

Financing Emerges as a Tool for Utility Programs

AESP Webinar, September 19, 2013



Agenda

- Some Recent Developments in On-Bill Financing (OBF)
 - *Pat Keegan, Collaborative Efficiency*
- Financing Home Performance Upgrades in OR
 - *Scot Davidson, VP at Clean Energy Works Oregon*
- OBR Programs: Key Design Elements, Recent Cases, Topics for Scale Up
 - *John MacLean, President, Energy Efficiency Finance Corporation*

Overview of Some Recent Developments

- California
- New York
- WHEEL Rollout
- PowerSaver program
- Electric Cooperatives
- Sources of Information

California EE Financing Program

- Commercial financing programs underway
- CPUC hired Harcourt, Brown and Carey, mandated \$200m IOU investment in EE finance
- IOU's submitted program applications for 2013-14
- CPUC to announce programs today, Sept 19
 - \$65m in credit enhancement
 - Pilot projects
 - New entity, CAEATFA, as the hub



New York EE Financing Program

- State legislation, 2011, created Green Jobs - Green New York (GJGNY)
- Implementation began in 2012, included residential, small business, multifamily
- Res loan terms: Up to \$13k loan, 2.99%
- NYSERDA issues QECCB's for capital, IOU's do billing and collection
 - Just raised \$24m for res EE at 3.2%

WHEEL - Warehouse for Energy Efficiency Loans

- Provides low cost, large-scale capital for government and utility residential energy efficiency loan programs
- Program Team – Citigroup, Energy Programs Consortium, Pennsylvania Treasury, Renewable Funding and AFC First
- Program funds used as a subordinated investment which can come back to program, and for rate buydowns
- WHEEL purchases, aggregates unsecured loans
- WHEEL issues rated asset backed notes, sells to investors
- Proceeds from note sales recapitalize WHEEL



PowerSaver - FHA Insured Energy Efficiency Loans

- FHA pilot, 18 lenders, 30,000 projected loans, single digit interest rates
- AFC First, a PowerSaver lender, plans a 12-state roll out
- Unsecured loans to \$7,500, secured loans to \$25,000
- Program funds can buy rates down with capital coming from an external source
- Initial capital pool now in place



EE Financing Opening Up for Cooperatives

- Rural Electric Savings Program Act (RESPA) passed the House in 2010
- A version of RESPA is in the 2013 Farm Bill awaiting final passage
- The Rural Utility Service of the US Department of Agriculture is finalizing an EE loan program
 - Co-ops would all have access to low interest capital
 - Draft rules were issued in 2012
 - Final program expected to roll out this fall
- SC OBF pilot a demonstration of benefits

Help My House, South Carolina OBF Pilot

- Help My House (HMH) pilot led by Central Electric and Electric Cooperatives of South Carolina
- 8 co-ops participate
- SC OBF legislation allows disconnect for non-payment and debt to transfer to next occupant
- 125 retrofits
- Findings addressed key issues
 - Cost-effectiveness to participant
 - Financial impact on co-op
 - Member satisfaction

Measured Results Close to Predicted

	Predicted	Actual
Annual kWh Savings	11,593 kWh	10,809 kWh
Annual \$ Savings	\$1,285	\$1,157
Project Costs	\$7,684	\$7,684
Project Simple Payback	6.0 years	6.6 years

All values are per home averages for a typical meteorological year.



Annual Savings: Average HMH Home



All values are per home averages for a typical meteorological year.



Help My House Participant Views

Satisfied with Co-op?

