

# Establishing a Local Green Bank

## MONTGOMERY COUNTY AND THE ROLE OF GOVERNMENT IN EXPANDING THE ENERGY FINANCE MARKET

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MICHELLE VIGEN, SENIOR ENERGY PLANNER  
MONTGOMERY COUNTY, MD

MAY 24, 2016  
ACEEE ENERGY FINANCE FORUM  
NEWPORT, RHODE ISLAND



# Let's start with...

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## **Montgomery County Green Bank**

- Why a Green Bank
- Work Group and Market Research
- Progress Report

## Bringing Energy Finance to Local Government

- Capacity Building and Crucial Partners

# What a local government can do to push a market

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## Montgomery County Energy Goals and Programs

2009: County Greenhouse Gas Reduction Goal & Climate Protection Plan



2009: EmPOWER Maryland Utility Energy Efficiency Programs Launch



2014: County Benchmarking and Transparency Law



2015: County Commercial Property Assessed Clean Energy

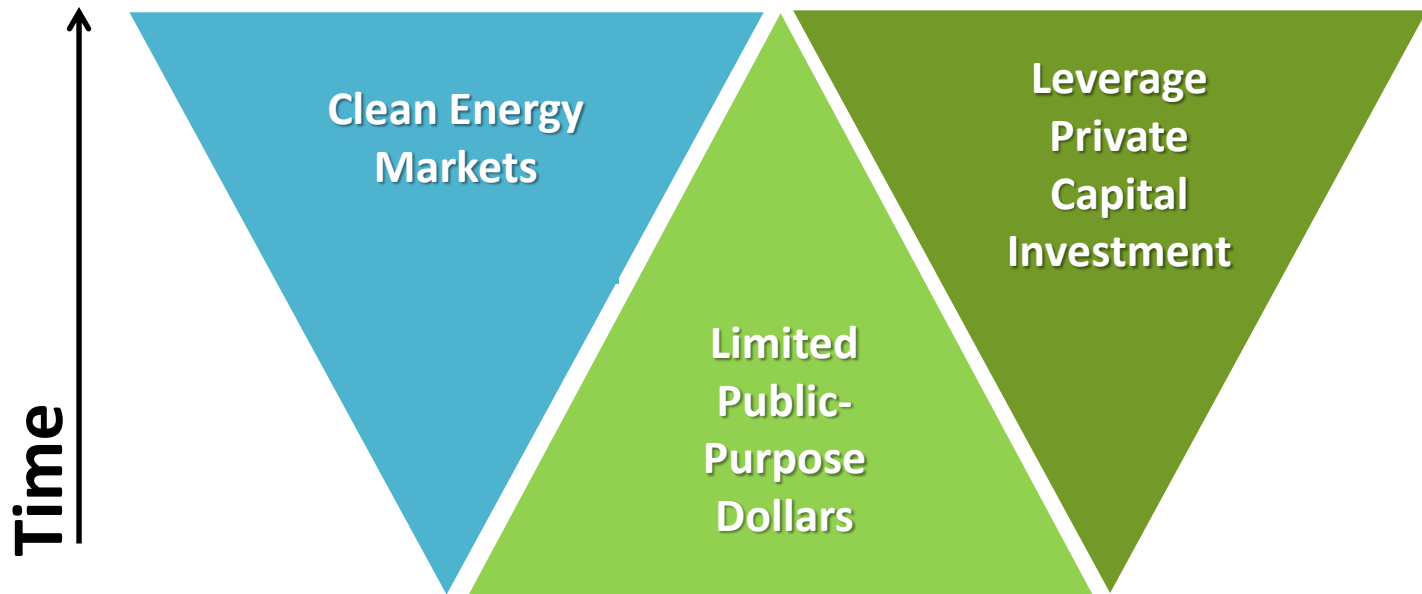


**2015: County Green Bank Law**

# A Green Bank is a Public-Private Partnership

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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



# Green Banks go where other banks don't go...yet

## Green Banks :

- **Leverage** private dollars
- Address market **gaps**
- Data **standardization**
- Support and enhance **demand**
- Build and bundle **volume**
- **De-risk** through innovative financing

## Connecticut Green Bank

	FY12-FY15 (CGB) <sup>1</sup>	FY16 Targets (CGB) <sup>2</sup>
Model	Financing	Financing
Clean Energy (MW/yr)	33.63	110.0
<b>Investment (\$MM/yr)</b>	<b>\$165.8</b>	<b>\$670.0</b>
<b>Leverage Ratio</b>	<b>3:1</b>	<b>10:1</b>
% of Funds as Loans	56	80

