USDN Equity in Energy Transformation and Innovation Case Study:

Craft3 Home Energy Loan Program

Snapshot

Craft3 is a nonprofit community development financial institution (CDFI) that makes loans to increase the resilience of families, businesses, and communities. It offers a range of products that can compose up to 100 percent financing for energy efficiency projects. Craft3's Home Energy Loan Program is specifically designed to be accessible to low- to moderate-income (LMI) homeowners and others with limited access to credit but is not restricted to these households. Craft3 uses a combination of traditional (credit score) and nontraditional (utility bill repayment history) underwriting to increase access to credit and homeowners repay the loan through their heating utility bill. Between 2009 and Q1 2018, the program supported approximately 4,000 loans for energy upgrades. This case study focuses primarily on the Home Energy Loan Program as it is structured in Oregon; the program is administered through similar loan products and partnerships in Washington.

Key Information:

- ***Technologies:*** Energy efficiency, air source heat pumps, heat pump water heaters
- ***Funding Source:*** Private, federal, and in-kind
- ***Financing Mechanism:*** Various government (Federal, state, local), banks, and philanthropic capital sources. Between 2013 and 2015, Craft3 sold $22 million of the Oregon Home Energy Loan Program portfolio to nonprofit CDFI Self-Help Credit Union to recapitalize the loan fund.
- ***Ownership:*** Household
- ***Location:*** Oregon (focus of this case study) and Washington

STAGE 1—PROGRAM DESIGN PROCESS

Program Genesis

Founded in 1994, Craft3 is a regional nonprofit that makes loans in Oregon and Washington to **strengthen the resilience of businesses, families, and nonprofits**, including those without access to traditional financing.[1] In 2009, the City of Portland worked with Craft3 to create a widely accessible home energy loan for its energy efficiency initiative. The initiative, the Clean Energy Works Portland Pilot, aimed to **help credit-constrained households take advantage of utility energy efficiency incentives** by offering low-interest loans that could be repaid on utility bills. The initiative also took advantage of energy efficiency funding from the 2008 Federal stimulus package and State-mandated on-bill repayment.

In addition to the **City of Portland**, a local redevelopment agency called **Prosper Portland** (formerly called the Portland Development Commission), the **Energy Trust of Oregon (ETO)**, and the **three main utility organizations in Portland** all played key roles in the Clean Energy Works Portland Pilot.[2] The City accessed **Federal Energy Efficiency and Conservation Block Grant funds** to use as capital for the program and pooled them with additional public and private investment to establish a $7 million pilot revolving loan fund portfolio.[3] Prosper Portland provided a small grant to support nonenergy maintenance upgrades in homes in urban redevelopment areas. ETO administered state funds for energy efficiency programs. The utilities collected loan repayments in the form of an extra charge on participating customers' utility bills, then forwarded the repayments to Craft3, the program lender.[4] Additional organizations conducted targeted outreach in LMI communities to generate demand.

The Clean Energy Works Portland Pilot ended in 2011 and Clean Energy Works now operates as a nonprofit called Enhabit.[5] However, a $20 million grant given to Portland in 2010 by the U.S. Department of Energy Better Buildings Program allowed the City and its partners to take the program statewide to develop the Home Energy Loan Program.[6]

Craft3 **further expanded the Home Energy Loan Program into Washington State in 2011**, when it served as the lender in an analogous pilot program led by the City of Seattle.[7] As of Q1 2018, the Craft3 Home Energy Loan Program is available to customers of participating utilities in Oregon (Northwest Natural, Pacific Power, PGE) and Washington (Northwest Natural, Pacific Power, Seattle City Light).[8] Although this case study focuses on Oregon, the program's loan product offerings are similar in Washington.

