Connecticut Green Bank
Unlocking Capital for Climate Solutions

Environmental and Energy Study Institute
June 8, 2021
Connecticut Green Bank
About Us

- **Quasi-public organization** – broad enabling statute and powers set forth in Conn. General Statute 16-245n

- **Focus** – Finance clean energy (e.g., renewable energy, energy efficiency, and alternative fuel vehicles and infrastructure) by leveraging public capital with multiples of private capital

- **Support** – from a variety of sources, including:
  - **State Support** – $0.001/kWh surcharge (i.e., Clean Energy Fund) on electric ratepayer bills (about $7-$10 per household per year ≈ $25 MM per year) and RGGI allowance proceeds about $3-5 MM per year (renewable energy)
  - **Federal Support** – competitive solicitations (e.g., SunShot, SEEDS), non-competitive resources (e.g., ARRA-SEP, etc.), and maybe Accelerator
  - **Other Support** – issue “green bonds,” interest income, and foundations (e.g., PRI’s)
Connecticut Green Bank
Mission Statement and Goals

**Confront climate change** and provide all of society a healthier and more prosperous future by **increasing and accelerating the flow of private capital** into markets that energize the green economy.

1. Leverage limited public resources to scale-up and **mobilize private capital investment** in the green economy of Connecticut.

2. Strengthen Connecticut’s communities, **especially vulnerable communities**, by making the benefits of the green economy inclusive and accessible to all individuals, families, and businesses.

3. Pursue investment strategies that **advance market transformation in green investing** while supporting the organization’s pursuit of financial sustainability.
Green Bank Model
Reduce Costs – Increase Customer Demand

**BEFORE**

| Energy Bill |

**AFTER**

| Clean Energy Project Financing Payment |
| Energy Bill |

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**Net Savings**

- Cheaper
- Cleaner
- Resilient
- Healthier

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**REFERENCE**
Definition provided by the Coalition for Green Capital and adapted by the Connecticut Green Bank
Green Bank Model
Reduce Risk – Increase Supply of Private Capital

1. Capitalization of Green Bank
2. Innovative financing structures
3. Private investment flows

Clean Energy Fund/RGGI

Connecticut Green Bank

Clean Energy Projects (Families, Businesses & Government)

Financial Return

Public Investment ($1.00)

Private Investment ($6.60)

Financial Return

Social & Environmental Return
Connecticut Green Bank
Impact Investment – Social and Environmental

INVESTMENT

$294 MM

$1.65 B

ECONOMIC DEVELOPMENT

23,387 direct, indirect, and induced job-years

ENVIRONMENTAL PROTECTION

8.9 million tons of CO₂ which equals

134 million tree seedlings grown for 10 years or

1.7 million passenger vehicles driven for one year

TAX REVENUES

$47.8 MM
individual income tax

$24.7 MM
corporate taxes

$24.2 MM
sales taxes

ENERGY BURDEN REDUCED

families 55,000+

businesses 375+

PUBLIC HEALTH SAVINGS

$232 to $525 million of public health value created

REFERENCES
Comprehensive Annual Financial Report for FY2020 (p. 110)
Public-Private Partnerships

>$800 Million\(^1\) in Private Capital Raised (5 Years)

