CONNECTICUT
GREEN BANK

ABDE-IDB

The Role of Financial Institutions in the Financing of Sustainable Infrastructure

May 16, 2016

Agenda

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- **What is a Green Bank** – what are they conceptually and what is the Connecticut Green Bank

- **What are Green Bank Products and Programs** – how are products structured to attract private investment and what programs can support clean energy deployment

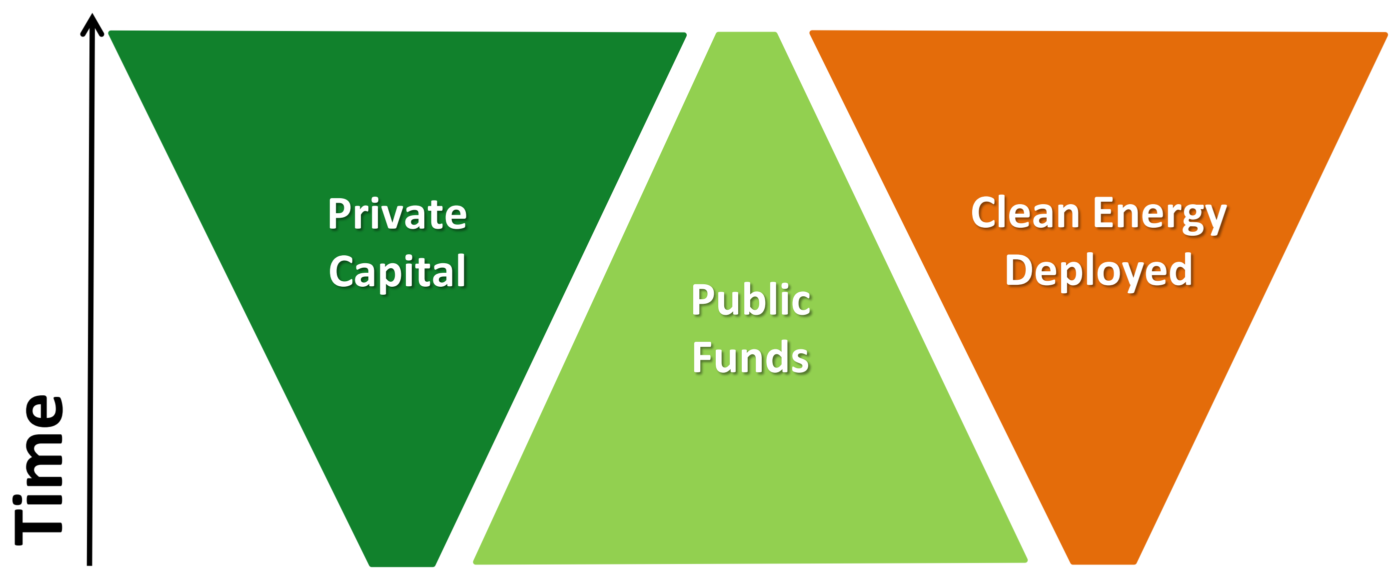
- **What are Green Bank Impacts** – what impact is the Connecticut Green Bank making and how is the green bank model growing

What is a Green Bank?

Green Bank Model

Public-Private Partnerships for Climate Protection

*A green bank is a **public financing authority** that **leverages private capital** with **limited public-purpose dollars** to **accelerate the growth** of clean energy markets*



Jobs ↑ CO_2 ↓

Connecticut Green Bank

1st Green Bank in the United States

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

…the Green Bank 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.***

Connecticut Green Bank
About Us

- **Quasi-public organization** – created by PA 11-80 and successor to the Connecticut Clean Energy Fund
- **Focus** – finance clean energy (i.e. renewable energy, energy efficiency, and alternative fuel vehicles and infrastructure)
- **Balance Sheet** – currently about $110 million in assets
- **Support** – supported by a $0.001/kWh surcharge on electric ratepayer bills that provides approximately $27-30 MM a year for investments, RGGI about $5 MM a year, federal competitive solicitations (i.e. SunShot Initiative) and non-competitive resources (i.e. ARRA-SEP), private capital, etc.

