



Empowering you to make  
smart energy choices

Clean Energy Finance and Investment Authority

**C-PACE:**

A Financing Tool to Make Your Project Happen

Connecticut Power and Energy Society

September 11, 2013

# Connecticut's “Green Bank”

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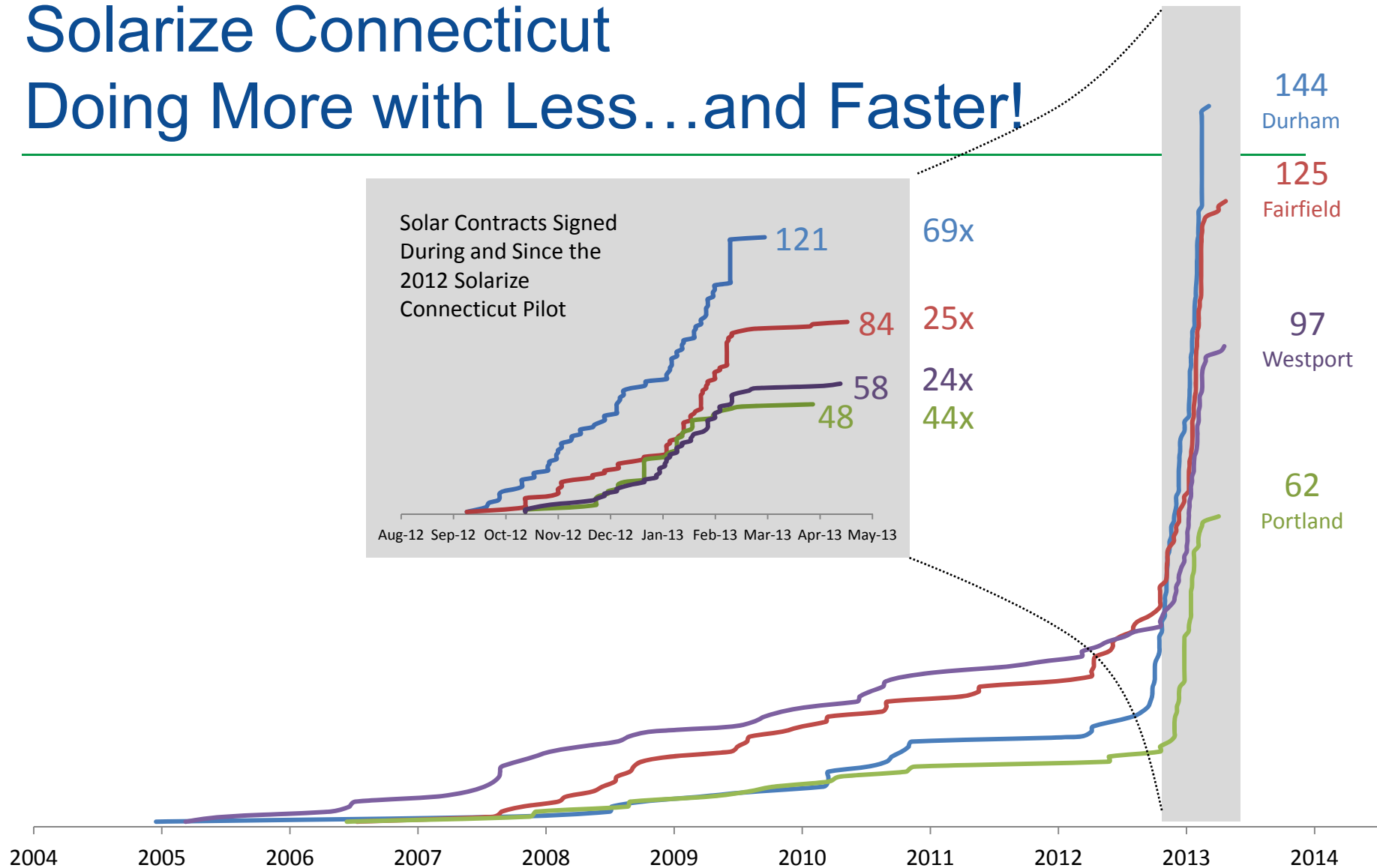
...transitioning programs away from government-funded grants, rebates, and other subsidies, and towards deploying private capital

...CEFIA was established in 2011 to develop programs that will leverage private sector capital to create long-term, sustainable financing for energy efficiency and clean energy to support residential, commercial, and industrial sector implementation of energy efficiency and clean energy measures.



