



June 11, 2014

LBNL-6663E

Selling an Energy Efficiency Loan Portfolio in Oregon: Resale of the Craft3 loan portfolio to Self-Help Credit Union

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Under the Clean Energy Works (CEW) program, Craft3 developed a loan product that widened access to financing for homeowners, offered long term funding, and collected repayments through the customer's utility bill. The program's success led Craft3 to pursue the sale of the loan portfolio to both mitigate its own risks and replenish funds for lending. This sale breaks new ground for energy efficiency finance and is notable as it was completed even with many novel program design elements. It replenished Craft3's program capital and uncovered some valuable lessons that may facilitate future transactions. However, the lack of data history and the unproven nature of the loan portfolio meant that Craft3 had to limit the risk of losses to Self-Help, the purchaser of the portfolio. It remains to be seen whether this experience will pave the way for more sales of on-bill energy efficiency loan portfolios. This case study illustrates how certain program design decisions can sometimes both facilitate programmatic objectives and possibly present challenges for the sale of a portfolio of energy efficiency loans.

Creating a Portfolio of Energy Efficiency Loans

Craft3 started lending in partnership with the Clean Energy Works (CEW) program in 2009, and by December 2013 had amassed a portfolio of approximately \$21.3 million in loan assets. The loans were made to owner-occupied single-family homes for energy efficiency upgrades that met the CEW program requirements. The loans are collected through the homeowners' utility bill and secured with a subordinate mortgage lien on the property or a UCC 1-A filing on the improvements.¹ Loans in the portfolio vary in term and size, but Craft3 originally established a cap of \$30,000 over a maximum of 20 years.² The program aims to expand access to capital,

Key Players

Clean Energy Works (CEW) provides education, incentives, and financing for home energy upgrades in Oregon. Loans are provided through five financing partners. Craft3 is the lender with the largest loan volume and the only lender offering on-bill finance. www.cleanenergyworksoregon.org

Craft3 is a nonprofit Community Development Financing Institution (CDFI) with a mission to strengthen economic, ecological, and family resilience in the Pacific Northwest. www.craft3.org

Self-Help is a member-owned, North Carolina state-chartered, and federally insured, low income credit union. Its mission is to create and protect ownership and economic opportunity for all. www.self-help.org

The work described in this Policy Brief was funded by the Department of Energy Office of Energy Efficiency and Renewable Energy, Weatherization and Intergovernmental Program under Contract No. DE-AC02-05CH11231. Please direct questions or comments to Charles Goldman (CAGoldman@lbl.gov).

¹ The loan is collected by the utility that provides the home's primary fuel used for space heating and cooling.

² Since March 2014, new loans have been restricted to 15-year terms and are only secured against the UCC 1-A filing on the improvements.

and therefore is open to customers with FICO scores as low as 590 who may not be able to obtain attractive financing elsewhere.³

The on-bill repayment feature of the program is primarily used as a collection mechanism; as there is no threat of utility service termination should borrowers fail to make debt service payments.⁴ Interest rates for the program are low (5.99 percent) despite the low credit thresholds and the long funding terms (e.g., consumer financing is rarely offered beyond 10 year terms without a first lien on a property). The program is supported by a loan loss reserve funded primarily with an American Recovery and Reinvestment Act (ARRA) grant received by the City of Portland through the Department of Energy’s Better Buildings Neighborhood Program, which covers Craft3 for losses of up to 10 percent of its on-bill loan portfolio.⁵

The Risk of Asset-Liability Mismatches

A material mismatch of the funding terms of assets and liabilities presents a risk for a lender when its own funding sources have a shorter term than the assets (here, the on-bill loans). Simply put, Craft3 was not scheduled to be paid back by borrowers in time to repay its own debts. For a CDFI, it is unusual to obtain financing beyond a 10-year term. In order to offer the most flexible options for customers and potentially match energy savings to repayment obligations, Craft3 chose to take a risk and offer loans that had longer terms than its own funding sources. To meet the obligation of its own debt, Craft3 needed to be able to refinance its own credit facilities, sell the loan portfolio, or manage any shortfalls from its equity.

Motivation for the Sale

Craft3 had anticipated the need to eventually sell its loan portfolio when it started to lend under the CEW program. The long terms of the loans presented a risk for the organization as its own funding sources, which it used to make loans to program participants, were typical of a CDFI with terms between 5 to 10 years. Offering 20-year loans from funding sources with much shorter terms created a mismatch in the terms of its assets and liabilities (see sidebar). Craft3 took a calculated risk in offering these long term loans, anticipating that it would be able to refinance its current funding when necessary or sell its portfolio of loans and use the proceeds to pay any debt service due.

