



Innovative Clean Energy Project Financing  
Thursday, January 24, 2019

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Janine Finnell, Executive Director, Leaders In Energy  
Dave McCarthy, Executive Director, Potential Energy DC



Thanks to our volunteers! Marcia Rock, Miriam Aczel, Lydia LaFerla, Tom Driscoll, Nikki Mehta, John Craig, Carole Douglass, Barbara Englehart, Dr Nasim Fathi

Thanks to FilmMedia Bison, Nick Hanson for videography and photography!

Thanks to Clarendon Presbyterian Church for hosting! Reverend David Ensign

Janine Finnell, Executive Director, Leaders In Energy



**Sustainable Communities**



**Green Economy and Jobs**



**Multigenerational Leadership  
And Talent**



Leaders in Energy

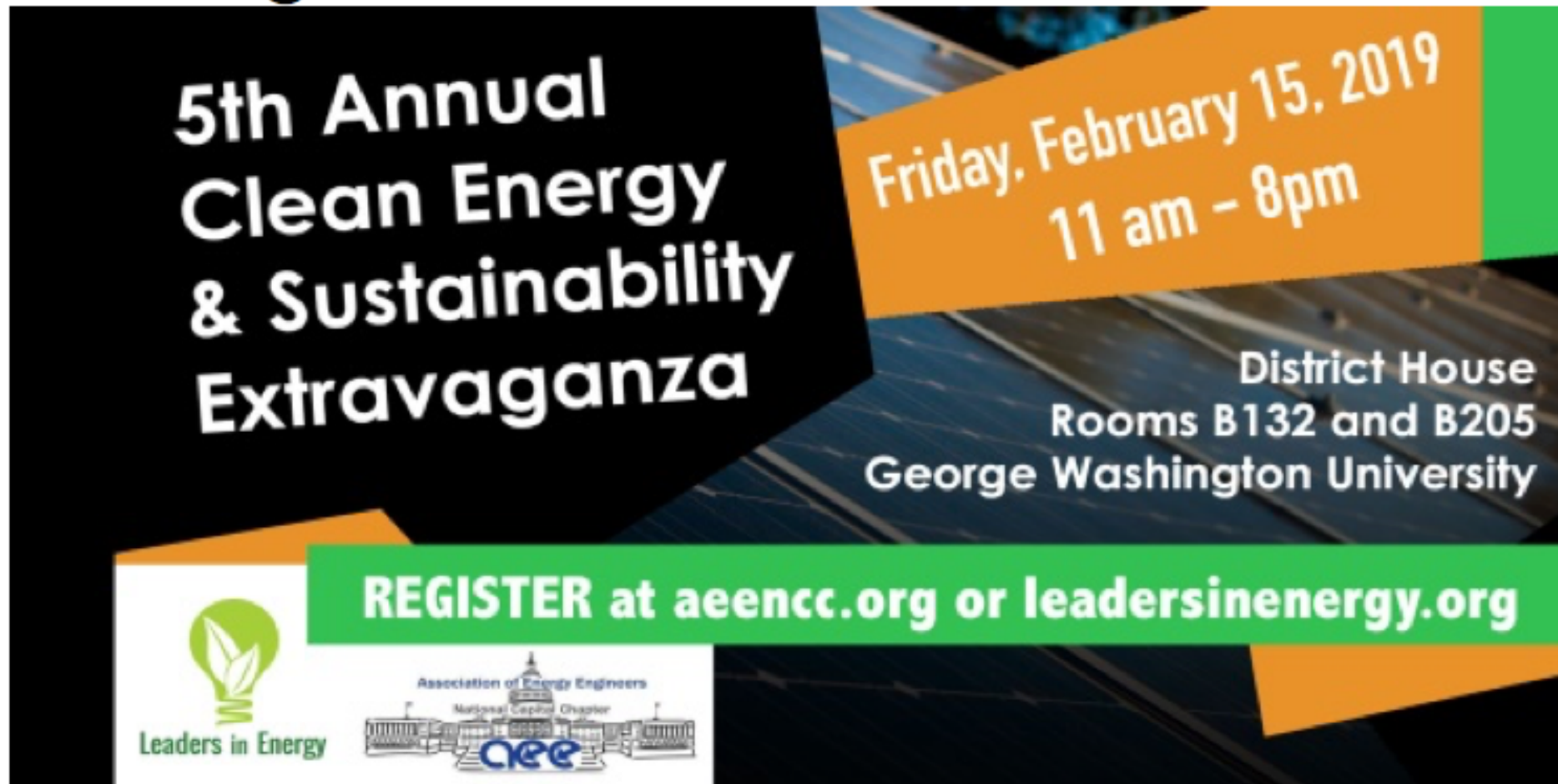
## **Building a community of leaders to advance clean energy and sustainable solutions**