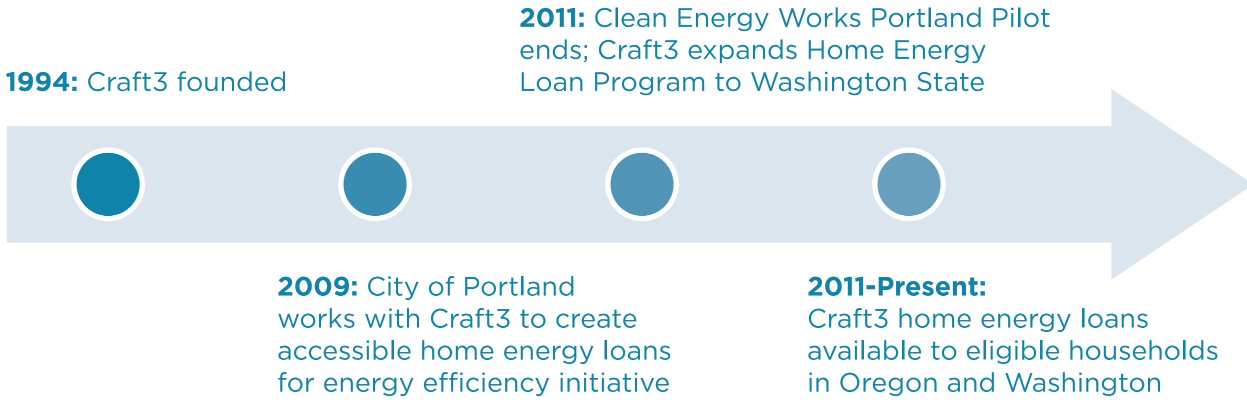

Figure 1: Program Timeline

Key Actors and Partnerships

Craft3 is a CDFI, which is a type of **nonprofit lending institution that invests in community and economic development in LMI areas**.[9] CDFIs are **eligible to receive funds from the U.S. Department of the Treasury CDFI Fund**, in addition to grants and investments from foundations, organizations, and private investors. Craft3's home energy loans are designed to work within a range of program designs, whether led by a utility, local government, energy management companies, or nonprofit organizations. Craft3's **ability to finance a high volume of successful energy efficiency projects to date** is in part a result of its operates as a nonprofit called Enhabit.[10] Each of the key partners in the current Home Energy Loan Program in Oregon is outlined with their roles:

- **Utility partners—On-bill repayment, incentives, and marketing.** Current partnering utilities include investor-owned and municipal utilities: Northwest Natural, Pacific Power, PGE, and Seattle City Light.[11] These utilities **provide incentives and rebates for energy efficiency upgrades**, including ducted and ductless heat pumps and heat pump water heaters, for the Home Energy Loan Program. Utilities have successfully marketed the program by attaching Craft3 brochures to their customers' energy bills.[12]
- **ETO—Ratepayer fund delivery and outreach.** ETO is the primary administrator for ratepayer-funded efficiency incentives for Oregon's utilities. ETO directs benefits to income-eligible homeowners **by providing cash incentives to contractors for energy efficiency upgrades**.[13] ETO also acts as an intermediary for homeowners, technical assistance providers, and lenders.[14] Craft3's loans help cover remaining customer costs after the incentives are applied.
- **Enhabit—Connecting Oregon homeowners to financing.** By partnering with private lenders to supply capital for its home energy efficiency loan program, Enhabit connects homeowners to financing options, with the goals of generating employment and minimizing energy waste. Approximately half of its applicants select Craft3 as their lender. [15]

- **ETO- or Enhabit-approved trade allies—Project implementation and communication**. Contractors have the most direct contact with community members and therefore end up serving as a large part of Craft3's "sales force."
- **Community organizations and nonprofits—Targeted outreach**.[16] Organizations across Oregon and Washington guide homeowners to Craft3 to finance their energy upgrades. For example, during the Clean Energy Works Portland Pilot, the Native American Youth and Family Center spoke with marginalized residents in Portland's Cully Neighborhood about the benefits of energy efficiency programs.[17] The center assisted eligible residents in applying for the program and working with contractors.
- **Capital investors and charitable organizations—Loan capital**. Self-Help, a federally insured, member-owned low-income credit union, purchased the Home Energy Loan Program portfolio, **which provided liquidity to expand the program** (more details in the section on Funding). Self-Help was motivated by the opportunity to be at the forefront of the clean energy financing market.[18] Self-Help also assumed the responsibility of **performing due diligence for the portfolio transaction**. Other important capital investors and grantors include regional and national banks and charitable organizations, such as the John D. and Catherine T. MacArthur Foundation and the Bill and Melinda Gates Foundation.[19]

STAGE 2—PROGRAM STRUCTURE

Program Function

- Once on the Craft3 website or in one of Craft3's seven regional offices, **homeowners choose to apply to a loan program based on where they live, who their utility is, and the ETO incentive program they will use**, if applicable.[20] Homeowners then **finalize a project bid with an approved contractor**. Contractors are approved by the utility, the ETO, or Enhabit depending on the context. **Craft3 pays contractors directly** and, with borrower permission, can provide a deposit of up to 50 percent of the project cost.[21]
- Paying contractors up-front allows contractors and homeowners **to take on large energy upgrades with high up-front costs**.[22] **Loans are repaid on the home-owner's heating utility bill**. In Oregon, the maximum loan amount is set by the ETO. The ETO also predetermines the set of qualifying energy conservation measures for the loan for participants in some of its incentive or rebate programs.

