CHEEF

CALIFORNIA HUB FOR ENERGY EFFICIENCY FINANCING

ENERGY EFFICIENCY FINANCING PILOTS

QUARTERLY REPORT & PROGRAM STATUS SUMMARY

FOURTH QUARTER 2019

CALIFORNIA ALTERNATIVE ENERGY AND
ADVANCED TRANSPORTATION FINANCING AUTHORITY
(CAEATFA)

Prepared by
The California Alternative Energy and
Advanced Transportation Financing Authority
(CAEATFA)

915 Capitol Mall, Room 538
Sacramento, CA 95814
www.treasurer.ca.gov/caeatfa/cheef

…

Please direct questions about
California Hub for Energy Efficiency Financing (Hub) programs to:

CHEEF@treasurer.ca.gov
(916) 651-8157

For the purpose of easing readability of this report, "the Hub" and "CHEEF" are used interchangeably as abbreviations of the California Hub for Energy Efficiency Financing.

Table of Contents

Background 4

Quarter Highlights 5

Program Status: Progress, Outreach, Challenges 6

The Residential Energy Efficiency Loan Program (REEL) 6

Updates 6

Outreach 10

REEL Year in Review 11

The Small Business Energy Efficiency Financing Program (SBF) 15

Progress 15

Outreach 17

Challenges / Contingencies 17

The Affordable Multifamily Energy Efficiency Financing Program (AMF) 18

Progress and Outreach 18

Extension for AMF Program Launch 18

Rulemaking Process Updates 19

Challenges / Contingencies 19

Nonresidential Program 20

On-Bill Repayment (OBR) 20

Appendices 21

Appendix 1: Program Structures and Eligibility Guidelines 21

Appendix 2: Hub Infrastructure 24

Appendix 3: Budget and Staffing Authorization 26

Appendix 4: Customer-Facing Products 27

Appendix 5: Loss Reserve Account Beginning and Ending Balances 28

Appendix 6: Residential Program Participating Lender Overview 31

Appendix 7: The Impact of the Credit Enhancement 33

Tables

Table 1: Enrolled REEL Finance Company Product Features – December 18, 2019 9

Table 2: REEL Loans Enrolled by Lender – 2019 12

Table 3: REEL Loan Performance as of December 31, 2019 13

Table 4: REEL Loan Claims Paid as of December 31, 2019 14

Table 5: SBF Enrolled Finance Agreements as of December 31, 2019 15

Table 6: Enrolled SBF Finance Company Features 16

Table 7: Budget for Hub Expenditures (September 2014 through December 31, 2019) 26

Table 8: Balance of IOU Holding Accounts 28

Table 9: Balance of REEL Accounts 28
Table 10: Balance of REEL Lender Loan Loss Reserve Accounts 29
Table 11: Balance of SBF Accounts 30
Table 12: Balance of SBF Lender Loss Reserve Accounts 30

The State of California has ambitious goals to reduce greenhouse gas emissions and address climate change.

In 2006, the Legislature passed the California Global Warming Solutions Act (Assembly Bill 32), which created a comprehensive, multi-year program to reduce greenhouse gas (GHG) emissions in California. In the subsequent Scoping Plans, intended to describe the approach California will take to reduce GHGs, one of the primary methods identified is increasing efficiency in existing buildings.

With so many headlines about electric vehicles, rooftop solar and other renewables, it's easy to forget how important energy efficiency is to the GHG reduction mix. Billions of square feet of existing commercial and residential properties are currently in need of energy upgrades—both the structures and the appliances inside them.

There is simply not enough public or ratepayer funding to pay for these upgrades.

With this awareness, the California Public Utilities Commission (CPUC) allocated funds to launch several financing pilot programs designed to attract private capital to finance energy efficiency upgrades.[1] In its decision, the CPUC acknowledged that energy efficiency (EE) measures are important tools for addressing greenhouse gas emissions, and that lowering the barriers to energy efficiency retrofits and financing—particularly in underserved market sectors—is critical to reaching the state's goals of reduced energy consumption and spreading benefits to all Californians.

Background

The California Public Utilities Commission Decision 13-09-044 (D. 13-09-044) authorized a series of financing programs designed to attract private capital to finance energy efficiency upgrades and established the California Hub for Energy Efficiency Financing (Hub) to administer the new programs. The CPUC requested that the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) assume the administration of the Hub and directed the investor owned utilities (IOUs) and CPUC staff to assist CAEATFA with implementation.

A core feature of the new financing programs is to incentivize private finance companies to enter the energy efficiency market and improve terms or expand credit criteria for the financing of energy efficiency projects by providing a credit enhancement funded with IOU energy efficiency ratepayer funds. This credit enhancement helps remove the upfront cost barrier for Californians to undertake energy efficiency retrofits. A key objective is to test whether transitional ratepayer support for credit enhancements can lead to self-supporting energy efficiency finance programs in the future.

In a separate document[2], the CPUC further clarified the goals under which the financing programs would be evaluated. The financing pilots should be scalable, be leveraged by private capital and able to support energy efficiency upgrades, reach underserved Californians who would not otherwise have participated in EE upgrades, and produce energy savings.

This report is prepared in response to D. 13-09-044, which directs CAEATFA, in conjunction with the IOUs, to issue quarterly reports on the progress of the Hub financing pilots. These reports contain quarter highlights and other informational items to keep interested parties informed as to the programs' challenges and successes.

[1] Decision 13-09-044

[2] Resolution E-4900, published December 14, 2017

Quarter Highlights — Q4 2019

REEL Surpasses $10 Million in Total Financing

This quarter, the Residential Energy Efficiency Loan (REEL) Program financed over $1.3 million in loans, bringing the total amount financed since program inception to more than $10 million. In 2019 alone, the REEL Program financed $4.65 million in loans, a 17% increase from 2018.

REEL Enrolls 73 Loans in Q4, Reaches Highest Annual Loan Volume in 2019

During Q4, 73 new loans were enrolled in the REEL Program, bringing the total number of enrolled loans in 2019 to 273. This represents the highest number of loans enrolled in any year since the program's launch in 2016, as well as an 18% increase in total number of loans enrolled between 2018 and 2019.

Small Business Program Develops Project Platform

Following the full launch of the Small Business Financing (SBF) Program in Q3 2019, CAEATFA staff continued development of the Project Platform, a digital data submission tool and project status tracker for Contractors, Project Developers and Finance Companies. Staff hosted a webinar introducing the platform and SBF to users and continued to provide training to enrolled Contractors and Project Developers.

Small Business Program Increases Outreach to Contractors

CAEATFA staff continued their outreach efforts for the SBF Program to Contractors, Project Developers, and Finance Companies with support from Frontier Energy, the Contractor Manager. Specific activities included newsletters distributed to enrolled Contractors and Project Developers and participation in the Institute of Heating and Air Conditioning Industries (IHACI) Trade Show.

Affordable Multifamily Program Featured in Conferences

CAEATFA staff engaged in efforts to connect with stakeholders in the multifamily industry in support of the Affordable Multifamily Financing (AMF) Program by attending and presenting at several conferences, including the San Diego Housing Federation Conference and the Southern California Association of Nonprofit Housing Conference.

Rulemaking Updates Across CHEEF Programs

CAEATFA staff held a public workshop for the SBF Program and submitted a Certificate of Compliance to complete the emergency and regular rulemaking process on December 13, 2019. In addition, emergency regulations for the AMF Program were approved for re-adoption on November 6, 2019.