# Building a Green Bank

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## Nation's First Local Green Bank

- Green Bank Legislation enacted June 2015
  - Public-Purpose Nonprofit Entity
  - Increase investment in clean energy deployment
  - Board of Directors Composition
  - Designation
- Work Group to provide recommendations
- Not Taxpayer-Funded
  - Anticipated to be capitalized with funding through the County's Settlement Agreement with the Exelon-Pepco merger

# A “Working” Work Group

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## Learning about Community Needs/Opportunities

- Work Group
  - 400+ email subscribers, 50+ committee members, 30+ super members
  - Over 120 attendees at Green Bank Kick-off
  - 3 Committees: Fundraising/Capitalization, Governance, Marketplace Development
  - Each committee met for 2 hours each month for seven months
- Coalition for Green Capital: Market Assessment
  - Landscaping
  - Market Sizing
  - Recommendations
- Harcourt Brown & Carey: Background Research



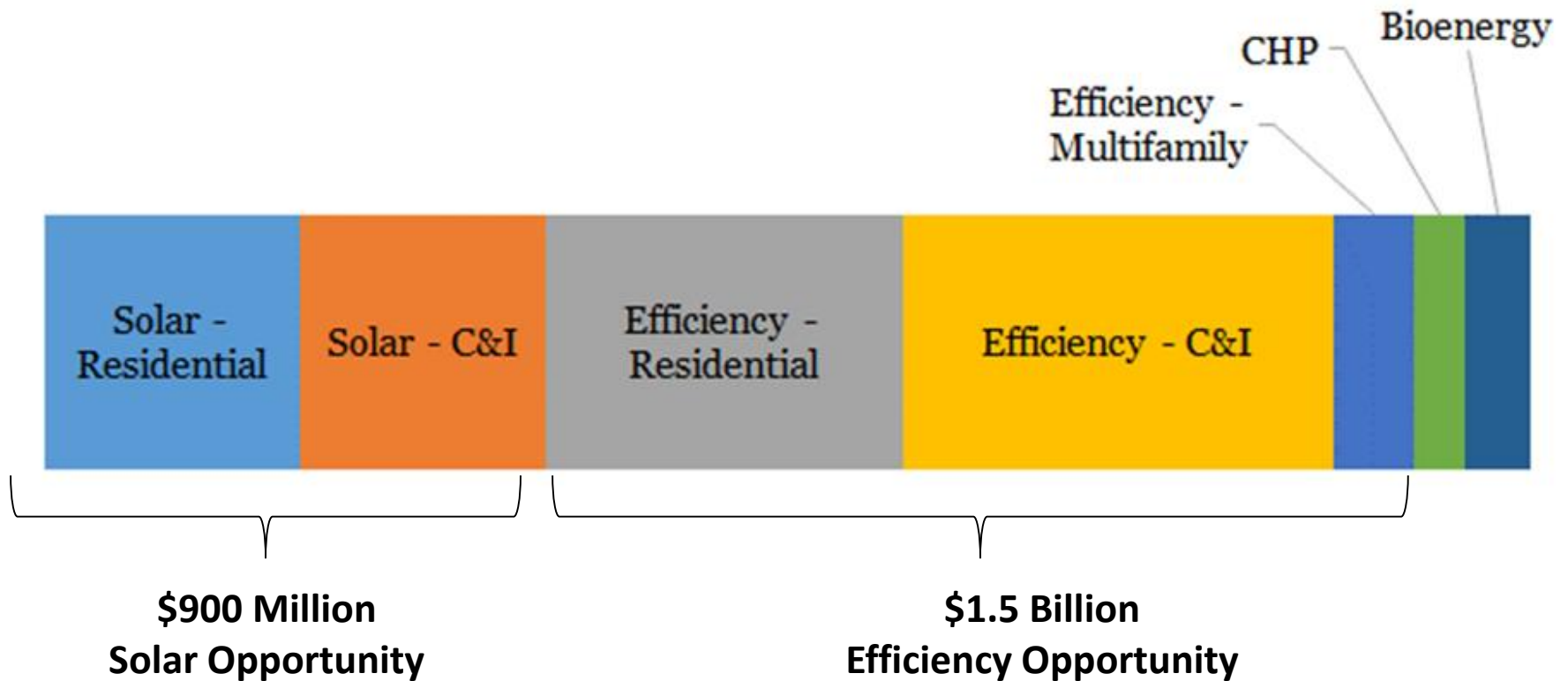
# \$2.7 billion of clean energy potential in the County