- Within the Home Energy Loan Program umbrella, the **Savings Within Reach loan** specifically targets LMI households and helps customers to take advantage of incentives offered through the ETO.[23] The specific loan terms and interest rates, as well as the portion of a customer's monthly energy bill that can go toward repayment, is determined by ETO in partnership with Oregon utilities.[24] Homeowners can borrow up to $5,000 for insulation, a heat pump water heater, a gas tank water heater, or energy-efficient windows; up to $6,000 for a ductless heat pump, gas furnace, or ducted heat pump; up to $7,500 for any combination of measures incentivized by the ETO.[25]
- The ETO and the utilities contributing to its ratepayer-funded energy efficiency programs **also sponsor the Heat Pump Upgrade loan product**, capped at $10,000. Loans through the Enhabit program are capped at $30,000. Loans are currently offered to owner-occupied households only (Additional information about the financing structure around this loan is included in the Stage 2: Core Equity Component section below).
- **If a borrower is delinquent past a set number of days, the loan is removed from on-bill repayment and serviced directly by Craft3.** In the infrequent cases in which a homeowner cannot repay the loan, **the homeowner's energy service is not shut off by the utility**. Craft3 works with the homeowner to find a financial solution or absorbs the loss of the loan. However, such situations are rare. As of Q1 2018, Craft3's **historic home energy loss rate is less than 1 percent**.

Funding and Financing Delivery

Funding Sources and Structure

As a nonprofit lending institution, Craft3 depends on capital from State and Federal agencies, larger lending institutions, and charitable organizations. **The Federal Energy Efficiency and Conservation Block Grant** funds initially provided for the Clean Energy Works Portland Pilot covered Craft3 "for losses up to 10 percent of its on-bill loan portfolio."[26] Other Federal funds that have supported Craft3 include the **U.S. Treasury Department's Community Development Financial Institutions Program**, which had provided $11 million to Craft3 as of September 2017.[27] Dividends from the revolving loan fund cover Craft3's administrative costs.[28] Last, **charitable foundations contribute** to Craft3's working capital with both investments and grants.

In 2013, Craft3 sold its Home Energy Loan Program portfolio to North Carolina's Self-Help Credit Union (Self-Help) in a $15.7 million transaction. **This sale represented the first secondary market** transaction in the relatively untested on-bill repayment market. The sale provided Craft3 with added capital to meet additional demand for the loan product. In 2015, Self-Help purchased another $6.4 million of on-bill repayment single-family, energy efficiency improvement loans.[29] The sale allowed Craft3 **to meet greater demand for its loan products by redeploying capital**. More importantly, the securitization demonstrated the viability of energy lending to LMI homeowners, which was perceived to be a high-risk market segment.[30]

Stage 2: Core Equity Components

Reduce Financial Burdens:

- Families at all income levels can have difficulty obtaining the credit to finance a major home improvement, but the challenge is both larger and more common for LMI homeowners.[31] Craft3's **underwriting includes reviews of nontraditional credit sources** (e.g., loan applicants' utility bill payment history) and traditional (e.g., credit scores). Craft3 takes a **personalized lending approach** that may allow Craft3 to accept loan applicants with FICO credit scores as low as 590.
- In addition to having flexible underwriting, Craft3 **offers loans with long payoff terms and affordable interest rates**. Offering longer loan terms can be risky for lending institutions, as they may not recover the loaned funds quickly enough to fund other lending and administrative activities. However, Craft3 made the decision to offer customers longer loan terms with the **goal of providing more flexible options for customers** and potentially matching energy savings to customer repayment obligations.

Make it Easy:

- Craft3 further reduces the transactional costs of program participation for homeowners by **taking away high up-front payments, and by allowing borrowers to sign their paperwork electronically or by mail**.[32] The mail and electronic signing options are important for households for whom the time and cost of traveling to a Craft3 office would be a burden.

STAGE 3—IMPLEMENTATION AND EVALUATION

Impact

From 2009 to May 2018, **Craft3's Home Energy Loan Program has provided nearly $50 million through about 4,000 loans to homeowners to install energy-saving measures**, which have avoided approximately 10,000 metric tons of greenhouse gas emissions.[33] Furthermore, improving households' access to capital **empowers families to pursue higher standards of living**. Energy-related upgrades can provide savings and co-benefits that are highly impactful for LMI households, which compose approximately 20 percent of all Home Energy Loan Program participants.[34] Craft3's long loan terms and affordable interest rates make loans more accessible to applicants, increasing the number of participants that have the financial means to participate.