REEL customer Juliana Maziarz in front of her Los Angeles home

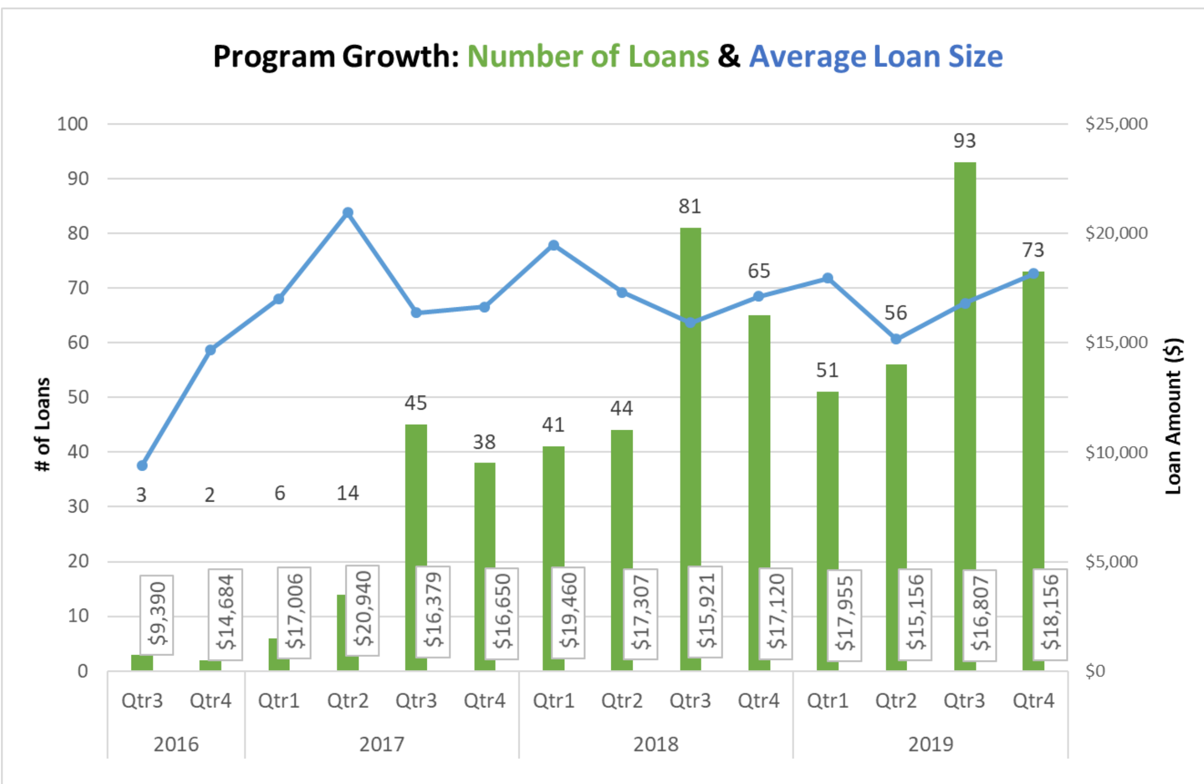
The Residential Energy Efficiency Loan (REEL) Assistance Program

Updates

In Q4 2019, the REEL Program continued its trend of growth for new loans enrolled. In keeping with the Program's history, and as is typical of the holiday season and end of the calendar year, there was a slight dip in the number of new loans enrolled in Q4. However, the 73 loans enrolled in Q4 represents the highest number of loans enrolled in the fourth quarter since the Program's inception in 2016.

As CAEATFA has focused on developing the SBF and AMF programs while awaiting the conclusion of the CPUC Evaluation Measurement & Verification (EM&V) process and subsequent action on REEL, staff has assigned limited resources toward further growth of the Program. Even so, the Program continues to grow organically at a steady rate. The 73 new loans enrolled in Q4 represented $1,325,398 in total financing, with an average project size of $18,156.

These new projects brought the total amount of REEL financing provided since the Program's inception to over $10 million. Since July 2016, the Program has enrolled 612 loans, representing a total financed amount of $10,433,097. The chart below illustrates REEL's growth and average loan size since program inception.



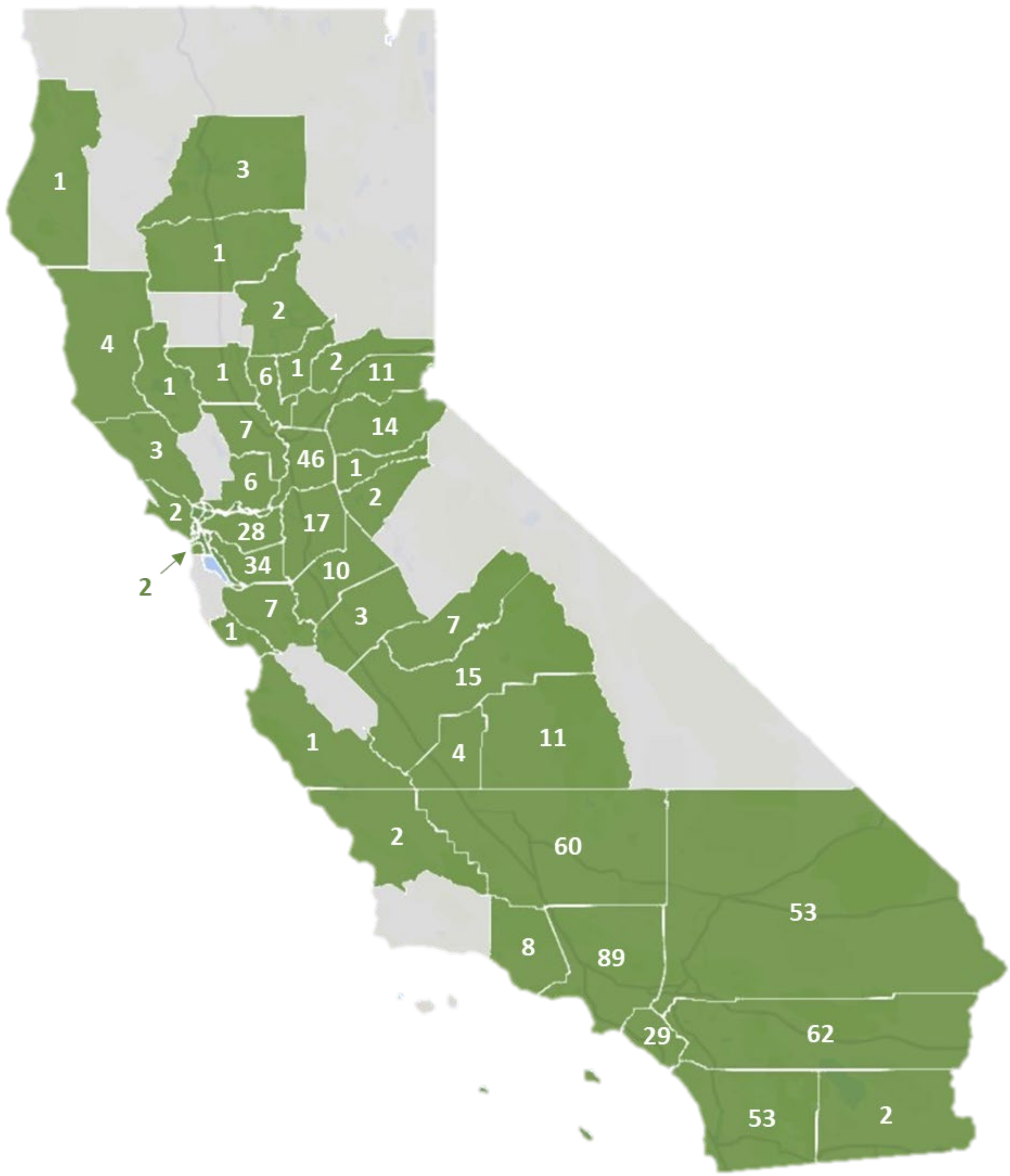
Five of the seven participating Finance Companies enrolled new loans during Q4 (details in Appendix 6). More than three in five (62%) loans were made to households in Low-to-Moderate Income census tracts, with 12% of loans going to borrowers in Disadvantaged Communities as defined by CalEnviroScreen, which measures pollution burden.

