



The Parker Ranch installation in Hawaii

**Using Loan Loss Reserves to Support
Financing Programs:
Lessons from the Field**

September 20, 2010

DOE's Technical Assistance Program (TAP) supports the Energy Efficiency and Conservation Block Grant Program (EECBG) and the State Energy Program (SEP) by providing state, local, and tribal officials the tools and resources needed to implement successful and sustainable clean energy programs.



TAP offers:

- One-on-one assistance
- Extensive online resource library, including:
 - Webinars
 - Events calendar
 - TAP Blog
 - Best practices and project resources
- Facilitation of peer exchange

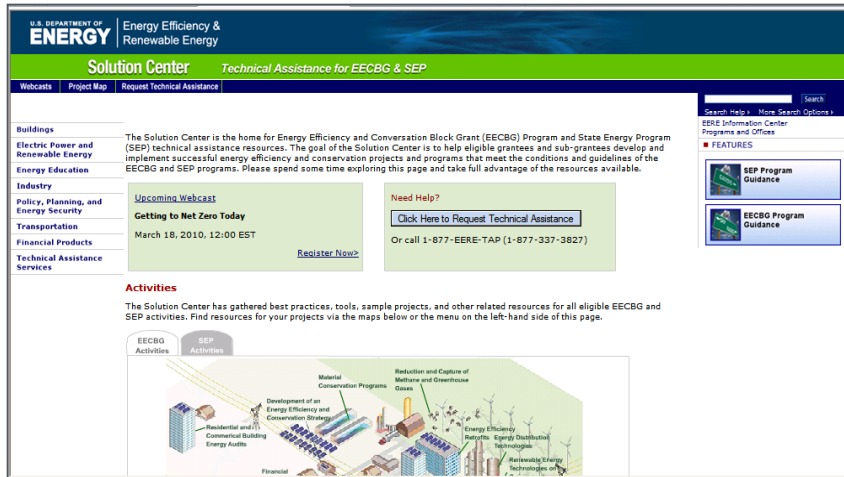
On topics including:

- Energy efficiency and renewable energy technologies
- Program design and implementation
- Financing
- Performance contracting
- State and local capacity building

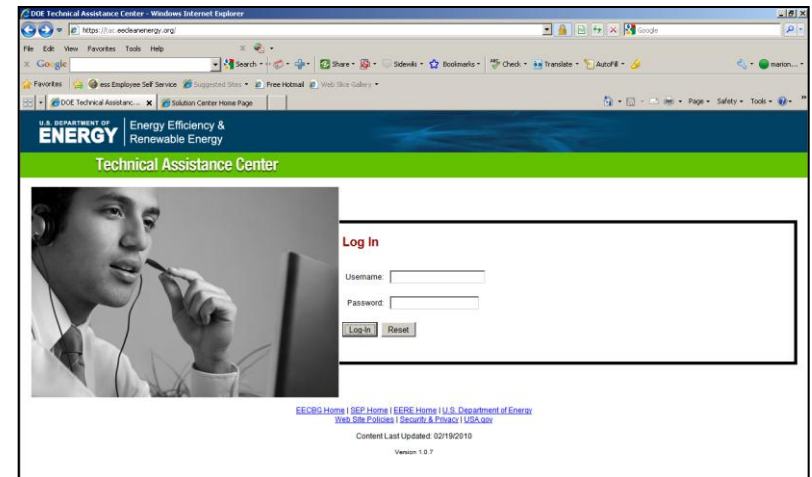
We encourage you to:

1) Explore our online resources via the [Solution Center](#)

2) Submit a request via the [Technical Assistance Center](#)



The screenshot shows the 'Solution Center' page for EECBG & SEP. The header includes the U.S. Department of Energy logo and navigation tabs for 'Webcasts', 'Project Map', and 'Request Technical Assistance'. The main content area is divided into sections: 'Buildings' (describing the Solution Center's purpose), 'Energy Education' (with an 'Upcoming Webcast' for 'Getting to Net Zero Today' on March 18, 2010), and 'Activities' (describing best practices and tools). A sidebar on the right contains 'EEERE Information Center Programs and Offices' and 'FEATURES' for 'SEP Program Guidance' and 'EECBG Program Guidance'. A 'Need Help?' section includes a 'Click Here to Request Technical Assistance' button and the phone number 1-877-EEERE-TAP (1-877-337-3827).



