On-Bill Financing: Assessing its Feasibility for your Utility

May 21, 2018

**ACEEE** 

American Council for an Energy-Efficient Economy

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## DUNSKY OVERVIEW





Governments • Utilities • CLIENTELE* • Private firms • Non-profits
BRITISH Albertan & Government
BChydro Cournment ATCO Saskatchewan Manitoba Contario Québec &
FORTIS BC CHERTICAL ASK Power Sieso Chertica
CALCARY Saskatoon Manitoba Baad Dectra utilities Baad alectra utilities Baad alectra Utilities Baad alectra
COVO MONTANA-DAKOTA UTILITIES CO. MINING CONTANA-DAKOTA UTILITIES CO. MINING CONTANA-DAKOTA UTILITIES CO. MINING CONTANA-DAKOTA UTILITIES CO. MINING CONTANA-DAKOTA UTILITIES CO. MINING CONTANA-DAKOTA UTILITIES CO. MINING CONTANA-DAKOTA UTILITIES CO. MINING CONTANA-DAKOTA
Center for Energy and Environment I Inficiency Vermont CONNECTICUT GREEN BANK
Columbia Gas- of Massachusetts
SoCalGas



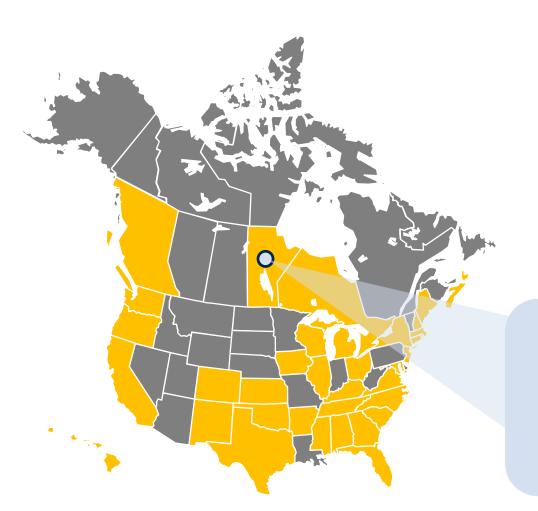
Different ways for a utility to benefit from on-bill financing

Up-front hurdles must be addressed prior to design

Utility may consider leveraging financing to generate revenue



# On-Bill Financing Programs



**4**<sub>/10</sub> Provinces

**32**/50 States

#### Canadian On-Bill Success: Manitoba Hydro

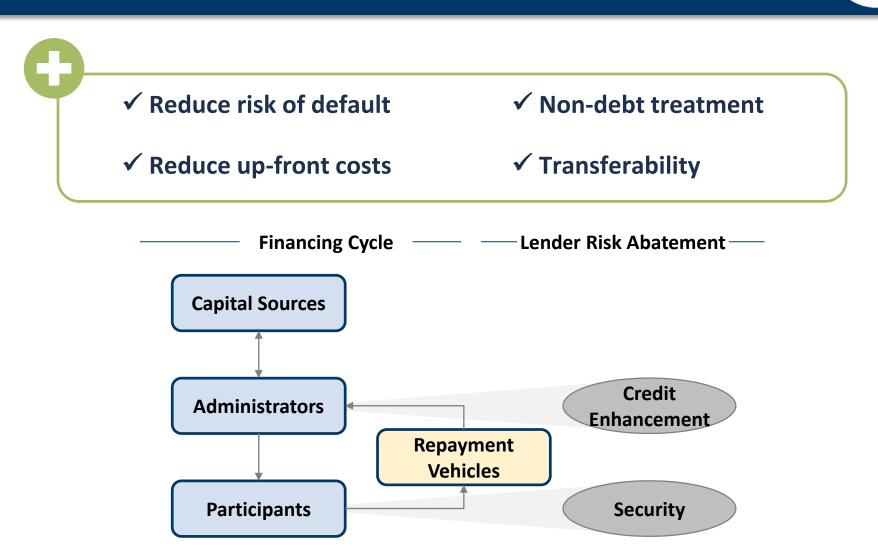
Program launched in 2001 +\$300M in loans disbursed +75,000 customers participating

\*Highlighted regions have an operating on-bill program.



