Financing Middle Income Energy Improvements

March 6, 2012

Lawrence Berkeley National Laboratory
Please join us again:

Title: **In-Person Middle Income EE Forum for Practitioners and Policy Makers**  
Date: March 26, 2012  
Time: 8:00am - 1:00pm at the Hilton Baltimore, MD

Title: **Policies to Drive Greater Energy Efficiency Market Penetration in Middle Income Households**  
Date: April 4, 2012  
Time: 3:00-4:30 EST

For additional resources, list serve sign-up and registration links, please visit LBNL’s Middle Income Energy Efficiency page at:  

http://middleincome.lbl.gov
Today’s Presenters

**Keith Canfield**
Communications and Energy Manager, Clinton Climate Initiative
Home Energy Assistance Loan (HEAL) Program

**Jeff Pitkin**
Treasurer, New York State Energy Research & Development Authority (NYSERDA)
NYSERDA Green Jobs-Green New York Financing Program

**Adam Zimmerman**
Senior Vice President, Craft3 (formerly Enterprise Cascadia)
Clean Energy Works Oregon Financing Program
Delivering Energy Efficiency to Middle Income Single Family Households

Environmental Energy Technologies Division
Lawrence Berkeley National Laboratory

Authors:
Mark Zimring, Merrian Goggio Borgeson,
Ian Hoffman, Charles Goldman, Elizabeth Stuart,
Annika Todd, and Megan Billingsley

December 2011
We define “middle income” as the middle third of U.S. households by income, who earn $32,500 to $72,500 annually.
Targeting Middle Income Households

Most middle income (MI) households live in, and own, single family homes—single family homes are the focus of this report*

* Single family homes include mobile homes and 1-4 unit dwellings

Most middle income households do not qualify for energy assistance programs like the Weatherization Assistance Program (WAP)*.

* The Department of Energy’s Weatherization Assistance Program offers low income households free basic weatherization improvements.

Financing to Address Upfront Costs

- The upfront cost of home energy improvements is a significant barrier to investment - energy upgrades for just 1/3 of the 32 million MI single family households would require $30-$100 billion.

Home Improvement Financing Patterns by Income in 2001

Home Values Have Declined Dramatically

Single family home values—the primary vehicle for MI home improvement financing—have declined by 32% since the housing market’s 2006 peak.

Source: Seasonally-adjusted S&P/Case-Shiller Home Price U.S. National Index Level Q2-2011
Qualifying for Credit

At the same time that access to home-secured financing has declined, the largest energy efficiency loan programs are rejecting 20-50% of applicants.

- MI households are rejected at higher rates than higher income households

Keystone HELP loan application, approval, funding and loan size rates (by income) – January 2010-August 2011

<table>
<thead>
<tr>
<th>Household Income</th>
<th># Applications (% of Total Applications)</th>
<th>Applications Approved (Approval Rate %)</th>
<th>Loans Funded (Approval → Loan Conversion Rate %)</th>
<th>Average Loan Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;80% AMI</td>
<td>~4,000 (40%)</td>
<td>~1,720 (43%)</td>
<td>~1,000 (58%)</td>
<td>~$7,500</td>
</tr>
<tr>
<td>≥80% AMI</td>
<td>~6,000 (60%)</td>
<td>~4,140 (69%)</td>
<td>~3,000 (73%)</td>
<td>~$9,500</td>
</tr>
</tbody>
</table>
Qualifying for Credit

Credit scores are a key metric for lenders in evaluating creditworthiness.

Source: Due to data limitations, for the purposes of the credit score analysis we use household income of $30,000 to $70,000 to define middle income. Credit score data from Energy Programs Consortium; based on analysis of TransUnion credit data from Intellidyn.
Qualifying for Credit

Loan underwriting may also include maximum debt-to-income (DTI) ratios—excessive DTIs are often responsible for more loan application rejections than credit scores.

Reasons for application rejection in NYSERDA’s residential energy efficiency loan program November 2010-October 2011

- DTI Too High: 42%
- Credit Score Too Low: 23%
- Bankruptcy, Foreclosure or Repossession: 17%
- Collections, Judgments, Chargeoffs: 15%
- Other (Including Poor Utility Bill Repayment History): 3%
Increasing Access to Capital

Middle income households need new ways of accessing affordable credit if they are to make home energy upgrades.

- But underwriting criteria exist for a reason—to ensure that those who get access to financing can and will repay it.