The screenshot shows the 'Technical Assistance Center' login page. The header features the U.S. Department of Energy logo and the title 'Technical Assistance Center'. The main content area is a 'Log In' form with fields for 'Username' and 'Password', and 'Log In' and 'Reset' buttons. Below the form is a photograph of a man wearing a headset. At the bottom, there are links for 'EECBG Home', 'SEP Home', 'EEERE Home', and 'U.S. Department of Energy', along with 'Web Site Policies | Security & Privacy | USA.gov'. The footer indicates 'Content Last Updated: 02/19/2010' and 'Version: 1.0.7'.

3) Ask questions via our call center at 1-877-337-3827 or email us at solutioncenter@ee.doe.gov

- **Alex Ramel** is the Policy and Energy Manager at Sustainable Connections, a nonprofit in Whatcom County, WA that works to foster a thriving local economy built on sustainable business practices. Alex is currently implementing the Community Energy Challenge, which offers financing supported by a loan loss reserve for home owners and small businesses.
- **John MacLean** is the Managing Director of Energy Efficiency Finance Corporation, an advisory firm specializing in finance for energy efficiency and renewable energy projects. John is a DOE technical assistance provider for Recovery Act-funded grantees, and has aided many communities in creating financing programs supported by loan loss reserve funds





A Place-Based Approach to Changing the Market for Energy Efficiency

Alex Ramel

Sustainable Connections, Bellingham, WA



Community Energy Challenge



A non-profit partnership making energy efficiency

ACCESSIBLE **AFFORDABLE** **ATTRACTIVE**

by creating a One Stop Shop for Energy Efficiency
in Whatcom County, Washington



Program Goals



1800 residential energy assessments

900 homes saving 5-30% of energy use

150 businesses provided assessments and saving energy



Over \$1 Million in annual energy savings



How are we doing it?

- Pioneering Partnerships
- Tackling Multiple Barriers
- Driving Demand through Social Change
- Transforming the Local Market for EE



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Pioneering Partnerships

Opportunity Council

- non-profit community action agency
- 25 years weatherization experience

Residential Program

Contractor Training

Start to Finish Project Coordination

Sustainable Connections

- non-profit network of local independently-owned businesses
- led successful 2007 Green Power Challenge

Commercial Program

Marketing & Outreach

Partnerships & Community Engagement



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Pioneering Partnerships

Utility Companies



Local Governments



Non-profits & Educational Institutions



Financial Institutions



Tackling Multiple Barriers

1 - Awareness

2 - Convenience

3 - Affordability

4 - Quality Control



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Tackling Multiple Barriers

Lack of Awareness

- Understanding benefits of efficiency
- Identifying necessary repairs
- Evaluating cost-effectiveness
- Locating reliable whole-house contractors
- County-wide outreach campaign
- Fuel-neutral home assessment
- Recommendations tiered by cost-effectiveness
- 3rd party certified contractors & QA



Tackling Multiple Barriers

Convenience



One Stop Energy Shop

- home energy assessment
- Home Energy Advisor
- assistance with utility rebates, tax incentives, and loan.
- vetted contractors
- 100% quality assurance

Tackling Multiple Barriers

Affordability

- Low-cost assessment (\$95)
 - *applied to implemented measures
- Up to \$1500 in added cash incentives
- Rebate & tax credit eligibility assistance
- Accessible low-interest loans



Tackling Multiple Barriers

Quality Control

An estimated 90% of HVAC equipment and insulation is installed sub-optimally, reducing efficiency by 20-30% (McKinsey & Co 2009)