Connecticut Green Bank

Mission and Goals

Support the Governor's and legislature's energy strategy to achieve cleaner, cheaper and more reliable sources of energy while creating jobs and supporting local economic development

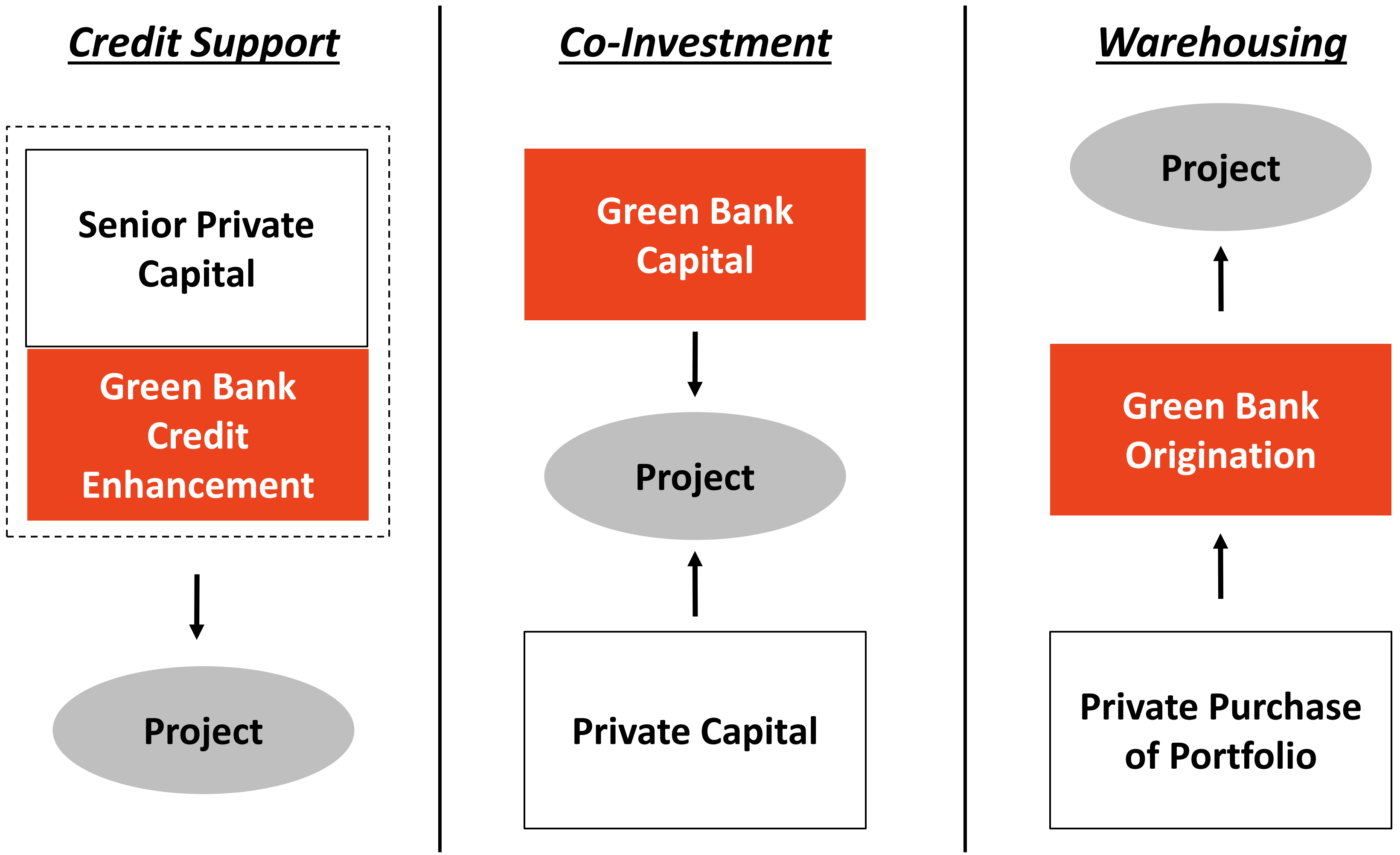
Attract and deploy capital to finance the clean energy goals for Connecticut