The REEL pilot program EM&V process, conducted by Opinion Dynamics Corporation on behalf of the CPUC, continued during the quarter. The EM&V final report was released in January 2020. The findings of the final report will be incorporated into the CPUC's consideration of whether and how REEL should be continued.

For information about REEL program structure and eligibility, see Appendix 1.

Map of Enrolled REEL Loans

This map shows the number of REEL loans enrolled, by county, from the start of the program through the end of Q4 2019.



REEL: Facts and Figures for Q4 2019

391 REEL Participating Contractors

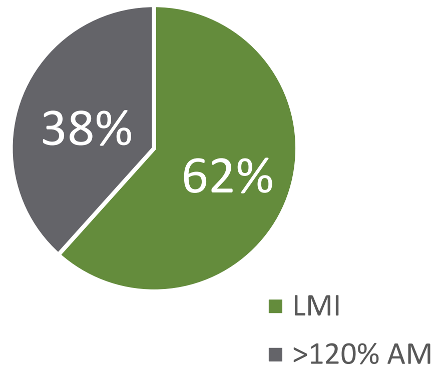
$1,325,398 In REEL Loans Enrolled

$18,156 Average Loan Size

$215,061 Total LLR Contributions

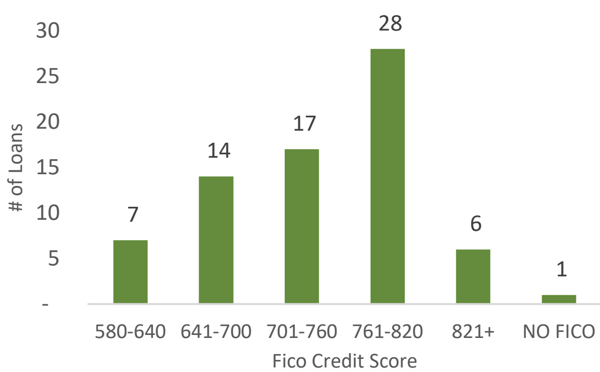
89% Finance-Only Projects (cases in which borrower made upgrades using REEL without a rebate or incentive)

Percentage of REEL loans made to borrowers in LMI census tracts

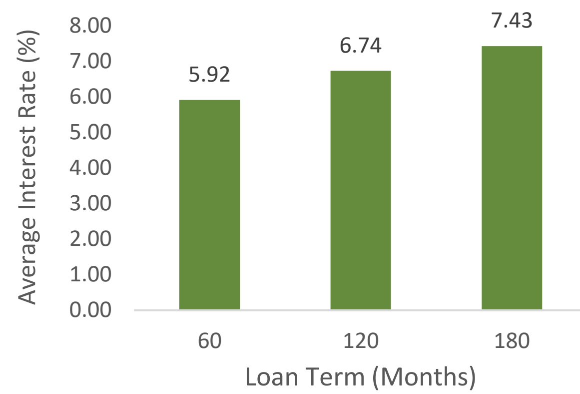


Low-to-Moderate Income (LMI) census tracts are those with median family incomes <120% of Area Median Income.

REEL Borrower Credit Score



REEL Average Interest Rates by Term



Top 3 Measure Types Installed During Q4 2019

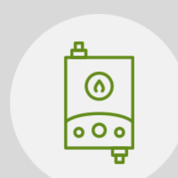
HVAC: 39

Equipment and ductwork

BUILDING ENVELOPE: 43

Air sealing, insulation, cool roofs, windows, etc.

WATER HEATING: 10



Water heaters and low-flow fixtures

Table 1. Enrolled REEL Finance Company Product Features - December 18, 2019

gogreen FINANCING™

Residential Energy Efficiency Loan (REEL) Approved Lenders

Financing for single-family residential units

	Lending Area	APR[1] (11/22/2019)	Loan Size	Minimum Credit Score	Pre-Approval	Contact Info
STATEWIDE LENDERS	**Available to borrowers in:**					
California Coast Credit Union	Anywhere in California	5.90% - 7.90% **Anniversary Promo** 3.90% - 5.90% for loans \$2,500 - \$30,000[2]	\$2,500 - \$50,000	600	Instant pre-approval for qualified borrowers *(up to \$25,000)*	(858) 495-1637 CCCU Energy Group: Ray, Zak, Bill & Katya energy@calcoastcu.org
Matadors Community Credit Union	Anywhere in California	5.74% - 7.74%[3]	\$2,500 - \$50,000	580	Within 24 hrs[4]	(818) 993-6328, option 3 MCCU Consumer Lending energy@matadors.org
REGIONAL LENDERS[5]	**Available to borrowers in:**					
Desert Valleys Federal Credit Union	Indian Wells Valleys, Searles Valley, Kern River Valley, Bishop, Barstow, and parts of Kern and Inyo counties[6]	5.00% - 9.00%	\$2,500 - \$50,000	580	Within 24 hrs[4]	(866) 743-6497 Eric Bruen REEL@desertvalleys.org
Eagle Community Credit Union	Orange County	4.99% - 9.15%	\$2,500 - \$50,000	580	Within 24 hrs[4]	(949) 639-7819 Bob Thompson bthompson@eaglecu.org
FirstUS Community Credit Union	Sacramento, Placer, Nevada, El Dorado, Amador, Yuba, Yolo, Sutter, San Joaquin, Solano, Sierra, and Contra Costa counties[7]	**New Low Rates** 4.99% - 8.99%[3]	\$2,500 - \$50,000	600	Within 24 hrs[4]	(800) 556-6768 x2009 First US Consumer Lending energy@firstus.org
Pasadena Service Federal Credit Union	Pasadena, Covina, Vernon, and the greater San Gabriel Valley	6.40% - 9.00%	\$2,500 - \$30,000	600	Within 24 hrs[4]	(877) 297-4707 PSFCU Lending lending@mypsfcu.org
Valley Oak Credit Union	Tulare County and Madera County[8]	6.65% - 9.15%	\$1,500 - \$50,000	580	Within 24 hrs[4]	(559) 688-5996 x2315 Kiersty Vaughan kvaughan@valleyoak.org

✓ **100% Financing** *(No closing costs or annual fees)* ✓ **No Collateral Required** ✓ **Terms Up to 15 Years**

Apply for a loan and start your REEL project today. More at GoGreenFinancing.com

[1] APR = Annual percentage rate. Rates are subject to change at any time. Check with lender for the most up-to-date rate information. [2] Promotion ends March 31, 2020. 29 month payback term limit. [3] Includes 0.5% auto-pay discount. [4] During normal business hours. [5] Regional lenders require a one-time \$5 membership fee. [6] Please see Desert Valleys' website for membership details. [7] Existing and retired federal employees throughout the State of California are also eligible. [8] Valley Oak can lend to select employee groups in Kings and Fresno counties. Please see Valley Oak's website for membership details.

12/18/2019

Outreach

GoGreenFinancing.com – A total of 76,195 users visited GoGreenFinancing.com in Q4, which represented a 10% increase in traffic from Q3 2019. These website visits translated to 1,517 click-throughs to the websites of REEL's participating lenders. A significant amount of this activity can be traced to a marketing campaign from San Diego Gas and Electric (SDG&E), as well as campaigns led by SoCalGas (SCG) and SoCal Edison (SCE).

Contractor Outreach – Frontier Energy, the Contractor Manager under the Hub, continued its outreach to potential REEL Contractors via several channels, including email newsletters. A total of 31 new contractors successfully enrolled in the REEL Program over the course of the quarter, and by December 31, borrowers could choose from 391 contractors statewide. SCG and Pacific Gas and Electric (PG&E) also marketed REEL to their Home Upgrade contractors via email.

IOU Customer Outreach – As trusted messengers, the IOUs have the opportunity to reach millions of statewide customers via several marketing channels. During Q4, the IOUs marketed the REEL Program through a variety of these channels, including two campaigns of note that utilized channels that REEL had not been advertised through previously.