With limited available funds, Craft3 needed additional funding to meet future demand for the program and could have obtained additional funding on similar terms to its existing funds (5-10 years). However, this would have increased its exposure to the risks of mismatched assets and liabilities. For Craft3, selling the portfolio could replenish its funding for lending, ameliorate its asset liability mismatch risk, and could help it establish a relationship with a longer-term capital partner.⁶

³ The program uses a combination of traditional and innovative underwriting methods. They perform a traditional credit score check and examine the utility repayment history. For more information, see the Clean Energy Policy Brief, Alternative Underwriting Criteria—Using Utility Bill Payment History as a Proxy for Credit: Case Study on Clean Energy Works Oregon ([link](#)).

⁴ When a loan becomes 90 days delinquent, the utility removes the loan from the bill and Craft3 is responsible for any future collections on that loan.

⁵ The 10% loan loss reserve is funded from several sources: ARRA funds, utility customer funds, State and City funding, foundations, and other sources.

⁶ CDFIs often raise capital from a mix of commercial banks, foundations, and public sources, typically with funding terms of less than 10 years.

Finding a Secondary Market Partner

In early 2012, following a strong two-year period of demand for loans through the CEW program, Craft3 actively started to look for a financial institution to purchase the loan portfolio. Craft3 enlisted the help of several industry consultants to identify possible partners and quickly faced the reality that commercial banks had limited interest in purchasing the portfolio. The relatively young age of the portfolio, novel program design features, and a lack of property valuation data made the assessment of risk exposure challenging for commercial banks.⁷ It became clear to Craft3 that it would need to find an organization with an aligned mission that was motivated to break new ground for energy efficiency financing, and willing to take on a considerable due diligence effort to complete this transaction.

In late 2012, Craft3 staff attended an industry conference looking to find an organization interested in purchasing the loan portfolio. They had previously had informal conversations with Self-Help about a possible sale of the loan portfolio, and discussions at the conference suggested that the timing might then be right as Self-Help was looking for opportunities to deploy capital. Self-Help found itself with additional liquidity following several acquisitions and mergers since 2008 and was also expanding its secondary markets programs. The environmental, job creation, and workforce benefits of the CEW program and Craft3's focus on making financing broadly accessible meant that a purchase of the loan portfolio provided an opportunity to deploy the available capital within the scope of Self-Help's mission. Furthermore, Self-Help was attracted by the unique opportunity to support the development of on-bill clean energy financing markets.

Self-Help is a regulated depository institution and the capital it was seeking to deploy was from its general pool of depository funds.⁸ This meant that the deal had to meet the requirements of a regulated and federally insured depository institution. For Craft3, completing a transaction with a regulated depository institution provided an opportunity to: (1) understand the requirements and underwriting rigor associated with a market-rate transaction, and (2) demonstrate to other regulated entities the viability of investing in energy efficiency loans.

Structuring the Deal

Finding a motivated partner proved crucial for the ultimate success of this transaction as the deal took over a year to complete and involved significant time and staff resources from both parties. It took a significant amount of time to finalize the contractual agreements that governed the on-bill repayment mechanism because they involved multiple parties and impacted the ultimate flow of principal and interest payments.⁹

⁷ Novel design features included the on-bill collection mechanism and the longer term funding that was only secured by a subordinated mortgage lien. Craft3 also did not have information on the valuation of the property, nor the details of other liens on the property, which made it difficult to assess the value of the subordinated mortgage lien for potential portfolio purchasers. As such, Self-Help viewed these loans as essentially unsecured.

⁸ A regulated depository institution is a financial institution that is legally allowed to accept monetary deposits from consumers and provides insurance on those deposits, subject to regulation. Credit Union deposits, like Self-Help's, are insured by the National Credit Union Administration (NCUA).

⁹ One challenge was that the loans used a simple interest calculation and followed the utility bill payment schedule, which was very different from standard mortgage loans that accrue compound interest. Since the utilities can change the due date of payments at will because of the contractual agreements, certain loans could look delinquent even if the customer had made the payment on time. Self-Help and Craft3 have had to accommodate for these significant differences in monthly principal and interest reporting and reconciliations.

