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ctgreenbank.com



December 23, 2016

Dear Connecticut Green Bank Board of Directors:

On behalf of the Strategic Retreat Committee, we are looking forward to holding our Strategic Retreat in a few weeks.

Here are a few details:

**Date:** Thursday, January 5, 2017

**Time:** 11:30 a.m. to 5:00 p.m. for the Strategic Retreat  
5:30 to 8:00 p.m. for the Tour of the Beinecke Library and Dinner at Mory's (please RSVP with Cheryl Samuels at [cheryl.samuels@ctgreenbank.com](mailto:cheryl.samuels@ctgreenbank.com))

<b>Location:</b>	<u>Strategic Retreat</u>	<u>Dinner</u> (please RSVP with Cheryl)
	Yale F&ES	Mory's
	Kroon Hall – 3 <sup>rd</sup> Floor	306 York Street
	195 Prospect Street	New Haven, CT 06511
	New Haven, CT 06511	(203) 562-3157

The Strategic Retreat will be facilitated by [Dr. Jonathan Raab](#). Jonathan has helped Connecticut navigate its climate change strategies for nearly 15 years and has been involved with the Connecticut Green Bank since inception. We are looking forward to working with him again.

We will also be joined by special guest [Frances Beinecke](#). Frances served as the President of the Natural Resources Defense Council from 2006 through 2015 where she focused on finding solutions to some of the biggest environmental challenges of our time, including clean energy, climate change, and sustainable communities. She is excited to join us and offer some useful insights into the challenges ahead.

We have prepared an exciting, impactful, and productive agenda for the Strategic Retreat, including:

- **5-Year Review** – an “ice breaker” session over lunch where we discuss the success and shortcomings (or missed best practices) of the Connecticut Green Bank’s first five years. The team has prepared an excellent summary document to provide background for this discussion.
- **Towards 2050** – Connecticut has a goal to reduce its greenhouse gas emissions by 80 percent from 2001 levels by the year 2050. Building from the work of the Governor’s Council on Climate Change, we will explore what role the Connecticut Green Bank can play to assist the state in achieving this target.

- **Sustainability** – the Connecticut Green Bank has made substantial progress building public-private partnerships that have attracted significant investments into Connecticut’s clean energy economy. There are a number of emerging opportunities to leverage our financial position to attract other sources of capital to the organization – pursuing a path towards sustainability.
- **Protectability** – because of the Connecticut Green Bank’s financial position, and given that the State of Connecticut is facing a billion-dollar budget deficit in FY 2018 and beyond, we will discuss strategies for how we can more accurately present and communicate our financial position as well as reduce the budget threats from the legislature.
- **Trump Administration** – to wrap up the day, we will discuss how the green bank movement might proceed at the national level during President Trump’s administration. This will be a “blue sky” conversation to determine pathways for the future of clean energy and green bank support at the federal level with respect to infrastructure investment.

For each agenda item, we have provided reading as background material. We have a lot of ground to cover – this will be meaningful and fun!

If you have any questions, comments or concerns, please feel free to contact any of us.

We look forward to seeing you in a few weeks. Happy Holidays!

Sincerely,



Bryan Garcia  
President and CEO

Cc: Catherine Smith  
Norma Glover  
Reed Hundt  
Dr. Jonathan Raab  
Eric Shrago





CONNECTICUT  
**GREEN BANK** SM

**Board of Directors**  
**Strategic Retreat**  
**5-Year Results (2012-2016)**

January 5, 2017

# Content



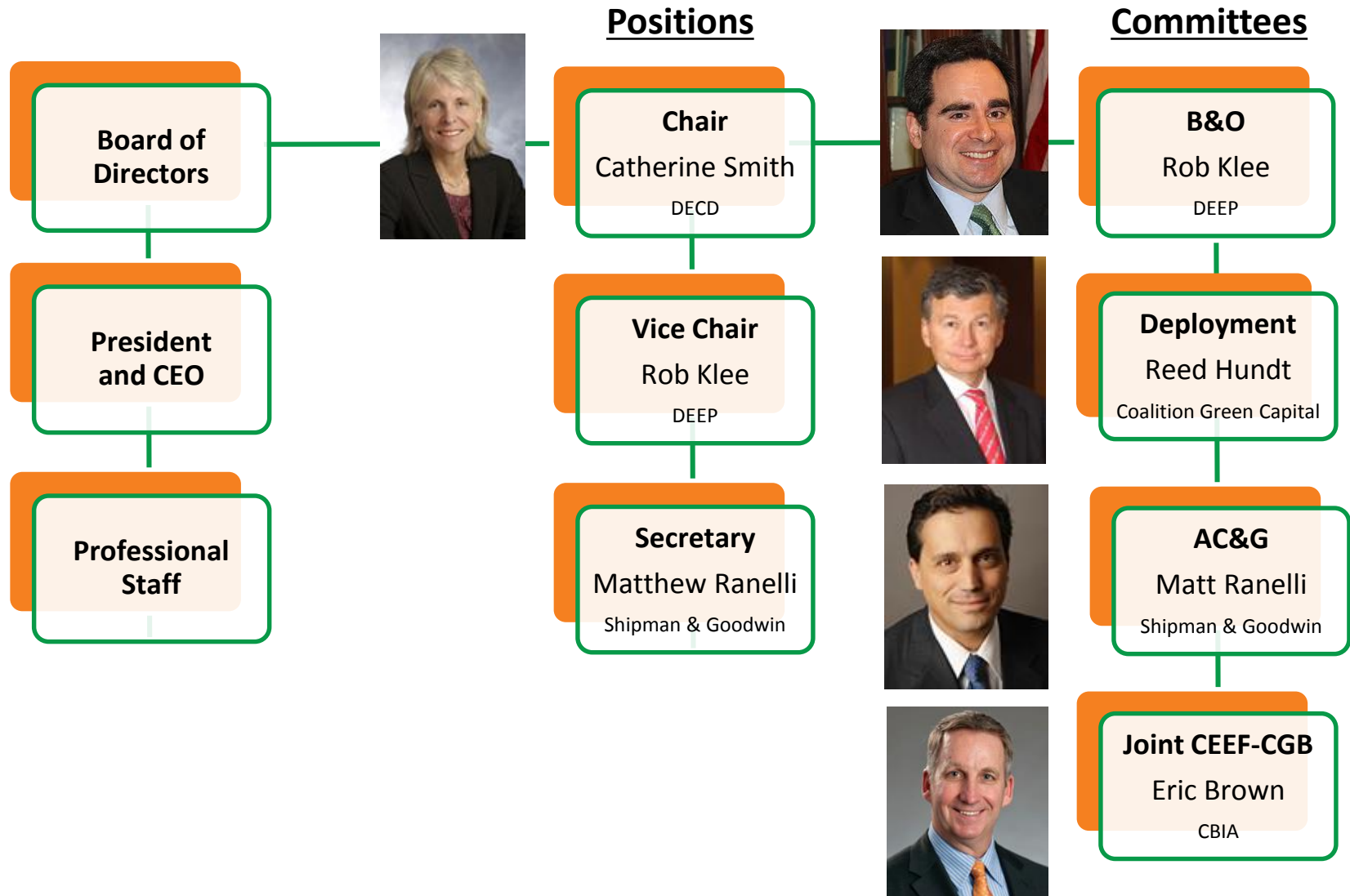
1. **Governance and Operations** – board of directors, senior leadership, and documentation;
2. **Financial Position** – reporting, assets, net position, revenues, and expenses;
3. **Impact** – investment, leverage ratio, public funds, pipeline, deployment, objective functions (e.g., \$ invested/kWh produced), economic development, and environmental protection;
4. **Community Outreach** – investments by county, distressed communities, area median income, and reporting;
5. **Public-Private Partnerships** – co-investment with private capital investors in various products

# Governance and Operations

## Connecticut Green Bank

- 1. Committed Governance** – assembled “best in class”  
Board of Directors committed to excellence
  - Structure – established key committees with strong composition
  - Transitions – Mun Choi a Governor’s appointment (R&D or manufacturing) and Pat Wrice a Speaker of the House’s appointment (residential or low income)
- 2. Talented Staff** – hiring “world class” talent of public servants committed to leading the green bank movement
  - Refocus – from subsidy model to financing model
  - Culture – mission-oriented, results-driven, and leadership-minded
- 3. Guidance Documentation** – statutes (e.g., PA 11-80), resolutions of purpose, bylaws, operating procedures, comprehensive plan, and ethics compliance

# Board of Directors Governance





# Board of Directors Members

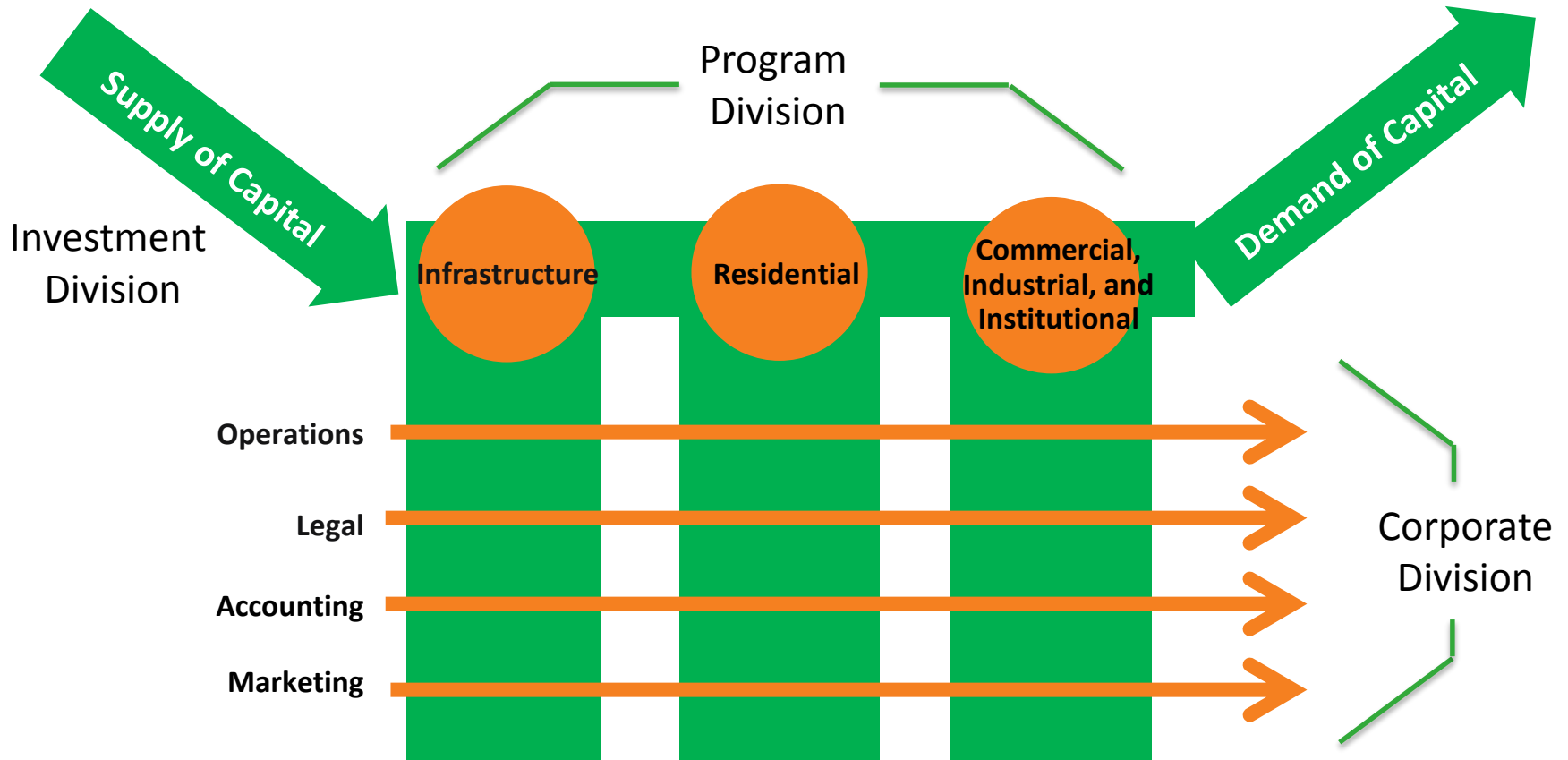


Position	Name	Status	Voting
Commissioner of DECD (or designee)	Catherine Smith	Ex Officio	Yes
Commissioner of DEEP (or designee)	Rob Klee	Ex Officio	Yes
State Treasurer (or designee)	Bettina Bronisz	Ex Officio	Yes
Finance of Renewable Energy	Reed Hundt	Appointed	Yes
Finance of Renewable Energy	Kevin Walsh	Appointed	Yes
Labor Organization	John Harrity	Appointed	Yes
R&D or Manufacturing	Mun Choi	Appointed	Yes
Investment Fund Management	Norma Glover	Appointed	Yes
Environmental Organization	Matthew Ranelli	Appointed	Yes
Finance of Deployment	Tom Flynn	Appointed	Yes
Residential or Low Income	Pat Wrice	Appointed	Yes
President of the Green Bank	Bryan Garcia	Ex Officio	No

## REFERENCES

Those noted in "red" are positions that will need to be filled in 2017

# Organizational Chart By Division



# Leadership Team



**George Bellas**  
VP of Finance  
Corporate Division



**Craig Connolly**  
Director of Marketing  
Corporate Division



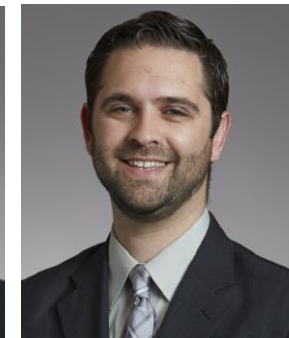
**Mackey Dykes**  
VP of CI&I (Officer)  
Program Division



**Brian Farnen**  
General Counsel & CLO  
Corporate Division



**Bryan Garcia**  
President and CEO  
Corporate Division



**Ben Healey**  
Director of Finance  
Investment Division



**Dale Hedman**  
MD of Infrastructure  
Program Division



**Bert Hunter**  
EVP and CIO  
Investment Division



**Suzanne Kaswan**  
VP of Human Resources  
Corporate Division

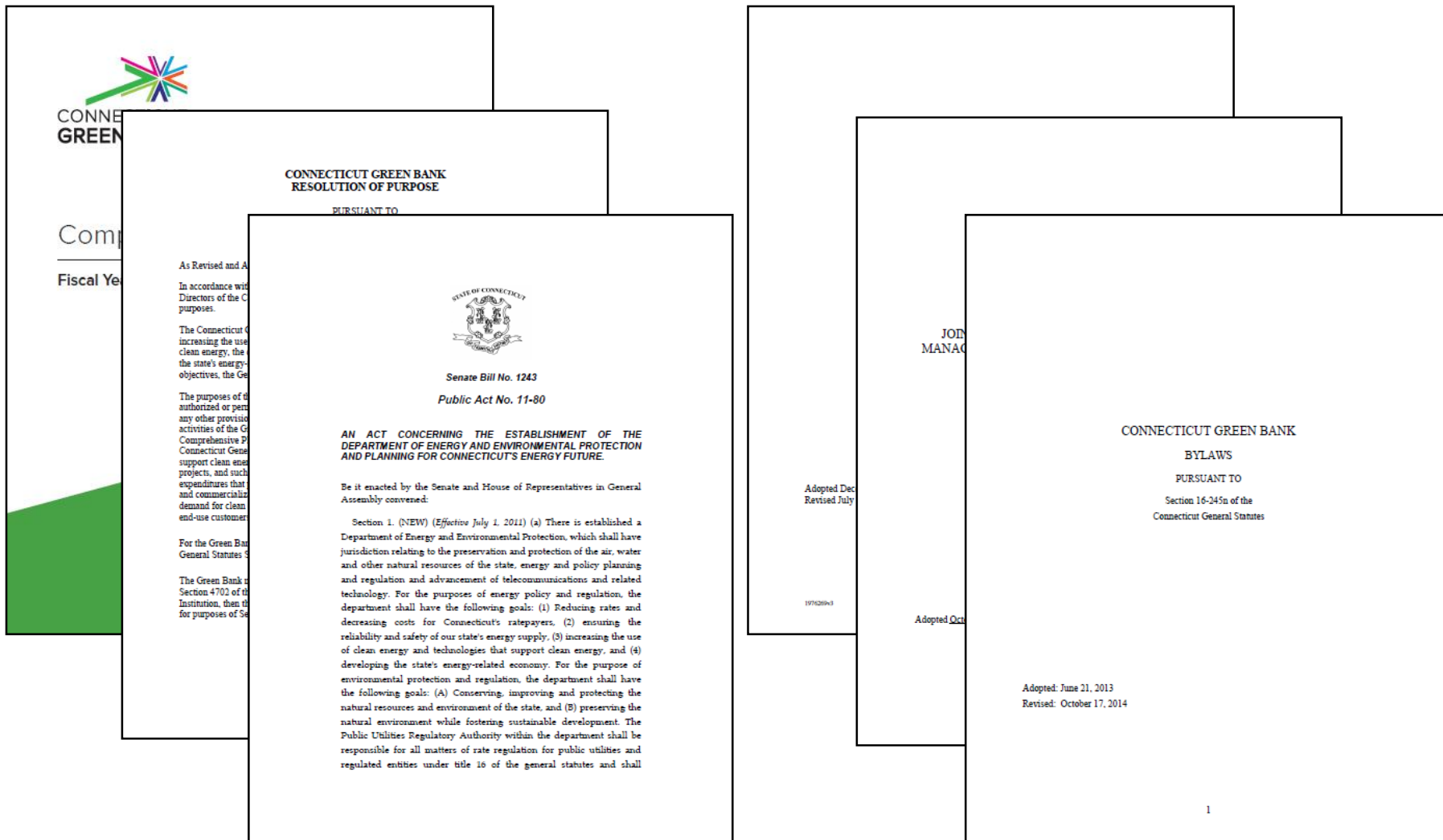


**Kerry O'Neill**  
MD of Residential  
Program Division



**Eric Shrago**  
Director of Operations  
Corporate Division

# Guidance Documentation



CONNECTICUT GREEN BANK

Comprehensive

Fiscal Year

**CONNECTICUT GREEN BANK  
RESOLUTION OF PURPOSE**

PURSUANT TO

As Revised and Approved by the Board of Directors in accordance with the purposes of the Connecticut Green Bank.

