

Financing Energy Efficiency: Background

Matthew H. Brown
ConoverBrown LLC

Matthew@ConoverBrown.com

720 246 8847

ConoverBrown LLC

- Consulting firm with a specialty in financing for clean energy & environmental strategy.
- Domestic and International government, non-profit and private clients.
- Clean energy finance clients include U.S. Dept of Energy, Iowa, Colorado, Michigan, utility, lender, national and regional associations and advocacy organizations.
- Working with these clients to set up or assist in establishing new financing programs.

Why Financing?

- It's all about going to scale:
 - 100 million households in the United States.
 - Typical basic-only efficiency installation investment is \$7,500, including HVAC, duct sealing, insulation -- but can range higher, up to \$10,000.
 - Total market, on this basis is \$750,000,000,000-\$1,000,000,000,000.
 - Utility, government capital will not be sufficient to meet this goal. Private investor capital is critical. (And this is only the residential side)

Scope of Efficiency Financing Potential

- 3 million furnace, a/c and water heater replacements each year. (Residential focus)
- Likely market for HVAC retrofits (replacements) alone is approximately \$7 billion per year.
- Additional products and sub-markets in the residential sector include insulation, windows, doors, etc.

A Definition: What are we investing in?

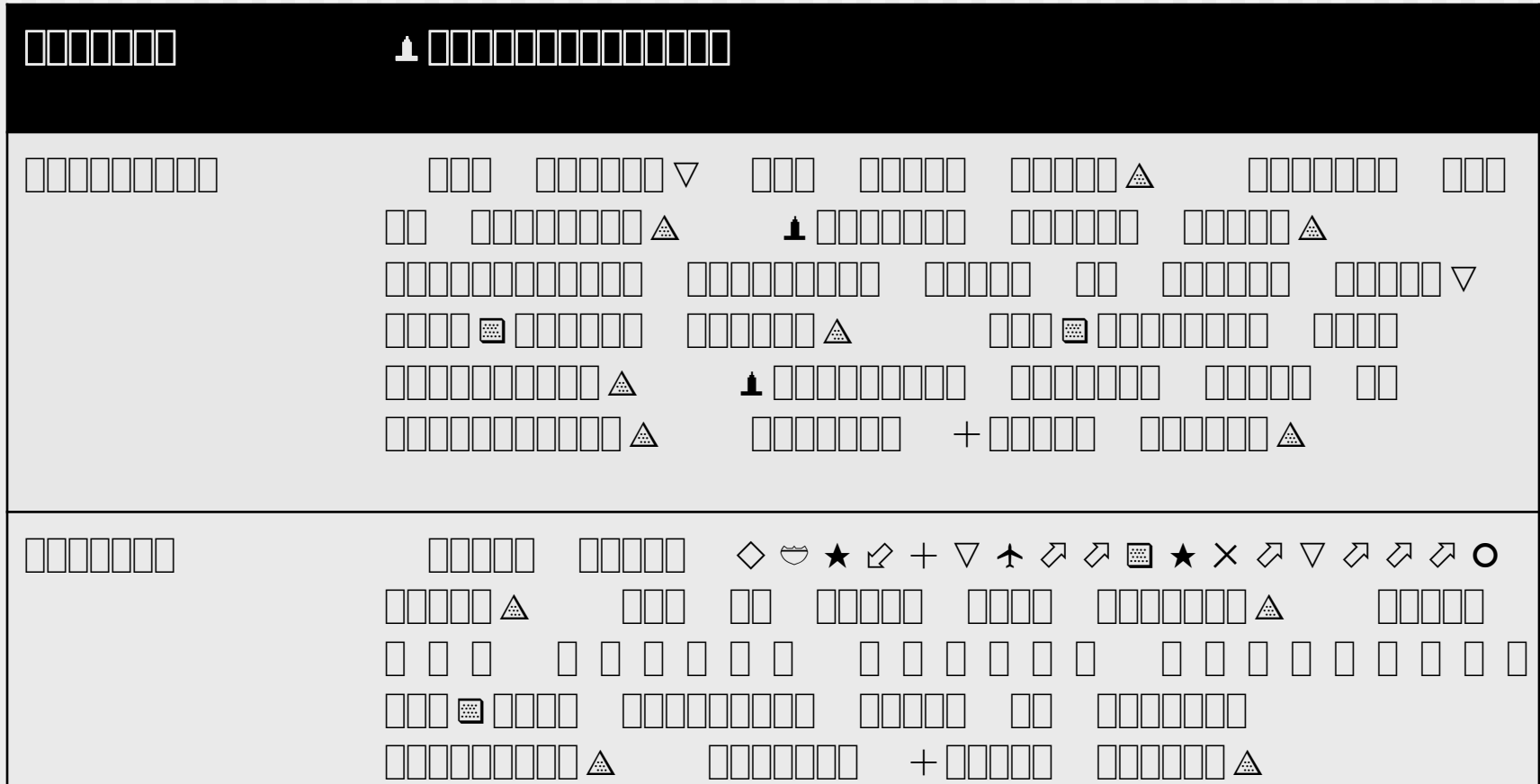
- Energy efficiency investments consist of:

<p>□□□□□□</p>	<p>□□□□□□□□</p>	<p>□□□□□□□ □□□ □ □□□□□□□□□□□□ □□□□</p>
<p>□□□□□□□□□□□□</p>	<p>□ × □ □□□□□□ □ □□□□□□□□□ □ □□□□□□ □ □□□□□□□□ □ □□□□□□ □ □□□□□□ □ □□□□□</p>	<p>★ ↑ ▾ ✈ ↶ ↷</p>
<p>□ □□□□□□□□□</p>	<p>□□□□□□□ □ □ × □ □ ▾ □□□□□□</p>	<p>★ ↶ ↷ ▾ ↶ ↷ ↷ □□□ □□</p>
<p>□□□□□□□□□□</p>	<p>□□□□□□ □ □ □□□□□□□□□ □□□□□□□□□□□□</p>	<p>★ ↶ ↷ ↷ ▾ ↶ ↷ ↷ □□□ □□</p>

Our Primary Focus for this Mtg.



Example: Residential Loan Product Structures



Default Rates Tend to be Low

- It's not the HDTV purchase...

<i>Program</i>	<i>Default Rate</i>	<i>Criteria Used to Assess Credit Quality</i>
Keystone HELP	1.5%	Credit score of 640 minimum. Average score is 720
Manitoba Hydro	<1%	Current on utility bill for at least 12 months; credit score considered
Mid west Energy	0%	Current on utility bill for 12 months
United Illuminating	<1%	Current on utility bill. In business for at least six months.
Sempra	<1%	Account in good standing with non disconnect in previous 12 months; applicant must have been a utility customer for at least 24 months. Default leads to disconnection.

A quick breakdown of costs

- Servicing: \$7-\$15/month.
- Origination: \$300-\$600/loan is typical
- On a \$5,000 loan, it's really important to keep those costs as low as possible.
- And...typical mortgage lenders will not be interested in these loans. They aren't set up to do a lot of small unsecured loans.

Who are the lender partners?

- Credit unions: Understand small loans, community-minded.
- Specialty Lenders: Know energy finance very well
- Community Development Financial Institutions (CDFI) lenders: low cost, but limited amounts of capital
- Public lenders (state or municipal bonding authorities such as housing finance agencies): low cost capital availability

What will bring these lenders to the table?

- A market for loans – deal flow. (Many lenders hungry for good quality loans).
- Good quality borrowers with good credit.
- A secondary market for loans (a place to sell the loans).
- Credit enhancements.

Michigan Example of Credit Enhancement (proposed)

- 5% loss reserve based on the total portfolio of loans that lender holds.
- Lender would be able to recover up to 80% of defaulted amount (skin in the game).
- Unsecured loan – although possibly tied to a meter and disconnection threat.
- For this, lenders willing to offer 5-7% loans. (about 1/2 market rate).

Secondary Market

- Just as mortgage lenders sell to Fannie Mae and others, some of these small energy lenders would like to be able to off-load their loans.
 - Allows them to raise capital quickly in order to reinvest in new lending.
 - Very substantially increases amount of capital available to lend -- it's no longer restricted to deposits on hand.

Credit Enhancements

- Loss Reserves or Guarantees
- Subordinated Debt
- Loan Insurance
- Interest rate buydowns sometimes fall into this category

Secondary Market

- Example: PA has \$30 million in loans that it could sell.
 - But who will buy?
 - At what price?
- Potential markets are SRI – Socially Responsible Investors who might take a lower return for verified energy savings.
- In the longer term, loans need to be aggregated in bundles of \$100 million or more and sold.

To Summarize

- Without financing we can't make our climate, energy independence or other goals.
- Financing requires working with financial institutions in new ways.
- The fundamentals of a good product exist, but big gaps remain –
 - Secondary markets
 - Credit enhancement structures.