98% same or higher

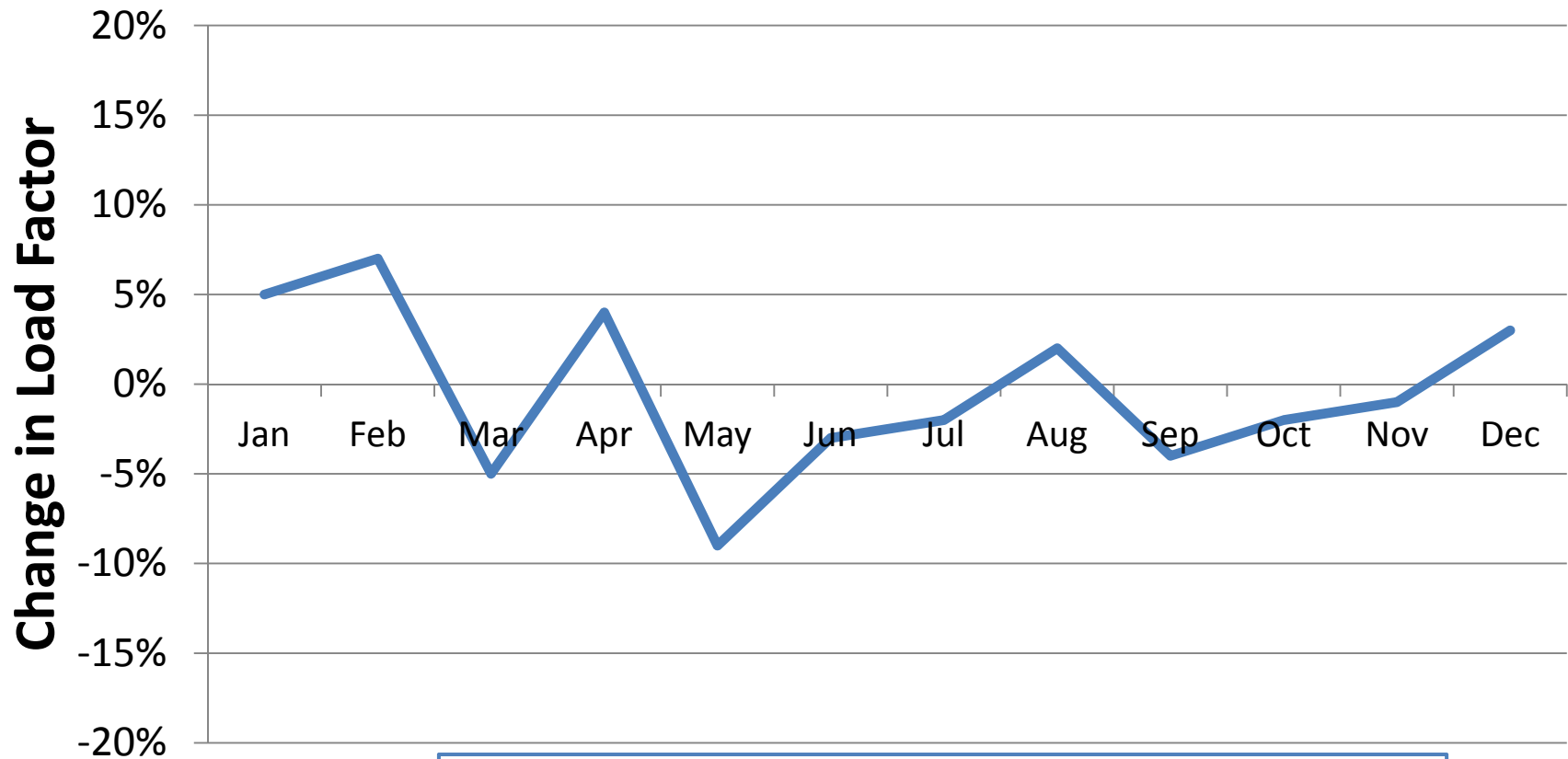
More Comfortable?