Another key challenge was the relatively short loan history for participants in the CEW program and the reality that there were few comparable loan portfolios from which to estimate likely performance. Self-Help had to find loan performance comparators from other industries to develop an expectation of loan performance for the portfolio. They used unsecured consumer loans as the comparable portfolio as they realized the limited value that subordinated mortgage liens would have in a foreclosure, and were unable to assess the potential value of the lien in the absence of property valuation data or first mortgage amounts.¹⁰ Furthermore, Self-Help was not able to quantify any additional value of the on-bill collection mechanism from a risk standpoint. Self-Help also excluded some portions of the portfolio from the transaction to mitigate risk and meet regulatory demands.¹¹ Exclusions included:

- Loans from borrowers with FICO scores below 620;¹²
- Any loan that had ever been more than 60 days delinquent;¹³ and
- Loans repaid on the bills of one of the collecting utilities, with which a contractual agreement had not yet been finalized.

Following these exclusions, Self-Help agreed to purchase 74 percent of the total value (principal balance) of the loans in the Craft3 portfolio. The purchased portfolio included 1,251 loans with a total outstanding value of \$15.7 million, which was approximately the price paid for the portfolio. Most loans in the purchased portfolio had 20 year terms and ranged in size from \$769 to \$29,761 with an average loan size of about \$12,500. Self-Help also sought protection against the risk of portfolio losses, in view of its obligations as a regulated depository institution and in light of the loans being considered essentially unsecured. The final transaction was structured to mitigate those risks by transferring all existing loss reserves to Self-Help and layering on several additional elements described in more detail below. In exchange, Self-Help agreed to pay approximately the face value (or “par value”) of the loans.¹⁴ Craft3 agreed to purchase back any loans that became delinquent within the first 12 months of the loan being originated, which helped mitigate any risks associated with its original underwriting and address Self-Help’s concern that loans that became delinquent in this period would be more likely to default in the future.¹⁵

¹⁰ Craft3 did not collect information on the property value or the amount of the first mortgage; thus, Self-Help was unable to determine loan to value (LTV) ratios of the loans. It was therefore difficult to assume that there would be value in a subordinated mortgage lien. Where the subordinated mortgage lien does add value is that the note would appear in any future title searches. Any subsequent lender would see the loan on the property and likely ensure that it is paid off before providing a new mortgage.

¹¹ Some of the exclusions are similar to conditions that may be seen in related secondary markets, such as mortgage investments, where Self Help has experience.

¹² This minimum credit score is still low relative to standard loan product underwriting, which often features a minimum credit score of 680.

¹³ One challenge encountered from the on-bill repayment process is that, due to timing differences between the Craft3 administration system and the utility reporting cycle, loans can appear delinquent when they are not. Craft3 and Self-Help have come to understand this and adjusted the purchase exclusion as necessary. Typically, secondary market transactions for home lending exclude any loans that have been 30 days delinquent in the last twelve months.

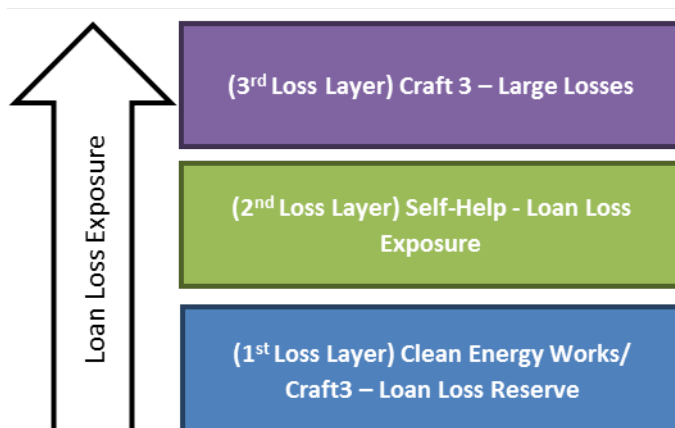
¹⁴ By purchasing the portfolio at face value, or “at par”, the purchase price is equal to the principal outstanding on the loans and Self-Help is scheduled to get a return equal to the interest rate on the loans. This interest rate (5.99%) is low for unsecured consumer credit. The layers of risk mitigation reduced the risk of loss to a level where Self-Help was satisfied with the balance of risk and return and agreed to purchase the portfolio “at par”. Without the risk mitigation, Craft3 may have had to sell the portfolio at a discount to the “par value” to increase the scheduled return to a level typically seen for unsecured consumer credit.