- BPC training for building analysts and contractors
- Contractor evaluation
- 3rd party quality assurance for 100% of projects



Driving Demand through Social Change

1 - Branding

2 - Goals

3 - Feedback

4 - Social Diffusion



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Driving Demand through Social Change

Branding

- Building on strong existing SC brand
- Materials and signage widely distributed



 Sustainable Connections

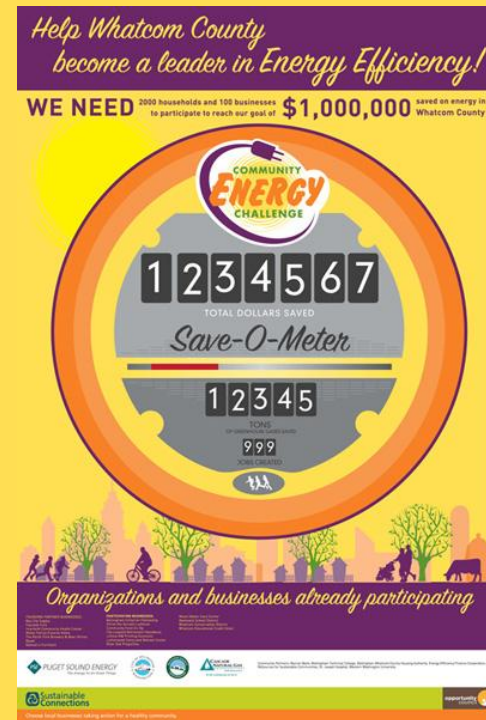
opportunity council 

Driving Demand through Social Change

Goals and Progress Indicators

Save-O-Meter

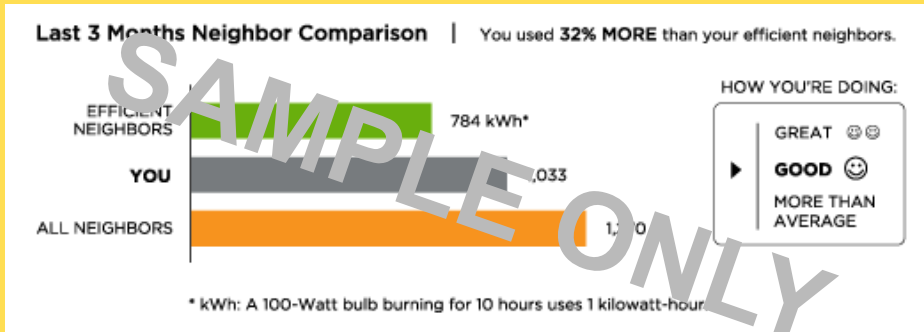
- High-profile banners
- Website
- E-Newsletter progress updates



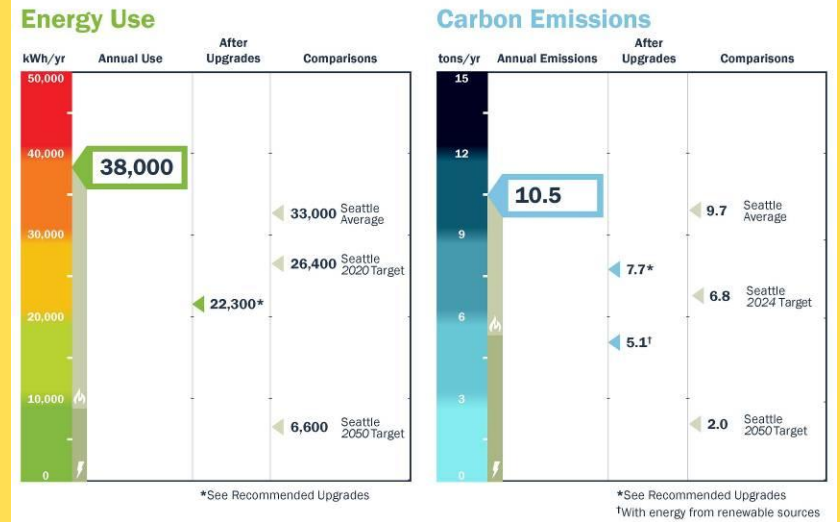
Driving Demand through Social Change

Feedback

Utility Mailer Reports by O Power



Energy Performance Score



Driving Demand through Social Change

Social Diffusion

- Neighborhood competition
- Yard signs
- Referral postcards
- Active community groups (faith-related & other)