A lot more 77%

Somewhat 19%

About the same 4%

Change in Load Factor of HMM Homes



Net Annual Change in Load Factor = 0%

Lost Revenue

- Successful retrofits reduce co-op sales revenue
- Co-op reduction in power purchases probably not enough to offset revenue drop
- Example:
 - If HMH reached 1% of members/yr for 10 yrs
 - If HMH saved 30% per home
 - If co-op covers 1/3 of fixed costs with service charge
 - A 2% rate increase would be necessary after 10 years
 - Half of this could be offset with load management

Overall Results

- The average HMM home
 - Electricity use dropped by one-third
 - Savings > loan repayment
- Participants extremely satisfied
- Load factor unchanged
- Lost revenue very small even for ambitious program
- HMM has spawned ongoing OBF (3 active programs, 1 or 2 more moving in that direction)

Co-op Business Case for OBF

Short Term

- Participant and member satisfaction positive
- Load factor impacts minimal
- Lost revenue would be small, even for a long term aggressive program

Long Term

- When more power is needed energy efficiency from OBF likely to cost less than 2 cents/kWh

Energy Efficiency Financing Information

- AESP National Conference (Jan 30-31, 2014)
- www.aceee.org/topics/energy-efficiency-financing
- www.cleanenergyfinancecenter.org
- www.harcourtbrown.com
- www.Caleefinance.com
- <http://treasurer.ca.gov/caeatfa/>
- www.afcfirst.com

www.collaborativeefficiency.com

Pat Keegan, pkeegan@collaborativeefficiency.com

720-331-0018



Financing Home Performance Upgrades in Oregon



Presented by:

Scot Davidson
VP-Strategy & Market Development
Clean Energy Works

Date:

September 17, 2013



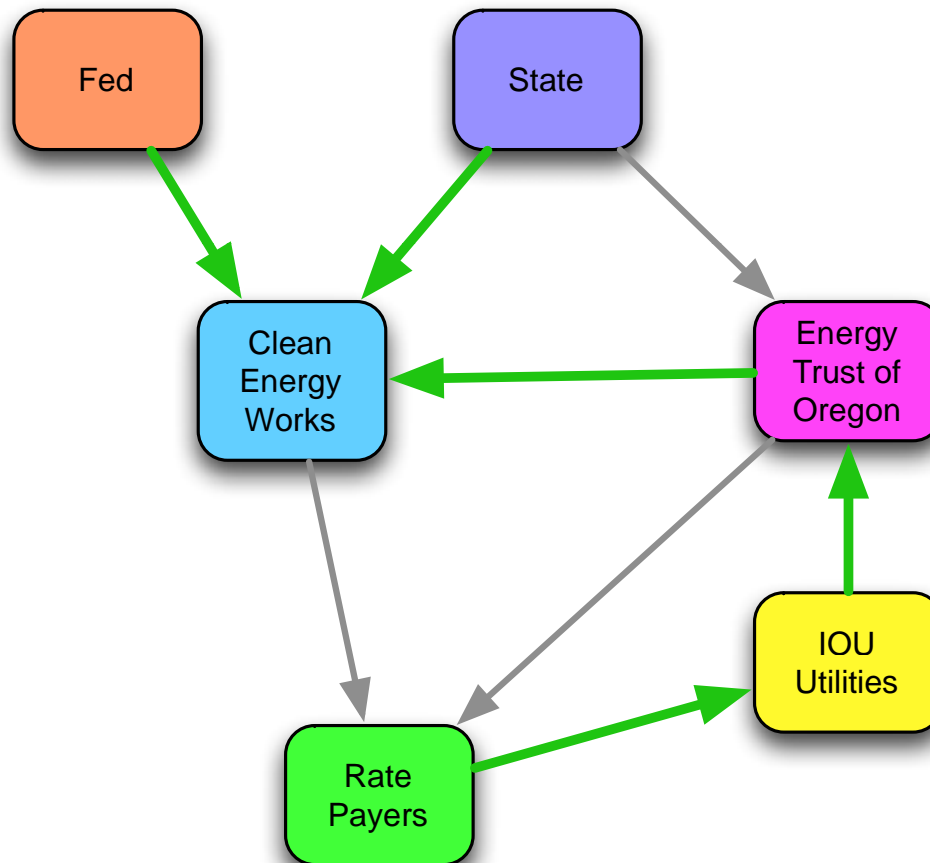
ABOUT CLEAN ENERGY WORKS

CEW partners with multiple public and private interests to overcome the inherent barriers to deep home retrofits.