Over the holiday season, SCG led an advertising campaign across five different radio stations that included a call to action driving listeners to GoGreenFinancing.com. Meanwhile, SDG&E provided a report to 800,000 of their residential customers in December that compared their energy use to similarly-sized homes in their neighborhood. This report included messaging around residential energy efficiency financing that directed customers to GoGreenFinancing.com. Additionally, SCG included messaging on outgoing bill envelopes to approximately 3 million residential customers, and SCE conducted an email campaign with an audience of 80,000 individuals.

REEL Year in Review

Data collected at the end of 2019 demonstrates the continued growth of the REEL Program and the effectiveness of financing for improving energy efficiency in California homes.

Financing Metrics

Loans Enrolled	Total Amount Financed	Average Loan Amount
273	$4,652,892	$17,044

Loans for Properties in LMI Census Tracts	Borrowers with Credit Score < 700	Average Interest Rate of All REEL Loans
150 (55%)	184 (67%)	6.83%

Many REEL borrowers took advantage of lower interest rates and longer payback periods provided by the Program this year. Of the 273 loans enrolled in 2019:

- 87 loans had a term of **60 months** (5 years), with an average interest rate of **6.1%**
- 73 loans had a term of **120 months** (10 years), with an average interest rate of **6.87%**
- 83 loans had a term of **180 months** (15 years), with an average interest rate of **7.63%**

The REEL Program provides customers with access to financing that they would not otherwise be able to secure. Through REEL, customers are able to extend terms up to 15 years, access larger amounts of financing and take advantage of lower interest rates. Additionally, without the REEL Program, borrowers with low FICO scores could expect to encounter serious obstacles to financing and would not be able to access financing at any significant amount from several of the Program's participating lenders.

On average, REEL borrowers saw interest rate savings of over 500 basis points[3] by financing through REEL rather than other personal, unsecured loans. The chart below compares interest rates between REEL loans and the equivalent non-REEL signature loan products offered by the Program's participating lenders, using a data set for loans with terms up to 60 months.

Average Interest Rate with REEL	Average Interest Rate without REEL
6.05%	11.49%

The loans enrolled in 2019 were distributed among REEL's seven participating lenders as follows:

[3] One basis point is equivalent to 0.01% or 1/100th of a percent. A change in interest rates from 6% to 5%, for example, is equal to a 100 basis point reduction.

Table 2. REEL Loans Enrolled by Lender – 2019

Lender	# of Loans	Claim-Eligible Principal[4]
California Coast Credit Union	119	$1,809,321
Desert Valleys Federal Credit Union	3	$72,163
Eagle Community Credit Union	4	$83,632
First US Community Credit Union	17	$222,118
Matadors Community Credit Union	120	$2,332,990
Pasadena Service Federal Credit Union	1	$26,505
Valley Oak Credit Union	9	$106,164
	273	**$4,652,892**

EEEMs Metrics

Energy efficiency projects undertaken by REEL borrowers encompassed a wide variety of Eligible Energy Efficiency Measures (EEEMs) in 2019. The four most popular measure groups (HVAC, building envelope, water heating, and appliances) each comprised a significant number of total measures installed across all projects:

HVAC	Building Envelope	Appliances	Water Heating
223	186	36	27

Within the measure groups listed above, there were four specific measures that were most commonly installed by REEL borrowers:

- 154 projects included HVAC units
- 91 projects included energy efficient windows
- 69 projects included ductwork
- 47 projects included insulation

Contractor Metrics

In 2019, CAEATFA staff and the Contractor Manager, Frontier Energy, continued efforts to enroll new contractors and encourage engagement among existing participants. By the end of 2019, customers were able to select from nearly 400 contractors across California, with more than 44% of enrolled contractors having completed at least one REEL project.

Contractors Currently Enrolled in REEL	Enrolled Contractors Who Completed At Least 1 Project	Enrolled Contractors Who Completed > 1 Project
391	174	93

[4] Loans issued through the REEL Program must meet specific criteria in order to receive a claim payment from the loss reserve in the event of a charge-off. REEL lenders may, at their discretion, issue loans through the REEL Program containing elements that are not claim-eligible. The claim-eligible principal differs from the total loan amount in these cases.

REEL Loan Portfolio

Since the first loan was enrolled in 2016, the REEL Program has financed over 600 loans totaling more than $10 million in financing for energy efficiency retrofits. The tables below break down the portfolio's performance by lender and repayment status, as well as the claims paid to lenders for charged-off loans.

Table 3. REEL Loan Performance as of December 31, 2019

	Number of Loans	Original Claim-Eligible Funded Amount	Claim-Eligible Outstanding Amount
Paid in Full	**75**	**$1,074,600**	**$0**
California Coast Credit Union	43	$615,738	$0
Desert Valleys Federal Credit Union	3	$23,701	$0
Eagle Community Credit Union	1	$21,193	$0
First US Community Credit Union	1	$8,436	$0
Matadors Community Credit Union	27	$405,532	$0
Current	**521**	**$9,039,889**	**$8,027,357**
California Coast Credit Union	286	$4,650,435	$4,034,742
Desert Valleys Federal Credit Union	12	$238,015	$200,523
Eagle Community Credit Union	8	$139,275	$125,044
First US Community Credit Union	23	$318,394	$297,580
Matadors Community Credit Union	177	$3,479,924	$3,181,997
Pasadena Service Federal Credit Union	2	$45,824	$44,283
Valley Oak Credit Union	13	$168,022	$143,188
Past Due[5]	**7**	**$149,885**	**$137,536**
California Coast Credit Union	6	$142,210	$129,997
Matadors Community Credit Union	1	$7,675	$7,539
Total Paid in Full, Current, Past Due	**603**	**$10,264,374**	**$8,164,893**
	Number of Loans	Original Claim-Eligible Funded Amount	Charge-Off Amount[6]
Charged Off	**9**	**$168,724**	**$161,326**
California Coast Credit Union	8	$156,910	$149,745
First US Community Credit Union	1	$11,814	$11,581
Grand Total	**612**	**$10,433,098**	

[5] At least 30 days past due, but not yet charged off.

[6] Does not include recoveries.

Through REEL, participating lenders may submit a claim for reimbursement for up to 90% of a charge-off of the outstanding Claim-Eligible Principal Amount. The Claim Amount Paid data point reflects the amount that REEL Lenders were paid on the claim.

Table 4. REEL Loan Claims Paid as of December 31, 2019

	Number of Loans	Charge-Off Amount	Claim Amount Paid
Claims Paid in 2019[7]	9	$161,326	$145,194
Recoveries	1		($20,691)
Net Loss to Portfolio			$124,502

[7] No claims were paid prior to 2019

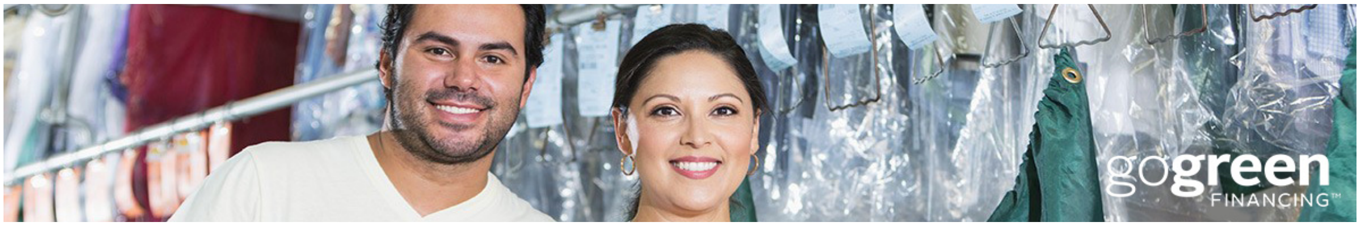


Image from GoGreen Financing digital campaign

The Small Business Energy Efficiency Financing Program

Progress

In the SBF Program's second quarter of operating with complete infrastructure in place, CAEATFA staff led a series of targeted efforts to increase engagement with enrolled Contractors and Project Developers and recruit new ones, as detailed in the Outreach section below. The Program enrolled one financing agreement and pre-approved one additional project for financing. As of December 31, 2019, the Program has enrolled three projects.