Credit Score and Corresponding Delinquency Projections

<table>
<thead>
<tr>
<th>FICO Score Range</th>
<th>Delinquency Projection (% Likelihood)</th>
</tr>
</thead>
<tbody>
<tr>
<td>300-499</td>
<td>87</td>
</tr>
<tr>
<td>500-549</td>
<td>71</td>
</tr>
<tr>
<td>550-599</td>
<td>51</td>
</tr>
<tr>
<td>600-649</td>
<td>31</td>
</tr>
<tr>
<td>650-699</td>
<td>15</td>
</tr>
<tr>
<td>700-749</td>
<td>5</td>
</tr>
<tr>
<td>750-799</td>
<td>2</td>
</tr>
<tr>
<td>800-850</td>
<td>1</td>
</tr>
</tbody>
</table>

Strategies that may increase MI household access to capital include:

- Credit Enhancements
- Alternative Underwriting
- Innovative Financing Tools

Source: Transunion 2011
Questions?

Mark Zimring
mzimring@lbl.gov
510.495.2088

For the full report, webcasts, policy briefs and other information, please visit:

http://MiddleIncome.lbl.gov
Home Energy Affordability Loan (HEAL)
Heal

/hēl/: Verb

Cause (a wound, injury, or person) to become sound or healthy again.
Employer: Energy Upgrade Catalyst

• Home Energy Affordability Loan (HEAL) provides the infrastructure that allows employers to offer Energy Upgrades in a turnkey manner
  o HEAL works like an employee benefit provider
  o Marketing, signup, audit, consultation, Upgrade delivery facilitation/QA and finance facilitation/management

• HEAL views Employers as:
  o Credible platforms for presenting marketing and education opportunities to workforce en masse
  o Point source aggregators of Upgrade demand
  o Sources of Credit Agnostic financing
Credit Agnostic Financing

Two Models of HEAL

• **Industry Financed (HEAL\textsuperscript{i})**: Original HEAL Model where employer provides Upgrade financing, with the loan pool often funded from facility EE retrofit savings
  - Financing eligibility decision based on non-credit metrics (e.g.- Seniority, Employment History)

• **Third Party Finance (HEAL\textsuperscript{3})**: For entities with lending restrictions, third party financing using a credit union is deployed
  - Can be used in conjunction with a Loan Loss Reserve
  - For those unable to qualify with credit union, Bridge Loan Fund administered by Clinton Foundation to advance funds that are projected to be paid back through rebates/incentives

• Both models use payroll deductions for repayment
• Neither model requires consideration of home value/equity for decision
Reality Check

When faced with third party involvement, preferences change

HEAL$^1$

- 85%
- 15%

- Self-Finance
- Employer/Credit Union
- Bridge Loan

HEAL$^3$

- 60%
- 28%
- 12%
EEM Frequency Metrics and Influence of Rebates

<table>
<thead>
<tr>
<th></th>
<th>Air Sealing</th>
<th>Duct Sealing</th>
<th>Insulation</th>
<th>Lighting</th>
<th>Appliances</th>
<th>Health/Safety</th>
<th>HVAC</th>
<th>Door/Window</th>
<th>Thermostat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All</strong></td>
<td>84%</td>
<td>39%</td>
<td>65%</td>
<td>89%</td>
<td>22%</td>
<td>12%</td>
<td>13%</td>
<td>9%</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Industry 6</strong></td>
<td>72%</td>
<td>97%</td>
<td>48%</td>
<td>83%</td>
<td>3%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Rebate Contribution is a primary determinate of uptake probability:

- Addition of rebates by Natural Gas provider has significantly impacted conversion ratio on affected EEMs
- 0% on bill financing offered by Electric Utility in lieu of rebates dramatically reduced conversion rates
Case Study: Home At A Glance

Location: Maumelle, AR
Project Type: Residential Retrofit
Home Size: 1,800 Square Feet
Built: 1975

Energy Savings (est): 25%
HERS Index before: 130
HERS Index after: 92
Annual Utility Savings (est): $796
Average GHG Savings (est): 7,800 Pounds Annually

Retrofit Cost:
- Air Sealing: $289
- Insulation: $524
- Duct Sealing: $271
- Lighting: $111
- Appliance Replacement: $641
- Total Costs: $1,836

AEO Appliance Rebate: $275
Utility rebates: $1,249
Total Incentives: $1,524

Net Costs: $312
Simple Payback: 4.75 Months

Employer Information:
Employer: L’Oréal USA
Location: North Little Rock, AR
Number of Employees: 650
Participating in HEAL: 90
THANK YOU