Selected Technologies		Total Current Installed Capacity	Total Potential Market	Total Unfilled Potential Cost
Wind		0 MW	N/A	\$0
Solar PV	Residential	14.3 MW	182 MW	\$549 M
	C&I	13.7 MW	175 MW	\$308 M
Energy Efficiency	Electric	896 GWh	3,842 GWh	\$879 M
	Thermal	N/A	9,032 BBtu	\$701 M
Bioenergy Electric Generation <sup>1</sup>		54 MW	31 MW	\$122 M
Combined Heat & Power		67 MW	75 MW	\$90 M
<b>TOTAL</b>		N/A	N/A	<b>\$2,652 M</b>

Notes & Sources: (1) Only includes power generation, does not include bioenergy used for end-use efficiency. Only estimates technical potential. SEIA, EIA, NREL, GTM, EmPOWER, ACEEE, DOE, GDS, EEFA, CHP Market Analysis



# \$2.7 billion of clean energy potential in the County



# Ground-truthing through Interviews

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Status	Count
Completed	43
Upcoming	0
Scheduling	0
No response	7
Declined	5
<b>Total</b>	<b>55</b>

Category	Completed
Finance	10
Government	4
Nonprofit	4
Consulting	4
Utility	3
End-User	2
Property Owner/Manager	4
Contractor	6
Community Solar	4
Academic	2
<b>Total</b>	<b>43</b>


# No surprises, but plenty work work for the Green Bank to do

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## *Supply – Side*

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- Limited financing options tailored for energy improvements
  - Need for energy financing technical assistance
  - Lenders seek risk-reducing measures for new types of investment

## *Demand – Side*

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- Customers need zero upfront cost, have immediately positive cash flows, and have simple process
  - Customers need more and clearer information, and trusted, central source of information
  - Customers need a turnkey solution that requires minimal effort

# Recommendations and Activities

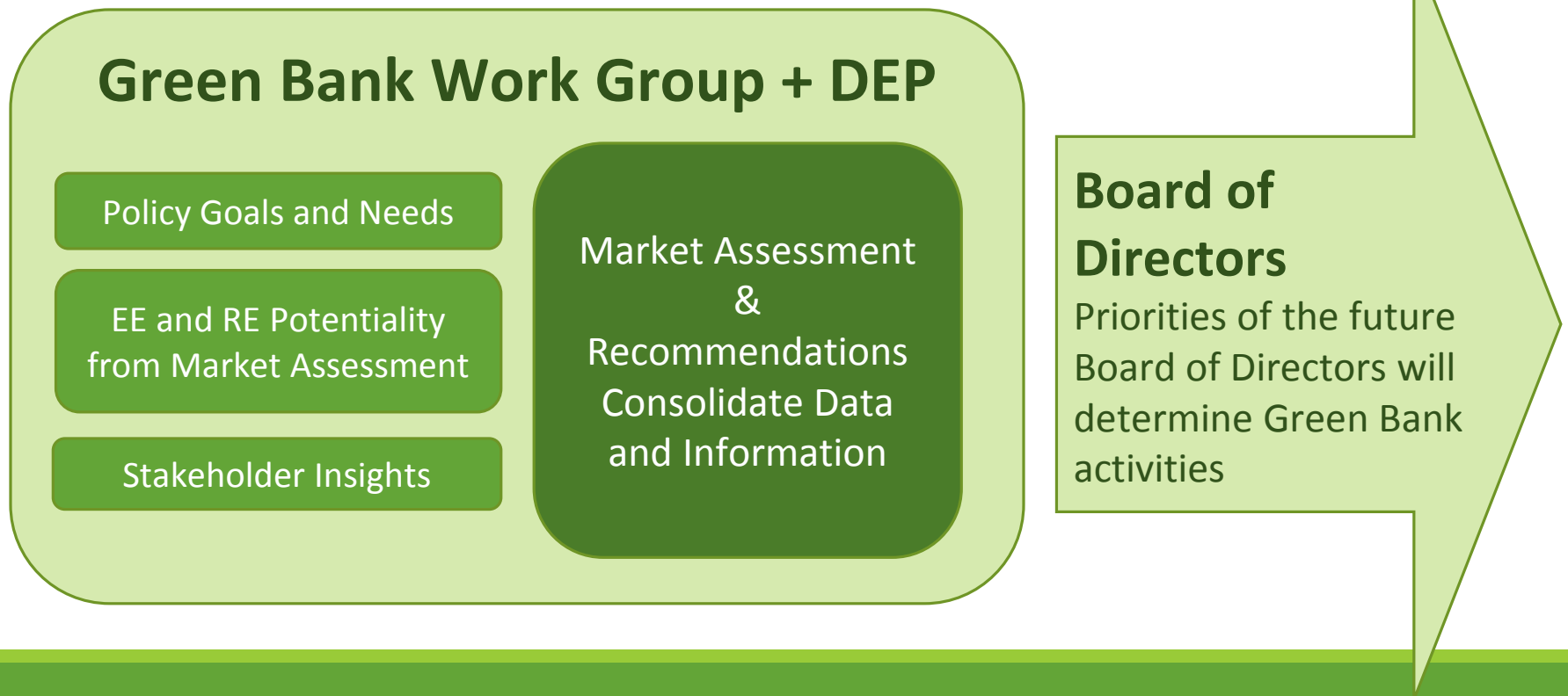
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REC Financing & Aggregation    Deep Retrofits    Residential  
Solar Loan/Lease    Energy Efficiency    Multifamily Project  
Development    Solar Co-op    Solarize    Low-to-Moderate  
Microgrid    Demand Aggregation    Pre-Dev Loans for  
Multifamily    Market Transparency    Energy Storage    EE Loan  
Warehousing    Community Solar    Data Standardization  
Commercial EE Loan    Online Resource    PACE Construction  
Loans    Electric Vehicle Lender Education    Commercial Solar  
Pilot Projects    Solar & Storage    Loan Loss for Residential  
Financing    Energy Management One-Stop Shop  
Weatherization    Consumer Outreach    Water Efficiency