The Connecticut Green Bank, in increasing the use of clean energy, the state's energy objectives, the Green Bank's

The purposes of the authorized or permitted activities of the Green Bank, support clean energy projects, and such expenditures that and commercialize demand for clean end-use customer

For the Green Bank General Statutes Section 4702 of the

The Green Bank of Connecticut, then the for purposes of Section



Senate Bill No. 1243

Public Act No. 11-80

**AN ACT CONCERNING THE ESTABLISHMENT OF THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION AND PLANNING FOR CONNECTICUT'S ENERGY FUTURE.**

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (NEW) (Effective July 1, 2011) (a) There is established a Department of Energy and Environmental Protection, which shall have jurisdiction relating to the preservation and protection of the air, water and other natural resources of the state, energy and policy planning and regulation and advancement of telecommunications and related technology. For the purposes of energy policy and regulation, the department shall have the following goals: (1) Reducing rates and decreasing costs for Connecticut's ratepayers, (2) ensuring the reliability and safety of our state's energy supply, (3) increasing the use of clean energy and technologies that support clean energy, and (4) developing the state's energy-related economy. For the purpose of environmental protection and regulation, the department shall have the following goals: (A) Conserving, improving and protecting the natural resources and environment of the state, and (B) preserving the natural environment while fostering sustainable development. The Public Utilities Regulatory Authority within the department shall be responsible for all matters of rate regulation for public utilities and regulated entities under title 16 of the general statutes and shall

JOINT MANAGER

Adopted Dec  
Revised July

1976209x3

Adopted Oct

**CONNECTICUT GREEN BANK**

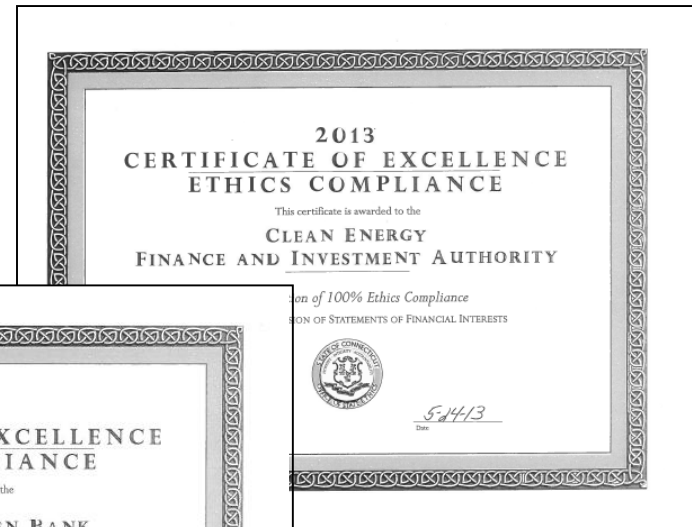
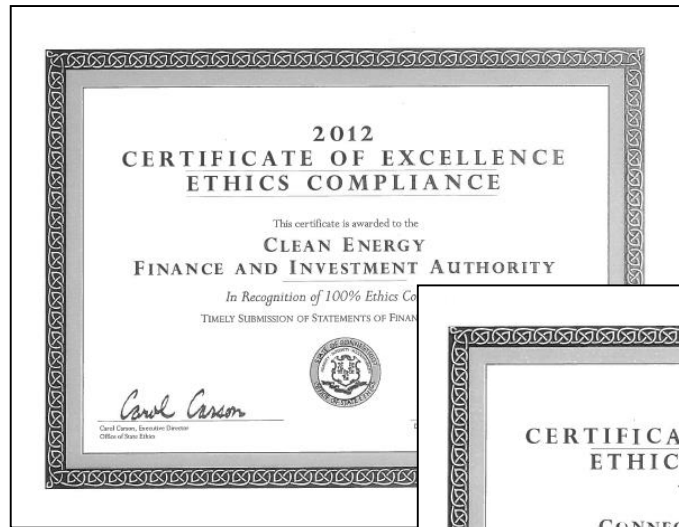
BYLAWS

PURSUANT TO

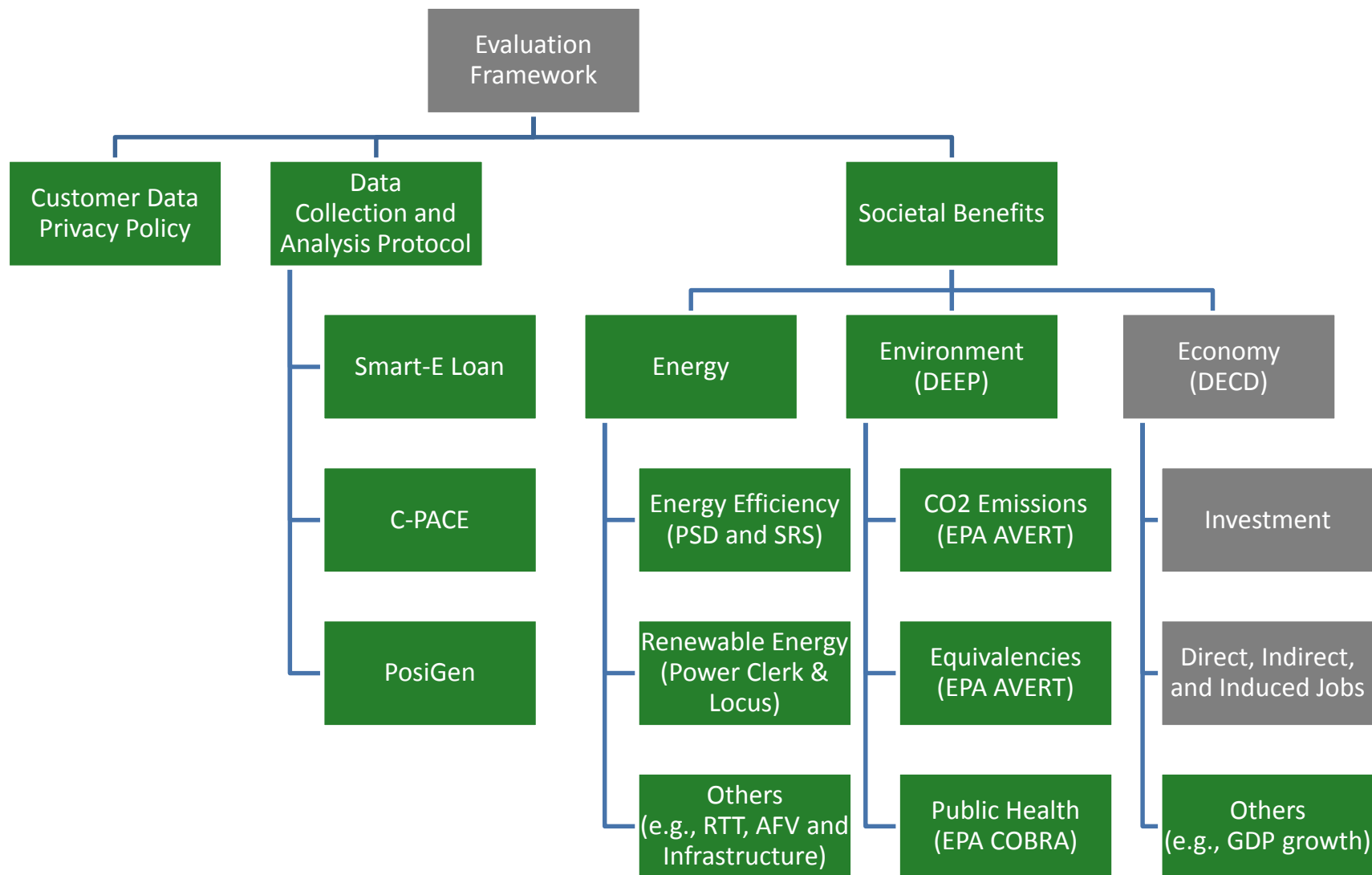
Section 16-245a of the Connecticut General Statutes

Adopted: June 21, 2013  
Revised: October 17, 2014

# Ethics Compliance Certificates of Excellence



# Evaluation Framework



# Financial Position

## Connecticut Green Bank

# Financial Position



1. **Reporting** – practicing the “Gold Standard” in government reporting through GFOA’s Comprehensive Annual Financial Report (CAFR)
2. **Balance Sheet** – strengthened financial position in 5 years to over \$175 million in assets and over \$125 million in net position
3. **Revenues** – diversifying sources of revenue to include interest income, fees, REC revenues, and grants on top of system benefit fund and RGGI allowance proceeds
4. **Expenses** – increasing operating expenses for administrative support of products and programs and increasing program expenses for more impact

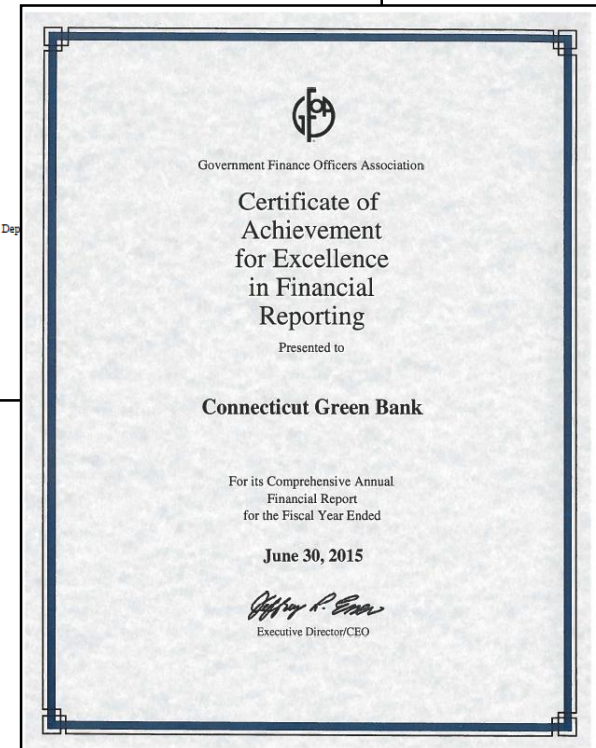
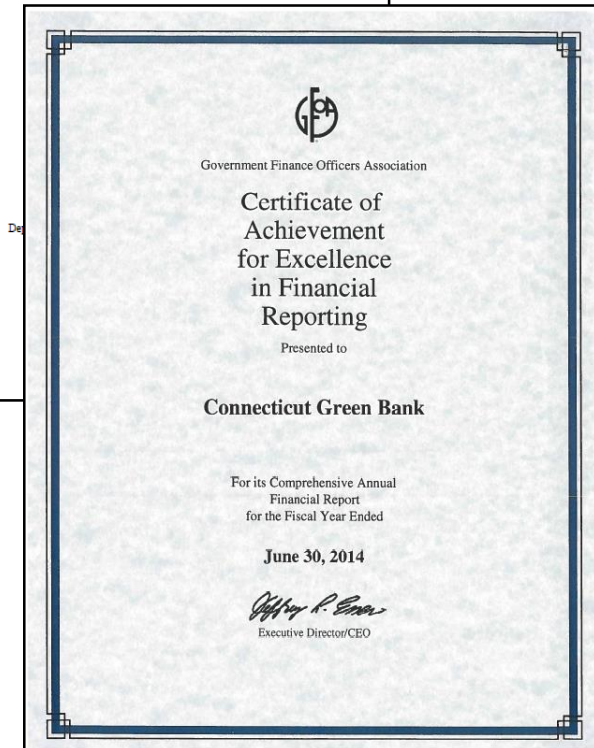


# Financial Reporting Certificate of Achievement



CONNECTICUT GREEN BANK  
(A Component Unit of the State of Connecticut)  
COMPREHENSIVE ANNUAL  
FINANCIAL REPORT  
FISCAL YEAR ENDED JUNE 30, 2014  
(With Summarized Totals as of and for Fiscal Year Ended June 30, 2013)

CONNECTICUT GREEN BANK  
(A Component Unit of the State of Connecticut)  
COMPREHENSIVE ANNUAL  
FINANCIAL REPORT  
FISCAL YEAR ENDED JUNE 30, 2015  
(With Summarized Totals as of and for Fiscal Year Ended June 30, 2014)



# Assets (\$000,000's)

## Connecticut Green Bank

(And Component Units)



	2012	2013	2014	2015	2016
<b>Current Assets</b>					
Cash and Equivalents	\$64.7	\$68.1	\$71.4	\$39.9	\$48.1
Receivables	\$3.3	\$4.5	\$8.3	\$2.9	\$4.5
Prepaid Expenses	\$0.4	\$0.5	\$0.6	\$1.0	\$4.2
Contractor Loans	-	-	-	\$3.1	\$2.3
Solar Lease (Current)	\$0.7	\$0.7	\$0.8	\$0.8	\$0.8
Program Loans (Current)	-	-	\$0.7	\$10.3	\$0.9
<b>Total Current Assets</b>	<b>\$69.0</b>	<b>\$73.9</b>	<b>\$81.8</b>	<b>\$58.0</b>	<b>\$60.8</b>
<b>Non-Current Assets</b>					
Portfolio Investments	\$2.2	\$1.0	\$1.0	\$1.0	\$1.0
Bonds Receivable	-	-	\$1.6	\$1.6	\$3.5
Solar Lease Notes, net	\$11.1	\$10.5	\$9.8	\$9.0	\$8.2
Program Loans, net	-	\$3.8	\$12.8	\$30.3	\$32.4
RECs	\$1.3	\$1.2	\$1.1	\$0.9	\$0.8
Capital Assets, net	\$0.1	\$0.4	\$3.1	\$27.0	\$57.9
Asset Retirement Obligation	-	-	-	\$1.0	\$2.3
Restricted Assets	\$8.5	\$9.5	\$9.5	\$8.8	\$9.7
<b>Total Non-Current Assets</b>	<b>\$23.2</b>	<b>\$26.4</b>	<b>\$38.9</b>	<b>\$79.6</b>	<b>\$115.8</b>
<b>Total Assets</b>	<b>\$92.2</b>	<b>\$100.3</b>	<b>\$120.7</b>	<b>\$137.6</b>	<b>\$176.6</b>

