Overview for Financing Programs

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U.S. Department of Energy
Financial mechanisms within Integrated Energy Efficiency Programs

Every successful energy efficiency program depends on four functional pillars

- Demand Creation
- Workforce training & certification
- EM&V, data collection, and continuous improvement
- Financing

Financing must address a broad spectrum of needs from small-dollar reactionary replacement of HVAC equipment to large-dollar, carefully planned whole-building retrofits

- No one product is effective across the entire spectrum
- Multiple complementary products maximize the effectiveness of the portfolio
- Different product serve different market segments – residential/commercial/non profit etc. and different sub-segments with each (eg. small commercial).

Financing programs allow payments on investments to be stretched out in time, the same way that the benefits created from the investments are accrued.
A Typical Integrated Residential Energy Efficiency Program

**EM&V**
- Build Measurement System
- Score Marketing Campaigns
- Score Audits to Applications Rate
- Score Applications to Loans Rate
  - Evaluate Work and Energy Performance
  - Evaluate Loan Performance
  - Tie Energy and Loan Performance

**Financing**
- Take Applications
- Underwrite
- Issue Funds
- Collect Payments
- Replenish Capital

**Workforce**
- Perform Audits
- Sell Projects

**Marketing**
- Create Demand for Audits
- Sell Projects
- Communicate Success Stories
- Nurture cycle for continued demand

**Additional Notes:**
- EM&V
- Financing
- Workforce
- Marketing
- Build Measurement System
- Create Demand for Audits
- Sell Projects
- Communicate Success Stories
- Nurture cycle for continued demand

http://www.eere.energy.gov/
Roadmap to a Self-Sustaining Private Market

Grantees currently are building programs at different points along the spectrum, as appropriate to their capabilities and the risk appetite of their financial partners.

- **Risk of Defaults**
  - Revolving Loan Funds: Public Funds
  - Loan Loss Reserve Programs: Public Funds
  - Self-Sustaining Private Market: Credit Enhancements from Public Funds

- **Loan Capital**
  - Revolving Loan Funds: Public Capital Funding
  - Loan Loss Reserve Programs: Public Capital Funding
  - Self-Sustaining Private Market: Private Capital Funding

- **Administration**
  - Revolving Loan Funds: Self-Administered
  - Loan Loss Reserve Programs: Private Partner-Administered
  - Self-Sustaining Private Market: Private Lender Administered
Over $1 Billion of private capital will go to work thanks to ARRA Programs

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<th>Workshop Attendees</th>
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Data was collected by TA Engagement Leaders, from grantees who have engaged with TA Team to design, develop, and implement financing programs. Additional financing activity is occurring, though in smaller volume than the grantees represented here. December 2010.
**Financial Terms**

**Financial Program**  An organized effort to match borrowers with capital. Both Management and supply of capital can variously be either by public entity or private partner.

**Financial Incentive**  Covers broad range of mechanisms to convince a customer to engage in EE – can include direct payments such as rebates, coupons, and gifts, or more sophisticated financial vehicles such as Interest Rate Buy-downs and Credit Enhancements.

**Rebate**  Not a financial tool, just a controlled payment to a consumer to incent specific behavior.

**Interest Rate Buy-down**  A payment to a lender which covers a portion of the interest payments that due to them for issuing a particular loan. The IRB allows the lender to charge the borrower a lower interest rate because the public entity has covered a portion of their tab.

Financing programs allow payments on investments to be stretched out in time, the same way that the benefits created from the investments are accrued.
Financial Terms

Revolving Loan Fund  A financing program that lends public dollars directly to borrowers. As the loans are repaid, the dollars can be loaned out to additional borrowers. Losses will be incurred to diminish the fund, but can be mitigated with interest and fees to extend the sustainability of the fund. The RLF can be managed by either a public entity or private partner.

Credit Enhancement  A mechanism that reduces the risk associated with an investment, making the investment more attractive, and lower-cost. Credit Enhancements are used to convince investors to engage in a particular investment despite a concern about its potential risk of default. Most effectively used in environments that carry a high degree of Unknown Risk, not actual likelihood of default.

Loan Loss Reserve  A financing program in which a public entity pledges to repay a lender for a portion of the losses experienced on a portfolio of loans. The LLR typically covers the first 5 – 20% of losses. Private lenders carry the capital burden, while the public funds carry the risk burden. Maximum liability for losses is limited to the funds in the reserve.

Secondary Market  When the originator of a loan sells it to another investor, a secondary market is said to exist. This can take many forms, from open liquid markets for bundled securities, to highly conservative participations in diversified portfolios of investments. In general, financial institutions often specialize in either origination of loans or investment in large blocks of loans. When the originator is able to sell a portion or all of a loan to a secondary investor, that originator’s capital is replenished and they are able to make additional loans.

Financing programs allow payments on investments to be stretched out in time, the same way that the benefits created from the investments are accrued
Every finance program must address the same basic functions, but an array of options can be selected within each function to meet local goals, and solve specific challenges.
Revolving Loan Fund Example

**Capital Source**
- Public (ARRA, SEP, EECBG, BB)
- Private
  - Local Lender
  - National Lender
  - Bonds (QECB, CREB, etc.)

**Loan Administration**
- Self-administered by Public Agency
  - Public
  - Private
  - Financial Institution Partner

**Payment Collection**
- Public Agency
- Tax Bill
- Financial Institution Partner
- Utility Company ("On Bill")
- PowerSaver (FHA Guarantee)
- Secondary Markets
Loan Loss Reserve Example

Options
- ARRA (SEP, EECBG, BB)
- Local Lender
- National Lender
  - Bonds (QECB, CREB, etc.)
- Self-administered by Public Agency
- Financial Institution Partner
- Public Agency
- Tax Bill
- Financial Institution Partner
- Utility Company (“On Bill”)

Capital Source
- Public
- Private

Loan Administration
- Public
- Private

Payment Collection
- Public
- Private
Questions

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