Develop and implement strategies that bring down the cost of clean energy in order to make it more accessible and affordable to consumers

Reduce reliance on grants, rebates and other subsidies and move towards innovative low-cost financing of clean energy deployment

What are Green Bank Products and Programs?

What are Green Bank Products and Programs



REFERENCE
Definition provided by the Coalition for Green Capital

CT Solar Loan (Credit Support)

$5 MM Crowdfund to $100 MM Private

Connecticut Green Bank

Digital Federal Credit Union

ement

and NY)

Solar Industry

Mosaic and Connecticut Team Up On Crowd Funding of Residential Solar

Mosaic has partnered with Connecticut Green Bank and Sungage Financial to package loans made to homeowners…

Michael Puttre (February 2014)

pv magazine PHOTOVOLTAIC MARKETS & TECHNOLOGY

Sungage Financial Secures $100 Million for Solar Loan

Following its participating in the CT Green Bank solar loan program, the Boston startup is aiming to expand residential solar loans on the East Coast.

Edgar Meza (November 2014)

Monthly Loan Payment

Loan Agreement

Customer

CT Solar Lease (Co-Investment)

$60 Million PPP

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Connecticut Green Bank

Sub Debt
Equity
Loan Loss Reserve
PBI (incentive)
Developer services

Debt Syndicate led by First Niagara

FIRST NIAGARA

WebsterBank

Debt

greentechmedia:

Connecticut's Green Bank: A Model for Public-Private Renewables Partnerships?

Fostering competition among installers and goodwill among taxpayers

Breaking Energy, Conway Irwin
July 8, 2013

Connecticut's Clean Energy Finance and Investment Authority (CEFIA) -- the state's Green Bank, and the first of its kind in the country -- has established a new solar financing system in a bid to expand capacity in the state. CT Solar Lease II seeks to avoid some of the most frequently cited criticisms of renewable energy finance, in that it uses less and recovers more taxpayers' funds, as well as fosters market competition.

Lease provides **<u>local</u>**
ın important **<u>sales tool</u>**,
stomers benefit from
<u>ble, no-money-down</u>
<u>g</u> and **<u>peace of mind</u>**.