*Join us on-line and at our events on cleantech, green  
jobs and finance, and leadership at:*

**[leadersinenergy.org](http://leadersinenergy.org)**

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## LE Upcoming Events and Working Group Meetings




**5th Annual  
Clean Energy  
& Sustainability  
Extravaganza**

**Friday, February 15, 2019  
11 am – 8pm**

**District House  
Rooms B132 and B205  
George Washington University**

**REGISTER at [aeencc.org](http://aeencc.org) or [leadersinenergy.org](http://leadersinenergy.org)**

 **Leaders in Energy**

 **Association of Energy Engineers  
National Capital Chapter  
CEE**

January 30, 2019 Circular Economy Working Group (more details on LE website under Events Tab)

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## PANEL 1: CLEAN ENERGY FINANCING MECHANISMS AND PROJECTS



Moderator: Dave McCarthy, Executive Director of Potential Energy DC

### Speakers:



Peter Drown, Strategy and Business Development at Recurrent Innovative Solutions



Scott Dicke, SRS' C-PACE Program Director



Mark J. Riedy, Partner at Kilpatrick Townsend & Stockton LLP, Energy,  
Project Finance & Clean Technologies Practice



## C-PACE Case Study

## Deep Energy Retrofit



Location: Rockville, MD

Year Built: 1980

Size (ft<sup>2</sup>): 101,021

Sector: Commercial

Electric Bill: \$200,000+/yr

Recurrent's Role: Design-Build



**\$1.8M C-PACE**



**\$3.7M** OPEX  
savings



Energy | Water |  
Maintenance  
**\$1.1M** funding  
leveraged



Grants | Rebates | Tax  
**\$4.2M +** Credits  
property value

# Commercial Property Assessed Clean Energy (C-PACE) Financing

## What?

- o New way to finance energy efficiency, water efficiency & renewable energy systems in existing Commercial & Industrial properties and new construction developments
- o Voluntary, special-assessment based, long term (up to 25 years), competitively-sourced private financing
- o Lowers energy costs.
- o Combines with utility, tax, and economic development incentives.
- o No personal guarantees.
- o Payment obligation can transfer upon sale (akin to sewer assessment).

## Why?

- o Economic development & environmental benefits to local jurisdictions.
- o Cash flow for building owners, capital efficiency for developers, new funding opportunities for local/regional institutions, jobs for contractors.

## Where?

- o DC, most of MD, and Arlington County VA
- o More in VA coming online in 2019.

# Equity And Equity Equivalent Funding

	Type of Funding	Corporate - Level Funding	Project- Level Funding	Dilutive ("D") or Non- Dilutive ("ND")
1.	Grants (State and Federal – DOE, USDA, DOT)	✓	✓	ND
2.	Angel Funding (including Crowdfunding (as modified in June 2015 by Regulation A-Plus), Foundations and Family Offices – Prime Coalition, CREO Syndicated, as part of Clean Energy Investment Initiative -- up to \$4 billion (Recent White House Initiative) Equity (Keiretsu – largest/ 2014 - \$24 billion in angel private placements with 6% to cleantech)	✓		D
3.	Venture Capital Equity (Zymergin raised \$44 million in series A round for its microbial programming to high value bioproducts from Data Collective, Draper Fisher, HVF, Innovation Endeavors, Obvious Ventures, True Venture and Two Sigma Ventures.)	✓	✓	D
4.	Private Equity (TIAA – CREF North American Sustainable Energy fund - \$1 billion; UK's Smart City Enterprise Investment Fund of \$150 million for energy efficiency; Bill and Melinda Gates Foundation is committing \$2 billion over 5 years for clean technology. Also, \$1 billion Breakthrough Energy Coalition Fund and \$2 trillion Saudi Arabia Public Investment Fund.)	✓	✓	D
5.	Strategic Equity (Bioeconomy companies raised approximately \$1.3 billion in the past 12 months or a 16% increase in deals and 17% drop in deal size per raise). Total acquired Saft for \$1.1 billion. Tesla announced the proposed \$2.6 billion acquisition of Solar City.	✓	✓	D
6.	Infrastructure Funds Equity (USDA's 4 new 2x \$150 million, \$100+ million and \$25+ million equity and debt funds – Advantage Capital Partners, Rural Business Investment Corporations ("RBICs") – Made In Rural America, Meritus and Innova, respectively, KKR raised a 2 <sup>nd</sup> fund of \$3.1 billion, and Sovereign Wealth Funds)		✓	D
7.	State (California, Connecticut, Hawaii, Illinois, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New York, Washington) and Federal Green Funds, State Revolving Funds (tend to be grants, loans, loan guarantees and not equity as government entities shy away from investments)		✓	ND
8.	International Green Funds (Australia, Brazil, Canada, Caribbean Energy Security Initiative (\$20 million US fund), European Investment Bank (Euros 8 billion), India, Malaysia, UK) (tend to be grants, loans, loan guarantees and not equity as government entities shy away from investments)	✓	✓	ND
9.	Tax Equity – ITCs, PTCs, Bonus and MACRs Depreciation and NMTCs		✓	Initially D to later ND
10.	Sponsor Equity – Project Developers, Hedge Funds (use has grown in last 2 years), YieldCos and EB-5 funding		✓	D
11.	Portfolio Equity - MLPs/ REITs/ YieldCos		✓	D