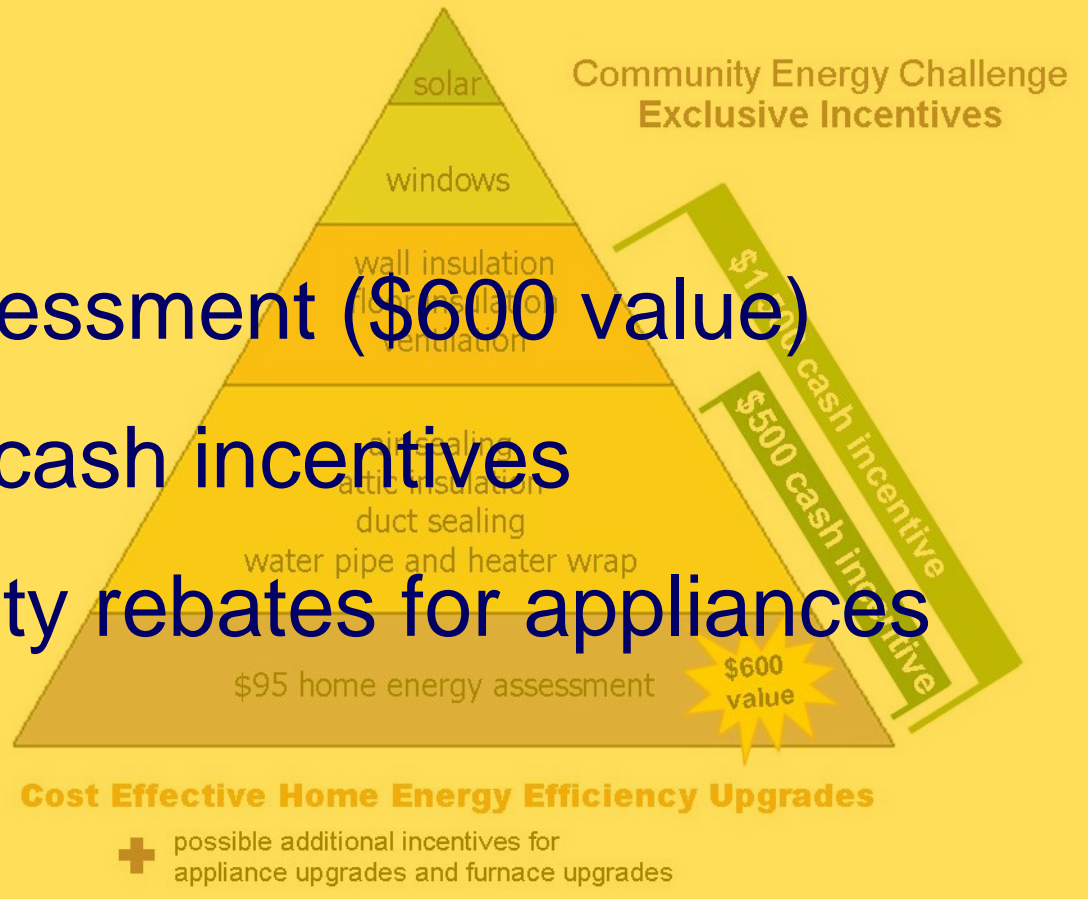
Transforming the Market

- 1 - Added Incentives
- 2 - Attractive Financing
- 3 - Economies of Scale

Transforming the Market

Incentives

- \$95 energy assessment (\$600 value)
- Up to \$1500 in cash incentives
- Match most utility rebates for appliances