# Operating Income

## Connecticut Green Bank



	2012	2013	2014	2015	2016	Since Inception
<b>Operating Revenues:</b>						
Utility company remittances	27,025,088	27,621,409	27,779,345	27,233,987	26,605,084	136,264,913
RGGI auction proceeds	2,052,748	4,744,657	20,074,668	16,583,545	6,481,562	49,937,180
REC sales	-	-	378,444	1,474,488	2,653,783	4,506,715
Grants	10,435,251	10,035,250	321,642	192,274	589,917	21,574,334
Other income	240,597	941,777	200,114	810,124	1,457,889	3,650,501
<b>Total operating revenues</b>	<b>39,753,684</b>	<b>43,343,093</b>	<b>48,754,213</b>	<b>46,294,418</b>	<b>37,788,235</b>	<b>215,933,643</b>
<b>Operating expenses</b>						
Grants and program expenses	31,122,355	23,634,465	23,439,362	22,130,676	26,843,083	127,169,941
General and administrative expenses	1,387,854	2,664,883	2,536,603	3,117,376	4,629,540	14,336,256
<b>Total operating expenses</b>	<b>32,510,209</b>	<b>26,299,348</b>	<b>25,975,965</b>	<b>25,248,052</b>	<b>31,472,623</b>	<b>141,506,197</b>
<b>Operating income</b>	<b>7,243,475</b>	<b>17,043,745</b>	<b>22,778,248</b>	<b>21,046,366</b>	<b>6,315,612</b>	<b>74,427,446</b>

# Net Position

## Connecticut Green Bank



	2012	2013	2014	2015	2016	Since Inception
<b>Nonoperating revenue (expense)</b>						
Interest income	729,793	687,503	1,141,978	2,311,317	2,640,764	7,511,355
Interest expense	-	-	-	(119,345)	(730,839)	(850,184)
Provision for loan losses	-	-	(1,310,933)	(563,825)	(1,021,826)	(2,896,584)
Payments to State of Connecticut	-	-	(6,200,000)	(19,200,000)	-	(25,400,000)
Unrealized loss on fair value of swap	-	-	-	(660,073)	(967,791)	(1,627,864)
Other non operating revenue (expense)	434,702	(656,546)	(12,585)	(1,284,864)	(335,271)	(1,854,564)
<b>Total nonoperating revenue (expense)</b>	<b>1,164,495</b>	<b>30,957</b>	<b>(6,381,540)</b>	<b>(19,516,790)</b>	<b>(414,963)</b>	<b>(25,117,841)</b>
Changes in net position before capital contributions	8,407,970	17,074,702	16,396,708	1,529,576	5,900,649	49,309,605
Capital contributions from CT SL2 member	-	237,594	201,334	6,844,430	12,294,443	19,577,801
<b>Increase (decrease) in net position</b>	<b>8,407,970</b>	<b>17,312,296</b>	<b>16,598,042</b>	<b>8,374,006</b>	<b>18,195,092</b>	<b>68,887,406</b>
<b>Beginning net position</b>	-	<b>81,188,309</b>	<b>84,195,195</b>	<b>100,793,237</b>	<b>109,167,243</b>	
CEFIA net position	72,780,339	-	-	-	-	
Initial GASB 68 adjustment for pension liability	-	(14,305,410)	-	-	-	
<b>Ending net position</b>	<b>81,188,309</b>	<b>84,195,195</b>	<b>100,793,237</b>	<b>109,167,243</b>	<b>127,362,335</b>	

# Impact

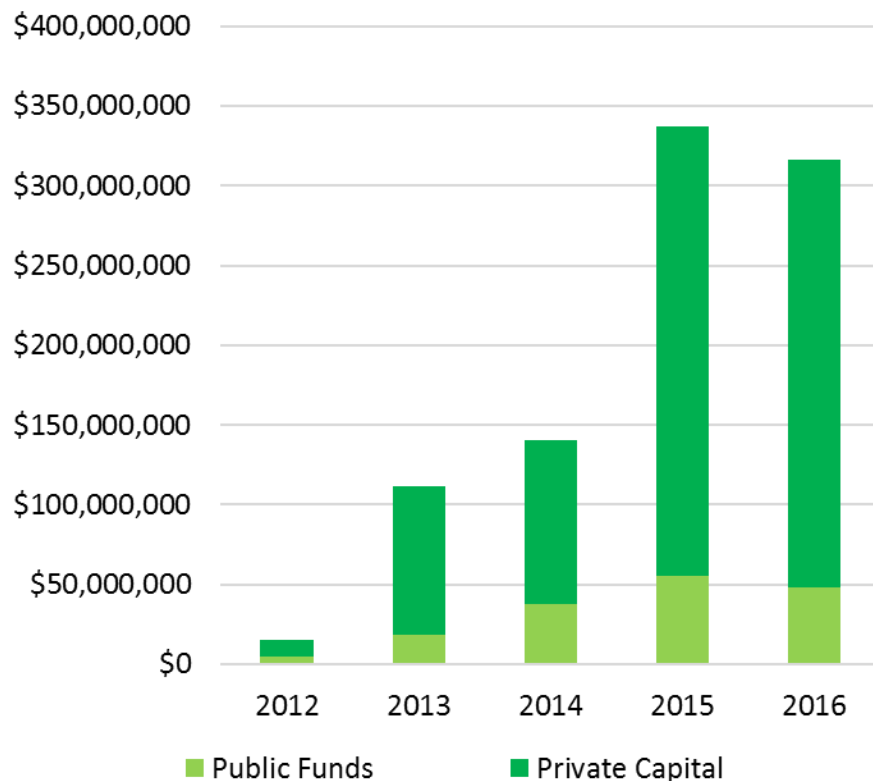
## Connecticut Green Bank

- 1. Investment** – delivered nearly \$1 billion of investment in Connecticut’s clean energy economy in the first 5 years
  - Leverage Ratio – delivering between 5 to 10 : 1 leverage ratio
  - Funds Invested – less than 50% of funds invested as grants
- 2. Projects** – increasing the number of projects and installed capacity supported year-to-year while increasing the amount of clean energy produced
- 3. Objective Function** – reducing the amount of Connecticut Green Bank funds at risk per installed capacity (i.e., kW - \$650/kW), production (i.e., lifetime kWh - \$0.02/kWh), and savings (i.e., lifetime MMBtu - \$50-\$100/MMBtu)
- 4. Societal Benefits** – supporting the increase in job-years created (i.e., over 11,500 direct, indirect and induced job-years) and GHG emission reductions (i.e., over 2.2 MTCO<sub>2</sub>)

# Investment Public Funds and Private Capital



**Public Funds vs. Private Capital  
Investment**



- **Investment** – over \$915 million of investment in the clean energy economy in 5 years – about \$80/capita/yr. for last 2 years (e.g., about \$325 million)
  - ❖ About \$165 million of investment from the Connecticut Green Bank
  - ❖ Over \$755 million of investment from private capital
  - ❖ ~\$325 million in BTM investment in 2015 and 2016 is nearly the same capital improvement budget (i.e., wires and poles) for Eversource, which is cost-recovered by ratepayers

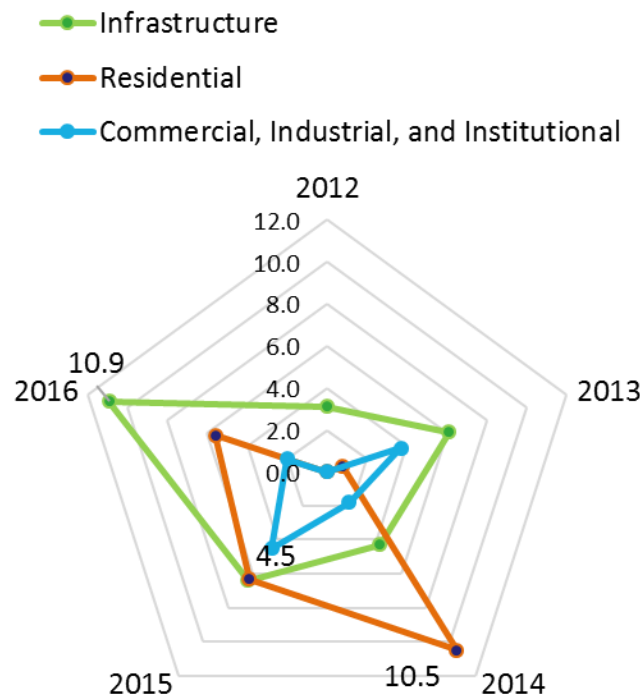
## REFERENCES

Comprehensive Annual Financial Report for FY 2016 (Page # TBD)

# Leverage Ratio

## Private Capital vs. Public Funds

### Leverage Ratio of Private to Public Funds



- **Leverage Ratio** – 5-year leverage ratio of 5.6 : 1 of private to public funds
  - ❖ Infrastructure – average of 6.6 : 1 with highest year of 10.9 : 1 (2016)
  - ❖ Residential – average of 6.2 : 1 with highest year of 10.5 : 1 (2014). Focusing now on hard-to-serve LMI markets.
  - ❖ CI&I – average of 2.9 : 1 with highest year of 4.5 : 1 (2015)
- **Target** – 5 to 10 : 1
- **Dilemma** – maximize leverage ratio to demonstrate power of public-private partnerships or build assets on our balance sheet for sustainability?

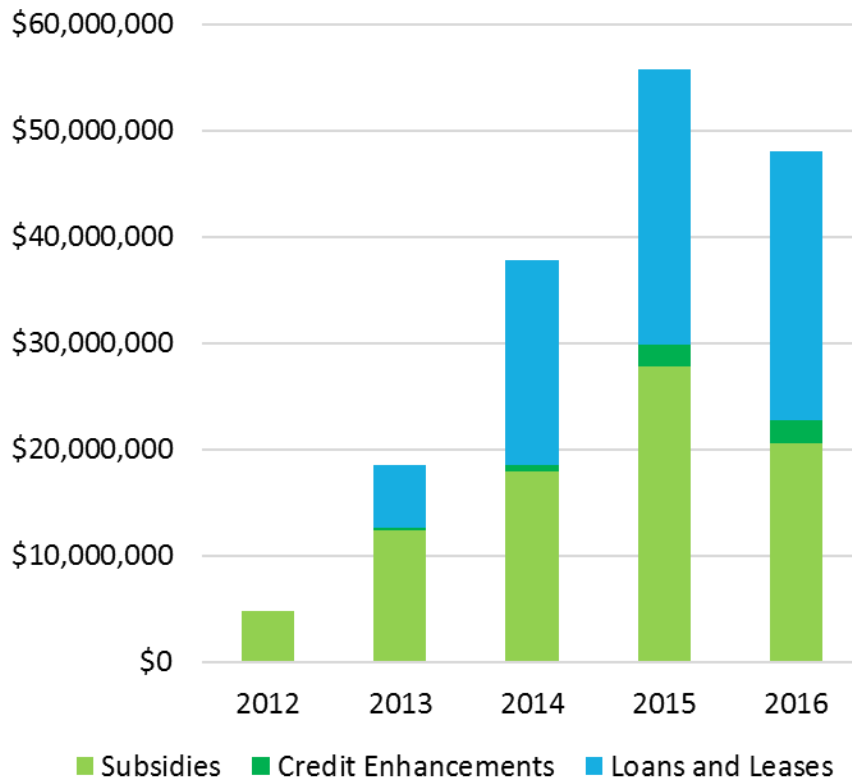
#### REFERENCES

Comprehensive Annual Financial Report for FY 2016 (Page # TBD)



# Public Funds Investment Type

**Public Funds – Subsidies, Credit Enhancements, Loans and Leases**



- **Financing** – transition from subsidy model to financing – about 50% of funds invested are financing
  - ❖ Subsidies – about \$84 million to support the RSIP<sup>1</sup>
  - ❖ Credit Enhancements – nearly \$5 million:
    - ✓ Loan Loss Reserves – \$4.1 million
    - ✓ Interest Rate Buy-Downs – \$0.9 million
  - ❖ Loans and Leases – over \$76 million:
    - ✓ Infrastructure – \$24 million
    - ✓ Residential – \$13 million
    - ✓ CI&I – \$39 million

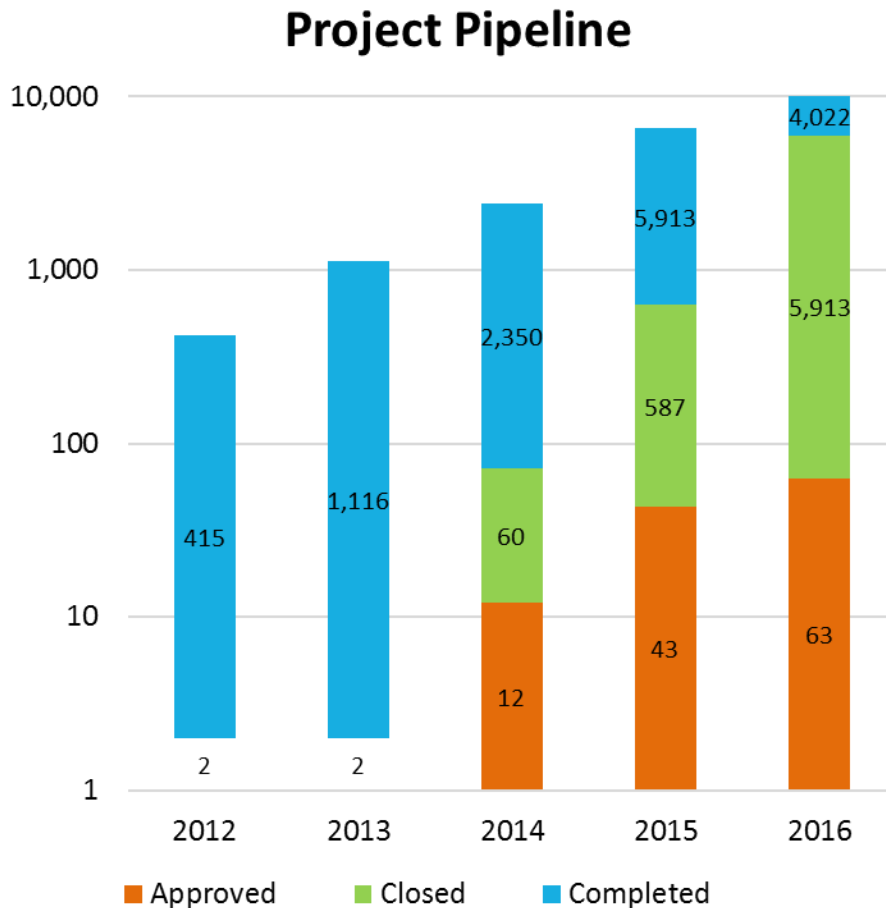
**REFERENCES**

Comprehensive Annual Financial Report for FY 2016 (Page # TBD)

1. All subsidies provided through the RSIP for projects approved after January 1, 2015 are recoverable through the sale of SHRECs to the EDCs through an MPA

# Project Pipeline

## Approved – Closed – Completed



- **Growth** – year-over-year growth in the project pipeline with prior year approvals being closed and completed
- **Development Time** – it takes time to move approved projects to completed (e.g., 1-24 months)
  - ❖ Residential – single-family varies with multifamily up to 24 months
  - ❖ CI&I – can be 12 months or more
  - ❖ Infrastructure – RSIP can be up to 6 months with AD and CHP projects as several years (i.e., permitting)

