

# On-Bill Financing in the United States

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# Energy Efficiency Financing Trends in the United States

## Property Assessed Clean Energy (PACE)

- Very popular 2 years ago
- Many states have enabled PACE legislation
- Legal complexities have stalled progress for residential PACE

## On-bill Financing (OBF)

- Rapidly increasing in popularity
- Achieving increased market acceptance
- High potential for scalability, several states engaging secondary markets

# Property Assessed Clean Energy (PACE)

Enables local governments provide capital to fund energy efficiency projects which are repaid through an assessment on the customer's property taxes.

## Benefits

- Enhances potential for large-scale retrofit projects.
- Repayment transfers on sale of property
- Potential for scalability

## Barriers

- Significant structural and legal hurdles
- Residential (shut down by regulators)
  - Debt seniority
- Commercial
  - Consent vs. Non-consent

# On-bill Financing

Allows utility customers to invest in energy efficiency improvements and repay the investment through an additional charge on their utility bill.

- Structured in numerous ways
  - Loan
  - Tariff
  - Service Agreement
- Serves an array of markets
  - Residential
    - Owner-occupied
    - Rental
  - Commercial and Industrial
    - Small business



# OBF: Benefits and Barriers

## Benefits

- Reduces first-cost barriers for customers
- Potential for bill neutrality
- Leverages existing billing relationship between consumers and utilities
- Financing can be tied to a property so that debt transfers across owners/tenants.
- Bill payment history can be used to enhance underwriting.
- Disconnection of utility serves a credit enhancement for financiers
- Versatility

## Barriers

- Utilities often wary of acting as lending institutions
- May require a redesign of utilities' billing systems
- Equity consideration
- Multiple fuel savings
- Legal considerations for handling transfer of property



# Current On-bill Landscape



# OBF: Financial Product Structure

Type	Tariff-based Financing	Loan-based Financing
<b>Transferability</b>	Yes -- financing is assigned to the meter. This has the potential to overcome the renter-landlord split incentive.	No -- financing is assigned to an individual and is non-transferrable. Some exceptions.
<b>Debt Classification</b>	Not necessarily classified as debt.	Classified as debt, which may limit the ability of some states to use this type of financing due to consumer financing laws.
<b>Regulatory Approval</b>	Required	Not required.
<b>Financing Term</b>	Longer financing term, making higher-cost measures more cost-effective.	Shorter financing term, making higher-cost measures less cost-effective.

# OBF: Current Sources of Capital

- Utility
  - Ratepayer Funds
  - **Shareholder Funds**
- Public
  - Grants (Federal, State, Local) e.g. Stimulus
  - Public Loan Funds
  - Bond Issues
  - Revenue from Cap and Trade Programs
- Private
  - Community Development Financial Institutions
  - Local Banks & Credit Unions
  - **Large Commercial Banks & Capital Markets**



# OBF: Adoption Drivers

## Customer

- Creative marketing
- Bill neutrality
- Free energy audit
- No money down
- Low interest rates
- Rebates & other incentives

## Utility

- Energy Efficiency Resource Standards
- Reduction of administrative burden
- Demonstrated cost-effectiveness

## Third-party lenders

- Low default rates
- Loan-loss reserves
- Loan guarantees

# OBF: Selected Program Statistics for Cooperatives

Program	State	Start Date	End Date	Program Goals	Available Capital	Participation Rate	Total Program Participants	Value of Financing
Rural Energy Savings Program Pilot	SC	2011	2011	100 homes	\$1.5-2 million	n/a	100 loans	\$1.5 million
Kansas How\$mart	KS	Pilot: 2007 Full: 2008	Ongoing	200 projects per year	\$1 million-\$1.2 million a year	1.3%	627 projects	\$3.6 million

# OBF: Selected Program Statistics for Investor-Owned Utilities

Program	State	Start Date	End Date	Program Goals	Available Capital	Participation Rate	Total Program Participants	Value of Financing
<b>Clean Energy Works</b>	OR	Pilot: 2009 Full: 2010	Ongoing	Remodel 6000 homes for energy efficiency by end of 2013.	2011: \$12 million 2012: \$24 million 2013: \$36 million	<1%	599 loans as of mid-2011 for pilot and full program	\$7.8 million
<b>CL&amp;P: Small Business Energy Advantage</b>	CT	2003	Ongoing	Unspecified	\$30 million	1%	6,685 loans since 2005	\$17.3 million
<b>UI: Small Business Energy Advantage</b>	CT	2000	Ongoing	348 projects in 2012	\$7.5 million	1.5%	3903 loans	\$4.1 million
<b>Small Business and Residential On-bill Programs</b>	MA NH NY RI	1992	Ongoing	Raise \$55 million for loans for 2012	\$30-40 million energy efficiency funds, also building relationships with third party lenders	<1% (for the past 3 years)	16,000 loans in the past 3 years	Approximately \$30 million over the last 3 years

# OBF: Selected Program Statistics for Municipal Utilities

Program	State	Start Date	End Date	Program Goals	Available Capital	Participation Rate	Total Program Participants	Value of Financing
Electric Cities of Georgia	GA	Late 2010	Ongoing	To utilize \$1.1 million by June 30, 2012	\$1.1 million	< 1%	119 loans	\$530,000 with additional \$350,000 approved

# OBF: Considerations for Scaling

- Quantify cost of operating loan programs & subsidizing finance charges.
- Weigh importance of bill neutrality.
- Collect data on asset class performance.



# Questions?

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