In Q4, the Project Platform received further testing and bug repairs, and development continued on functions including reporting and data storage. Reference materials were created as self-help tools for users of the Project Platform. Additionally, CAEATFA staff led trainings on the Project Platform for SBF's participating Finance Companies in October and later hosted a public webinar for Contractors and Project Developers focused on SBF's launch and project basics.

CAEATFA staff also completed the emergency and regular rulemaking process for the SBF Program's regulations, which began in December 2018. In October 2019, staff held a public hearing introducing proposed modifications to Program regulations. A 15-day public comment period ensued after the hearing. In December, staff submitted a Certificate of Compliance, proposed modified regulations, and all corresponding documents to the Office of Administrative Law (OAL). Submission of the Certificate of Compliance completes the regular rulemaking, which began with the emergency rulemaking process. Staff anticipates that OAL will approve and enact the regulations in January 2020.

For information about SBF program structure and eligibility, see Appendix 1.

Table 5. SBF Enrolled Finance Agreements as of December 2019

	Finance Agreements Enrolled	Total Amount Financed
Alliance Funding Group	0	$0
Ascentium Capital	1	$172,500
DLL Financial Solutions Partner	2	$265,401

Table 6. Enrolled SBF Finance Company Product Features

gogreen FINANCING™

Small Business Financing (SBF) Participating Finance Companies

	ascentium CAPITAL	dLL financial solutions partner	AFG Alliance FUNDING GROUP
	Equipment finance agreements	**Loans, leases and service agreements***	**Equipment lease agreements**
Amount available	$10,000 - $1,500,000	$10,000 - $5,000,000	$10,000 - $5,000,000
Term	12 - 60 months Up to 84 months if required for project cashflow	12 - 84 months Up to 120 months if required for project cashflow	24-60 months for amounts up to $50,000 Up to 120 months for $50,000 or more
Document fees	$195 ($295 if your contractor is prefunding)	$125 ($225 if financing more than $250,000)	$395
WHAT CAN BE FINANCED			
Energy efficiency & demand response	✓	✓	✓
Soft costs	✓	✓	✓
Nonenergy savings measures	✓	✓[X]	✓[X]
Distributed generation & battery storage	✓	✓	
CUSTOMER ELIGIBILITY			
Tenant occupants permitted	✓	✓[T]	✓[TZ]
Minimum months in business	12 months (up to $100,000) Greater amounts require 18+ months in business	18 months	12 months ($300,000 and up) 36-60 months for amounts less than $300,000
FEATURES			
Application only (no financials required)	Up to $250,000	Up to $125,000	Up to $300,000
Fast credit approvals	Within 2 business hours (up to $250,000)	Within 2 business hours (up to $250,000)	24-48 hours (up to $300,000)
Other features	▪ Prefunding up to 95% of financed amount for contractors that satisfy a credit check	▪ Progress payments or escrow funding for contractors who pass credit checks ▪ DLL can bill for and collect regular service and maintenance charges for contractor	▪ Prefunding available on a contractor-by-contractor basis ▪ Lease reamortization option after 5 years
Contact	**Josh Patton** (281) 902-1969 joshpatton@ascentiumcapital.com Ascentium.info/GoGreen19	**Matt Singer** (484) 688-4644 msinger@leasedirect.com	**David Goldstein** (714) 450-1026 dgoldstein@alliancefunds.com

*Service agreements require a minimum of $50,000 and a 36 month term. [X]Up to 30% of claim-eligible amount. [T]If financing is less than or equal to time remaining on occupancy lease. [Z]Limited to measures not affixed to property.

All financing is subject to credit approval and compliance with the program terms. Rates and terms are subject to change. Please contact the finance company representatives above for up to date information.

GoGreenFinancing.com

07/15/2019

Outreach

In Q4, staff participated in the Institute of Heating and Air Conditioning Industries (IHACI) Trade Show alongside one of SBF's participating Finance Companies and the Hub Contractor Manager, Frontier Energy. The Trade Show served as a key opportunity to interact with industry participants and enhance awareness of the Program. Staff is currently preparing for many additional direct outreach engagements that are planned for Q1 2020, including the annual kick-off meetings of the IOUs' Trade Professional Alliances and the California Association for Local Economic Development (CALED) Annual Training Conference.

The Contractor Manager continued sending out its monthly SBF newsletter to both prospective and enrolled Contractors and Project Developers. Contractor and Project Developer recruitment also continued, and by the close of the quarter, SBF customers could choose from 30 Contractors and 12 Project Developers.

Additionally, a new Marketing, Education and Outreach Specialist who will focus in part on the SBF Program was hired and on-boarded in Q4. With the CAEATFA marketing team now at full capacity, staff developed new engagement plans for 2020 to expand outreach efforts for the Program.

CAEATFA staff will also endeavor to recruit a microlender and a finance company offering savings-based payment agreements to the SBF Program in 2020.

Challenges / Contingencies

Microlending – Recruitment of a microlender remains a priority for the SBF Program, given research by the CPUC, IOUs and CAEATFA regarding the energy efficiency financing needs of California's small businesses for loans of $5,000 or less. Current On-Bill Financing programs offered by the IOUs do not offer loans less than $5,000, and SBF's three participating Finance Companies have minimum loan amounts of $10,000. Helping small businesses access microloans for small lighting, refrigeration or water heating projects remains an unmet need. CAEATFA will begin outreach to potential SBF microlenders in the upcoming months.

Program Awareness – Given the program's recent entry into this market, awareness of the SBF Program among contractors is still limited, and development of a strong pipeline of new projects faces a lengthy timeline. Staff continues to engage with Program participants, IOU program and finance leads, and trade professionals to build market awareness and identify opportunities where SBF can help customers finance projects that otherwise would not happen. CAEATFA staff is also focused on building relationships with industry leaders, including IOU third-party implementers, and intends to expand on these efforts early in 2020.

Image from GoGreen Financing digital campaign

The Affordable Multifamily Energy Efficiency Financing Program

Progress and Outreach

Following the Q3 enrollment of Renew Energy Partners as the Affordable Multifamily Financing (AMF) Program's first participating Finance Company, CAEATFA staff focused on direct outreach to stakeholders and adoption of emergency regulations in Q4.

Specifically, CAEATFA staff attended the San Diego Housing Conference and the Southern California Association of Nonprofit Housing Conference in October to connect with leaders in the affordable multifamily housing industry and increase awareness of the Program. These conferences offered valuable interactions with potential customers, Finance Companies, utility program implementers, and housing organizations. AMF Program staff also presented Program Partner training to the Association of Energy Affordability and continued its outreach to Finance Companies and property owners.

Extension for AMF Program Launch

CPUC Decision 17-03-026 set a deadline which required that all CHEEF pilots launch by the end of 2019, with "launch" defined in prior CPUC Decision 15-06-008 as the program enrolling at least one project. Over the past two years, CAEATFA staff has worked diligently to improve REEL, launch SBF, and develop and implement the AMF Program. Efforts to launch this Program included successfully enacting program regulations, enrolling AMF's first participating Finance Company, and engaging in comprehensive outreach within the AMF industry.