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## PANEL 2: FUNDING OPPORTUNITIES FOR CLEAN ENERGY PROJECTS



Moderator: Janine Finnell, Executive Director, Leaders in Energy



Speakers:

Adler Prioly, Director, Clean Energy Finance, The Reinvestment Fund



Jay Wilson, Program Manager, DC Department of Energy and Environment



Musa Asad, Managing Director & Founder, BGB Investment Partners

# Reinvestment Fund

## Clean Energy Practice

- Investing since 1993
- Can invest across the US
- \$120MM in debt transactions
- 7.9MM MWh of energy produced

## Adler Prioly

Director, Clean Energy

215.574.5894

[adler.prioly@reinvestment.com](mailto:adler.prioly@reinvestment.com)

## Portfolio includes:

- Solar
- Energy Efficiency
- Cogeneration
- Portfolios of consumer loans
- Portfolios of aggregated projects
- For-profits and non-profits
- Projects in underserved communities







# THE PATHWAY TO CUT THE CARBON POLLUTION OF DISTRICT OF COLUMBIA

## EFFICIENT BUILDING DESIGN & OPERATION



### CONSTRUCTING NET-ZERO BUILDINGS

Require highly efficient and zero emission new buildings

### RAMPING UP RETROFITS

Expand and intensify energy use reductions in existing buildings

## MODERNIZED & RENEWABLE ENERGY SUPPLY



### SHIFTING TO CLEAN ENERGY

Move from fossil fuels to clean and renewable energy

### GROWING LOCAL SOLAR

Maximize local renewable energy generation

## ELECTRIFICATION & FUEL SWITCHING



### ELECTRIFYING TRANSPORTATION

Electrify bus transit, vehicle sharing, and personal vehicles

### SHIFTING TRANSPORTATION

Increase the use of walking, biking, and mass transit



A CLEAN ENERGY FINANCE SOLUTION

The **Clean Energy DC** plan funds the **DC Green Bank** which will:

- **Grow** private investment for clean energy projects
- **Create** green jobs for District Residents
- **Increase** equity and access to capital to lower energy bills



GOVERNMENT OF THE DISTRICT OF COLUMBIA  
**MURIEL BOWSER, MAYOR**

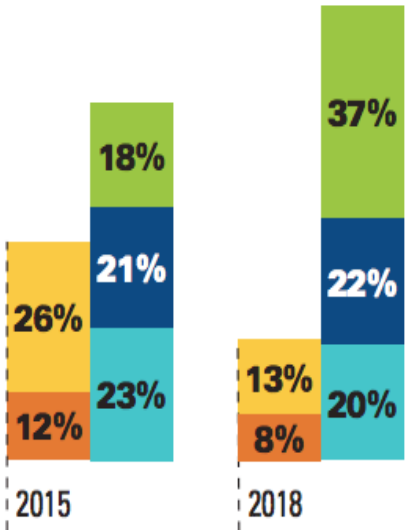
# Opportunity Zones – Resilience & Sustainability

Knowing the full effects of climate change, including how it impacts energy supply, makes it

## Level of Green Building Activity (According to Global Respondents)

Dodge Data & Analytics, 2016

- 1% to 15% Green Projects
- Exploring (No Green Involvement)
- More Than 60% Green Projects
- 31% to 60% Green Projects
- 16% to 30% Green Projects



## Neighborhood Development Company

- Mixed-use Benning Project will provide innovative office space and healthy food-focused neighborhood-serving retail in the River Terrace neighborhood of DC.
- USED Silver Equivalent (IgCC)
- Enterprise Community Investment Partner (HFFI; GC)

INTENDED FOR ILLUSTRATIVE PURPOSES ONLY - CONSULT INDEPENDENT QUALIFIED ADVISORS FOR OPPORTUNITY ZONE DETAILS



The Climate Service “Climanomics”



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You are invited to attend our other events!  
Leaders In Energy's Extravaganza - Friday, February 15th  
Potential Energy DC's Pitch Night - Coming in June

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