Martha Jane Murray
Clinton Climate Initiative
mjmurray@clintonfoundation.org
Financing Middle Income Energy Improvements
LBNL Webinar
March 6, 2012

Jeff Pitkin, Treasurer
New York State Energy Research and Development Authority
Legislative Authority


- Establishes a revolving loan fund and innovative financing mechanisms to provide loans to finance energy efficiency improvements for:
  - Residential 1-4 family dwelling (up to $25,000)
  - Multifamily buildings (program limit $5,000/unit or $500,000 per building)
  - Small business (<101 employees) and not-for-profit structures (up to $50,000)
- Unsecured residential loans launched Nov 2010

**Power NY Act of 2011 (Aug 2011)**

- Establishes an on-bill recovery charge for repayment of GJGNY loans
- Statewide - customers of Central Hudson, Con Edison, NYSEG, National Grid, Orange & Rockland, Rochester Gas & Electric, and Long Island Power Authority
- Tariff charge – subject to termination of service
- Unless satisfied prior to sale, on-bill recovery charge survives changes in ownership
  - Seller must provide notice to purchaser
  - Loan requires filing of mortgage – ensures notice, subordinated
  - Legislative amendment to replace mortgage with “Declaration”
- Annual repayment amount may not exceed estimated annual savings
- Utility fees to fund billing system upgrades; collections subordinated to utility charges
- Launched January 30, 2012 – no payments until June
GJGNY Funding

• $112M Regional Greenhouse Gas Initiative auction allowance proceeds
  
  | Revolving loan fund         | $25.7M |
  | - Residential               | $13.3M |
  | - Small Commercial/NFP     | $11.3M |
  | - Multifamily               | $51.3M |
  | Energy Audit Subsidies     | $27.4M |
  | Workforce Development      | $8.0M  |
  | Outreach (constituency-based organizations) and Marketing | $10M |
  | Program Admin & Evaluation | $15.3M |

• $18.6M US DOE Better Buildings grant
  • $9.3M loan loss reserves – leverage private capital
  • $900k utility billing system upgrades to support on-bill recovery mechanism
Roles

NYSERDA – Administrator, capital provider
Utilities – Collects On-Bill Recovery Loan installments

Loan Originator
• Launched using single originator Energy Finance Solutions (EFS)
• Open up to multiple lenders in 2012
• Loans originated using NYSERDA loan underwriting standards
• Lender closes on loan and loan purchased by NYSERDA
• Lender paid $175 origination fee by NYSERDA; can charge additional fee (financeable) to borrower if needed to cover costs (EFS charges $150)

Master Loan Servicer (Concord Servicing Corporation)
• Performs billing and collection services, lockbox payments
• Responsible for data file transfer with utilities to support On-Bill Recovery Loans
• Monitors loan origination (15% sample) to ensure conformance with standards

Title Company (NY Title)
• Performs last owner search to verify ownership
• Records mortgage/declaration for On-Bill Recovery Loans
Loan Underwriting Standards

Two Loan Tiers:

- Tier1 loans: loans meet standards that can be financed in capital markets (FNMA standards)
  - These loans will be aggregated and financed through capital markets

- Tier2 loans: loans originated under alternate criteria (utility bill paying history) and slightly relaxed debt-to-income criteria
  - Loans held in revolving loan fund
  - Monitor loan performance over time (~3 yrs) and added to pool of loans financed through capital markets if satisfactory performance
## Residential Loan Underwriting Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>“Tier 1” Loans</th>
<th>“Tier 2” Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum FICO or alternate</td>
<td>640 (680 self-employed 2yrs+) (720 self-employed &lt;2yrs)</td>
<td>None - min score may apply based on debt-to-income ratio</td>
</tr>
<tr>
<td>Utility and mortgage payment</td>
<td>None</td>
<td>• Current on all energy bills for at least 2 consecutive billing periods during each of the last 2 years</td>
</tr>
<tr>
<td></td>
<td>history</td>
<td>• Current on any and all mortgage payments for the last year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No energy/mortgage payments more than 60 days late for last 2 yrs</td>
</tr>
<tr>
<td>Max Debt-to-Income ratio</td>
<td>Up to 50%</td>
<td>Up to 55%</td>
</tr>
<tr>
<td></td>
<td>Up to 70% if FICO score of 680+</td>
<td>Waived for applicants who qualify for Assisted Home Performance with Energy Star subsidy (50%/up to $5,000 of cost)</td>
</tr>
<tr>
<td>Bankruptcy</td>
<td>No bankruptcy, foreclosure, or repossession within last 7 yrs</td>
<td>No bankruptcy, foreclosure, or repossession within last 5 yrs</td>
</tr>
<tr>
<td>Outstanding judgments</td>
<td>No combined outstanding collections, judgments or tax liens &gt; $2,500</td>
<td></td>
</tr>
</tbody>
</table>
## Loan Terms