¹⁵ Repurchase clauses are common for certain other types of secondary market transactions, such as mortgage sales. Originators may be required to repurchase underperforming loans that do not meet certain representations and warranties regarding due diligence during underwriting. Typically, originators are protected from repurchase risk after a fixed period, such as 12 or 36 months.

The transaction can be thought of as a hierarchy of loan loss exposure (see Figure 1):¹⁶

1. Initial losses are covered by a loan loss reserve (LLR) held in a cash account by Self-Help. The reserves are comprised of the original loan loss reserve provided by CEW for the program from ARRA funds, and an additional amount provided by Craft3 to facilitate the transaction. The additional reserves consist of proceeds from the sale that were essentially held back to cover losses.¹⁷ Together, these reserves are pledged as loss protection until Self-Help becomes comfortable that the risk of losses is sufficiently low for the funds to be released.¹⁸
2. Self-Help is then exposed to loan losses as owners of the portfolio. However, their losses are limited in scale by the third loss layer.
3. Craft3 has provided a full guarantee against losses that exceed a certain level (large losses) through full recourse to its balance sheet. This was provided to mitigate the risk of major shifts in performance of the portfolio arising over time from catastrophic events (e.g., a major economic downturn). It also served to mitigate a specific legislative risk identified by Self-Help: the obligation on the utilities to collect the repayments was created through state legislation and not contractually with Craft3. This lack of contractual control over the collection mechanism presented a remote, yet material, risk to Self-Help that a legislative change might alter collection payments.¹⁹ The protection against large losses proved to be critical to enable the transaction to go ahead from Self-Help's perspective.

Figure 1: Hierarchy of loan loss risk following the transaction



Finally, Craft3 made changes to its portfolio administration to meet the requirements necessary for a regulated financial institution. Those included, but were not limited to, shortening the transition of a loan from delinquency to default status and ensuring that data collection standards were sufficient to provide reports on a monthly basis.

Conclusions

Craft3 developed an innovative financial product designed to overcome the perceived barriers to financing energy efficiency measures. It widened access to financing for homeowners, offered long term funding, and collected repayments through the customer's utility bill. The program's loan volume led Craft3 to pursue the sale of the loan portfolio to both mitigate its own risks relating to mismatches of

¹⁶ While the parties were willing to share the overall structure, they refrained from disclosing certain details of the risk mitigation structure (e.g., specific dollar amounts) due to proprietary considerations.

¹⁷ These proceeds are held in an account at Self-Help, though they are treated as part of Craft3's balance sheet.

¹⁸ Self-Help expects to review the status of these reserves with Craft3 approximately every two years. Craft3 and CEW have agreed independently from Self-Help that the CEW funds would be released first.

¹⁹ In 2009, the Oregon Legislature passed HB 2626, known as the Energy Efficiency and Sustainable Technology Act (EEAST). The legislation compels investor-owned utilities (IOU) to offer On-Bill Repayment. An IOU that wants to opt out of the program needs a waiver from the Oregon Public Utilities Commission (PUC). While this risk is remote, a legislative change could alter collection payments.

assets and liabilities and replenish its funds for additional lending. The successful sale breaks new ground for energy efficiency finance and is notable as it was completed with many novel program design elements. Table 1 describes how some of the program design features impacted the transaction and may be relevant for other program administrators considering the impact of design features on their own program.