Transforming the Market

Innovative Financing



- \$750,000 loan loss reserve fund
 - Available credit in difficult market
- \$500,000 in direct interest rate buy-downs
 - Rates reduces a further 2-3%
- Bank promoting program on location

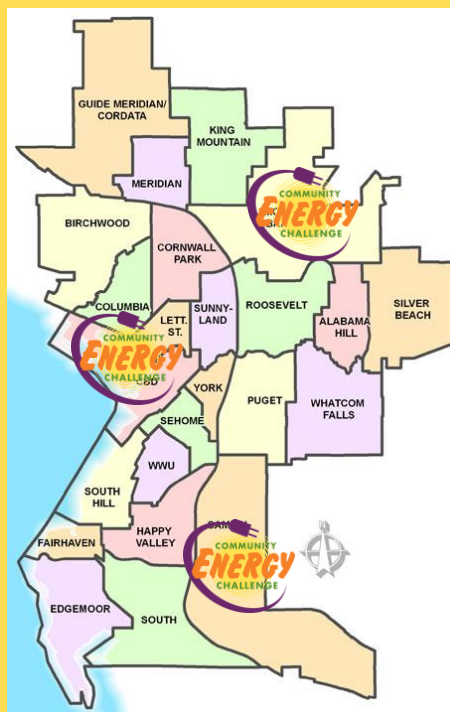


Transforming the Market

Economies of Scale

Experimenting with grouping projects

- Geographically
- By type of work



Current Program Status

As of August 13, 2010

Since February 2010

- 69 assessments completed, 60 scheduled
- 47 Home Energy Advisor appointments
- 18 projects completed or in progress
 - 25 still reviewing options, 4 declined
- 11 jobs created or retained





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Structuring Loan Loss Reserve Funds Energy Efficiency Finance Programs: Lessons from the Field

September 20, 2010

Presented by:
John MacLean
Energy Efficiency Finance Corp.



Credit Enhancement Overview

- Risk sharing: can be instrumental to support Financial Institution (FI) energy efficiency (EE) & renewable energy (RE) lending
- Goals: pioneer new finance products, expand risk horizons, broaden access to finance, extend tenors, reduce rates
- Credit enhancements can support a range of finance models: FI loan facilities, bond issues, PACE, utility on-bill financing, etc.
- Credit enhancement structures include:
 - Loan Loss Reserve Funds
 - Debt Service Reserve Funds
 - Subordinated co-financing

Loan Loss Reserve Funds

- Provide partial risk coverage to motivate commercial FIs to offer EE/RE finance products
- Can be funded with ARRA monies (no guarantor is required)
- Cover first losses on a portfolio of EE/RE loans
- Take a “portfolio approach” to credit structuring
- As a % of total loan portfolio principal = 2-10%
- Achieve significant leverage of public funds
- Most commonly applied to single family residential and small commercial sectors

LRF Goals & Impacts on Underwriting

Use of LRF can have the following results:

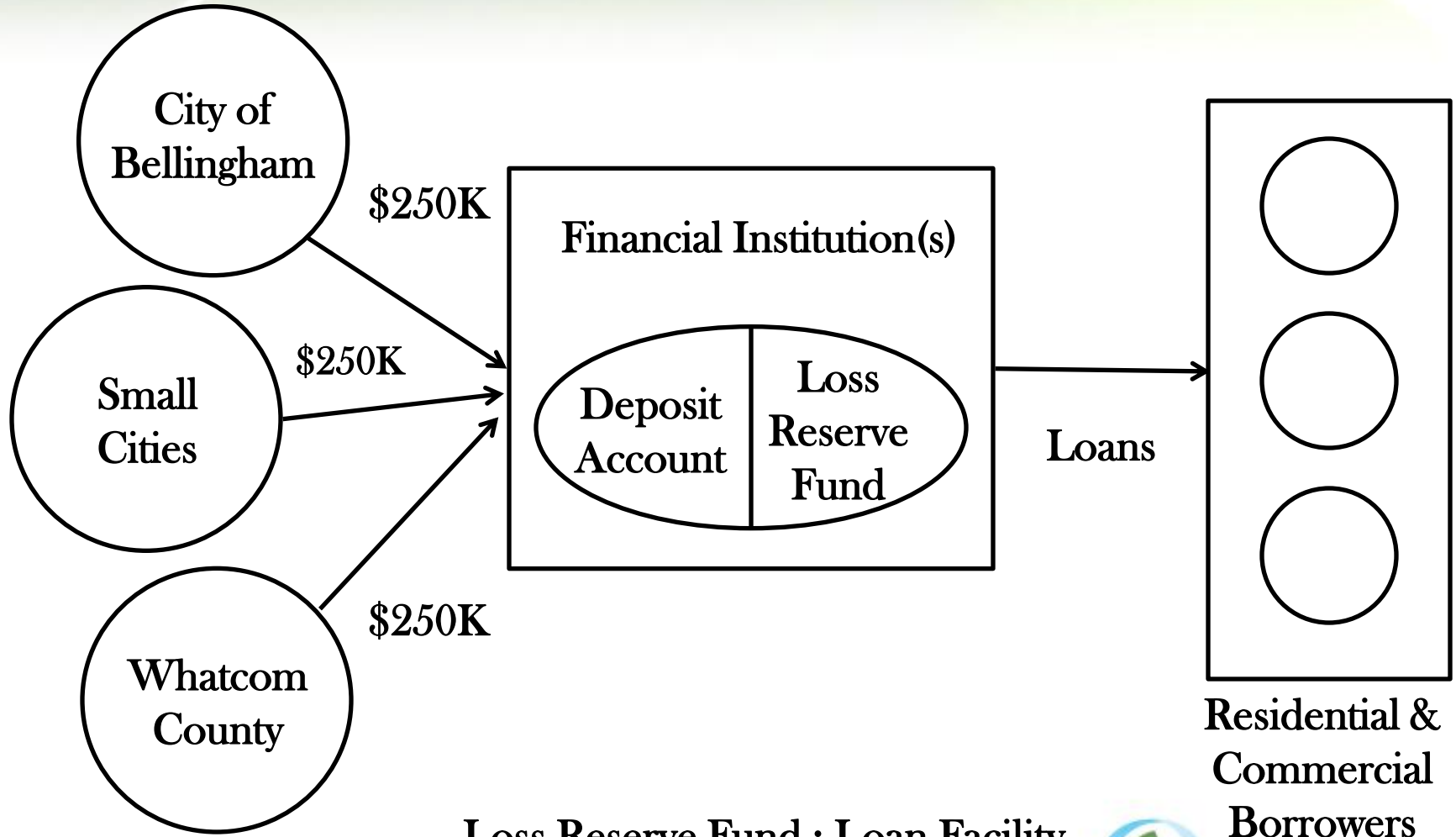
- Reduces required credit score
- Increases debt to income ratio
- Lengthens loan tenor
- Allows larger unsecured loans
- Increases or eliminates loan to value ratio
- Lowers required customer capital contribution
- Lowers interest rate

Bellingham/Whatcom Co., WA:

Loan Loss Reserves, with 3rd Party Lender

- Using City & County EECBGs and WA State SEP Credit Enhancement Grant for both
 - Loan Loss Reserve Fund and
 - interest rate buy downs
- Target single family residential & small commercial sectors
- Three government entities involved
- RFP process conducted to procure FI Partner
- Program operational since May 2010

Loan Loss Reserve Structure



Loss Reserve Fund : Loan Facility
\$750,000 : \$8.25+ million

Program Implementing Agreements

- Loan Loss Reserve Agreement
 - between the FI & Donor (City/County in Bellingham case)
- EE Loan Program Agreement
 - between the FI & Program Administrator
 - defines all administrative coordination & roles & during loan origination. Flexible agreement
 - Key steps in loan origination include:
 - Marketing
 - Credit screening
 - Loan application
 - Credit approval
 - Loan agreement
 - Disbursements