<table>
<thead>
<tr>
<th>Amount</th>
<th>Status</th>
<th>Leverage</th>
<th>Technology</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$80 MM</td>
<td>CLOSED</td>
<td>15:1</td>
<td>Residential Solar &amp; Energy Efficiency</td>
<td>Grid-Tied</td>
</tr>
<tr>
<td>$60 MM</td>
<td>CLOSED</td>
<td>4:1</td>
<td>Residential Solar</td>
<td>fuelcellenergy</td>
</tr>
<tr>
<td>$105 MM</td>
<td>CLOSED</td>
<td>7.5:1</td>
<td>Residential Solar</td>
<td>PosiGen Solar Solutions</td>
</tr>
<tr>
<td>$30 MM</td>
<td>CLOSED</td>
<td>4:1</td>
<td>C-PACE</td>
<td>usbank</td>
</tr>
<tr>
<td>$60 MM</td>
<td>OPEN</td>
<td>17:1(^2)</td>
<td>Residential Energy</td>
<td>smart-eloan energize connecticut</td>
</tr>
<tr>
<td>$100 MM</td>
<td>OPEN</td>
<td>5:1</td>
<td>Residential Solar</td>
<td>INCLUSIVE PROSPERITY CAPITAL</td>
</tr>
<tr>
<td>$50-100 MM</td>
<td>CLOSED</td>
<td>9:1</td>
<td>C-PACE</td>
<td>HANNON ARMSTRONG</td>
</tr>
<tr>
<td>$60+ MM</td>
<td>CLOSED</td>
<td>6:1(^3)</td>
<td>Commercial Solar</td>
<td>ONYX</td>
</tr>
<tr>
<td>$77 MM</td>
<td>PROJECT FINANCE</td>
<td>8:1</td>
<td>Residential Solar &amp; Energy Efficiency</td>
<td>fuelcellenergy</td>
</tr>
<tr>
<td>$40 MM</td>
<td>CLOSED</td>
<td>100%</td>
<td>CT Green Bank</td>
<td><a href="http://www.libertybank.com">www.libertybank.com</a></td>
</tr>
<tr>
<td>$67 MM</td>
<td>Open</td>
<td>10:1</td>
<td>Small Business</td>
<td>EVERSURCE ENERGY</td>
</tr>
<tr>
<td>$17 MM</td>
<td>CLOSED</td>
<td></td>
<td>CT Green Bank</td>
<td>ramirez</td>
</tr>
</tbody>
</table>

**REFERENCES**

1. Several transactions such as small hydro, wind, microgrid, CHP and anaerobic digestors not represented on slide
2. LLR of $3.3 MM yields high leverage – and it is 2\(^{nd}\) loss and thus with no to low defaults (i.e., 10 loans out of 3,447 have defaulted as of 12/31/18 with $22K in LLR).
   IRB’s using ARRA-SEP not considered in the leverage ratio.
# Energy Infrastructure

## Residential Solar PV and Energy Efficiency Lease

<table>
<thead>
<tr>
<th>Market Segment</th>
<th>Residential Single Family LMI (Co-Investment)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Summary</strong></td>
<td>Solar lease + energy efficiency package (fixed 20 years) to reduce energy burden with alternative underwrite/no credit score using community based marketing approach</td>
</tr>
</tbody>
</table>
| **Support Needed**   | ▪ Good solar economics including tiered LMI incentive  
 ▪ Municipal, community and nonprofit introductions  
 ▪ Subordinated debt capital – if available, but not required |
| **CT Results**       | 3,328 leases for $91.8 MM investment, 21.9 MW, 99.9% get EE (HES), 63% ESA, and reached 75% LMI |

**REFERENCES**
Comprehensive Annual Financial Report FY 2020
# Waste Infrastructure

## Food Waste to Energy AD Project

<table>
<thead>
<tr>
<th>Market Segment</th>
<th>Project Finance (Co-Investment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Summary</td>
<td>Provided long-term subordinated debt (i.e., 15 years) at low interest rate (i.e., 2%) for 20% of the capital structure to finance the 1\textsuperscript{st} AD project of its kind in CT</td>
</tr>
</tbody>
</table>
| Support Needed | ▪ Links to food waste collection policy (PA 11-127)  
▪ Attracted local lender as a senior debt provider (i.e., Peoples Bank) along with equity and tax equity |
| CT Results | $10 MM project, 1 MW, diverts organic materials from waste stream while producing renewable energy |
## Water Infrastructure
### New England Hydropower

<table>
<thead>
<tr>
<th>Market Segment</th>
<th>Virtual Net Metering – Municipality (Investment)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Summary</strong></td>
<td>Long-term PPA (i.e., 30+ years) for behind the meter (VNM) for this run-of-the-river hydro facility in Meriden – first of its kind in the U.S.</td>
</tr>
</tbody>
</table>
| **Support Needed**   | ▪ Project finance  
▪ Support for start-up developer using European technology  
▪ Working capital (Webster Bank), construction financing (Key Bank), and green bonds (BAML) |
| **CT Results**       | $3 MM investment using federal CREBs and 193 kW hydro project |
Green Liberty Bonds
Celebrating the 50th Anniversary of Earth Day
Connecticut Green Bank
Vision Statement

…a planet protected by the love of humanity

REFERENCES
Vision Statement inspired by the Innovations in American Government Awards at the Ash Center of Harvard University’s Kennedy School of Government, Mayor Muriel Bowser of Washington, DC, Maya Angelou’s “On the Pulse of Morning,” and the powerful words of Mary Evelyn Tucker on “inclusive capitalism”.

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Thank You
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