

May 2014

# ACEEE Energy Efficiency Finance Forum

## *Building Momentum and Driving Demand*

Have We Arrived? How Would That Look? Reflections on the State of Energy Efficiency Financing

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Alternative Energy Finance

# “So much dialogue, so little financing!” *is changing*

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- Ratio: Conferences / Deals should be less than 1
- Some developers seek low-cost Energy Efficiency financing, then decide it is cheaper to finance on balance sheet
- Some developers seek low-cost Energy Efficiency financing, cannot obtain it, and don't move forward with their projects
- Many developers have unrealistic expectations about what can be financed today
- However, many developers are realistic and are financing Energy Efficiency projects today and working with Citi (and other financial intermediaries) to develop new structures for the future
- One possible solution is Green Bonds
- **Massive progress over the last 2 years in growing EE solution set**  
- **Importance of new products**

# Product Development

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- New structures will be required
- Citi will work with Issuers and Investors to develop new structures
- Citi will work with Rating Agencies
- Danger of not understanding Client / Investor objectives
- Product development process can be lengthy and frustrating
  - Economic issues / risk sharing
  - Regulatory, tax, legal, accounting, and other implications
  - Easier to start with a doable segment and expand vs. “leap” to new segment
  - Incremental change vs. radical leap forward

# Energy Efficiency Financing Solutions

<i>PRODUCT / SOLUTION</i>	<i>PROPERTY TYPE / SECTOR</i>			
	<b>MUSH</b>	<b>Single Family</b>	<b>Commercial</b>	<b>Corporate/ Industrial</b>
<b>Large Single Project</b>				
<b>Pooled Asset Deal</b>				
<b>ESCO/ESA/Two Factor Credit</b>				
<b>PACE</b>				
<b>On-Bill (OBR)</b>				
<b>Sustainable Energy Utility</b>				
<b>Microfinance</b>				

# Energy Efficiency Financing Solutions

*PROPERTY TYPE / SECTOR*

<i>PRODUCT / SOLUTION</i>	MUSH	Federal/ DOD	Single Family	Multifamily	Commercial	Corporate/ Industrial
Large Single Project						
Pooled Asset Deal						
ESCO/ESA/Two Factor Credit						
PACE						
On-Bill (OBR)						
Sustainable Energy Utility						
Microfinance						

# Energy Efficiency Financing Solutions

## PROPERTY TYPE / SECTOR

<i>PRODUCT / SOLUTION</i>	MUSH	Federal/ DOD	Single Family	Multifamily	Commercial	Corporate/ Industrial
Large Single Project	Yes	Yes	N/A	Yes	Yes	Yes
Pooled Asset Deal	Yes Green Campus	Yes	Yes Kilowatt, WHEEL	Difficult HPET	Difficult Hybrids	Yes
ESCO/ESA/Two Factor Credit	Yes	Yes	N/A	Difficult NYCEEC	Difficult NYCEEC	Yes Citi London
PACE	Yes C-PACE	N/A	Yes—On hold CAHERO	Yes	Yes	Yes
On-Bill (OBR)	Yes	N/A	Yes NYSERDA	Yes	Yes	Yes
Stranded Cost Tariff	Yes	N/A	Yes	Yes	Yes	Yes
Green Bond	Yes	N/A	N/A	N/A	N/A	Yes Unilever
Sustainable Energy Utility	Yes Delaware	N/A	N/A	N/A	N/A	N/A
Microfinance	N/A	N/A	Yes Mongolia	N/A	Yes	N/A

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Citi works with its clients in greenhouse gas intensive industries to evaluate emerging risks from climate change and, where appropriate, to mitigate those risks.

efficiency, renewable energy and mitigation