# Solarize Connecticut

## Doing More with Less...and Faster!



#### REFERENCES

Graphic created by Ken Gillingham, Assistant Professor at Yale University School of Forestry and Environmental Studies (2013)

# Property Assessed Clean Energy

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- An innovative financing structure that enables commercial, industrial, and multi-family property owners to access financing for qualified energy upgrades and repay through a benefit assessment on their property tax.

Private capital  
provides 100%  
upfront, low-cost,  
long-term funding

Repayment through  
property taxes

A senior PACE lien is  
put on the property  
and stays regardless  
of ownership

# Municipalities Opted into C-PACE

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- |                |                 |                  |                 |
|----------------|-----------------|------------------|-----------------|
| ▪ Avon         | ▪ East Haddam   | ▪ Newtown        | ▪ Waterbury     |
| ▪ Beacon Falls | ▪ East Hampton  | ▪ North Branford | ▪ Waterford     |
| ▪ Berlin       | ▪ East Hartford | ▪ Norwalk        | ▪ West Hartford |
| ▪ Bloomfield   | ▪ Glastonbury   | ▪ Old Saybrook   | ▪ Westbrook     |
| ▪ Branford     | ▪ Greenwich     | ▪ Plainville     | ▪ Westport      |
| ▪ Bridgeport   | ▪ Hartford      | ▪ Putnam         | ▪ Wethersfield  |
| ▪ Brookfield   | ▪ Killingworth  | ▪ Simsbury       | ▪ Wilton        |
| ▪ Canaan       | ▪ Manchester    | ▪ Southbury      | ▪ Windham       |
| ▪ Canton       | ▪ Mansfield     | ▪ Southington    | ▪ Windsor       |
| ▪ Chester      | ▪ Meriden       | ▪ Stamford       | ▪ Windsor Locks |
| ▪ Clinton      | ▪ Middletown    | ▪ Stratford      | ▪ Vernon        |
| ▪ Coventry     | ▪ Milford       | ▪ Suffield       |                 |
| ▪ Danbury      | ▪ New Britain   | ▪ Tolland        |                 |
| ▪ Durham       | ▪ New London    | ▪ Torrington     |                 |
| ▪ East Granby  | ▪ New Milford   | ▪ Trumbull       |                 |

**63% of the C&I  
Market is “Open  
for Business”**

# Project Eligibility

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**Anything that saves energy from baseline** ... *as long as it isn't going anywhere*

- High efficiency lighting
- HVAC upgrades
- New automated building and HVAC controls
- Variable speed drives (VSDs) on motors fans and pumps
- High efficiency chillers, boilers, and furnaces
- High efficiency hot water heating systems
- Combustion and burner upgrades
- Fuel switching
- Water conservation
- Heat recovery and steam traps
- Building enclosure/envelope improvements
- BMS
- Renewable energy systems

# 855 Main Street (Bridgeport)

## Case Study – Deep Energy Efficiency

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### Project

- \$1,990,000 in energy efficiency financed (after \$469,024 in CEEF incentives), ranging from the installation of variable frequency drives to chiller replacements to new energy efficient windows to new cooling towers.

### Financing

- Save owners \$258,563 per year versus \$195,411 in annual C-PACE assessment.

### Impact

- Over 1,366,000 kWh saved a year – over 60%
- 36,240 therms saved a year – over 70%



# 100 Roscommon (Middletown)

## Case Study – Energy Efficiency and Renewables

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### Project

- \$2,535,766 in energy efficiency and renewable energy financed (after \$277,906 in CEEF incentives) including the installation of air units, variable frequency drives, high efficiency lights, occupancy sensors, air leakage improvements, an upgraded energy management system, and a 260 kW ground-mounted photovoltaic system.

### Financing

- Energy savings of \$224,272 annually – of which about \$33,000 is ZREC revenue – with a C-PACE benefit assessment of \$189,953

### Impact

- Nearly 1,100,000 kWh saved a year – over 85%
- 269 mmBTU saved a year – about 30%



# Bushnell Center (Hartford)

## Case Study – Boiler Replacement at Non-Profit

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### Project

- \$650,000 boiler replacement

### Financing

- \$384,000 of replacement financed through 20 year C-PACE assessment.
- \$250,000 covered with grant from Department of Economic and Community Development.