- No one party has to carry the full cost of customer acquisition and service.
- Both public and private dollars are leveraged.
- Homeowners enjoy lower costs in healthy, comfortable homes.
- Communities are strengthened through jobs.
- Multiple public initiatives are served.



STRUCTURE IN OREGON



PROGRESS

- Launched via 2009 Energy Efficiency and Sustainable Technology Act (EEAST)
- 2009 Clean Energy Works Portland (500 Homes Pilot)
- DOE Investment expands statewide 2010
- Seattle engagement 2013
- 3000 homes to date.
- Now serving 82% population in Oregon



BARRIERS TO ADOPTION



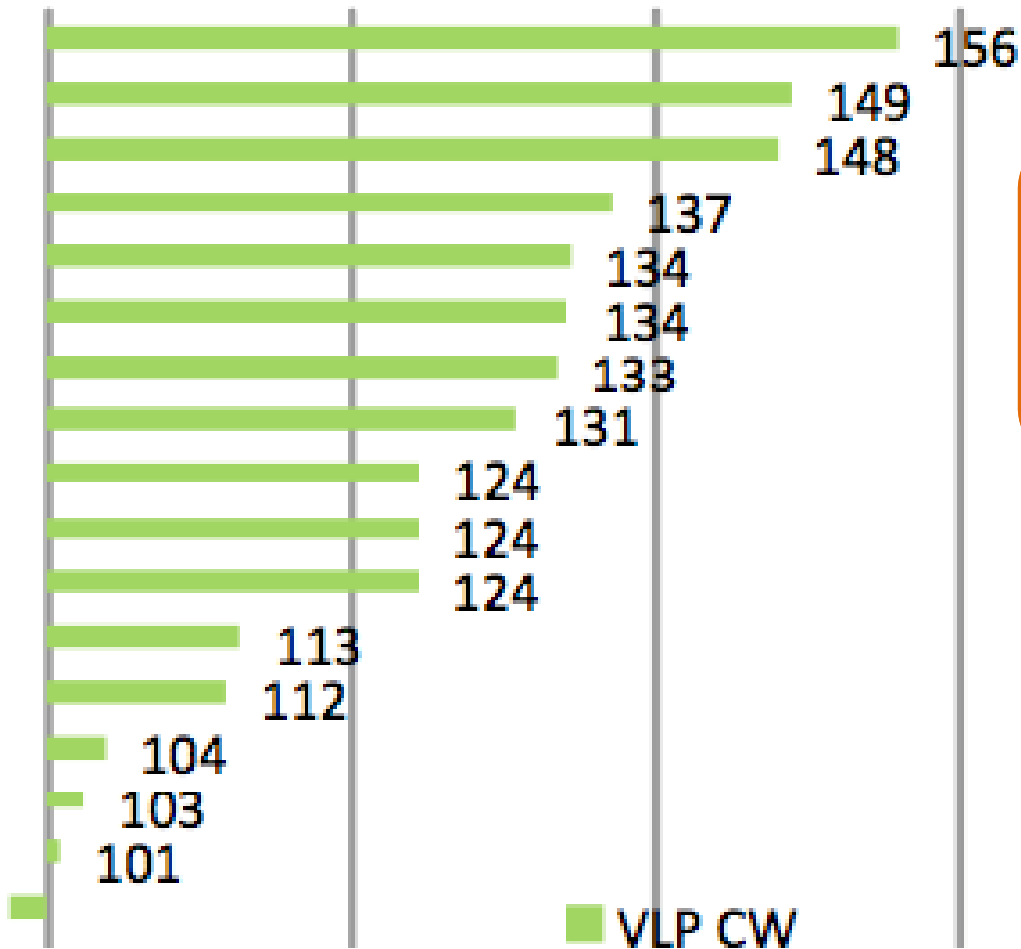
- Value Proposition to Homeowners
- Regulatory Support
- Single Measure Paradigm
- Real Estate Recognition of Value
- Access to Capital
- Contractor Readiness
- Workforce Readiness
- Lack of Data Standard
- Valuing of Non Energy Benefits