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## On-Bill Primer

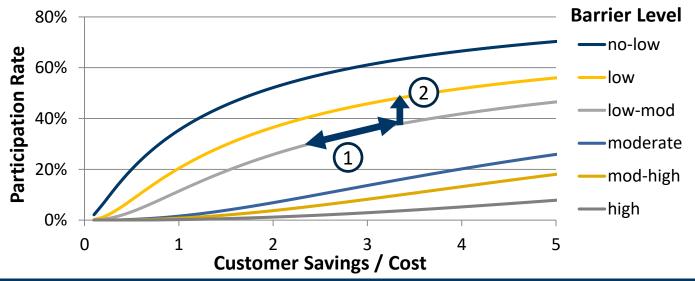




## Benefits of financing How Financing Can Help



Factors influencing EE participation	How financing can help		
1. Customer Financials	Reduce measure cost		
2. Customer Barriers	Improve access to capital Reduce payback period Reduce competing capital priorities Improve ease of understanding business case		



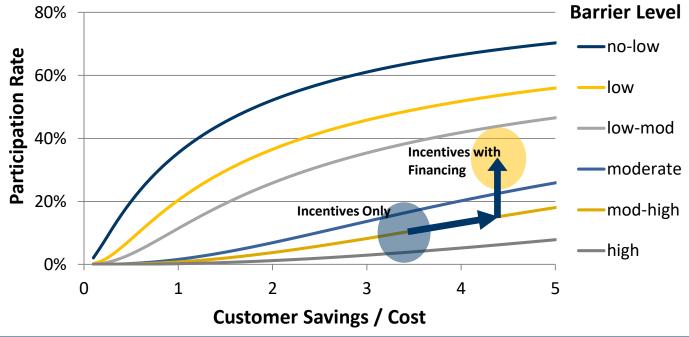


## Benefits of financing Increasing Uptake



#### **<u>Case Study #1</u>: Adding financing to a home insulation incentive program**

- Home insulation program achieved less than 10% of target savings
- Identified barriers which included *significant up-front investment, long payback period,* and *limited understanding of business case for EE*

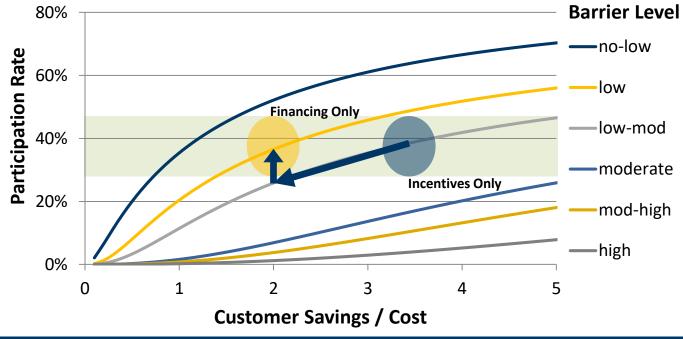


## Benefits of financing Reducing Utility Costs



#### **<u>Case Study #2</u>**: Replacing a heat pump incentive with financing

- Heat pump incentive program exceed its energy savings target by over 300%
- As a result, costs were greater than initially budgeted





## Benefits of financing Reducing Utility Costs (Cont'd)

#### **<u>Case Study #2</u>: Replacing a heat pump incentive with financing**

- Heat pump incentive program exceed its energy savings target by over 300%
- As a result, costs were greater than initially budgeted

Program	Utility Cost*	Customer Savings / Cost
Incentive (no financing)	\$500	3.8
0% Financing (no incentive)	\$536	2.4
2% Financing (no incentive)	\$325	2.2

\*Financing programs assume a 5% 5-year loan with a utility funded interest rate buy-down



### Pre-program design Key Considerations









Regulatory Requirements

System Upgrades Funding Sources



## Pre-program design Regulatory Requirements





#### **Operate an on-bill program**

Some jurisdictions require legislation to be passed to allow the utility to offer on-bill payment.



#### Act as a lender

On-bill programs need to comply with consumer lending laws. Requirements may lead to utilities not being able to charge an interest rate.

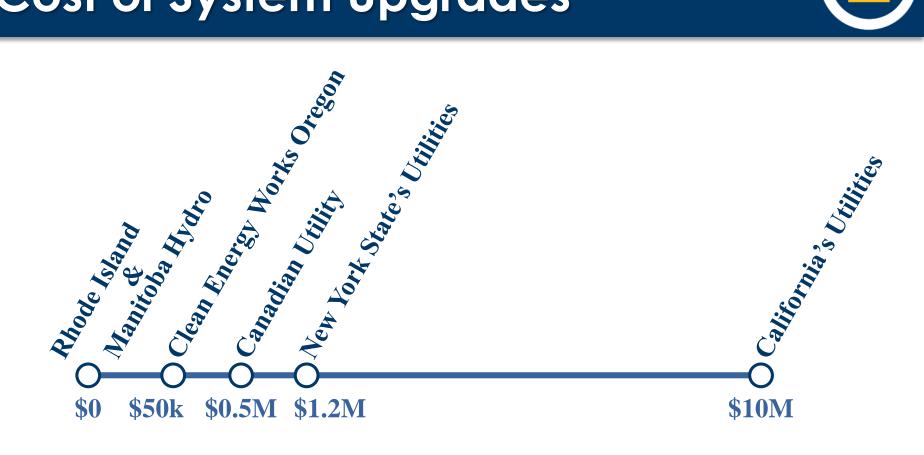


#### **Disconnect delinquent participants**

Regional laws or utility regulations can influence whether disconnection is possible.