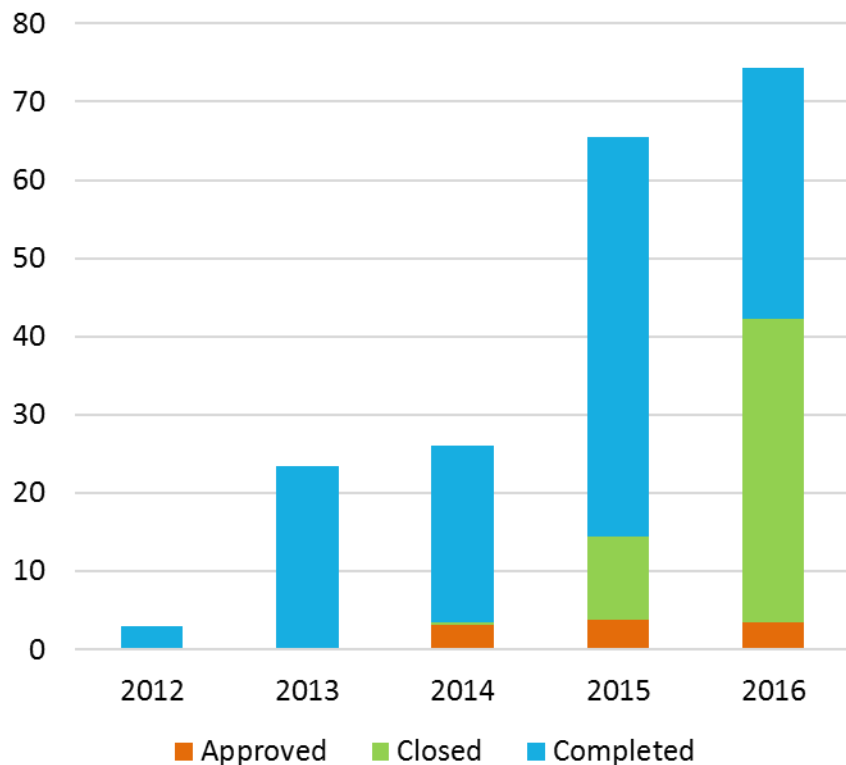
**REFERENCES**

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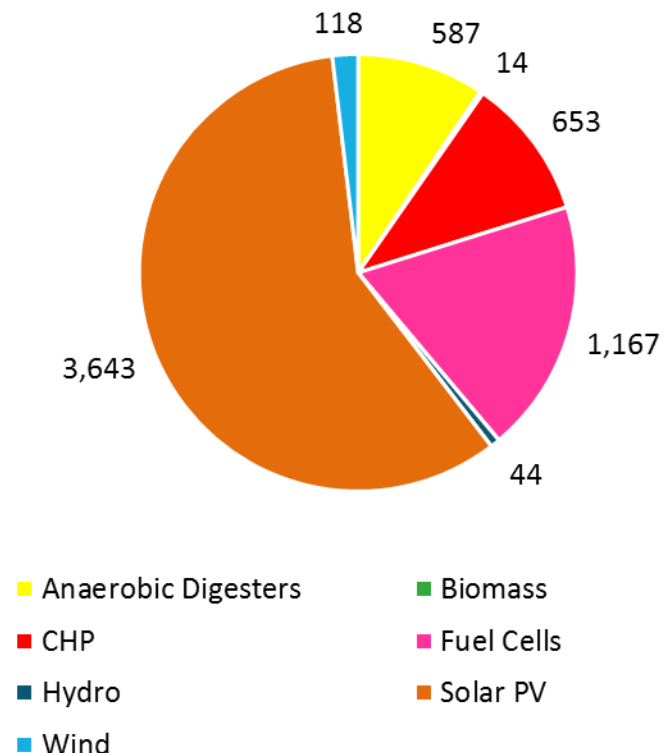
# Renewable Energy Deployment Installed Capacity and Production



### Installed Capacity (MW)



### Lifetime Production (GWh)



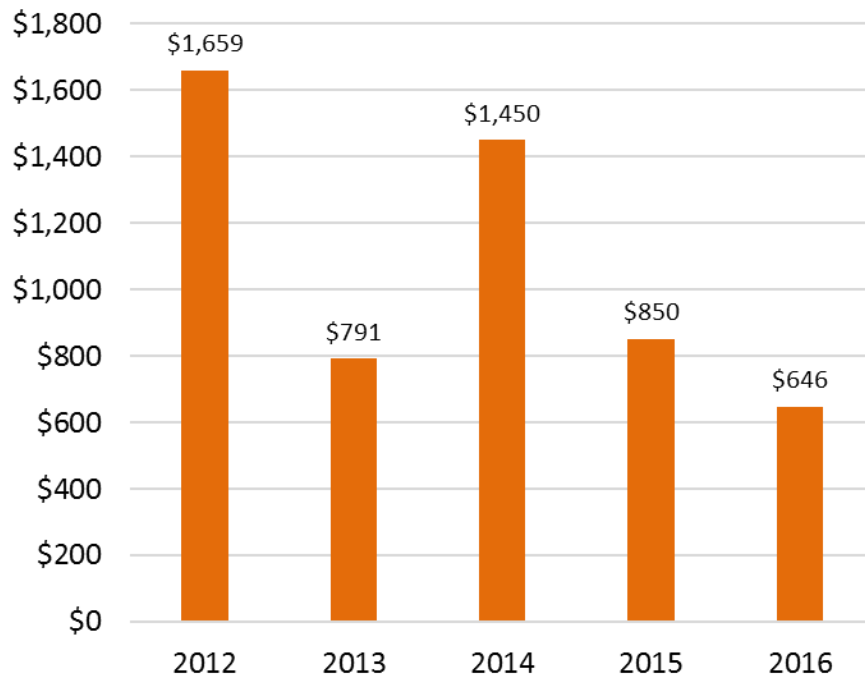
#### REFERENCES

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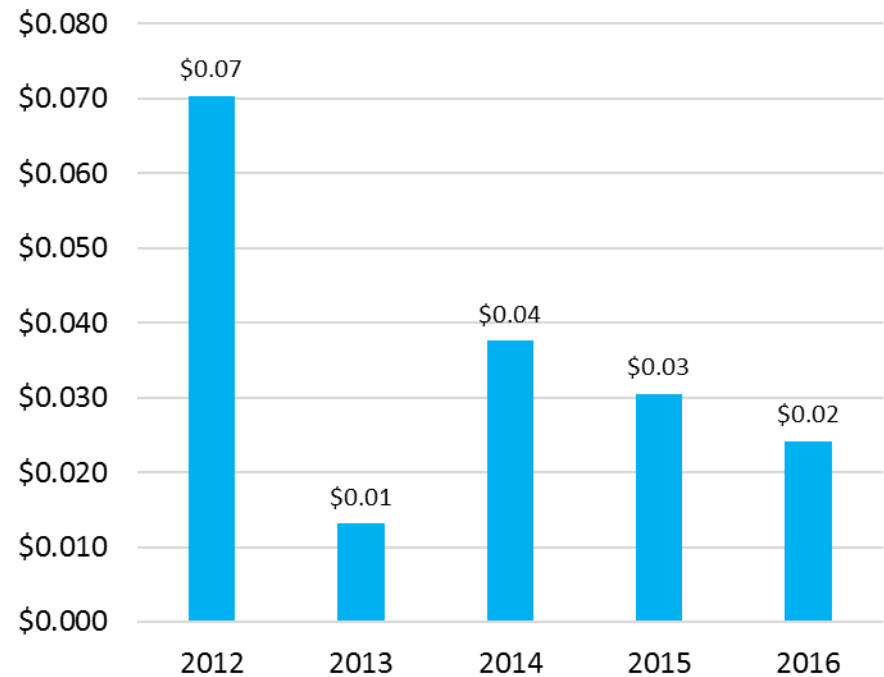
# Objective Functions



### Green Bank Investment (\$) per Installed Capacity (kW)



### Green Bank Investment (\$) per Lifetime (kWh)



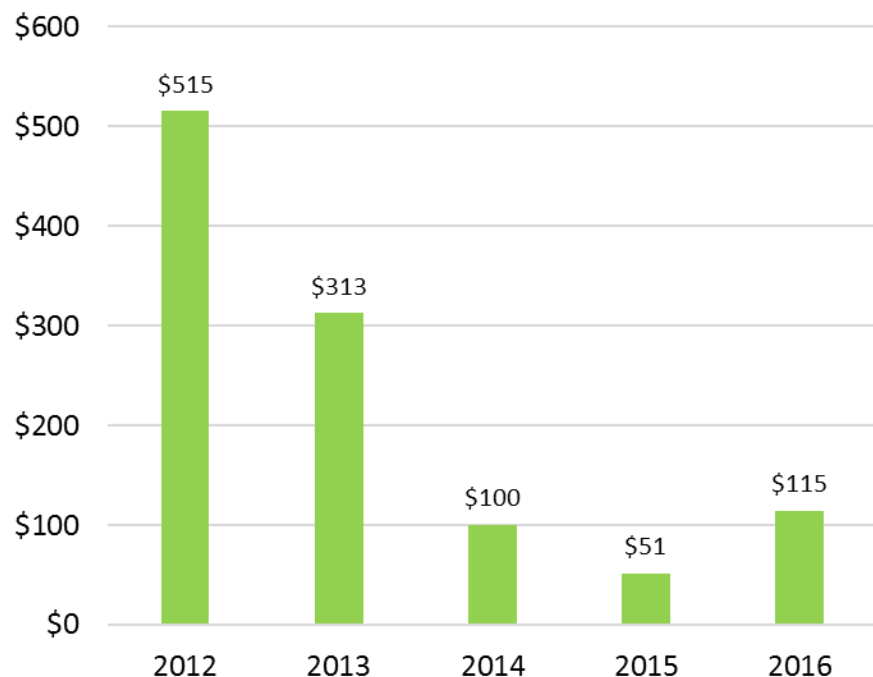
#### REFERENCES

Comprehensive Annual Financial Report for FY 2016 (Page # TBD)

# Objective Functions (cont'd)



**Green Bank Investment (\$) per Annual Energy Savings (MMBtu)**



- **Decreasing Objective Function** – shows increasing leverage of the Green Bank
- Driven by decreasing costs of technology and increase of private capital
- **2013 Dip** – Bridgeport Fuel Cell Park led to the lowest objective function in 2013 for installed capacity and investment

## REFERENCES

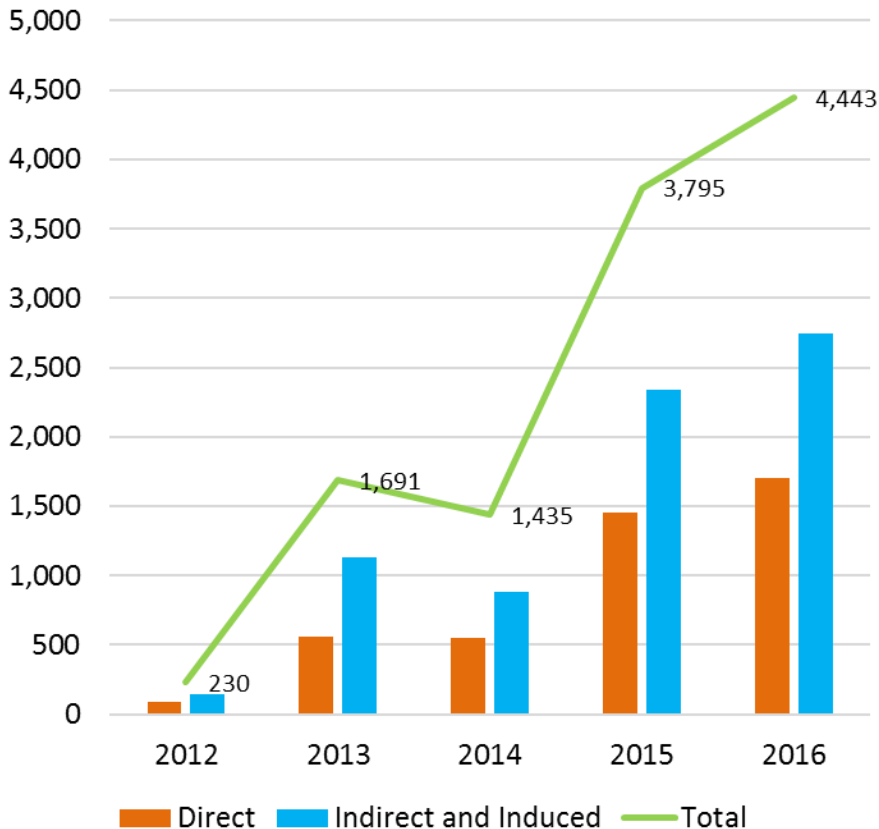
Comprehensive Annual Financial Report for FY 2016 (Page # TBD)

# Economic Development

## Direct, Indirect and Induced Job-Years



### Job-Years Created

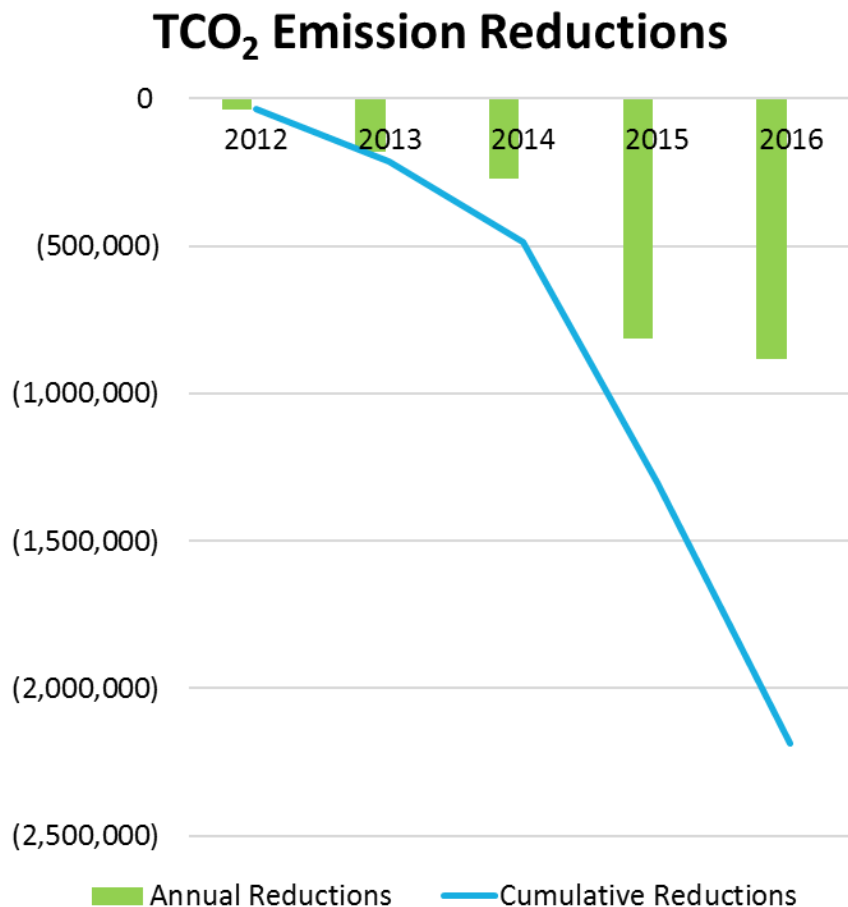


- **Growth** – year-over-year job growth from project pipeline for direct, indirect, and induced job-years
- **Installed Costs** – as a result of declining installed costs leading to more clean energy deployment, there has been an increase in jobs created
- **Estimates** – the update in job estimates by Navigant in the Jobs Study aren't reflected in these numbers

#### REFERENCES

Comprehensive Annual Financial Report for FY 2016 (Page # TBD)  
Includes approved, closed, and completed projects

# Environmental Protection TCO<sub>2</sub> Emission Reductions



- **Reductions** – year-over-year emission reductions from projects are increasing as a result of increased clean energy deployment
- **Public Policy** – the emission reductions resulting from these projects are through the Class I RPS through the production of RECs
- **Estimates** – these estimates are based on eGRID data from the EPA and will be updated in FY 2017 with AVERT

#### REFERENCES

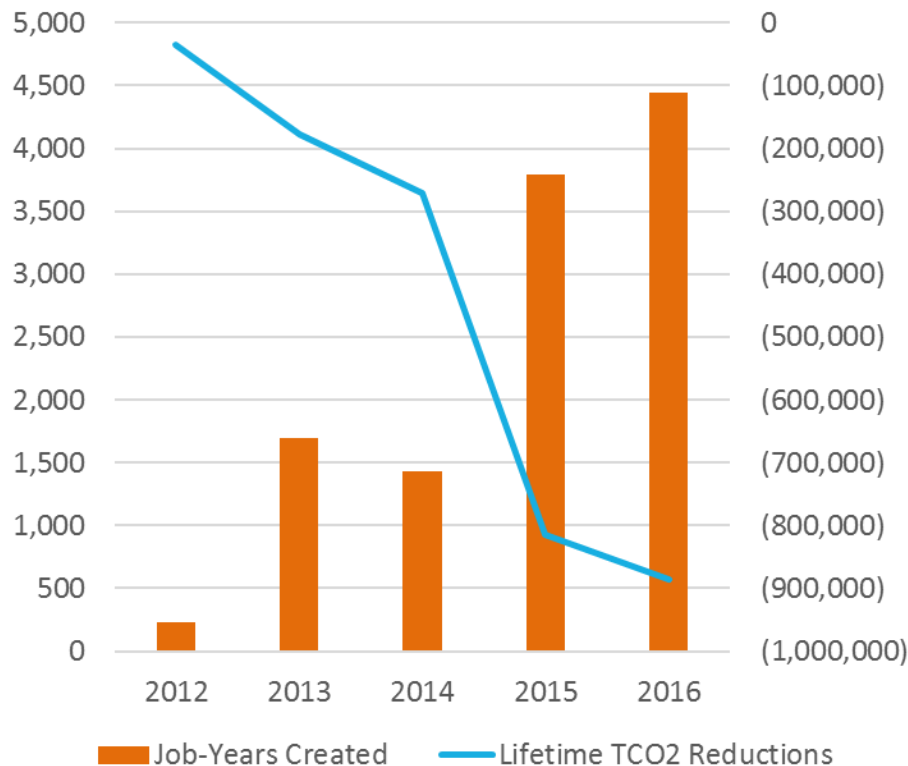
Comprehensive Annual Financial Report for FY 2016 (Page # TBD)  
Includes approved, closed, and completed projects

# Economy and Environment

## Jobs Created and CO<sub>2</sub> Reductions



### Economic Development and Environmental Protection



- **Mutually Beneficial** – job creation can coincide with GHG emission reductions
- **Progress** – year-to-year increases in jobs created and GHG emissions reduced

#### REFERENCES

Comprehensive Annual Financial Report for FY 2016 (Page # TBD)  
Includes approved, closed, and completed projects



# Community Outreach

## Connecticut Green Bank

# Community Outreach



- 1. Investment** – over \$915 MM invested – Fairfield County the largest (\$258 MM) and Windham County the lowest (\$40 MM)
  - Investment per Capita – average of \$261 with Middlesex County as the highest (\$379) and New Haven as the lowest (\$186)
  - Investment per Household – average of \$685 with Middlesex County as the highest (\$938) and New Haven as the lowest (\$490)
- 2. Deployment** – nearly 200 MW of clean energy deployment – Hartford as the highest (49 MW) and Windham County as the lowest (9 MW)
  - Deployment per Capita – average of 55 W with Middlesex County as the highest (84 W) and New Haven County as the lowest (40 W)
- 3. Distressed Communities** – of Connecticut’s 169 communities, 15% of them are considered distressed, which represents 33% of the population and 33% of the households in the state. The Connecticut Green Bank has mobilized 33% of its investment (\$298 MM) and 30% of its deployment (57 MW) in distressed communities.