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>Unsecured Loan</th>
<th>On-Bill Recovery Loan</th>
</tr>
</thead>
</table>
| Eligible for financing              | • Energy efficiency improvements by a BPI-accredited Home Performance with ENERGY STAR contractor.  
• Cost of financed improvements must be less than the estimated energy savings over the anticipated life of the improvements | Same, but in addition annual payments may not exceed estimated annual energy savings |
| Borrower eligibility                | Owner or tenant                                                                 | Owner and named on utility account                                                      |
| Loan Amount                         | Up to $13,000; $25,000 if payback period is 15 years or less                   |                                                                                         |
| Loan Term                           | 5, 10, or 15 years; term may not exceed expected useful life of measures        |                                                                                         |
| Interest Rate                       | 3.99%  
3.49% if repaid by automatic ACH payment | 2.99%                                                                                   |
| Repayment terms                     | • Repaid through monthly statement billing or ACH payment.  
• Responsible for satisfaction upon sale or transfer of property  
• Nonpayment subject to judgment | • Repaid through charge on utility  
• Requires a mortgage/declaration to be filed  
• Remaining obligation may be assumed by purchaser upon sale of property.  
• Nonpayment may subject the borrower to termination of utility service |
Capital Markets Financing Approach

- Loans funded from Revolving Loan Fund in first instance
- Aggregate loans and issue bonds using master trust structure
- Bonds supported by loan repayments and loan loss/debt service reserve
- Proceeds used to fund additional program loans
- First issuance $25M
- Subsequent issuances will increase scale
- Anticipate A rating; ~5.7% (300-400 bps over Treasury); ~10-12yr term
- On-Bill Recovery Loans may qualify for AAA rating
- Issue as Qualified Energy Conservation Bonds – 70% federal subsidy
  - Use limited QECB bond cap from state and amount reverted by local governments
  - Once exhausted, loan rates will be increased due to loss of federal subsidy
# Unsecured Residential Loan Portfolio Status

2/29/2012

<table>
<thead>
<tr>
<th>Status</th>
<th># Loans</th>
<th>Amount</th>
<th># Loans</th>
<th>Amount</th>
<th># Loans</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unsecured Loan</strong></td>
<td></td>
<td></td>
<td><strong>On-Bill Recovery Loan</strong></td>
<td></td>
<td></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>(from 11/15/2010)</td>
<td></td>
<td></td>
<td>(from 1/31/2012)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closed Loans</td>
<td>1,194</td>
<td>$10,655,174</td>
<td>-</td>
<td>-</td>
<td>1,194</td>
<td>$10,655,174</td>
</tr>
<tr>
<td>Approved</td>
<td>260</td>
<td>2,484,377</td>
<td>-</td>
<td>-</td>
<td>260</td>
<td>2,484,377</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1,454</td>
<td>$13,139,551</td>
<td>-</td>
<td>-</td>
<td>1,454</td>
<td>$13,139,551</td>
</tr>
<tr>
<td>Pre-approved</td>
<td>593</td>
<td>105</td>
<td>698</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2,047</td>
<td>105</td>
<td>2,152</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applications Received</td>
<td>3,263</td>
<td>180</td>
<td>3,443</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval Rate</td>
<td>63%</td>
<td>58%</td>
<td>63%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Unsecured Residential Loan Portfolio Status

2/29/2012

<table>
<thead>
<tr>
<th>Loans Outstanding</th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Loans</td>
<td>1,086</td>
<td>70</td>
<td>1,186</td>
</tr>
<tr>
<td>Weighted Avg FICO score</td>
<td>750</td>
<td>672</td>
<td>726</td>
</tr>
<tr>
<td>Weighted Avg Original Term (yrs)</td>
<td>11.9</td>
<td>13.3</td>
<td>12.0</td>
</tr>
<tr>
<td>Weighted Avg Term Remaining (yrs)</td>
<td>11.5</td>
<td>13.1</td>
<td>11.6</td>
</tr>
<tr>
<td>Weighted Avg Interest Rate</td>
<td>3.57%</td>
<td>3.54%</td>
<td>3.57%</td>
</tr>
<tr>
<td>Average Loan</td>
<td>$8,913</td>
<td>$10,039</td>
<td>$9,480</td>
</tr>
<tr>
<td>Current Balance of Loans</td>
<td>$9,292,231</td>
<td>$691,581</td>
<td>$9,983,812</td>
</tr>
<tr>
<td>% of Total</td>
<td>93.1%</td>
<td>6.9%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
## Unsecured Residential Loan Portfolio Status