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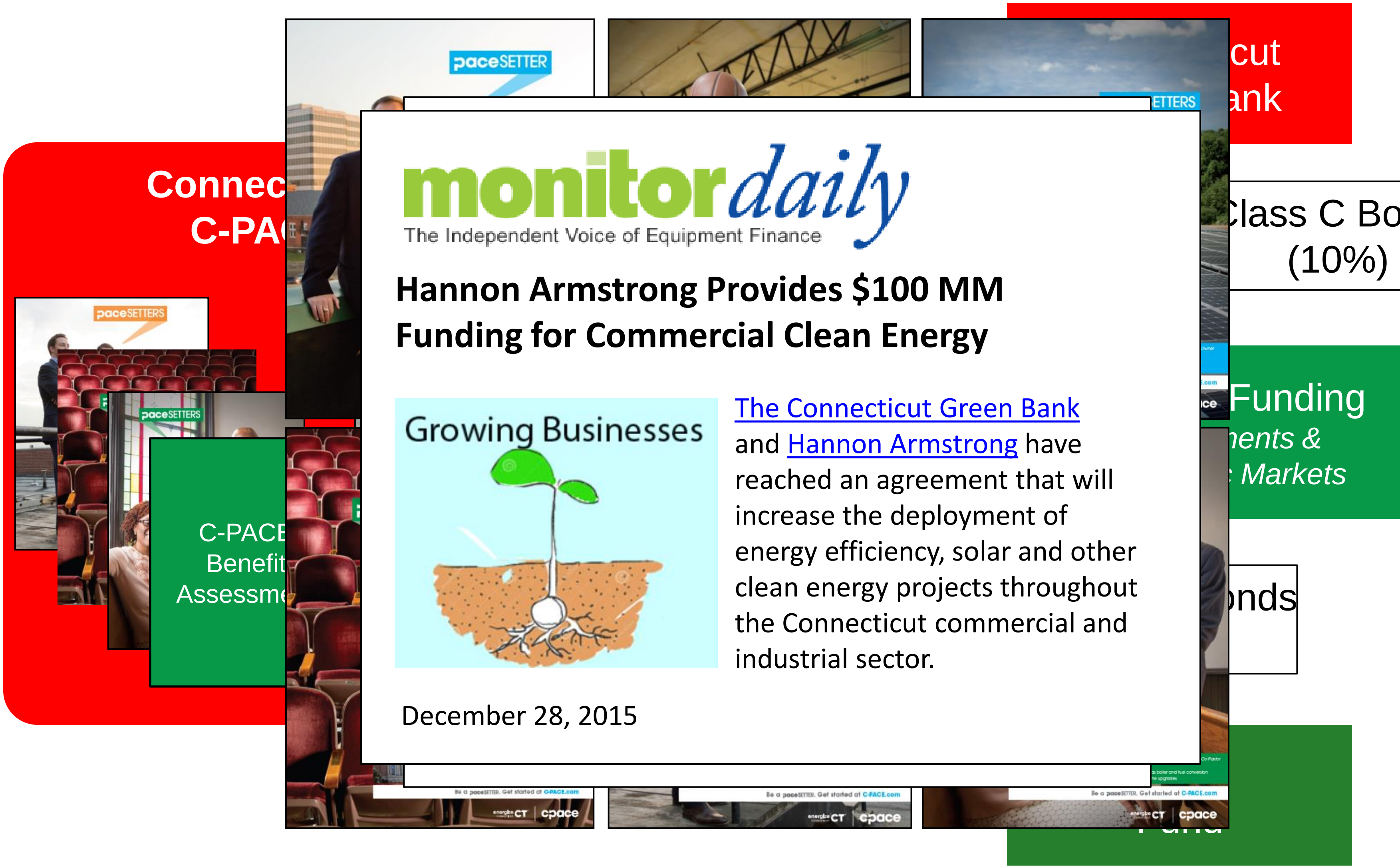
Contractor

Install

Solar PV Customer

C-PACE (Warehouse)

$40 MM Warehouse to $100 MM PPP



monitordaily
The Independent Voice of Equipment Finance

Hannon Armstrong Provides $100 MM Funding for Commercial Clean Energy

Growing Businesses

The Connecticut Green Bank and Hannon Armstrong have reached an agreement that will increase the deployment of energy efficiency, solar and other clean energy projects throughout the Connecticut commercial and industrial sector.

December 28, 2015

What are Green Bank Results?

Connecticut Green Bank

Accelerate Clean Energy Deployment

	FY 2000-FY 2011 (CCEF)	FY 2012-FY 2015 (CGB) [1]	FY 2016 Targets (CGB) [2]
Model	Subsidy	Financing	Financing
Years	11.00	4.00	1.00
Energy (MW)	43.1	134.5	110.0
Investment ($MM)	$349.2	$663.2	$670.0
Leverage Ratio	1:1	3:1	10:1
% of Funds as Loans	10	56	80

Deploying **more** clean energy at a **faster** pace while using ratepayer-taxpayer resources **responsibly**

REFERENCES
1. Comprehensive Annual Financial Report for FY 2015 for approved, closed, and completed transactions
2. Board approved targets for FY 2016

Connecticut Green Bank
An NRDC and CGC Observation

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- **Based on Connecticut** and its market size, growth rate, and public-private leverage ratio, we estimate that **a Green Bank in every state in America** would **yield $200 billion in national annual investment within 5 years**, with 90% of the funds coming from private sources and all taxpayer contributions returned over 10 to 20 years.