### Pre-program design Cost of System Upgrades

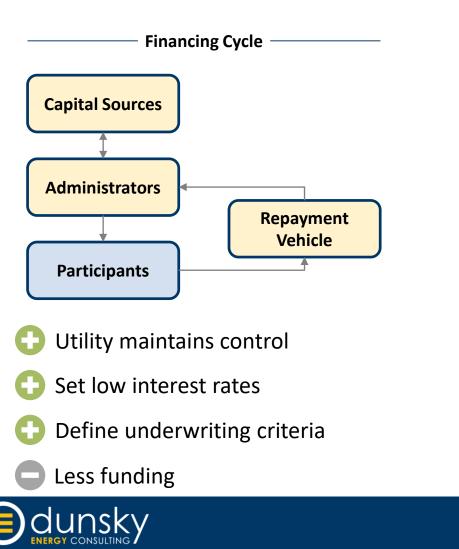


Determine if limiting complexity can reduce upgrade cost

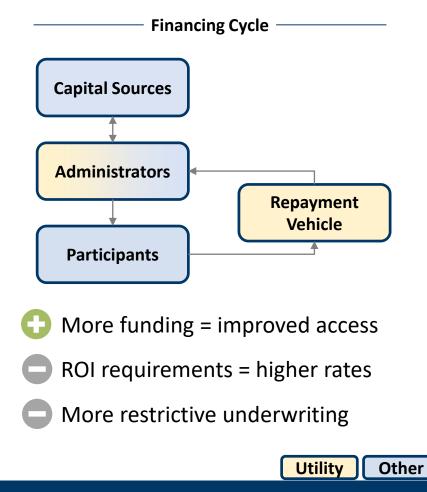


## Pre-program design Funding Source

#### **On-Bill Financing**



#### **On-Bill Repayment**





Identified a range of products and services currently being offered by utilities.

Products & Services	Duke Energy	FirstEnergy	Green Mountain Power	Nova Scotia Power	Pacific Gas & Electric
Efficient Lighting	✓	$\checkmark$		$\checkmark$	$\checkmark$
Efficient Water Heating	✓		$\checkmark$		$\checkmark$
Smart Home Systems		$\checkmark$	$\checkmark$		$\checkmark$
Home EV Chargers		$\checkmark$	$\checkmark$		$\checkmark$
Energy Audits	✓				$\checkmark$
Landscaping / Tree Services		$\checkmark$		$\checkmark$	
Ductless Heat Pumps			$\checkmark$	$\checkmark$	
Battery Energy Storage			$\checkmark$		$\checkmark$
Electrical Services		✓			
Home Repair Services		✓			
HVAC Efficiency Upgrades	✓				
Efficient Pool Pumps	✓				
Solar Energy					$\checkmark$



Determine if a financing program can remove key barriers for uptake.

Additional revenues may be achieved by offering products/services but should not be pursued through the financing terms themselves (e.g. by using higher rates).

	FirstEnergy	Green Mountain Power		
Program	SmartMart by FirstEnergy	Tesla Powerwall 2.0 Program		
Program Type	Online Marketplace	DSM Program		
Products & Services	High efficiency lighting,			
Offered	leases on EV chargers and smart	Home energy storage		
Offered	home systems, other services			
<b>Products &amp; Services</b>	Products by utility,	Utility		
Sold By	services by contractors			
Financing Available	Yes – OBF	Yes – OBF		
		Rate: 2.12%		
	(for select services)	Term: 10 Years		







Different ways to benefit from financing:

- Increase your program's participation
- Decrease your program's cost while maintaining participation

Up-front hurdles must be addressed before beginning to design:

- Program design will need to align with regulatory requirements
- System upgrades can influence program design elements
- Funding sources will have an impact on program design
- Utility may consider leveraging financing to generate revenue:
  - Opportunity to explore leveraging on-bill program to generate revenue from an increase in product or service sales





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