“I don’t have the money right now.”



INFLUENCE ON PARTICIPATION



Certified contractors trained in home energy efficiency
 CEW One-Stop Shop Program for all your energy upgrades

No money down financing

No fee financing

Interest rates competitive with comparable loans

Flexible loan terms for low monthly payments

Built in financing

Financing options for renewable energy systems

Upgrades inspected after installation by objective 3rd party

Contractors rated highly by other homeowners

Receive bids from up to 3 participating contractors

Step by step guidance from project start-to-finish

Loan payments made through your heating utility bill

Choice of home equity or unsecured loans

Detailed Home Energy Assessment Report

Contractor bids reviewed by an objective 3rd party

In-Home energy assessment



Among "Very Likely to Participate" homeowners (scale score of 9,10)

LENDERS



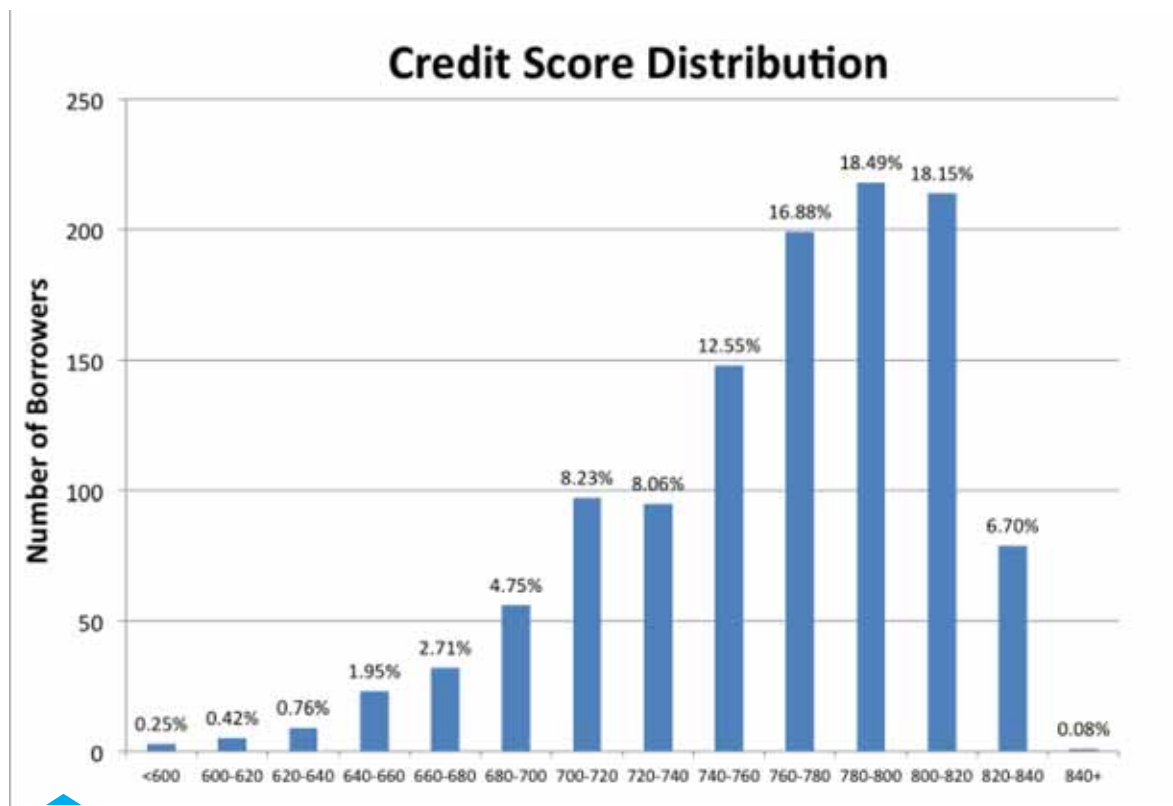
- Banks
- Credit Unions
- Community Development Financial Institutions
- Mortgage Banks