NRDC

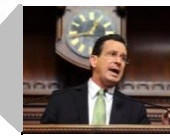
coalition for green capital

Green Bank Movement

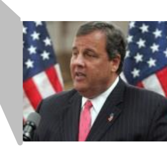
United States Trends

CONNECTICUT GREEN BANK

2015



2011



2014

2014

CONNECTICUT GREEN BANK[SM]

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

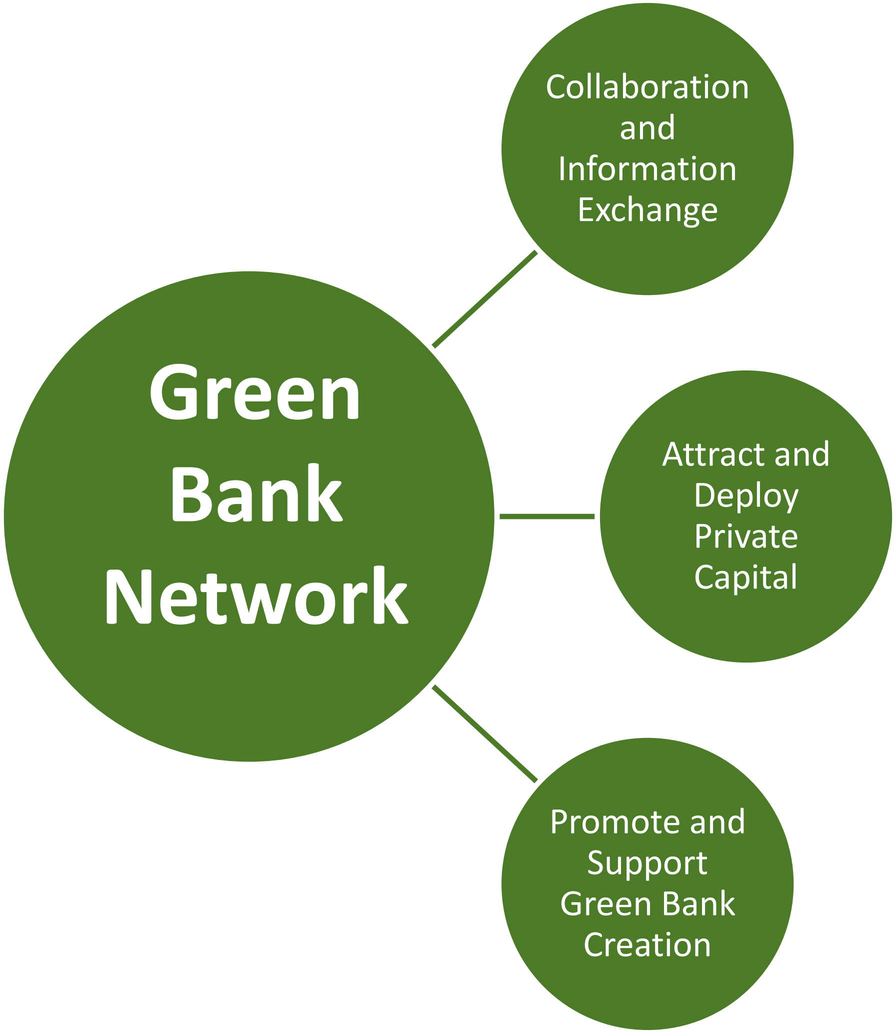
coalition for green capital

REFERENCES

Map provided by the Coalition for Green Capital

Green Bank Network

Public-Private Partnerships Worldwide



Japanese Green Fund

REFERENCE

Information provided by the Coalition for Green Capital

Thank You

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