2/29/2012

<table>
<thead>
<tr>
<th>Delinquency Analysis</th>
<th>Tier 1</th>
<th>Tier 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Loans</td>
<td>% of $</td>
</tr>
<tr>
<td>Current</td>
<td>1,085</td>
<td>99.8%</td>
</tr>
<tr>
<td>31-60 days past due</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>61-90 days past due</td>
<td>0</td>
<td>0.1%</td>
</tr>
<tr>
<td>90+ days</td>
<td>1</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total</td>
<td>1,086</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
## Unsecured Residential Loan Portfolio Status

2/29/2012

<table>
<thead>
<tr>
<th>Applications Approved (from 11/15/2010)</th>
<th>Loans Closed (from 11/15/2010)</th>
<th>Value</th>
<th>Total</th>
<th>Market Rate</th>
<th>Assisted</th>
<th>Assisted % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td></td>
<td>1,602</td>
<td>$8,679,325</td>
<td>1,001</td>
<td>768</td>
<td>233</td>
</tr>
<tr>
<td>Tier 2</td>
<td></td>
<td>119</td>
<td>$571,883</td>
<td>61</td>
<td>39</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1721</td>
<td>$9,251,209</td>
<td>1,062</td>
<td>807</td>
<td>255</td>
</tr>
</tbody>
</table>
Lending to people, Investing for resilience

info@craft3.org | www.craft3.org | facebook.com/Craft3org
Craft3 Is

- Community Development Financial Institution (CDFI)
- A non-profit and charitable corporation
  - Not a bank or credit union and does not take on insure deposits
- 17 years old (founded in 1995)
- A regional institution serving a diverse two state investment area
  - 45 people with *their feet on the ground* inside rural and urban communities
- Focused on three bottom lines
  - Economy
  - Environment
  - Equity

*Lending to people, Investing for resilience*
Craft3 Financial Resources

- Regulated Banks: 40%
- Non-Bank Financial Institutions: 22%
- Foundations: 15%
- Federal Government: 11%
- Individual: 4%
- Other: 7%
- Faith Based: 1%
- Other: 7%

Lending to people, Investing for resilience
Craft3 Loan Products

- Commercial Loans
  1. Business: for real estate, start-up and expansion of businesses;
  2. Non-Profit: for affordable housing, community development projects, health care, childcare, environmental conservation, and human services initiatives; and
  3. Conservation: for conservation organizations to acquire sensitive lands, restore habitat, and protect water quality are available.

- Consumer Loans
  1. Energy Efficiency: To property owners to reduce CO2
  2. Septic Repair: To property owners to repair or replace failing systems
# Craft3 Outcomes from Outputs

<table>
<thead>
<tr>
<th>ECONOMY</th>
<th>ENVIRONMENT</th>
<th>EQUITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Jobs Created and/or Retained</td>
<td>Linear Feet of Functioning Riparian Zone</td>
<td>People of Color and Women Entrepreneurs Assisted</td>
</tr>
<tr>
<td>Leveraged Third Party Investment</td>
<td>Acres of Land in Sustainable Management</td>
<td>Number of Low Income Families Assisted</td>
</tr>
<tr>
<td>Added Value of Products Locally Manufactured</td>
<td>Gallons of Water Diverted from Waste Stream</td>
<td>Local Tenures Supported</td>
</tr>
</tbody>
</table>

Lending to people, Investing for resilience
Single Family Residential Loan Product

- **CO2 Matters: Energy reduction analysis**
  - Recruit the greatest CO2 impact
- **Low Touch Underwriting**
  - **Non-Traditional**: Utility payment history, FICO > 590
  - **IT Platform**: Linked to utilities and loan management
- **Product Specifications**
  - **Rate**: 5.99%
  - **Term**: 20 years
  - **Security**: subordinated lien on property
  - **Servicing**: on bill of utility providing energy for heat
  - **Risk**: Cash funded loan loss reserve: 10%
  - **Affordable**: Goal is net zero impact on the family budget
Goal: **Shift the residential energy efficiency market to an environment where action to improve the efficiency of homes is as easy as buying a car with better gas mileage.**