# “What will the Green Bank do first?”

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The Board of Directors will take all the research, templates, and input collected through this process, and use that to set priorities.



# We're on our way...

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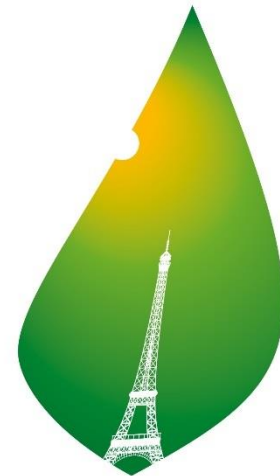
- ✓ Incorporation in the State of Maryland
- ✓ BoD Recruitment
- Amendments & Report to Executive and Council – in progress
- Recruitment of Board of Directors – in progress
- Establishment of the Board of Directors
- First Meeting: Passage of Bylaws (“baby”/abridged)
- Appointment of Directors of DEP/FIN
- Designation by Resolution (Anticipated Summer/Fall 2016)

# Increasing Activity around Energy Investment Globally

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## New commitments mean greater investment

- COP21 and the Global Green Bank Network
- New York Green Bank
- Connecticut & Hannon Armstrong
- California Residential PACE
- Montgomery County C-PACE Designated Lender



COP21 • CMP11  
**PARIS 2015**  
UN CLIMATE CHANGE CONFERENCE

# Wrapping up with...

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## Montgomery County Green Bank

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## **Bringing Energy Finance to Local Government**

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# So you want to build a Green Bank?

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## Challenges

- No energy finance expertise in the government
- Language barriers between departments
- “Green Bank” concept can be hard to grasp
- No clear model – Lots of options
- Lack of policy-level education on energy financing

# Vote of Confidence

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*“You’re not exactly qualified to build a bank, Michelle.”*

*– Mom, in her skeptical-but-encouraging voice*

*“I know! But it’s not really my decision...”*

# Turning a Policy-head into a Finance-Fiend

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## My tips?

- **Get curious.**
- **Finance is a “language” – learn it like one.**
  - SPEAK it and READ it...
- **Know there isn’t a “right” way...but find out if there’s a “better” way.**
- **Make Friends:**
  - In-House: Department of “Government” Finance, Housing Finance Authorities, CDFIs, Economic Development
  - Not-for-Profit: DOE, ACEEE, IMT, Cadmus, Coalition for Green Capital
  - For-Profit: Harcourt Brown & Carey, Urban Ingenuity, Eutectics, Local Banks
  - Community Stakeholders: *I highly recommend a Work Group Process.*

# Thank you

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Michelle Vigen

Senior Energy Planner

[michelle.vigen@montgomerycountymd.gov](mailto:michelle.vigen@montgomerycountymd.gov)