Perhaps most importantly, Craft3 has demonstrated that **home energy loan programs can be successful for investors and participants alike, and are worth replicating**. The Pacific Northwest has seen more lenders enter the home energy loan space following the growth of the Craft3 program.[35]

Community Context

Craft3 has been successful with its loans in a variety of demographic and political contexts, which is promising for organizations seeking to replicate elements of its model elsewhere. Craft3 serves diverse socioeconomic and ethnic groups in both rural and urban areas.[36] The areas in which Craft3's seven offices operate are governed by different municipal, county, tribal, and state governments. Having offices embedded in the communities that it serves allows Craft3 to build relationships with customers and tailor loans to local contexts.

Acknowledgements

Urban Sustainability Directors Network (USDN) Equity in Energy Transformation and Innovation Project:

Supported by the USDN Innovation Fund, this case study is the result of the "Equity in Energy Transformation and Innovation" project. The project's intent was to develop actionable resources for local governments and partners to use to advance social equity in clean energy program design and implementation in their communities. The project also produced an inventory of best practice programs, three other in-depth case studies, and a Guidebook on Equitable Clean Energy Program Design. Seven core USDN cities from the U.S. and Canada were involved throughout the project, as well as an Equity Advisory Committee, composed of eight representatives whose work or lived experiences could ground the research.

Case Study Authors:

Mary Ignatiadis and Farrah Andersen, The Cadmus Group

Interviewees:

The authors would like to thank the following interviewee, who generously shared her insights on the program featured in the case study:

Desiree Sideroff, Craft3

The seven core municipalities and the advisor supporting this project are:

- Jennifer Green, City of Burlington (lead municipality)
- Laura Armstrong, City of Aspen
- Billi Romain and Sarah Moore, City of Berkeley
- Julie Barrett-O'Neil, City of Buffalo
- Peter Lengo and John Phelan, City of Fort Collins
- Mark Bekkering and Linda Swanston, City of Toronto
- Jennifer Venema, City of Sacramento
- Allison Ashcroft, Canadian Urban Sustainability Practitioners

Equity Advisory Committee:

- Cassandra Chambers, Toronto Lived Experience Advisory Group for the Poverty Reduction Strategy
- Rachel Forbes, Denver University
- Jennifer Gremmert, Energy Outreach Colorado
- Philip Haddix, Grid Alternatives
- Shelley Jiang, Sacramento Air District
- Susan (Susie) Leonard, Energy Committee for New Haven, VT
- Eric Walker, Independent Solar Advocate
- Stephanie Wang, California Housing Partnership

September 2018

USDN urban sustainability directors network

CADMUS

1 "Mission & Strategy." Craft3. 2018. https://www.craft3.org/About/Mission.

2 Sideroff, Desiree. Personal Interview by Farrah Andersen and Mary Ignatiadis. May 4, 2018.

3 "Clean Energy Works Portland." City of Portland, Oregon. https://www.portlandoregon.gov/bps/article/431322.

4 Energy Investment Partnerships: How State and Local Are Engaging Private Capital to Drive Clean Energy Investment. United States Department of Energy. 2015. https://www.energy.gov/sites/prod/files/2015/12/f27/Energy%20Investment%20Partnerships.pdf.

5 "Portland Clean Energy Works Completes Revamp with Name Enhabit." Portland Business Journal. 2015. https://www.bizjournals.com/portland/blog/sbo/2015/10/portlandsclean-energy-works-completes-revamp-with.html.

6 "Clean Energy Works Portland." City of Portland, Oregon. https://www.portlandoregon.gov/bps/article/431322.

7 "Clean Energy Works Portland." City of Portland, Oregon. https://www.portlandoregon.gov/bps/article/431322.

8 "Home Energy Loans." Craft3. 2018. https://www.craft3.org/Borrow/home-energy.

9 "What Are CDFIs?" U.S. Department of the Treasury. https://www.cdfifund.gov/Documents/CDFI_infographic_v08A.pdf.

10 "Portland Clean Energy Works Completes Revamp with Name Enhabit." Portland Business Journal. 2015. https://www.bizjournals.com/portland/blog/sbo/2015/10/portlandsclean-energy-works-completes-revamp-with.html.

11 "Home Energy Loan Product Sheet." Craft3. January 1, 2018. https://www.craft3.org/docs/default-source/product-sheets/brochure---home-energy-loan-ore-2018.pdf?sfvrsn=34.