- Standardized product offering with options
- Standardized & auditable performance rating
- Widely branded “outlets” for sales
- Affordable, easy to access financing terms
- Warranty and peace of mind (value proposition)

Ultimately, the product must remove obstacles to policy decisions that drive markets to “value” efficiency
Clean Energy Works Oregon  
*John and Jennifer Williams*

John and Jennifer Williams lived in an amazing house. But in the winter, gusts of cold wind blew into their bedroom. In summer, that bedroom became a sauna. Then, the couple discovered Clean Energy Works Oregon (CEWO), and handed their problems over to pros. The external walls and crawl spaces were now snug with insulation, and they upgraded from a gas to an electric water heater.

In April 2010; CEWO began as a pilot program in the City of Portland before receiving an award from the US Department of Energy to expand beyond Portland. This joint venture between Craft3, Energy Trust of Oregon and the City of Portland was modeled after Craft3’s Septic Loan. It delivers financing at affordable rates to implement Energy Efficiency measures in Oregon homes, achieving reduced CO2, increased ‘green collar’ jobs, reduced energy costs and increased home tenure.

Since inception, Craft3 has provided $14 million in Energy Efficiency Loans to homeowners in Oregon.

**Triple Bottom Line Outcomes**

**Economy**
- Green collar jobs created/retained

**Environment**
- Reduced CO2

**Equity**
- Minority owned businesses assisted
- Women owned businesses assisted
- Low income families assisted
- Increased land tenure
## Outputs

### July 2009 – February 2012

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homes Retro-fitted</td>
<td>1275</td>
</tr>
<tr>
<td>Value of Loans Originated</td>
<td>$15,843,000</td>
</tr>
<tr>
<td>Simple ROI</td>
<td>5.7%</td>
</tr>
<tr>
<td>Participating Contractors</td>
<td>50</td>
</tr>
<tr>
<td>% Criticized Assets</td>
<td>3.8%</td>
</tr>
</tbody>
</table>
## Outcomes

<table>
<thead>
<tr>
<th>Access to Credit (Inclusion)</th>
<th>Access to Opportunity (Jobs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Borrowers &lt; Median HH Income</td>
<td>% of Loan $ Paid as Wages</td>
</tr>
<tr>
<td>53%</td>
<td>65%</td>
</tr>
<tr>
<td>% Borrowers Non-White</td>
<td>Average Wage</td>
</tr>
<tr>
<td>11.3%</td>
<td>$24.65</td>
</tr>
<tr>
<td>% Borrowers in CDFI Tracts</td>
<td>% of Employees Women/Minority</td>
</tr>
<tr>
<td>34%</td>
<td>51%</td>
</tr>
<tr>
<td>% Subordinated Debt</td>
<td>% of Employees with Health Care</td>
</tr>
<tr>
<td>98%</td>
<td>65%</td>
</tr>
</tbody>
</table>
The Quest For Liquidity

- **Mandate**: Develop a high output product with quality outcomes and demonstrate a capital market
- **Now**: $12MM pilot, Q3 2012: Replicable, marketable
  - Tiered PRI/SRI/Market with guaranty options
  - Yield below market in the 5% range
  - Right regional players at the table
- **Challenges**: price point; portfolio performance; underwrite; maturities; market place
- **Bottom Line**: Liquidity must value the outcomes and the pace of achieving them
Learn more about Craft3

Adam Zimmerman
azimmerman@craft3.org
503-688-1708

Website
www.craft3.org

Social Media
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Please join us again:

Title: In-Person Middle Income EE Forum for Practitioners and Policy Makers
Date: March 26, 2012
Time: 8:00am - 1:00pm at the Hilton Baltimore, MD

Title: Policies to Drive Greater Energy Efficiency Market Penetration in Middle Income Households
Date: April 4, 2012
Time: 3:00-4:30 EST

For the most up-to-date information and registration links, please visit LBNL’s Middle Income Energy Efficiency page at:

http://middleincome.lbl.gov

Mark Zimring  
LBNL  
mzimring@lbl.gov

Keith Canfield  
William J. Clinton Foundation  
kcanfield@clintonfoundation.org

Jeff Pitkin  
NYSERDA  
jip@nyserda.org

Adam Zimmerman  
Craft3  
azimmerman@craft3.org