### Impact

- Annual savings of \$48,000



# C-PACE

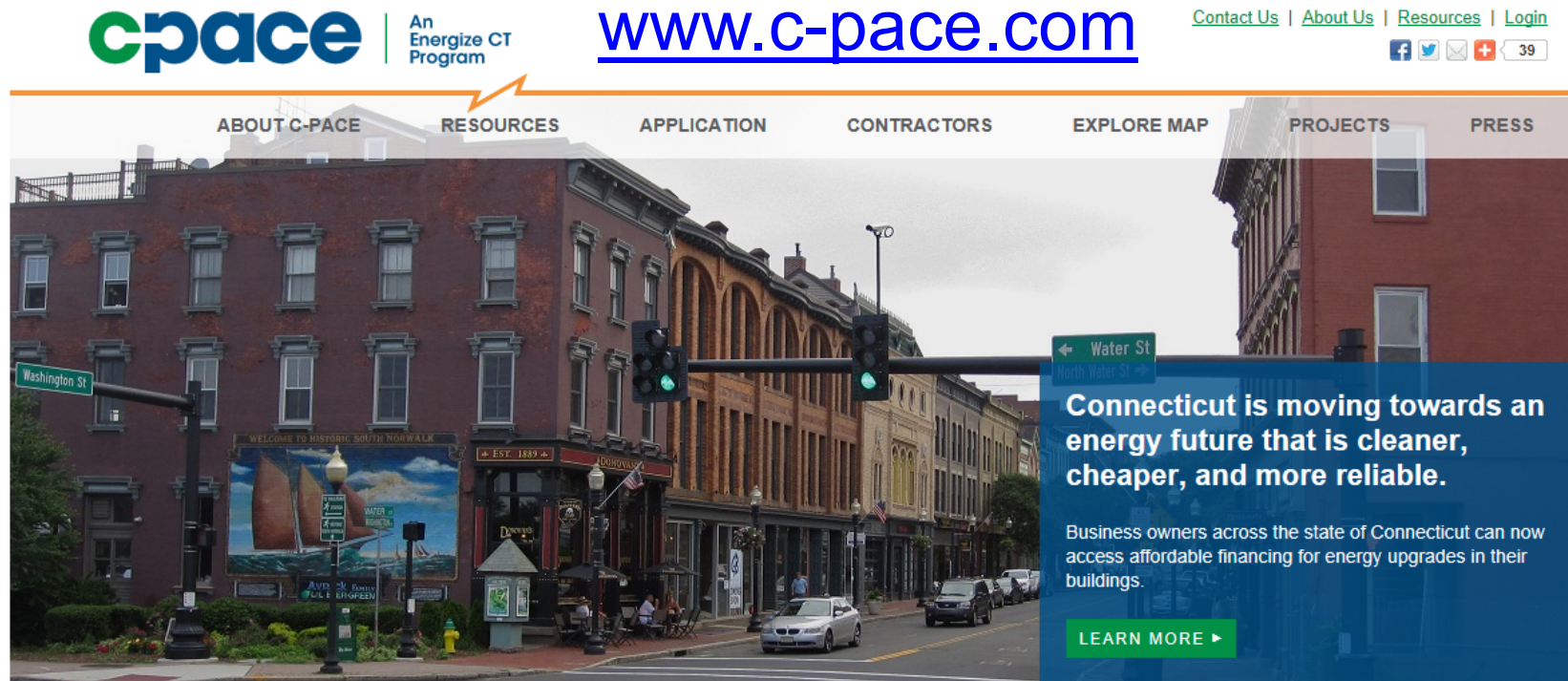
## A Financing Tool to Make Your Project Happen

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| Project Type      | # of Projects<br>in the<br>Pipeline | Average<br>Project Size | Estimated<br>Total Project<br>Costs | Square Footage<br>(Avg/Tot) |
|-------------------|-------------------------------------|-------------------------|-------------------------------------|-----------------------------|
| Energy Efficiency | 42                                  | \$855,528               | \$35,932,168                        | 56,023/2,532,970            |
| Renewable Energy  | 30                                  | \$558,378               | \$16,751,353                        | 31,037/931,097              |
| Both              | 17                                  | \$612,155               | \$10,406,632                        | 75,805/1,288,685            |
| Unlisted          | 24                                  | \$462,500               | \$11,100,000                        | 36,560/877,436              |
| <b>Total</b>      | <b>113</b>                          |                         | <b>\$74,190,152</b>                 |                             |



# C-PACE Website



Whether you are a building owner, a municipality, a contractor, project developer, or an investor, you can get started on C-PACE now. It's easy.





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