12 Sideroff, Desiree. Personal Interview by Farrah Andersen and Mary Ignatiadis. May 4, 2018.

13 Energy Trust of Oregon. "Home Upgrades + Cash Incentives." https://www.energytrust.org/residential/incentives/

14 Energy Investment Partnerships: How State and Local Are Engaging Private Capital to Drive Clean Energy Investment. United States Department of Energy. 2015. https://www.energy.gov/sites/prod/files/2015/12/f27/Energy%20Investment%20Partnerships.pdf.

15 Ibid.

16 Sideroff, Desiree. Personal Interview by Farrah Andersen and Mary Ignatiadis. May 4, 2018.

17 "High Road Efficiency Outcomes in Portland's Energy Efficiency Upgrade Pilot." Green for All. March 2011. https://www.craft3.org/docs/case-studies/high-road-outcomes-in-portlands-energy-efficiency-upgrade-pilot-green-for-all-030111.pdf?sfvrsn=0.

18 Thompson, P., Borgeson, M., Zimring, M., Goldman, C., and Kramer, C. "Selling an Energy Efficiency Loan Portfolio in Oregon: Resale of the Craft3 Loan Portfolio to Self-Help Credit Union." Lawrence Berkeley National Laboratory. June 11, 2014. https://emp.lbl.gov/sites/all/files/craft3-policy-brief.pdf.

19 "Invest with Craft3—Institutions." Craft3. 2018. https://craft3.org/Invest/Institutions#subp.

20 "Home Energy Loans." Craft3. 2018. https://www.craft3.org/Borrow/home-energy.

21 Ibid.

22 "Better Buildings Neighborhood Program Financing Peer Exchange Call: Working Capital for Contractors." U.S. Department of Energy. August 30, 2012. https://www.energy.gov/sites/prod/files/2015/02/f20/bbrn_083012_Financing_WorkingCapitalforContractors_Summary.pdf.

23 "Savings Within Reach." Energy Trust of Oregon. 2018. https://www.energytrust.org/wp-content/uploads/2016/11/eh_fs_savingswithinreach.pdf.

24 Sideroff, Desiree. Personal Interview by Farrah Andersen and Mary Ignatiadis. May 4, 2018.

25 "Home Energy Loans." Craft3. 2018. https://www.craft3.org/Borrow/home-energy.

26 Thompson, P., Borgeson, M., Zimring, M., Goldman, C., and Kramer, C. "Selling an Energy Efficiency Loan Portfolio in Oregon: Resale of the Craft3 Loan Portfolio to Self-Help Credit Union." Lawrence Berkeley National Laboratory. June 11, 2014. https://emp.lbl.gov/sites/all/files/craft3-policy-brief.pdf.

27 Daily Astorian Staff. "Craft3 Receives Federal Grant Support." The Daily Astorian. 2017. https://www.craft3.org/About/news/news-detail/2017/09/24/federal-grant-support.

28 Energy Investment Partnerships: How State and Local Are Engaging Private Capital to Drive Clean Energy Investment. United States Department of Energy. 2015. https://www.energy.gov/sites/prod/files/2015/12/f27/Energy%20Investment%20Partnerships.pdf.

29 "CDFIs Craft3, Self-Help Complete Second On-Bill Repayment (OBR) Loan Sale." Self-Help Credit Union. 2015. https://www.self-help.org/who-we-are/resources/media-center/media-release/cdfis-craft3-self-help-complete-second-on- bill-repayment-(obr)-loan-sale.

30 Thompson, P., Borgeson, M., Zimring, M., Goldman, C., and Kramer, C. "Selling an Energy Efficiency Loan Portfolio in Oregon: Resale of the Craft3 Loan Portfolio to Self-Help Credit Union." Lawrence Berkeley National Laboratory. June 11, 2014. https://emp.lbl.gov/sites/all/files/craft3-policy-brief.pdf.

31 "Expanding Access to the Financial Mainstream." JP Morgan Chase. 2018. https://www.jpmorganchase.com/corporate/Corporate-Responsibility/expanding-financial-access.htm.

32 "Home Energy Loans." Craft3. 2018. https://www.craft3.org/Borrow/home-energy.

33 Sideroff, Desiree. Personal Interview by Farrah Andersen and Mary Ignatiadis. May 4, 2018.

34 Ibid.

35 Ibid.

36 Zimmerman, Adam. "Lending to People, Investing for Resilience." Craft3. 2015. www.pnwer.org/uploads/2/3/2/9/23295822/craft3_overview_oregon_az.pptx.