Despite staff having created a financing structure designed to accommodate the unique needs of affordable multifamily properties, several barriers to project enrollment remain. In addition to their complex debt structures and deed restrictions, most affordable multifamily properties need projects to yield enough energy savings to offset financing costs entirely. With a Finance Company and a concrete offering now onboard, property owners are able to explore energy efficiency projects through the AMF Program. However, due to the aforementioned barriers discovered through robust engagement with stakeholders, staff realized that the CPUC deadline would not be reached for the AMF Program.

On December 11, 2019, CAEATFA staff submitted a request to the CPUC for a one-year extension to enroll the first financing under the AMF Program (through the end of 2020) to accommodate the implementation schedule and address the complexity and constraints within affordable multifamily structures and the industry as a whole. On December 24, 2019, the CPUC approved CAEATFA's requested extension.

In light of this extension, CAEATFA staff has worked with program stakeholders to identify potential projects, increase alignment with the industry's priorities and strengthen cooperation between the AMF Program and existing multifamily programs. Staff have continued outreach to additional finance and service entities, and several have expressed interest in participating in the Program. Staff have also prepared the internal procedures and processes necessary to enroll the first AMF project and will continue to work diligently to enroll a project prior to the end of 2020.

Rulemaking Process Updates

The AMF Program emergency regulations, initially approved by the CAEATFA board on April 16, 2019, were submitted for re-adoption and subsequently approved by the Office of Administrative Law in October. CAEATFA staff plans to continue the rulemaking process in 2020 by holding a workshop and submitting a Certificate of Compliance to adopt permanent regulations.

Challenges / Contingencies

In addition to the barriers to project enrollment identified above, program staff's ongoing engagement with stakeholders has revealed that property owners have recounted the need to conduct tenant education around energy efficiency before undertaking projects, as tenants of affordable multifamily properties are often hesitant to support new projects. Affordable multifamily properties also face lengthy energy auditing and development processes for energy efficiency projects.

For information about AMF program structure and eligibility, see Appendix 1.

Photo by Allyunion at English Wikipedia

Nonresidential Program

The Nonresidential Program is not being actively developed at this time. Launch of the Nonresidential Program is dependent upon the development of on-bill repayment (OBR), which will not be completed until 2020. Since CPUC Decision 17-03-026 requires all pilots to be launched by the end of 2019, CAEATFA staff chose to direct resources to the SBF and AMF Programs during 2019.

In the event that CAEATFA is authorized to develop the Nonresidential Program in the future, prior work can be leveraged. While developing the SBF Program design and regulations, CAEATFA anticipated how the Nonresidential Program would be incorporated into the Hub's offerings.

On-Bill Repayment

CAEATFA continued to develop On-Bill Repayment (OBR) functionality in Q4. OBR will allow borrowers to repay energy efficiency financing through their utility bill. This functionality is viewed by the CPUC as a critical component of the Hub programs, due to its potential to both encourage program uptake and reduce default rates. SBF, AMF, and the Nonresidential Program (should it be developed) will include OBR as a key feature upon its release.

CAEATFA staff proceeded with its ongoing work with the IOUs and the Master Servicer to establish an OBR infrastructure that guarantees the secure flow of funds between accounts and accurate transmission of corresponding data. This complex task necessitates close coordination with the IOUs, since each utility has a unique billing architecture and security protocols. In December, CAEATFA staff met in-person with the Master Servicer in Phoenix to review the newly-developed secure cash flow technical solution, which is used to track and process customer payments from the IOUs to each respective finance company. Review of the secure cash flow solution involved a holistic OBR system integration, including aspects of the Data Exchange Protocol and lender report file specifications. During Q4, work also continued on regression testing, and preparations were made for more significant OBR development and regulations implementation expected in 2020.

The expected launch date to offer OBR features is projected for mid-2020.

Appendices

Appendix 1: Program Structures and Eligibility Requirements

REEL

The Residential Energy Efficiency Loan (REEL) Assistance Program provides attractive financing to owners and renters of existing residential properties who select from a broad list of energy efficiency measures intended to reduce energy consumption. Customers may upgrade a single-family home, townhome, condo, duplex, triplex, fourplex or manufactured home. Renovations for up to four units can be bundled into the same loan.

As with all Hub programs, eligibility requires that the property receive electric or natural gas service from at least one of the IOUs: PG&E®, SDG&E®, SCE® or SoCalGas®. Properties in areas served by community choice aggregators (CCAs) or electric service providers (ESPs) qualify. Those in areas served by publicly owned utilities (POUs) qualify only if they also receive energy service from an IOU (for example, electricity from the Sacramento Municipal Utility District and natural gas from PG&E). For financing to be considered "claim-eligible" in the case of a default, 70% of that financing must be used to fund the installation of measures that use the type of energy that the IOU delivers.

REEL lenders receive a credit enhancement of 11% of the claim eligible amount, or 20% if the borrower is considered underserved. CAEATFA defines underserved borrowers as those who meet at least one of the following criteria:

> *Residence in a Low-to-Moderate Income (LMI) Census Tract* – Area Median Income (AMI) of the borrower's census tract does not exceed 120% of the AMI for the Metropolitan Area, County, or State. To make this determination, CAEATFA selected the existing geocoding tool administered by the Federal Financial Institutions Examination Council (FFIEC) Geocoding System.[8]
>
> *Low-to-Moderate Household Income* – Borrower's household income is at or below the current annual income limits as determined by the California Department of Housing & Community Development and accounting for county of residence and family size.
>
> *Credit-Challenged* – A borrower whose credit score is less than 640 (if the lender has opted in to the Credit-Challenged facility by demonstrating additional benefits to credit-challenged borrowers).

REEL Program regulations may be viewed on the CAEATFA website.

SBF Program

The Small Business Energy Efficiency Financing (SBF) Program regulations were approved by the Office of Administrative Law (OAL) and went into effect on Dec. 17, 2018. The SBF Program seeks to:

1. Provide a state-backed financing program designed to address the energy efficiency challenges faced by small business owners and tenants
2. Provide accessible and attractive financing options for small businesses
3. Provide a source of financing that allows deep energy retrofits in existing buildings

Financing through the Program is available to small businesses, nonprofits and market rate multifamily properties (5 or more units) that meet at least one of the following business size requirements:

[8] https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx

- Employ 100 or fewer individuals
- Have annual revenue of less than $15 million
- Meet SBA size classifications (annual revenue limits range from $750,000 to $41.5 million, depending on industry)

SBF is available to both small business property owners and tenants.

To best accommodate the small business energy efficiency market, the Program facilitates a variety of financing instruments for potential customers to consider, including loans, equipment leases, service agreements and savings-based payment agreements; each participating Finance Company offers products from this menu of authorized instruments. Small business owners may take out loans of up to $5 million. Up to $1 million of the financed amount is eligible to receive a credit enhancement for qualifying measures, as follows:

- The first $50,000 of claim-eligible financing will be credit enhanced at 20%
- The remainder (up to an additional $950,000) will be credit enhanced at 5%
- Maximum loss reserve contribution will be $57,500

As with all Hub Programs, eligibility requires that the property receive electric or natural gas service from at least one of the IOUs: PG&E®, SDG&E®, SCE® or SoCalGas®. Properties in areas served by community choice aggregators (CCAs) or electric service providers (ESPs) located within IOU territories qualify. Those in areas served by publicly owned utilities (POUs) qualify only if they also receive energy service from an IOU.

There are three methods of project qualification for the SBF Program:

1. The Program has published a searchable and downloadable list of pre-qualified energy saving measures (ESMs). Measures on the ESM list can be financed without any additional approval.
2. Any measure approved by an IOU, REN, or CCA custom incentive program for the property within the last 24 months is eligible.
3. For any measures that are not listed on the ESM list or tied to a custom incentive program, an Energy Professional can certify that the installation of the measure will result in energy savings compared to existing conditions. For the SBF Program, an eligible Energy Professional is a California licensed Professional Engineer (PE) or an Association of Energy Engineers Certified Energy Manager (CEM).

SBF Program regulations may be viewed via the CAEATFA SBF Regulations page.