# Community Investment Overall Comparison



County	Population	Households	Investment (millions)	Investment / Capita	Investment / Household
Litchfield	187,467	74,767	\$68.1	\$363	\$911
Fairfield	898,137	327,670	\$258.3	\$288	\$788
Hartford	880,467	341,717	\$223.2	\$254	\$653
New Haven	849,161	322,963	\$158.1	\$186	\$490
Tolland	149,309	54,641	\$42.6	\$286	\$780
Middlesex	165,918	67,078	\$62.9	\$379	\$938
Windham	118,145	43,870	\$39.9	\$338	\$911
New London	262,533	105,052	\$61.3	\$234	\$584
Unknown			\$1.2		
<b>Total</b>	<b>3,511,137</b>	<b>1,337,758</b>	<b>\$915.8</b>	<b>\$261</b>	<b>\$685</b>
Average	438,892	167,220	\$114.3	\$291	\$757

# Community “Top 10” Investment Overall Comparison



Top 10	City or Town	Investment (millions)
1	Bridgeport	\$145.7
2	Southington	\$44.0
3	Milford	\$35.4
4	Colebrook	\$22.9
5	Middletown	\$17.8
6	Bristol	\$14.3
7	Waterbury	\$13.6
8	New Britain	\$13.5
9	Norwalk	\$12.0
10	Manchester	\$11.4

Top 10	City or Town	Investment / Capita
1	Colebrook	\$15,426
2	Canaan	\$1,188
3	Southington	\$1,023
4	Bridgeport	\$1,010
5	Windsor	\$856
6	Ashford	\$796
7	Hampton	\$791
8	Durham	\$760
9	Woodbridge	\$680
10	Milford	\$671

# Community Impact Overall Comparison



County	Population	Deployment (kW)	Watts / Capita	Job-Years	MTCO <sub>2</sub>
Litchfield	187,467	15,298.2	81.6	690	189
Fairfield	898,137	46,595.5	51.9	3,009	414
Hartford	880,467	49,134.0	55.8	2,745	557
New Haven	849,161	34,213.7	40.3	2,063	399
Tolland	149,309	10,017.3	67.1	632	124
Middlesex	165,918	13,907.7	83.8	887	173
Windham	118,145	9,439.7	79.9	613	159
New London	262,533	13,540.3	51.6	950	169
Unknown		187.9			
<b>Total</b>	<b>3,511,137</b>	<b>192,334.3</b>	<b>54.8</b>	<b>11,594</b>	<b>2,186</b>
Average	438,892	24,018.3	54.7	1,449	273

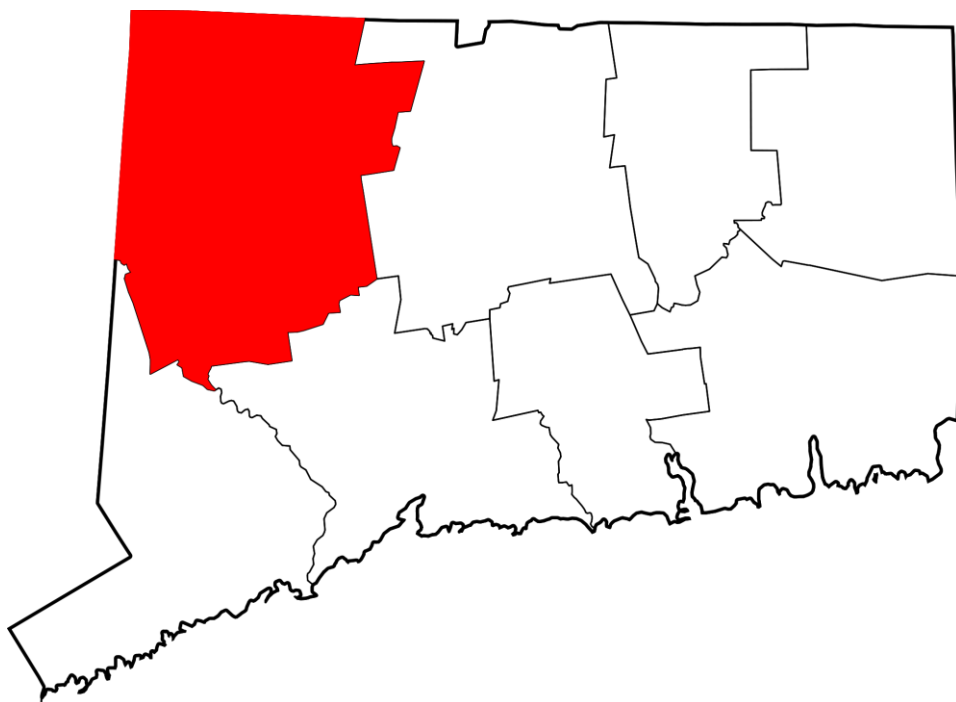
# Community “Top 10” Deployment Overall Comparison



Top 10	City or Town	Deployment (MW)
1	Bridgeport	20.9
2	Milford	5.8
3	Southington	5.3
4	Colebrook	5.1
5	New Britain	4.9
6	Norwalk	4.3
7	Middletown	3.8
8	Bristol	3.4
9	Manchester	3.2
10	Waterbury	3.1

Top 10	City or Town	Watts / Capita
1	Colebrook	3,426.9
2	Canaan	249.5
3	Woodbridge	213.7
4	Hampton	208.9
5	Durham	187.6
6	Ashford	185.0
7	Kent	183.5
8	Voluntown	175.4
9	Windsor	163.4
10	Haddam	161.3

# Community Investment Litchfield County



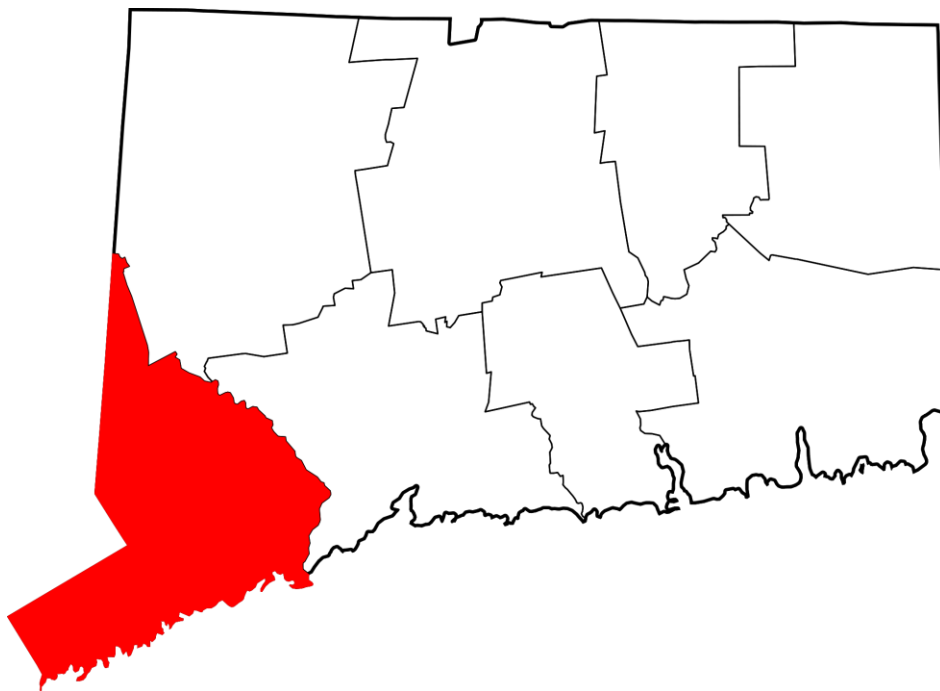
- **Investment** – \$68.1 million, \$363/capita, and \$911/household
- **Economic Development** – 426 direct and 265 indirect and induced job-years
- **Environmental Protection** – 189 MTCO<sub>2</sub>, 5.2 TCO<sub>2</sub>/capita

Strong investment per capita and location of Colebrook Wind



“Top 5” Towns	Investment (millions)	Installed Capacity (MW)
Colebrook	\$22.9	5.1
Watertown	\$5.8	1.4
New Milford	\$5.6	1.2
Torrington	\$5.3	1.2
Plymouth	\$4.9	1.0

# Community Investment Fairfield County



- **Investment** – \$258.3 million, \$288/capita, and \$788/household
- **Economic Development** – 1,944 direct and 1,065 indirect and induced job-years
- **Environmental Protection** – 414 MTCO<sub>2</sub>, 2.9 TCO<sub>2</sub>/capita

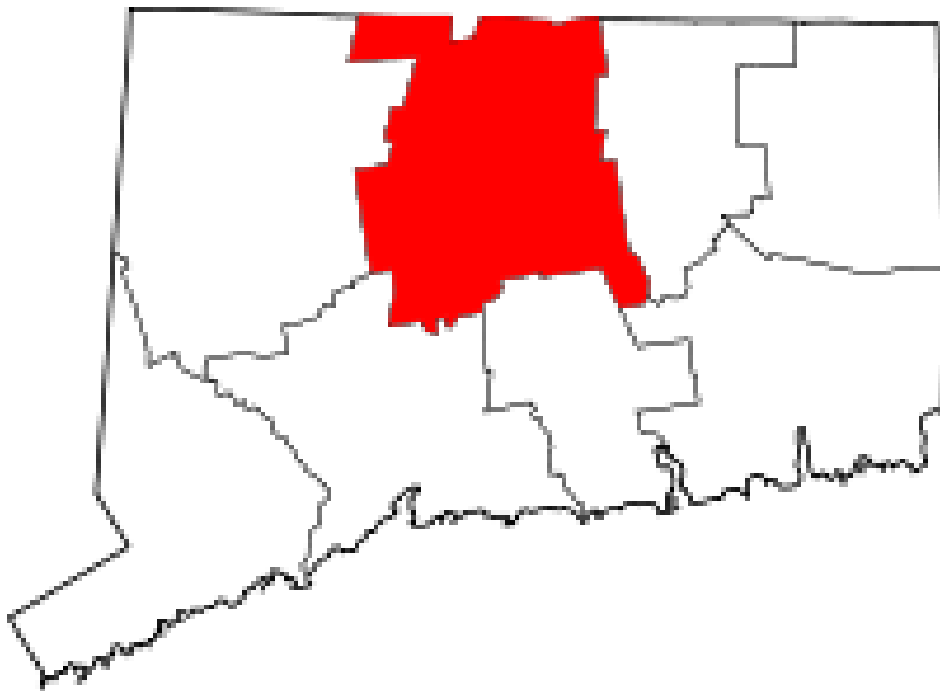
“Top 5” Towns	Investment (millions)	Installed Capacity (MW)
Bridgeport	\$145.7	20.9
Norwalk	\$12.0	4.3
Stratford	\$10.4	2.3
Fairfield	\$10.3	2.5
Stamford	\$9.9	1.5

Largest investment in the state and location of the Dominion Bridgeport Fuel Cell Park





# Community Investment Hartford County



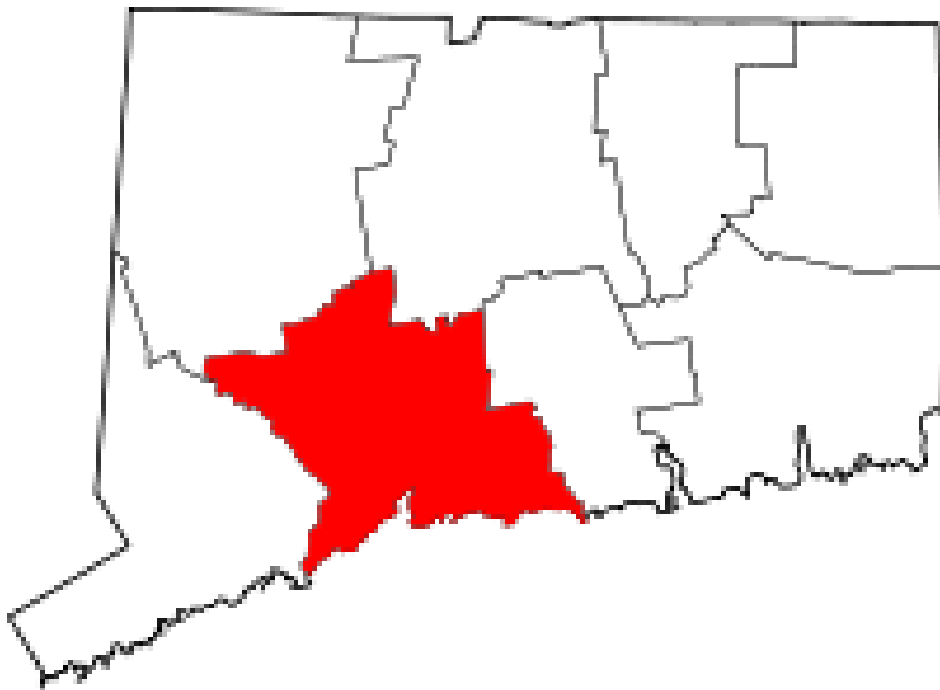
- **Investment** – \$223.2 million, \$254/capita, and \$653/household
- **Economic Development** – 1,692 direct and 1,053 indirect and induced job-years
- **Environmental Protection** – 557 MTCO<sub>2</sub>, 4.5 TCO<sub>2</sub>/capita

“Top 5” Towns	Investment (millions)	Installed Capacity (MW)
Southington	\$44.0	5.3
Bristol	\$14.3	3.4
New Britain	\$13.5	4.9
Manchester	\$11.4	3.2
Windsor	\$10.7	2.0