PAYMENT OPTIONS



- Unsecured Loan
- Second Mortgage
- Home Equity Line of Credit
- Cash
- Credit Card
- On Bill Financing
- Other

ATTRACTING LENDERS



- Loan Growth
- Loan Size
- Loan Quality
- New Customers
- Potential
- Community Benefits

ATTRACTING CUSTOMERS



- Affordable and Easy
- No Money Down
- Low Rates/Flexible Long Terms
- Local Lenders

OREGON ENERGY EFFICIENCY AND SUSTAINABLE TECHNOLOGY ACT (EEAST)



- 2009 Bill Providing for On Bill Financing
- Financial Backing by State
- Utility Administration
- Contractor Requirements
- Pilot Phase
- Evaluation in process

ENGAGING THE TRADES

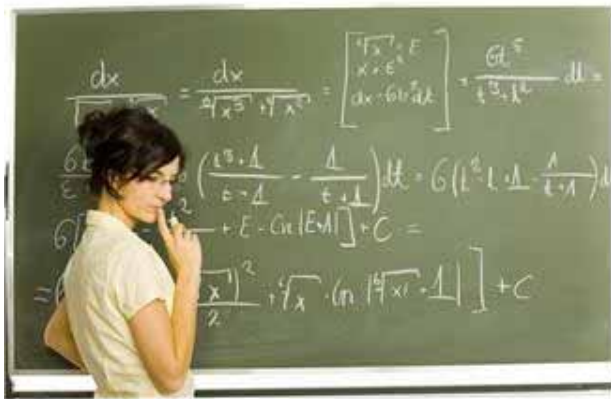


- Training to extend the offer.
- Creating relationships with lenders.
- Link customer with a lending officer.
- Follow up!

EXPERIENCE



OTHER LEARNINGS



- Home performance projects aren't just about the energy savings.
- Relationships are a big part of working with financial institutions.
- Pay attention to the quality of the business for the banker.
- On Bill Financing is not the only answer.

IMPACT



- 3000+ projects since inception.
- 300 direct construction jobs created.
- \$42 million dollars of economic activity generated.
- \$840,000 of annual energy savings accruing to homeowners.
- 86% of projects finance since inception.
- 57% of 2013 projects financed.

QUESTIONS?



Presented by:

**Scot Davidson
VP-Strategy & Market Development
Clean Energy Works**

Date:

September 17, 2013





On-Bill Repayment Programs:
Key Design Elements
with Two Recent Cases, Commercial & Residential, &
Topics to Address for Scale Up

Association of Energy Services Professionals Webinar
September 19, 2013

Presented by:

John MacLean

Energy Efficiency Finance Corp.

jmaclean@eefinance.net

phone = 360-339-3936



OBF Program Design Elements

- Advantages of OBF/OBR: strengthen credit structure & payment performance; offer improved terms; make financing convenient/attractive for customers;
- Target sectors & choice of measures: Eligible Borrowers; Eligible Projects
 - cost-effectiveness tests for participants & non-participants
 - Relationship with existing rebate & EE/DSM programs
- Marketing & customer uptake strategy
 - Trade Allies & Vendor Network
 - EE project development services provided to customers
- Financing structure
 - Source of funds: utility or financial institution (FI) partner
 - Loan terms: making loans attractive to borrowers
 - Security & underwriting guidelines; collections mechanism
 - Loan origination functions, through the full cycle
 - FI partner, selection, distribution of roles & risks
- Administration; MIS & billing systems; flow of funds
- Monitoring & evaluation