AMF Program

The Affordable Multifamily Financing (AMF) Program emergency regulations were approved by the CAEATFA Board on April 16, 2019 and enacted on May 9, 2019. CAEATFA staff expects to submit the emergency regulations for readoption on October 23, 2019 while it undertakes the regular rulemaking process.

The Affordable Multifamily Energy Efficiency (AMF) Program seeks to facilitate energy efficiency retrofits in multifamily properties of five or more units where at least 50% of the units are income-restricted at low to moderate (80-120% of area median income). To be eligible, properties must remain affordable for at least five years.

The AMF Program will fund any energy efficiency or demand response measure approved for rebate and incentive by any IOU, REN or CCA, as well as any measure from the Energy Saving Measures list developed for use in the SBF Program. In-unit as well as common area measures are eligible. Up to 30% of the financed amount may fund non-energy efficiency improvements; solar photovoltaic and distributed generation may be financed but will not receive a credit enhancement.

Key AMF Program Features

- No minimum or maximum financing size
- The first $1 million of each financed project will be credit enhanced at 15% of the claim-eligible amount
- Fixed or variable rates allowed
- No underwriting requirements imposed on the Finance Company. Underwriting is based on participating Finance Company requirements
- Designed to integrate with existing affordable multifamily housing energy programs such as the Low-Income Weatherization Program (LIWP) and Solar On Multifamily Affordable Homes (SOMAH)

Like the SBF Program, the AMF Program supports traditional loans and leases as well as innovative financing products such as energy service agreements and savings-based payment agreements.

As with all Hub Programs, eligibility requires that the property receive electric or natural gas service from at least one of the IOUs: PG&E®, SDG&E®, SCE® or SoCalGas®. Properties in areas served CCAs or ESPs located within IOU territories qualify. Those in areas served by POUs qualify only if they also receive energy service from an IOU.

For more detail about program design, read the AMF Program emergency regulations.

Nonresidential

Like all the Hub financing programs, the Nonresidential Program is intended to encourage growth in private market lending, in this case for public and large commercial buildings. Though a credit enhancement will not be provided, the Program will be designed to provide financing, which will be repaid on the utility bill, for building energy efficiency, distributed generation, battery storage and demand response projects. The flexibility of the program will allow the combination of financing with IOU rebates and other incentives.

The Nonresidential Program is not being developed at this time. Launch of the Nonresidential financing program is dependent on the development of On-Bill Repayment (OBR) functionality.

Appendix 2: Hub Infrastructure

CAEATFA is creating a statewide platform for finance companies and contractors to participate in the uptake of energy efficiency projects through increased access to financing. As the manager of the Hub, CAEATFA is developing uniform program requirements, standardized documentation and processes, and a central administrative entity to facilitate investment in energy efficiency projects and implementation of the programs.

Key infrastructure elements needed to implement the Hub include a Master Servicer, Trustee Bank, Secure Flow of Funds functionality, Contractor Manager, Data Manager, and Technical Advisors. Below are descriptions of each of these roles and information regarding their current status as it relates to CAEATFA's procurement processes.

Master Servicer

Organization	Concord Servicing Corporation
Duties	The Master Servicer plays a key role in the daily administration of the programs, accepting loan enrollment applications and processing on-bill repayment transactions.
Contract Term	1/1/18 – 12/31/20
Notes	A one-year extension of this contract was approved by the Department of General Services on December 13, 2019.

Trustee Bank

Organization	US Bank
Duties	The Trustee Bank holds the ratepayer funds provided by the IOUs to serve as Credit Enhancements under the various programs. CAEATFA provides direction to the Trustee Bank to transfer CE funds between various accounts.
Contract Term	1/8/18 – 12/31/20
Notes	A one-year extension of this contract was approved by the Department of General Services on October 29, 2019.

Contractor Manager

Organization	Frontier Energy
Duties	The Contractor Manager recruits, enrolls, trains, supports and manages contractors and conducts quality control oversight of projects not participating in an IOU rebate/incentive program. Following CAEATFA's issuance in Q1 2019 of a Request for Proposals for a universal Contractor Manager for multiple programs, Frontier was awarded the contract in June 2019 and added SBF activities to its existing efforts on behalf of REEL.
Contract Term	6/4/19 – 5/28/21
Notes	Option for a one-year extension.

Data Manager

Organization	TBD
Duties	The Data Manager will receive program data from the Master Servicer and other energy efficiency finance program administrators in order to prepare it for public presentation and use. It will also receive program-related energy savings data from the CPUC. The data will be aggregated and anonymized according to the combined standards and regulatory requirements of the IOUs and capital providers. The RFP for the competitive solicitation for this service has yet to be released while CAEATFA prioritizes its workload to develop and implement the programs. Concurrently, CAEATFA and its agents will continue to collect the appropriate data to ultimately be transmitted to the data manager when it is brought under contract.
Contract Term	TBD
Notes	TBD

Technical Advisors

Technical Advisors provide expertise to CAEATFA in the development and implementation of the Hub programs.

Organization	Energy Futures Group (EFG)
Duties	Provides technical assistance to continue research and development as well as implementation assistance for SBF.
Contract Term	3/13/19 – 3/13/21
Notes	Option for a one-year extension.

Appendix 3: Budget and Staffing Authorization

D.13-09-044 directs the IOUs to allocate a total of $75.2 million to finance the programs over the initial period. Table 2 provides an itemized breakdown of these allocations, current expenditures and remaining balance. As of December 30, 2019, CAEATFA had expended $11,567,636 of the $15.36 million allocated for Hub Administration, Direct Implementation, and Marketing, Education, and Outreach.

CAEATFA will be seeking additional funding for program implementation beyond 2020 to align with the current program implementation timetable.

Table 7: Budget for Hub Expenditures (September 2014 through December 31, 2019)

Item	Allocated	Expended/ Encumbered[9]	Balance
Hub Administration			
Includes start-up costs, Hub administrative, direct implementation, outreach and training to finance companies and contractors, and contracting costs[10]	$ 13,360,000	$ 9,993,981	$ 3,366,019
Subtotal Hub Administration Costs	**$ 13,360,000**	**$ 9,993,981**	**$ 3,366,019**
Marketing, Education, Outreach (MEO)			
Statewide MEO plan	$ 8,000,000	N/A[11]	$ 8,000,000
CAEATFA outreach and training to finance companies and contractors	$ 2,000,000	$ -[12]	$ 2,000,000
Subtotal Marketing, Education, and Outreach	**$ 10,000,000**	$ -[13]	**$ 10,000,000**
Residential Pilots Credit Enhancement Funds[14]			
Residential Energy Efficiency Loan (REEL)	$ 25,000,000	$ 1,529,260	$ 23,470,740
Energy Financing Line Item Charge (Funding to PG&E)	$ 1,000,000	(TBD)	$ 1,000,000
Affordable Multifamily	$ 2,900,000	$ -	$ 2,900,000
Subtotal Residential Pilots	**$ 28,900,000**	**$ 1,529,260**	**$ 27,370,740**
Non-Residential Pilots Credit Enhancement Funds			
Small Business sector with credit enhancement	$ 14,000,000	$ 44,395	$ 13,955,605
Subtotal Non-Residential Pilots	**$ 14,000,000**	**$ 44,395**	**$ 13,955,605**
Information Technology (IT)			
IT Funding to IOUs[15]	$ 8,000,000	*(TBD)*	$ 8,000,000
Subtotal IT Funding to IOUs	**$ 8,000,000**	***(TBD)***	**$ 8,000,000**
Hub Pilot Reserve			
Hub Pilot Reserve[16]	$ 984,931	$ -	$ 984,931
Subtotal Hub Pilot Reserve	**$ 984,931**	**$ -**	**$ 984,931**
GRAND TOTAL	**$ 75,244,931**	**$ 11,567,636**	**$ 63,677,295**

***Note**: Quarterly expenditures are based on good faith estimates due to a lag in invoice submittals.

---

[9] "Encumbered" refers to the credit enhancement funds reserved for enrolled loans under the Residential Energy Efficiency Loan (REEL) Loan Loss Reserve (LLR).