Strong investment in the state and location of Quantum AD Project



# Community Investment New Haven County

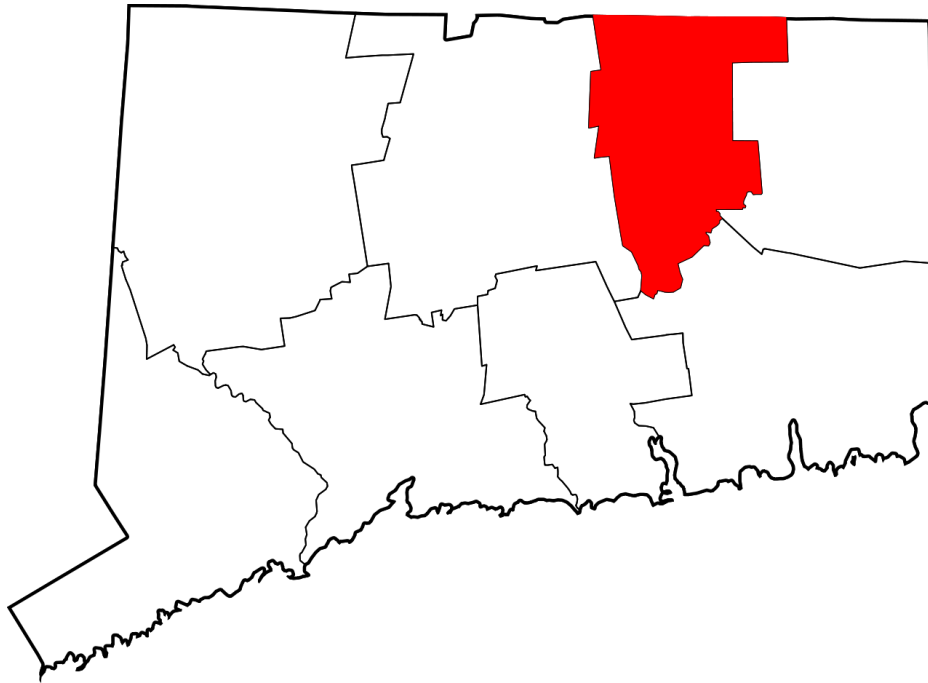


Average investment in the state and location of a developing food waste to energy project (i.e., AD and CHP) in Milford

- **Investment** – \$158 million, \$186/capita, and \$490/household
- **Economic Development** – 1,272 direct and 791 indirect and induced job-years
- **Environmental Protection** – 399 MTCO<sub>2</sub>, 3.1 TCO<sub>2</sub>/capita

“Top 5” Towns	Investment (millions)	Installed Capacity (MW)
<b>Milford</b>	<b>\$35.4</b>	<b>5.8</b>
Waterbury	\$13.6	3.1
Hamden	\$10.1	2.3
Meriden	\$9.7	1.8
West Haven	\$8.7	2.1

# Community Investment Tolland County

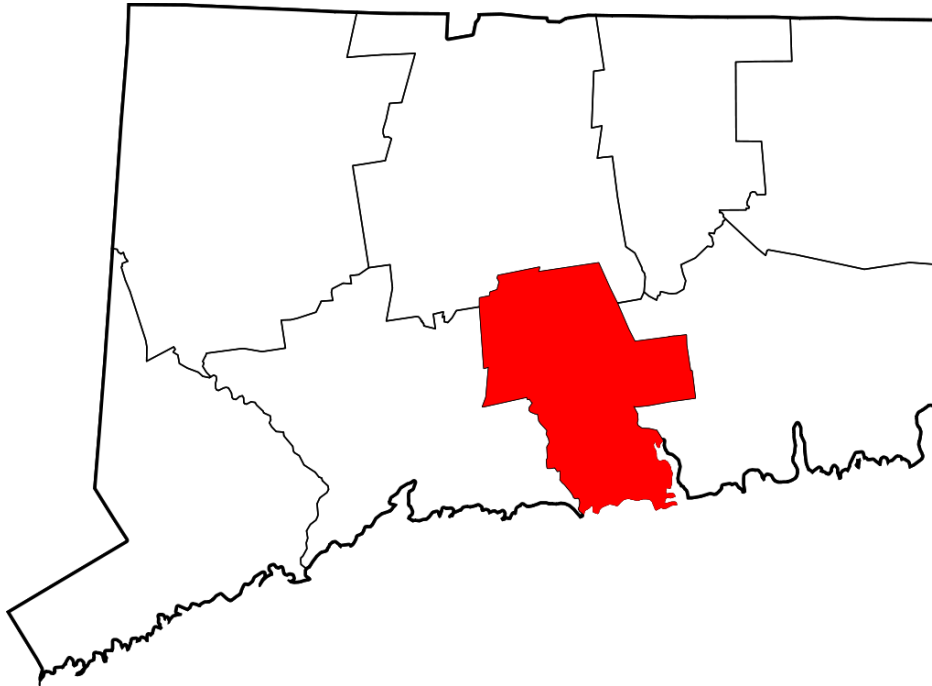


- **Investment** – \$42.6 million, \$286/capita, and \$780/household
- **Economic Development** – 390 direct and 242 indirect and induced job-years
- **Environmental Protection** – 124 MTCO<sub>2</sub>, 4.2 TCO<sub>2</sub>/capita

Regional investment driven by residential solar projects

“Top 5” Towns	Investment (millions)	Installed Capacity (MW)
Vernon	\$6.1	1.5
Coventry	\$5.9	1.5
Tolland	\$5.2	1.2
Ellington	\$4.8	1.1
Mansfield	\$4.7	1.1

# Community Investment Middlesex County



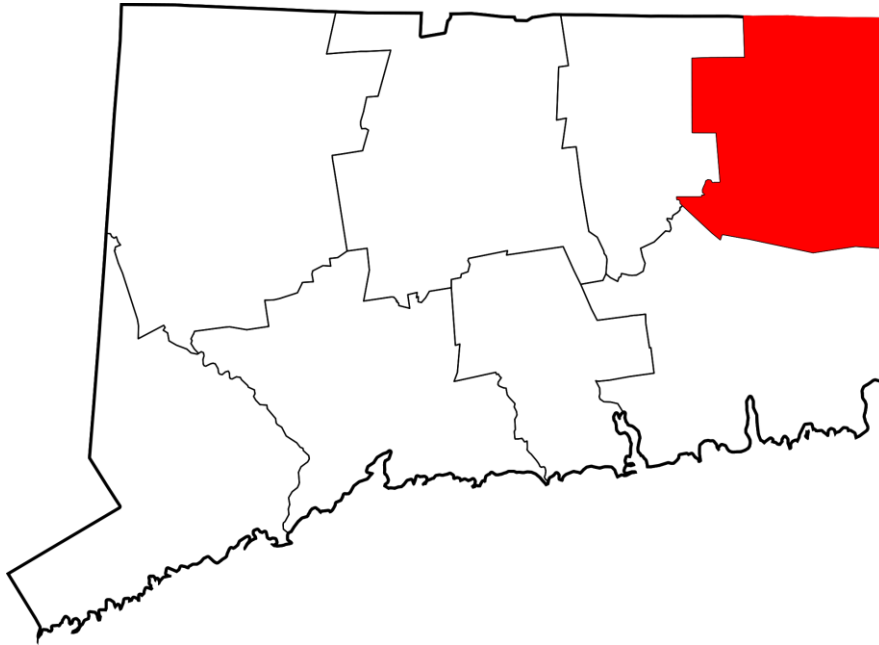
- **Investment** – \$63.0 million, \$379/capita, and \$938/household
- **Economic Development** – 547 direct and 340 indirect and induced job-years
- **Environmental Protection** – 172 MTCO<sub>2</sub>, 3.6 TCO<sub>2</sub>/capita

Middletown C-PACE and CHP-Microgrid projects drive investment in the region



“Top 5” Towns	Investment (millions)	Installed Capacity (MW)
Middletown	\$17.8	3.8
Cromwell	\$5.8	0.9
Durham	\$5.6	1.4
Haddam	\$5.4	1.3
Killingworth	\$4.0	1.0

# Community Investment Windham County



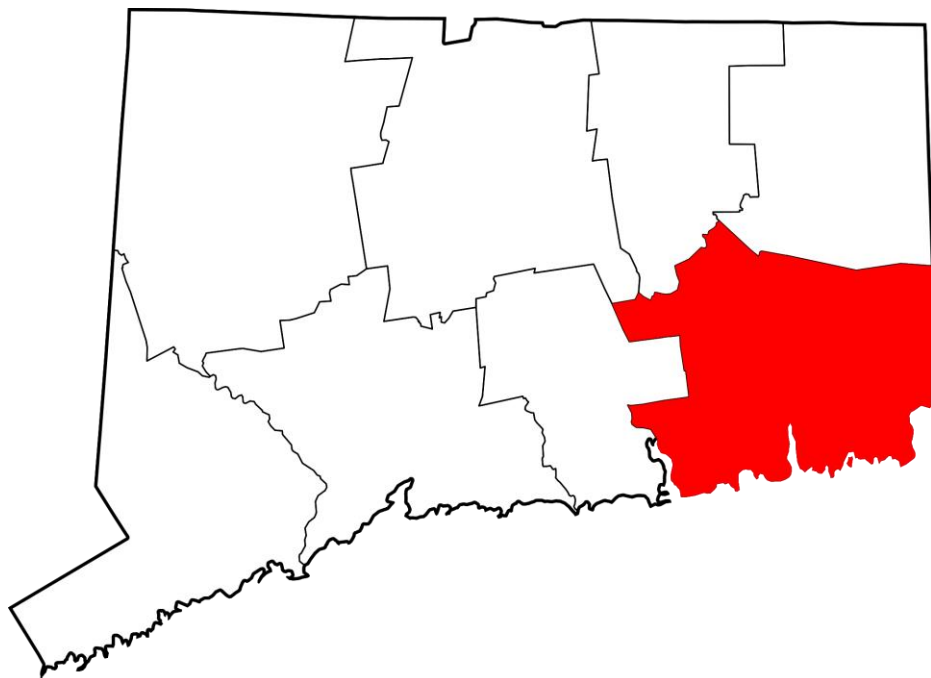
- **Investment** – \$40.0 million, \$338/capita, and \$911/household
- **Economic Development** – 378 direct and 235 indirect and induced job-years
- **Environmental Protection** – 159 MTCO<sub>2</sub>, 6.3 TCO<sub>2</sub>/capita

“Top 5” Towns	Investment (millions)	Installed Capacity (MW)
Putnam	\$4.8	1.2
Killingly	\$4.7	1.2
Plainfield	\$4.6	1.0
Windham	\$3.8	0.8
Woodstock	\$3.8	0.8

Cargill Falls in Putnam is the leading investment in the region



# Community Investment New London County



Regional investment driven by residential solar projects

- **Investment** – \$61.3 million, \$234/capita, and \$584/household
- **Economic Development** – 586 direct and 364 indirect and induced job-years
- **Environmental Protection** – 169 MTCO<sub>2</sub>, 4.2 TCO<sub>2</sub>/capita

“Top 5” Towns	Investment (millions)	Installed Capacity (MW)
Stonington	\$6.4	1.5
Montville	\$6.1	1.4
Griswold	\$6.1	1.3
Waterford	\$5.8	1.3
East Lyme	\$4.7	1.0

# Distressed Communities



Focus	Not Distressed	Distressed	Total	% Distressed
# of Towns	144	25	169	<b>15%</b>
Population	2,406,785	1,167,312	3,574,097	<b>33%</b>
Households	899,083	438,675	1,337,758	<b>33%</b>

Community Designation	# Projects	Investment (\$MM)	Investment / Capita	Installed Capacity (MW)	Watts / Capita	Job-Years	Lifetime CO <sub>2</sub> (TCO <sub>2</sub> )
Not Distressed	14,039	\$616.5	\$528	135.1	115.8	7,933	1,573,531
Distressed	4,728	\$298.1	\$124	57.0	23.7	3,655	609,933
Unknown	<u>4</u>	\$1.2	-	0.2	-	5	2,315
Total	18,771	\$915.8	\$256	192.3	53.8	11,594	2,185,779
<b>% Distressed</b>	<b>25%</b>	<b>33%</b>		<b>30%</b>		<b>32%</b>	<b>28%</b>

Working hard to attract investment  
in distressed communities!!!

**REFERENCES**

Distressed Communities as defined by the Connecticut Department of Economic and Community Development

# Area Median Income Investment and Deployment



**Investment**

Year	100% or Below AMI	Over 100% AMI	Total	100% or Below AMI
2012	\$1,901,884	\$13,087,685	\$14,989,569	13%
2013	\$79,017,723	\$32,046,769	\$111,064,486	71%
2014	\$69,598,876	\$70,553,491	\$140,152,366	50%
2015	\$113,254,360	\$222,190,050	\$335,444,411	34%
2016	\$125,461,942	\$179,261,682	\$304,723,625	41%
<b>Total</b>	<b>\$389,234,786</b>	<b>\$517,139,671</b>	<b>\$915,828,602</b>	<b>38%</b>

**Deployment**

Year	100% or Below AMI	Over 100% AMI	Total	100% or Below AMI
2012	0.4	2.5	2.9	14%
2013	16.6	6.9	23.5	71%
2014	9.5	16.6	26.1	36%
2015	17.1	48.3	65.5	26%
2016	28.1	43.3	72.1	40%
<b>Total</b>	<b>72.4</b>	<b>117.5</b>	<b>192.3</b>	<b>38%</b>

**REFERENCES**

Note – there are Unknown AMI for investment (i.e., total \$9,454,145) and deployment (i.e., total 2.4 MW). Also, Bridgeport Fuel Cell Park occurred in 2013.



# Area Median Income (cont'd)

## Deployment



**Projects**

Year	100% or Below AMI	Over 100% AMI	Total	100% or Below AMI
2012	62	355	417	15%
2013	184	934	1,118	16%
2014	649	1,773	2,422	27%
2015	1,995	4,545	6,540	31%
2016	3,209	4,925	8,134	39%
<b>Total</b>	<b>6,099</b>	<b>12,532</b>	<b>18,771</b>	<b>32%</b>

Concentrated focus for LMI sector is required to make progress. LMI programs and approaches launched in 2015 and 2016 are starting to pay off.

**REFERENCES**

Note – there are Unknown AMI for projects (i.e., total 140). Also, Bridgeport Fuel Cell Park occurred in 2013

# Community Outreach Annual Reporting to Cities and Towns



845 Brook Street, Rocky Hill, CT 06067  
T 860-563-0015  
ctgreenbank.com

November 3, 2015

The Honorable Matt Ritter  
Legislative Office Building, Rm. 3004  
Hartford, CT 06106

Dear Representative Ritter,

It is our pleasure to update you on our many efforts to grow the clean energy economy in Connecticut, especially within your own municipality. The enclosed fact sheet details these investments and accomplishments for the part of the state you represent. Please also accept a copy of our most recent annual report.

As America's first green bank, the Connecticut Green Bank (formerly the Clean Energy Finance and Investment Authority or CEFIA) continues to lead a national movement to accelerate private investment in clean energy deployment. In the process, we are helping Connecticut achieve greater economic prosperity by creating more jobs, promoting energy security and of course, addressing climate change.

As a catalyst for change, the Green Bank and its innovative programs have encouraged homeowners, companies, municipalities, and other institutions to embrace clean energy. From making renewable energy more affordable and accessible, to increasing confidence to go deeper with energy efficiency improvements, the success of Connecticut's clean energy economy is made possible only through cooperation with communities like yours. The enclosed materials demonstrate how the power of positive energy is benefiting your town with immediate energy savings.

We look forward to continuing our work with Connecticut municipalities to make energy clean, abundant and affordable.