Outline of Typical EE Loan Terms

- 1) Eligible borrowers
- 2) Eligible projects
- 3) Loan application
- 4) Credit prescreening
- 5) Loan terms
- 6) Interest rate
- 7) Payment schedule
- 8) Loan size
- 9) Loan underwriting guidelines and security
- 10) Loan disbursement and flow of funds during project construction
- 11) Prepayment option

Typical LRF Risk-Sharing Formula

- Ratio of (A) total original principal amount of Loans in portfolio, to (B) LRF funds. $A/B = \text{leverage ratio}$
- “First loss percentage” = portion of the total Loan portfolio original principal the LRF will cover, e.g., 2-10%
- Share of first losses that LRF will pay, e.g., 80-90%+; balance to the account of the FI
- Trade-offs between the leverage ratio, risk sharing formula, Loan security and access to finance
- Incentives for good loan origination/administration are aligned

LRF Agreement: Key Terms

- Definition of Deposit Account & Reserve Account
- Reprogramming Funds in the Deposit Account
- Interest on both the LRF and Deposit Accounts
- Definition of Loss & Event of Loss
- Risk sharing formula; expanded lending & reset formula
- Responsibility for & Distribution of Recoveries
- Underwriting Criteria & Loan terms
- Reporting & Monitoring
- Availability Period
- Disposition of loan loss reserve funds at end of Loan period
- Program Fees
- Assignment of LRF

LRFs: Lessons Learned & Challenges

- Many programs being set up in other states
- Best applied to portfolios of large #'s of loans; other credit enhancement structures can be applied for other sectors
- Additional LRF contributors possible for scale up: vendors, FI, utilities, etc.
- Leverage ratios: can start low & increase with experience; include these terms in LRF Agreement
- Can accelerate transfer of funds to Reserve Account to meet USDOE definition of “spent”
- Make LRF assignable, supports secondary market
- Single vs. multiple FIs: a challenge
- Can use of separate Escrow Agent

Steps to Recruit & Procure Financial Partners & USDOE Technical Assistance

- Conduct FI research: identify interested FIs
- Structure financial products and use of ARRA funds
- Develop FI Request for Proposal (RFP), if required
- Conduct FI RFP process
 - Leave room for creative responses, at the same time ...
 - Provide initial structure concepts
- Develop & negotiate implementing agreements with FIs

USDOE Financial Advisory team can assist in this process.

Financial Institution RFPs: Outline

- Program Background: e.g., partners, target market, lending goals, types of equipment, project economics, marketing, etc.
- Proposes structure & terms of financial products
- Defines use of ARRA grant funds
- Prescribes format for proposals
- RFP rules, procedures, schedule, evaluation criteria
- Implementing agreements, e.g., LRF Agreement

Draw the target well so proposers can hit a bull's eye!
Same information needed in sole source negotiation.

Topics for FI to Address in a Proposal

1. Summary Financing Structure & Approach
2. Loan Interest Rates and Fee Pricing
3. Loan Terms, Tenors, Prepayments, etc.
4. Underwriting Guidelines
5. Loan Marketing
6. Loan Origination & Administration
7. Qualifications & Experience, Officers and Staffing
8. Other services
9. FI background and financial condition

Thank You!

John MacLean

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Please join us again:

Taking Advantage of Qualified Energy Conservation Bonds (QECBs)

Date: September 22, 2010

Time: 3:00-4:30 EST

Energy Saving Performance Contracting (ESPC) Basics

Date: September 23, 2010

Time: 1:30 – 2:30 EST

“Green” Codes and Programs

Date: September 24, 2010

Time: 2:00 – 3:00 EST

Designing Effective Renewables Programs

Date: September 28, 2010

Time: 2:00 – 3:00 EST

Driving Demand for Home Energy Improvements: Lessons from the Field

Date: September 29, 2010

Time: 3:00-4:15 EST

For the most up-to-date information and registration links, please visit the Solution Center webcast page at www.wip.energy.gov/solutioncenter/webcasts