Illinois Residential OBF Program

- On-Bill Financing (OBF) program design prescribed by legislation (SB 1918, 2009). Utilities are: Ameren, ComEd, Nicor Gas & Peoples Gas
- Program targets single family residential property owners (up to 4 units); program includes small commercial
- Eligible measures: Estimated energy cost savings \geq customer's total cost of measures including finance charges over the measure's useful life
 - EE measures differ by utility
 - Electric Utilities: recent legislative action now allows all EE Portfolio measures to be eligible for OBF
 - Gas Utilities subject to Act's original cost-effectiveness criteria
- No up-front payment by customer required
- Financial institution partner procured; AFC First Financial Corp. selected
- Loans are made by AFC. Underwriting guidelines developed with the utilities & approved by the ICC
- Loan collections by utility on the utility bill; Utility makes aggregated loan payments to AFC monthly

Illinois Residential OBF Program(2)

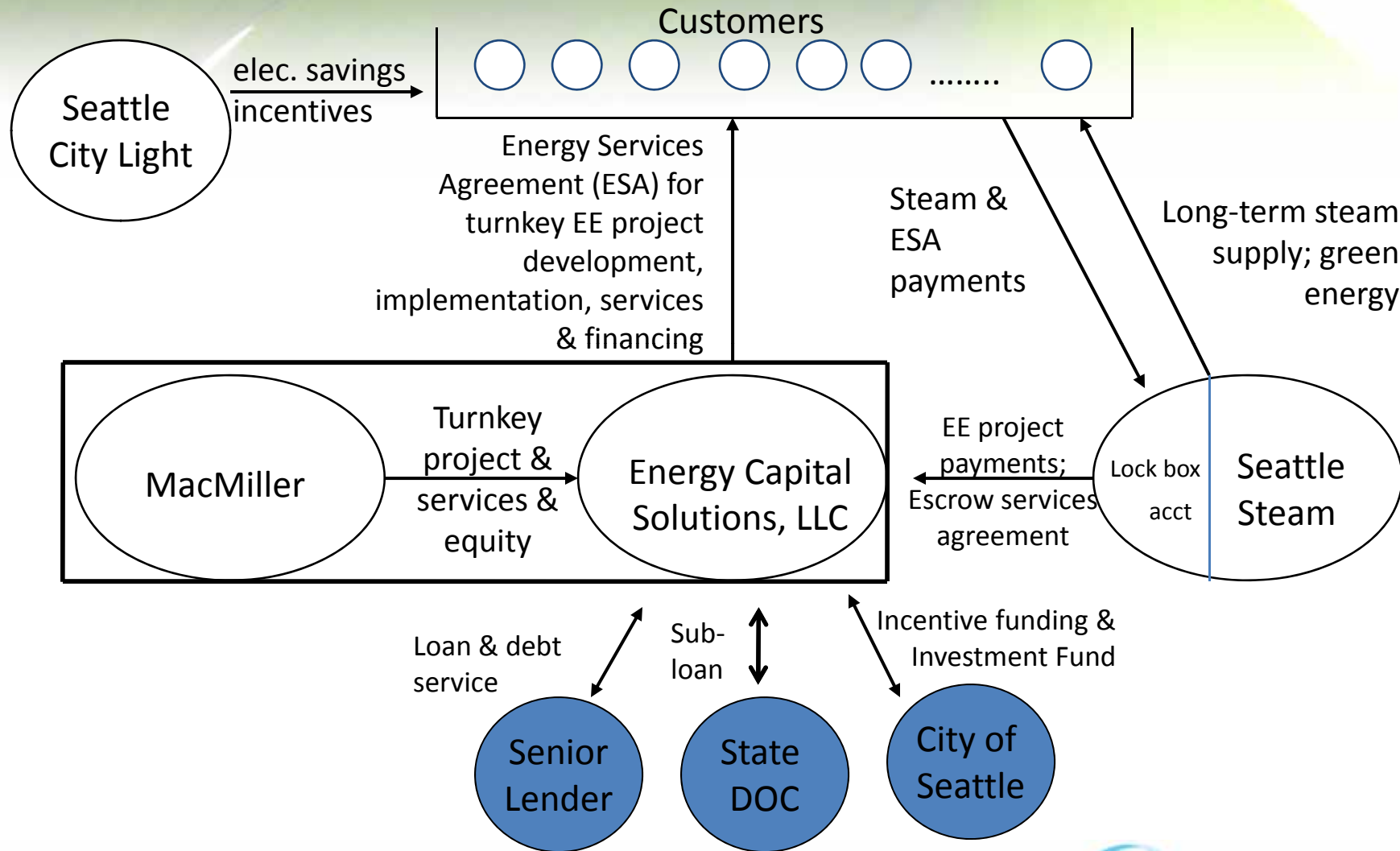
- In the event of non-payment, the utility may suspend utility service and use other established collections and bad debt recovery methods
- Utilities assure full repayment of loans to AFC
- Max. program size = \$2.5 million/ utility = \$12.5 million total
- Coordinated Program marketing & implementation by Vendors, AFC and Utilities
- AFC's set up & loan origination costs are paid by Utilities. Utility Program costs are recovered through tariffs.
- Loan tenors up to 10 years. Interest rate same for all loan tenors = 4.99%
- Loan size: \$400 to \$20,000
- Term finance only; construction period financing by Vendors
- Loan disbursement to Vendor at project completion with approval of Borrower