Sincerely,

Bryan Garcia, President and CEO  
Connecticut Green Bank



## Andover 2015 Progress Report



## ACTIVATING GREEN ENERGY COMMUNITIES



### Average Impact per Community

Fiscal Year	Closed or Completed Projects	Total Cost of Projects	Green Energy Deployed (kW)	Annual Energy Saved (MMBTU)	Jobs Created	Tons of CO <sub>2</sub> Avoided (Lifetime)
2015	42	\$1.7 million	390	206	24	4,809
<b>TOTAL 2012-2015</b>	<b>69</b>	<b>\$3.2 million</b>	<b>691</b>	<b>1,564</b>	<b>48</b>	<b>8,093</b>

### Andover 2015 Green Energy Profile

Fiscal Year	Closed or Completed Projects	Total Cost of Projects	Green Energy Deployed (kW)	Annual Energy Saved (MMBTU)	Jobs Created	Tons of CO <sub>2</sub> Avoided (Lifetime)
2015	8	\$0.3 million	57	17	5	708
<b>TOTAL 2012-2015</b>	<b>16</b>	<b>\$0.5 million</b>	<b>107</b>	<b>17</b>	<b>9</b>	<b>1,736</b>

### How does Andover Compare?

- Dollars invested in clean energy per capita:

**91 of 169**

- Clean energy deployed (kW) per capita:

**28 of 169**

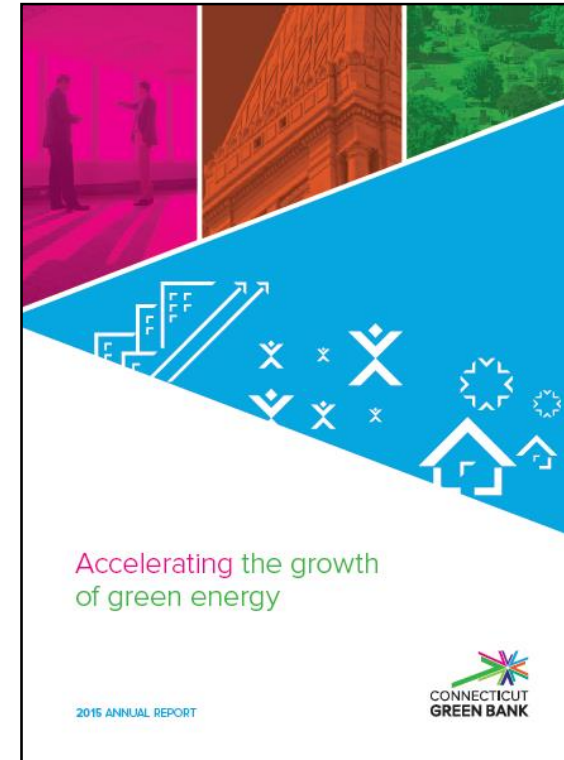
### A Bright Future for Green Energy in Connecticut

Connecticut Green Bank is sparking a green energy movement. We will continue to introduce more program innovations and initiatives in 2016 for local communities to help more people and businesses thrive with green energy.

- Multifamily and low income housing programs for solar and energy efficiency will activate to ensure that green energy opportunities are affordable and accessible to all residents.
- Innovative Green Bonds will be issued to facilitate the development of green energy improvements for state-owned facilities and institutions.
- C-FACE and Smart-E, our commercial and residential loan programs, will continue to leverage more private capital to accelerate the growth of clean energy throughout Connecticut.

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300 Main Street, 4th Floor, Stamford, CT 06901  
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# Public-Private Partnerships

## Connecticut Green Bank

# Public-Private Partnerships Investment Transactions



**\$6 MM**  
CLOSED  
6:1

Residential Solar

**\$75 MM**  
CLOSED  
7.5:1

Residential Solar  
Commercial Solar

**\$30 MM**  
CLOSED  
4:1

Commercial Energy

**\$30 MM**  
OPEN  
10:1<sup>1</sup>

Residential Energy

**\$20 MM**  
OPEN  
4:1

Residential Solar

**\$50-100 MM**  
OPEN  
9:1

Commercial Energy

**\$10 MM**  
OPEN  
5:1.3<sup>2</sup>

Multifamily Energy

**\$60+ MM**  
CLOSING  
6:1<sup>3</sup>

Commercial Solar

**\$3 MM**  
CLOSING  
100%<sup>4</sup>

Residential Storage  
Commercial Storage

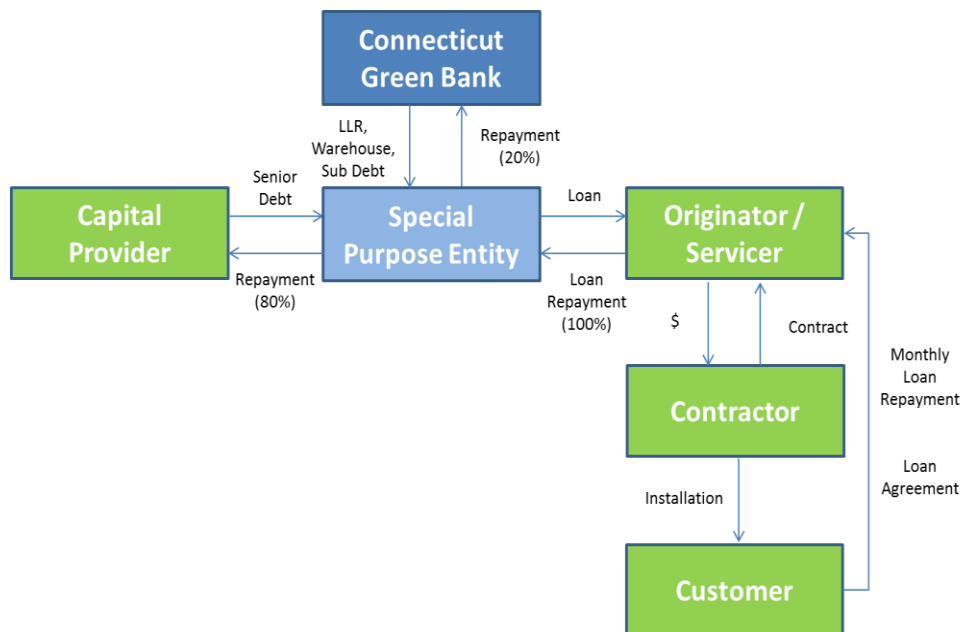
**\$10 MM**  
IN PROCESS  
100%<sup>4</sup>

Connecticut  
Green Bank

## REFERENCES

1. LLR yields high leverage – and it is 2<sup>nd</sup> loss and thus with no to low defaults, we haven't used to date. IRB's not considered in the leverage ratio.
2. Foundation PRI is to HDF is guaranteed by the CGB in the case of MacArthur Foundation.
3. Onyx Partnership has no upper limit and CGB currently has authorization to commit up to \$15mm . The team expects to commit \$5mm for the first \$60-70mm.
4. Foundation PRI and commercial loan are backed by CGB balance sheet in the case of the Kresge Foundation and Bank of America respectively.

# CT Solar Loan \$6 Million Partnership



- **Description** – residential solar loan product developed with Sungage Financial that uses credit enhancement (i.e., \$300,000 LLR) in combination with \$5 million warehouse of funds and \$1 million subordinated debt from CGB. Provided up to \$55,000 per loan with 15-year maturity terms and affordable 6.49% interest rates (including 0.25% ACH benefit)

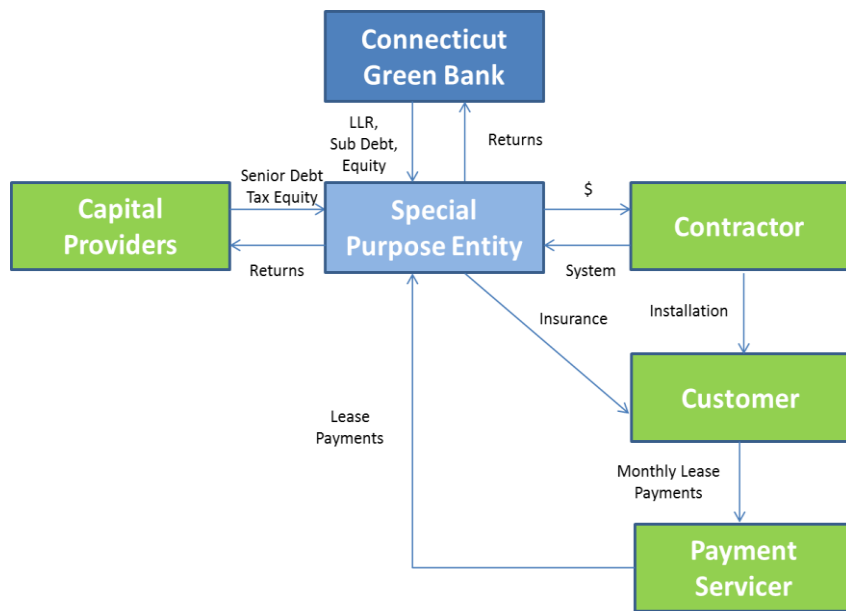
## Investment Return

- - Sell Down – \$1.0 MM Solar Mosaic, \$2.6 MM TRF
  - Expected ROI – 6.49%. Greater than 75% of principal returned (50bps spread on remaining capital)
  - Performance – 0 defaults and 5 delinquencies
  - Other – exit resulted in \$100 MM commitment to Sungage by Digital Federal Credit Union

## Impact

- - Customers – served 279 projects and 2.2 MW of deployment for following credit scores:
    - ❑ 680-699 – 11 (3.9%)
    - ❑ 700-719 – 15 (5.4%)
    - ❑ 720+ – 253 (90.7%)
  - Contractors – provided 19 contractors with an important sales tool

# CT Solar Lease \$75 MM Partnership



- **Description** – residential and commercial solar lease product developed with tax equity investor (i.e., US Bank) and syndicate of local lenders (i.e., Key Bank and Webster Bank) using a credit enhancement (i.e., \$3.5 MM LLR) in combination with \$2.3 million in sub-debt and \$4.2 MM in sponsor equity from CGB.

- **Investment Return**

- Expected ROI – 2-3%
- Performance – 0 defaults and 2 delinquencies
- Other – won CESA SLICE Award

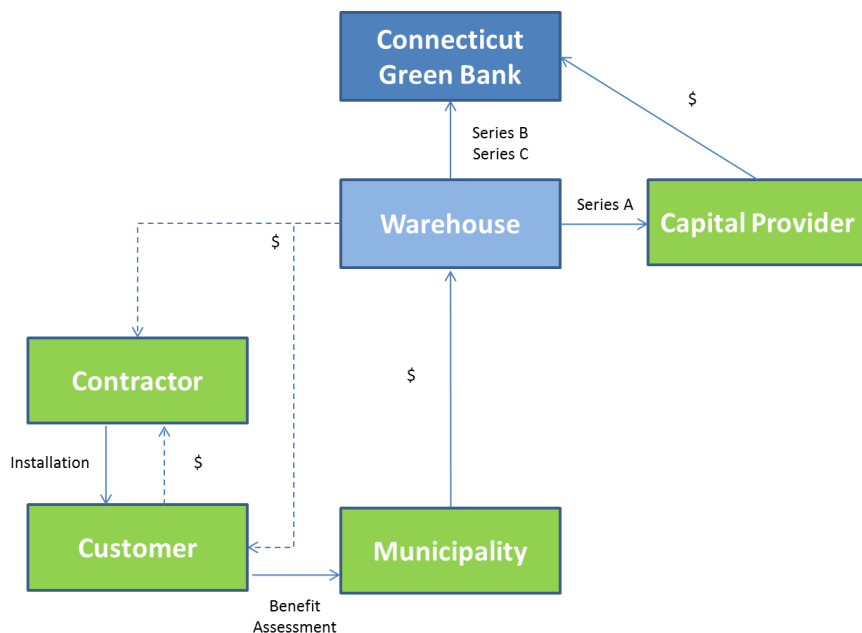
- **Impact**

- Residential Customers – served 1,192 projects and 9.6 MW of deployment for following credit scores:
 

❑ Below 640 – 1 (0.1%)	❑ 700-719 – 78 (6.5%)
❑ 640-679 – 45 (3.8%)	❑ 720+ – 1,029 (86.3%)
❑ 680-699 – 39 (3.3%)	
- Commercial Customers – served 36 projects and 7.5 MW of deployment
- Contractors – provided 20 residential and 11 commercial contractors with an important sales tool

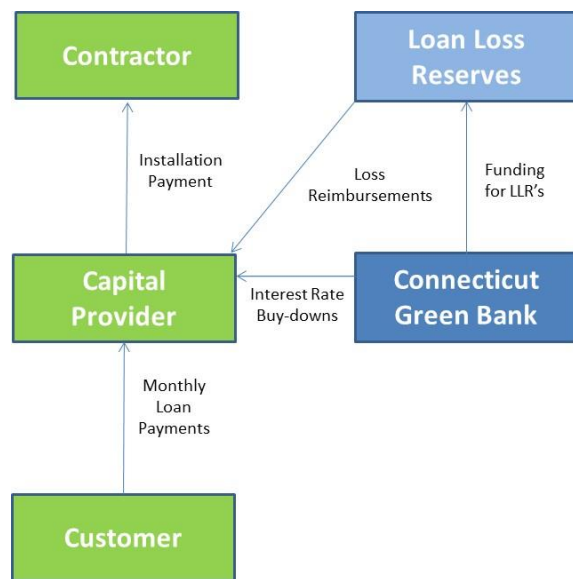
# C-PACE

## \$30 MM and \$100 Partnerships



- **Description** – CI&I product that uses a benefit assessment to provide access to affordable (i.e., up to 6.5%) and long-term (i.e., up to 25 years) debt for clean energy improvements.
- **Investment Return**
  - Expected ROI:
    - Clean Fund – 5.42%
    - HAC-PACE – 10-12%
  - Performance – 0 defaults and 3 delinquencies
  - Other – 32 unique banks and 5 specialized lending institutions have approved consent of benefit assessment to be senior to their mortgage
- **Impact**
  - Customers – served 114 projects, 15.7 MW of deployment, and \$72.5 MM in loans to date
  - Contractors – provided 50 contractors with an important sales tool
  - Capital Providers – 1<sup>st</sup> securitization (i.e., \$30 MM with Clean Fund) and \$100 MM public-private partnership with Hannon Armstrong

# Smart-E Loan \$30 MM Partnership



- **Description** – residential clean energy loan product developed with local community banks and credit unions by using a credit enhancement (i.e., \$1.8 MM 2<sup>nd</sup> LLR) to attract affordable unsecured rates with long-term maturities (i.e., up to 12 years). IRB's being used to further lower interest rates for special product offers (i.e., RTT, Solar + EE, etc.)

## Investment Return

- Expected ROI – NA
- No 2<sup>nd</sup> LLR reimbursement to date
- Leverage ratio of 10:1
- Performance – 2 defaults (i.e., \$51,127) and 0 delinquencies
- Other – lenders are competing to increase the maximum allowable loan amount per project

## Impact

- Customers – served 737 projects, 2.8 MW of deployment and \$13.0 MM in loans to date for following credit scores:
 

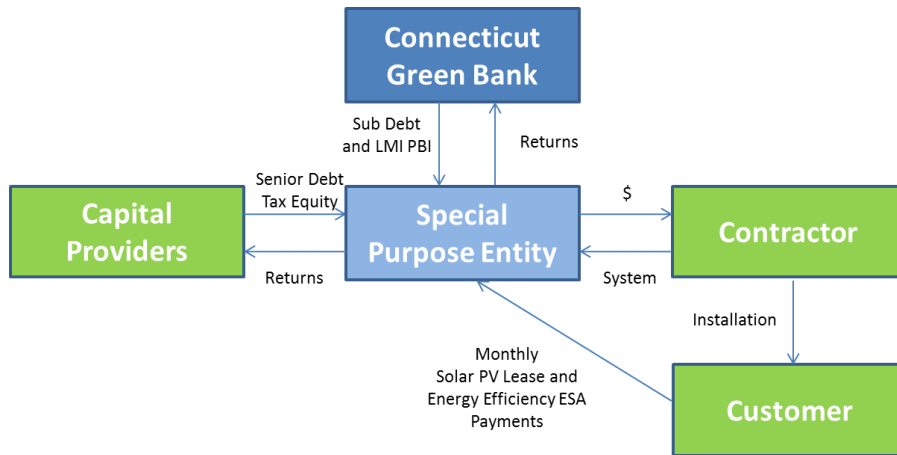
<input type="checkbox"/> Below 640 – 26 (3.4%)	<input type="checkbox"/> 700-719 – 65 (8.8%)
<input type="checkbox"/> 640-679 – 75 (10.2%)	<input type="checkbox"/> 720+ – 501 (68.0%)
<input type="checkbox"/> 680-699 – 45 (6.1%)	<input type="checkbox"/> Unknown – 25 (3.4%)
- Contractors – provided 300+ contractors with an important sales tool
- Capital Providers – 11 local lenders in the program, including CDFI for credit-challenged/580+ FICO





# PosiGen

## \$20 MM Partnership



- **Description** – residential low-to-moderate income solar lease and energy efficiency ESA product developed with PosiGen which includes tax equity investor (i.e., US Bank) and local senior debt lender (i.e., Enhanced Capital) using sub-debt (i.e., \$5.0 MM with option to expand to \$10.0 MM)