Table 1: Analysis of how Craft3/CEW design features impacted the transaction

On-bill collection of the loans	The on-bill repayment of the loan was a key factor in attracting Self-Help to this transaction. Self-Help was interested in assessing (and hopefully demonstrating) that on-bill loans with long-term performance data represent a low risk and can be re-sold. However, for the purposes of this transaction, Self-Help was unable to quantify any credit enhancing benefit of the on-bill collection mechanism, and the loans were thus assessed as being unsecured loans. The complex and novel contractual framework of the on-bill repayment mechanism added additional time and due diligence costs to the transaction.
Subordinate mortgage lien	The subordinate mortgage lien provided little financial value to the portfolio purchaser as Self-Help assumed that it was unlikely to ever be exercisable. The lack of current property value data and the amount of the first mortgage also meant that they were unable to establish loan to value ratios and assess the potential residual value in the case of a property foreclosure. ²⁰ However, Self-Help would not have been able to purchase these loans without the security provided by the UCC 1-A fixture filing, which ensured that the loans would show up during a title search and therefore have to be paid or modified at the time of a refinance or property sale.
Loan loss reserve	The transfer of the existing loan loss reserve, along with additional reserves from proceeds held back, helped facilitate the sale of the loans at par value. However, the transfer also prevented Craft3 from using the existing loan loss reserve to cover additional originations until the funds are released by Self-Help.
Long term loans	The long term lending presented Craft3 with a risk of mismatched asset and liability terms. To Self-Help, this presented a greater risk of default as the loans may be outstanding through a number of economic cycles. Additional credit enhancements were needed to execute the transaction due to this risk. Craft3 has since modified its loan terms, offering a maximum 15-year term in order to facilitate future secondary market transactions.
Loan terms and alternative underwriting criteria	The program used a combination of traditional and innovative underwriting methods. Craft3 then provided loans at low interest rates over a long term with only a subordinated mortgage lien. These program design decisions were made to attract customers and expand the customer base in a market that has struggled to drive demand. However, Self-Help assessed the transaction as the purchase of an unsecured loan portfolio that would typically have a higher level of return. Self-Help required a significant amount of risk mitigation from Craft3 and CEW in order to purchase the portfolio at approximately par value and mitigate risks in accordance with its status as a regulated depository institution.

Craft3’s engagement with the administration systems of a regulated depository institution provided them with valuable experience and prepares them for future portfolio sales. Exposure to the data collection standards, reporting systems, documentation, and servicing platforms facilitated changes to their own processes that will make any future transactions easier. Craft3 has also started to adapt their loan product to the needs of their customers and with a view to further loan portfolio sales in the future. Subsequently, they reduced the term of their loans to a maximum 15-year term. This has, in part, been due to the strong demand for the 10-year loan product from other lenders in the marketplace. Reducing the maximum loan

²⁰ In March 2013, Craft3 made the decision to switch from securing the loans with real property liens to UCC 1-A fixture filings, which have much fewer regulatory requirements (e.g., no need for documentation of flood insurance on the property).

term allows Craft3 to make future loan portfolios more attractive for sale while still offering a financial product that overcomes financing barriers for energy efficiency. Craft3 also ceased filing subordinated mortgage liens, based in part, by their experience in this transaction.

Self-Help's experience helps prepare it for on-bill loan portfolio purchases going forward. Spending time understanding the relationship between all the actors in the on-bill mechanism and the contractual agreements that govern their roles and obligations was critical as these could impact the monthly loan payments or a workout situation in some way. Finding a mission-oriented counterparty proved critical to the success of the transaction. However, it does highlight a challenge for other program administrators as these willing counterparties may be difficult to find until the risks and long-term performance of on-bill loans are well understood by the financial community.

The details of the deal itself reflect the reality that the on-bill repayment mechanism and long term loans not secured by a first mortgage lien are considered by many lenders to be novel assets with uncertain value. The lack of performance history data for this loan type and the unproven nature of the portfolio meant that Craft3 and CEW had to limit the risk of losses to Self-Help in order to complete the transaction. It remains to be seen whether this experience will pave the way for further sales of on-bill energy efficiency loan portfolios with a more complete transfer of loan loss exposure. Program administrators may find that they need to take significant, and potentially costly, steps to mitigate risks in these transactions until the risks and returns of energy efficiency loans with on-bill repayment are better understood by financial institutions through demonstrable performance data.

It is clear from this experience that efficiency program goals may not always overlap with the interests of prospective purchasers of loan portfolios. For example, program administrators may place value on offering long-term, on-bill unsecured loans with expanded underwriting criteria. Potential financial partners may perceive additional risk in these features, and either seek a discount in the purchase price or require the seller to mitigate the risk of losses. Some program design decisions may not fit into a "standardized" loan product that is currently well-understood by the financial market; however, it may be important for program administrators to take these risks in order to create new products that better enable the deployment of energy efficiency. In doing so, they will start to develop the performance data needed for financial institutions to properly assess the impact of these program features on the risk and performance of the loan assets. These tradeoffs need to be carefully considered as policy makers and program designers contemplate both the ability of program features to attract customers and meet program goals, and also the viability of longer-term sources of capital for efficiency financing programs.

This case study is part of the LBNL Clean Energy Financing Policy Brief series. To join the email list to receive these policy briefs, please [click here](#).

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