Seattle Steam Company Energy Efficiency Project Development & Finance Program

- EE investments for Seattle Steam Company customers on customer side of the meter
- MacDonald-Miller Facilities Solutions, Inc. provides turnkey project development, implementation & savings guarantees
- Customer signs Energy Services Agreement to make payments based on savings; this is not a loan but is OBR with an ESA
- Customer payments collected on SSC steam bill; lenders on the project get paid first in the order of disbursement
- ARRA funds used for subordinated debt financing, debt service reserve & carbon reduction incentives
- Sources of funds for first projects financings include mission-related foundation investment & carbon finance
- Scalable & replicable program



Seattle Steam Company & MacDonald Miller Facilities Solutions, Inc.: Energy Efficiency Project Development & Finance Program



OBR Issues for Design & Scale Up

- Extent of OBR credit enhancement & credit OBR structure, variations:
 - Suspension of energy services in event of late & non-payment, according to established utility practices
 - In default events, new customer at same meter must assume remaining obligation..."run with the meter". Reach tenant market
 - UCC filings & mortgage lender consents
- Eligible measures
 - Bill neutrality test & replacement of energy systems
 - Allow for comprehensive EE (gas, elec, water, thermal)
- Accounting topic: customer treatment of ESAs as a service agreement
- Extent of Utility recourse, if any. Limited recourse can be effective & a good buy for utilities. Can blend in Public Benefit Funds & other concessional/public funds
- Utility billing system modifications & coordination
- EE Feed-in Tariff; combine this with OBR
- Customer decision process: limiting factor



Thank You!

John MacLean

President

Energy Efficiency Finance Corp.

Olympia, WA

jmaclean@eefinance.net

Phone: 1-360-339-3936





QUESTIONS

Type Your Questions in the Chat Box



Save the Dates

Sept. 30-Oct. 2, 2013

AESP's Fall Conference
Seattle, WA

Jan. 27-30, 2014

AESP's National Conference
San Diego, CA

May 12-14, 2014

AESP's Spring Conference
Baltimore, MD

For more information - www.aesp.org