- **Investment Return**

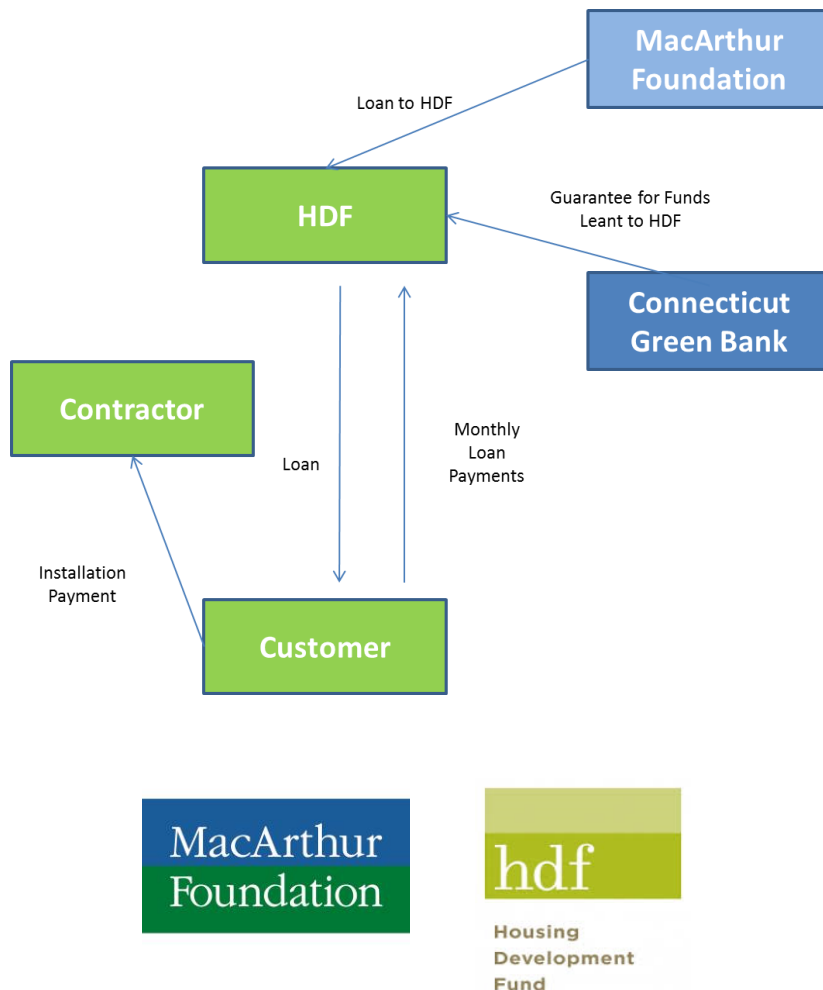
- Expected ROI – 5%
- Performance – 0 defaults and 4 delinquencies
- Other – opportunity for further financial innovation on the ESA

- **Impact**

- Customers – 508 projects and 3.3 MW of deployment
- 100% of customers getting basic EE (via Home Energy Solutions)
- Over 65% of customers also signed up for the energy efficiency ESA

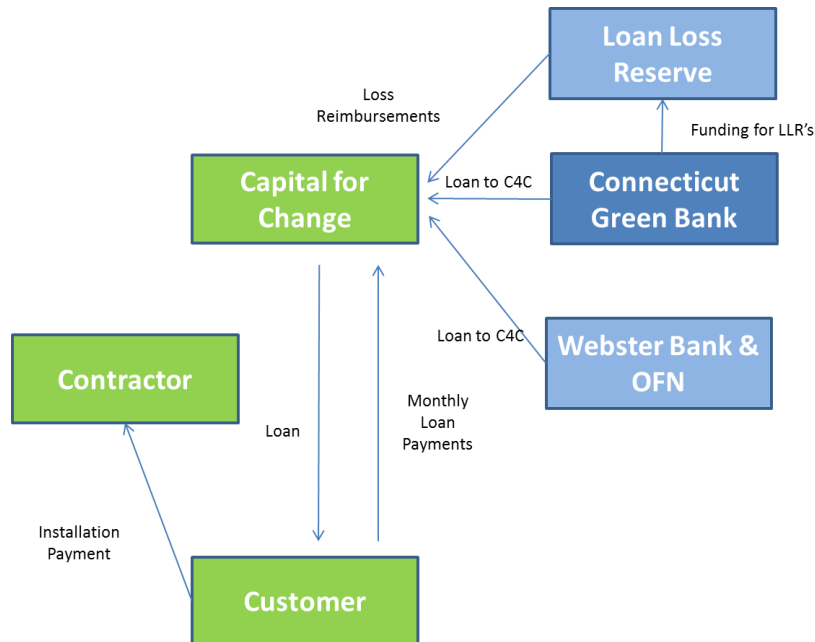


# MacArthur Foundation \$5MM Partnership with HDF



- **Description** – \$5 MM MacArthur Foundation program related investment to the Housing Development Fund using a 100% guarantee from us to support affordable multifamily pre-development loans and flexible gap financing and health & safety term loans.
- **Investment Return**
  - Expected ROI – N/A
  - 100% guarantee, no draw to date
  - Performance – 0 draws on guarantee to date
  - Other – fills critical affordable housing need for up-front technical assistance and flexibility on term financing to bring down overall rate or finance other repairs related to energy work (e.g. health and safety)
- **Impact**
  - Customers – served 2 predevelopment projects totaling \$ 86K in loans to date

# Capital for Change \$5 MM Partnership



CAPITAL  
FOR CHANGE

- **Description** – Low Income Multifamily Energy (LIME) Loan developed with Capital for Change to provide unsecured financing at affordable rates (i.e., 5-6%) and longer terms (i.e., up to 20 years) for clean energy improvements; includes our capitalization (\$1 MM) and credit enhancement (\$300K loss reserve).
- **Investment Return**
  - Expected ROI – 3%
  - Performance – 0 defaults or delinquencies
  - Other – fills critical need for mid-cycle financing on affordable multifamily properties with complex covenants and flexibility to finance other repairs that cash flow with energy savings (e.g. health and safety)
- **Impact**
  - Customers – served 16 projects, 1.4 MW of deployment, and \$5 MM in loans to date
  - Contractors – provided 12 contractors with an important sales tool

# Resilience Product Kresge Foundation



**KRESGE COMMUNITY FINANCE**

SOCIAL INVESTMENT PRACTICE

- **Description** – \$3 MM Kresge Foundation program related investment to the Connecticut Green Bank to support deployment of resilient renewable energy projects (e.g. includes energy storage) in urban and coastal communities
  
- **Investment Return**
  - Program Related Investment (Loan) to Green Bank for 10 years at 2% interest
  - Green Bank ROI to be determined
  - Other: low cost capital to develop a financing model for an emerging technology
  
- **Impact**
  - Customers – aim to fund 13 to 18 projects at affordable multifamily, community/critical facilities, and local businesses acting as community hubs with initial focus on the Greater Bridgeport, New Haven and Hartford regions



# Memo

**To:** Connecticut Green Bank Board of Directors  
**From:** Bryan Garcia, Ben Healey, Bert Hunter, and Eric Shrago  
**Date:** January 5, 2016  
**Re:** Strategic Retreat Issue #2 – Financial Position of the Connecticut Green Bank; Leveraging Resources for Public-Private Partnerships and Sustainability: Emerging Opportunities with Bank of America

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## SITUATION

The Connecticut Green Bank (Green Bank) has a strong balance sheet with \$131,800,539 in assets, \$18,239,265 in liabilities, and a net position of \$116,136,641 as of November 30, 2016. How the Green Bank uses its financial resources to pursue a strategy of organizational sustainability presents an opportunity for consideration.

Following the Plenary Session at the ACEEE Finance Forum<sup>1</sup> on “The Green Bank Movement: Public-Private Partnerships to Accelerate Efficiency,” Dan Letendre, the CDFI Lending & Investing Executive for Bank of America (BoFA) said “the Bank of America should be lending to green banks!” Hearing that, the team of the Green Bank connected with Mr. Letendre and subsequently scheduled a meeting in mid-August in NYC with him and Amy Brusiloff, Senior Vice President and internal liaison between CDFI Lending & Investing and the Catalytic Finance Initiative.<sup>2</sup> At this meeting, BoFA expressed a desire to lend to the the Green Bank. Over the past few months, the Green Bank team has been liaising with the BoFA CDFI team to establish a lending relationship. We expect to be able to bring a transaction to the board of Directors for approval later this month where the Green Bank will borrow from BoFA unsecured for 10 years at low interest rates.

This desire by BoFA to channel funds to Green Banks is consistent with its commitments to address climate change issues and to assist in the transition to a sustainable and low-carbon future. This initiative also builds on BoFA’s goal to deploy \$125 billion in sustainable and low-carbon business by 2025 to address climate change and demands on natural resources.<sup>3</sup>

It is evident that the Green Bank leadership with the green bank movement, its demonstrated public-private partnership success with financial products, and its “best in class” leadership team made a positive impression on executives from BoFA. This was a milestone moment for the Green Bank whereby a leading commercial bank was asking us what terms we would request from them to enable a public-private partnership between BoFA and the Green Bank. At a follow-on call with BoFA

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<sup>1</sup> 2016 Energy Efficiency Finance Forum “Achieving Deep Energy Efficiency” was held in Newport, RI on May 22-24, 2016.

<sup>2</sup> \$10 billion initiative to accelerate clean energy investment that reduce carbon emissions.

<sup>3</sup> <http://newsroom.bankofamerica.com/press-releases/environment/bank-america-commits-carbon-neutrality-and-100-percent-renewable-electric>

in early October, they expressed an interest in the Green Bank being the first BofA green bank client – as they expect to invest in domestic and international green banks in 2017.

## COMPLICATION

There are a number of complications for the CGB with respect to using its balance sheet to receive a low-interest and long-term loan from BofA, including:

- **Unique Opportunity** – outside of our partnerships with philanthropic foundations (i.e., MacArthur Foundation loan guaranty and Kresge Foundation program related investment), this is a unique opportunity whereby a for-profit commercial bank has approached us to lend us funds at below market rates in support of our mission;
- **Strategic Selection** – per our Operating Procedures, there are certain circumstances where a strategic selection and award clearly outweigh the general public interest in an open and public process based on certain characteristics of a transaction; and
- **Legislative Diversion of Funds** – despite having worked hard to build a strong balance sheet that would attract potential investors such as BofA, there is always the risk of the legislature diverting funds away from the Green Bank to address a revenue shortfall in the General Fund, particularly as stress on the State’s fiscal situation intensifies.

As the Green Bank continues to make progress accelerating the deployment of clean energy in Connecticut through public-private partnerships and a line of successful financing products, there is always the threat of state raids on its balance sheet.<sup>4, 5</sup>

Despite these complications, this is a unique situation that presents the CGB with an opportunity to deliver on our vision:

*“To lead the green bank movement by accelerating private capital investment in clean energy deployment for Connecticut to achieve economic prosperity, create jobs, promote energy security and address climate change.”*

This first-of-its-kind public-private partnership for clean energy finance to address climate change with BofA would also serve to elevate the national (and international) conversation on green banks.

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## NEXT STEPS

To be discussed at the Strategic Retreat.

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<sup>4</sup> “Budget Robs Green Bank” by Jan Ellen Spiegel of the CT Mirror (June 5, 2013)

<sup>5</sup> “Green Bank Raid Upsets Business, Environmental Communities” by Jan Ellen Spiegel of the CT Mirror (May 2, 2016)



# Memo

**To:** Connecticut Green Bank Board of Directors  
**From:** Bryan Garcia, George Bellas, Bert Hunter, and Eric Shrago  
**Date:** January 5, 2016  
**Re:** Strategic Retreat Issue #3 – Financial Position of the Connecticut Green Bank – Protecting Resources from Transfer to the General Fund: Strategies and Communications

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## SITUATION

The Connecticut Green Bank (Green Bank) has a strong balance sheet with \$131,800,539 in assets, \$18,239,265 in liabilities, and a net position of \$116,136,641 as of November 30, 2016.<sup>1</sup> The Green Bank has an operating budget of \$20,508,815 for FY 2017 that covers program expenses and general operations and seeks to invest \$43,259,581 in clean energy deployment through its financing programs. The organization is budgeted to recognize \$39,887,689 in revenue from various sources this fiscal year, including financial returns on its portfolio of loans and investments. Revenue for the Green Bank primarily comes from rate payers in the state in the form of a system benefit charge on rate payers' bills. This \$26,704,434 constitutes 67% of budgeted FY 2017 revenues. The Green Bank also received revenue from quarterly auctions for cap-and-trade allowances held by the Regional Greenhouse Gas Initiative (RGGI), which for FY2017 the Green Bank budgeted \$4,105,350 or 10% of total revenues. Interest income from portfolio investments and revenues from the sale of RECs provide the majority of the balance of budgeted revenues.

The current representation of the balance sheet does not reflect all of the organization's financial commitments that have been approved by the Board of Directors. The Green Bank has committed to fund \$86,103,000 in projects through incentives and loans. The organization has guaranteed the obligations of third-party issuers up to a maximum of \$19,552,000 as of November 30, 2016. - see Summary of Unfunded Commitments and Loan Guarantees (page 10-11).

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## COMPLICATION

The revenues anticipated to be received and the strength of our balance sheet for the organization are at risk of being repurposed by the Legislature to close a gap in the state's budget.<sup>2</sup> Presently, there is a \$1.3 Billion budget deficit in Connecticut for the fiscal year commencing July 1, 2017 and if history serves as a guide, the legislature will look to the Green Bank as a source of funds (see Table 1):

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<sup>1</sup> Note: "Net Position" is not equal to "Assets" less "Liabilities" due to the need for GASB purposes to account for "Deferred Outflows and Inflows of Resources"

<sup>2</sup> <http://www.nhregister.com/general-news/20161204/green-bank-hopes-connecticut-lawyers-wont-dip-into-its-clean-energy-funds>

**Table 1. Transfer of Resources from the Connecticut Green Bank to the General Fund**

<b>Fiscal Year</b>	<b>Balance Sheet Re-appropriation</b>	<b>Revenue Re-appropriation</b>	<b>Bond Authorizations</b>
2014	\$6,200,000	-	-
2015	\$19,200,000	-	-
2016	-	\$750,000	\$10,500,000
Total	\$25,400,000 <sup>3</sup>	\$750,000	\$10,500,000

Since FY 2014, the Connecticut Green Bank has transferred over \$26,000,000 in cash to the General Fund and cancelled the authorization of over \$10,000,000 in bond funds.

Given the challenges of GAAP not truly reflecting the financial position of the organization on its balance sheet, the Green Bank needs to better reflect our future assets and liabilities in a way that will help us better communicate the true status of our resources during this legislative session, otherwise we risk the legislature diverting more resources to the General Fund than are actually available.

We have identified the following possible ways to achieve a more accurate presentation of our financial position, including:

- Reflect future liabilities:** The Green Bank would reflect the future liabilities on its balance sheet thus reducing our net position. We have discussed this matter with our current audit firm and provide updates at the retreat.
- **A Third Party Commitment:** The Green Bank would establish a legal commitment to a third party thus restricting the cash assets of the organization. This would acknowledge certain commitments (e.g., PBI payments on the RSIP) and force the organization to fund these commitments in the present. This could take the form of restricted cash on the balance sheet. Designating cash resources as “restricted” is a process that would require an act or actions by the Green Bank’s Board of Directors as well as compliance with GAAP and GASB accounting standards that establish what cash resources are to be accounted for as “restricted”. Alternatively, the Green Bank could establish an external trust with the purpose of paying these future commitments. In this scenario, the Green Bank, working with internal and external counsel and a trustee at one of our financial partners could establish a separate legal entity, independent of the Green Bank in the form of a trust with the established responsibility of honoring specific commitments in the future as set forth in a trust agreement with the Green Bank. The Green Bank would fund the trust both initially by reallocating unrestricted cash from its balance sheet to the trust and through ongoing contributions to the trust to meet its commitments. By locking funds in this trust, future commitments would be guaranteed to be paid. Of concern would be the fact that once committed to the trust, the funds would be under the control of the trustee(s) with responsibility for managing the corpus of the trust until the commitments of the trust have been completely satisfied (at which point at some future date any residual in the trust could be structured to return to the Green Bank). Additionally, the Legislature will likely have the ability to unwind such transaction if it so chooses.

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<sup>3</sup> It should be noted that all but approximately \$1 million was returned to the Connecticut Green Bank through a reallocation of RGGI allowance proceeds for energy efficiency.



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**NEXT STEPS**

To be discussed at the Strategic Retreat.