[10] Amount of funds allocated to this section includes the additional $8.36 million that was approved by CPUC Rulemaking 13-11-005: Joint Ruling of Assigned Commissioner and Administrative Law Judge on Financing Pilots and Associated Marketing, Education and Outreach Activities issued November 22, 2016.

[11] The contract for the Marketing Implementer is undertaken by SoCalGas and ongoing budgetary updates are not provided in CAEATFA's reporting.

[12] The expenses expended for this line item have been included in the expended/encumbered value presented in the Hub Administration line item above.

[13] This table is not a comprehensive representation of the budget. It does not reflect CSE's expenditures related to ME&O, the IOUs' expenditures and additional allocations for IT and administration, or other non-CAEATFA costs.

[14] Actual credit enhancement dollars available less funds for operations setup by IOUs.

[15] IT funding to IOUs reports only the initial allocation and does not reflect current IOU expenditures.

[16] This amount reflects the remaining balance after the release of funds that was approved by CPUC Rulemaking 13-11-005: Joint Ruling of Assigned Commissioner and Administrative Law Judge on Financing Pilots and Associated Marketing, Education and Outreach Activities issued November 22, 2016.

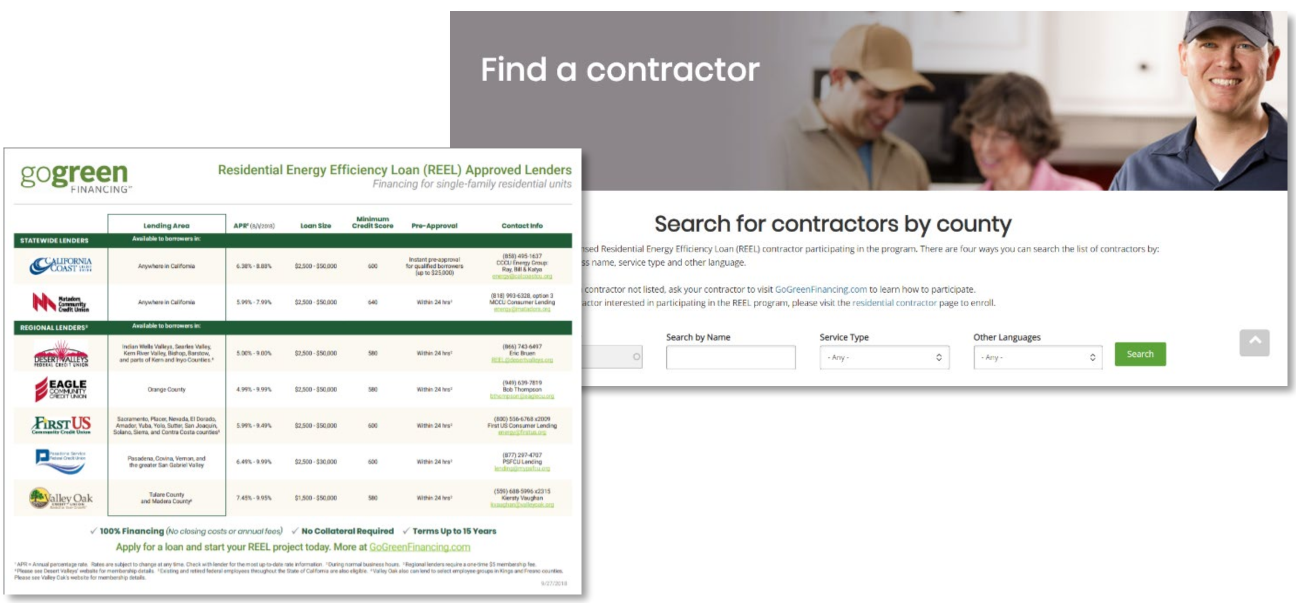
Appendix 4: Customer-Facing Products

Customer-facing products are discussed throughout this report, but this Appendix functions as a summary.

Designed and implemented by the Hub program marketing implementer, the Center for Sustainable Energy (CSE), with input and direction from CAEATFA and the IOUs, GoGreen Financing (www.gogreenfinancing.com) serves as the primary customer-facing website for the financing programs.

GoGreen Financing contains information for end users (customers), contractors, finance companies and partners for each of the programs. Some of the resources on the website include:

- Pages that allow potential REEL borrowers to find a local REEL participating contractor, review the rates of participating lenders and apply for a REEL loan online through the participating lender's website
- Pages that allow potential SBF customers to find an SBF participating contractor or project developer, review the products offered by participating finance companies and apply for an SBF loan through the participating finance company's website
- Program descriptions and benefits of the AMF and Nonresidential programs
- Partner resources for contractors, finance companies, local governments and nonprofits (some of which are available to these organizations to co-brand), including:
    - A customer-facing REEL flyer, available in both English and Spanish
    - Finance company comparison charts for REEL and SBF
    - PowerPoint Presentations
    - Partner talking points
    - REEL case studies



Appendix 5: Loss Reserve Account Beginning and Ending Balances

IOU HOLDING ACCOUNTS

The IOUs release funds into their respective holding accounts upon approval of requests by CAEATFA staff. CAEATFA staff coordinates with the IOUs to ensure acceptance of the funds from the IOUs and transfer of these funds to the appropriate Program accounts. The IOU holding accounts earn a small amount of interest each quarter, as shown below:

Table 8. Balance of IOU Holding Accounts

	SCG	PGE	SCE	SDG&E
Beginning Balance 10/01/2019	$736.54	$727.68	$100,722.81[17]	$729.48
Credit Enhancement (CE) Release from the IOUs to their Holding Account	$100,000.00	$100,000.00	$0.00	$100,000.00
Transfer of CE Funds from the Holding Account to the REEL Program Account	($100,000.00)	($100,000.00)	($100,000.00)	($100,000.00)
Interest Accrued	$3.58	$1.53	$5.63	$4.40
Ending Balance 12/31/2019	$740.12	$729.21	$728.44	$733.88

REEL-RELATED ACCOUNTS

Table 9: Balance of REEL Accounts

	REEL Program	REEL Reservation	REEL Interest
	The *REEL Program* account holds the available portion of the requested CE funds that are used to CE projects that are enrolled in the REEL Program. Once a project is enrolled in the REEL Program, the CE portion of the Claim Eligible Amount is transferred to the Participating Lender's LLR. The IOUs hold additional funds budgeted for the REEL Program, and those funds are available to be released to the holding account when needed, then transferred to the Program account.	The *REEL Reservation* account holds funds set aside in the event a loan is pre-approved.	The *REEL Interest* account holds the interest swept from the following accounts: REEL Program, REEL Reservation and all the REEL Lender LLR accounts.
Beginning Balance 10/01/2019	$150,739.41	$0.00	$5,091.84
Contributions to Lender Loss Reserve Accounts	($215,061.00)	$0.00	$0.00

[17] In the third quarter of 2019, SCE deposited a $100,000 tranche of funds in the days just prior to the close of the quarter, and so the temporarily enlarged balance is reflected here. These funds were transferred to the REEL Program account early in Q4 2019.

Claim Paid[18]	($10,422.79)	$0.00	$0.00
Transfer of Funds from Holding Account to Program Account	$400,000.00	$0.00	$0.00
Interest Sweep from Lender Loss Reserve Accounts	$0.00	$0.00	$586.80
Ending Balance 12/31/2019	$325,255.62	$0.00	$5,678.64

REEL LENDER LOAN LOSS RESERVE ACCOUNTS

Each time a lender enrolls a project, a CE of either 11% or 20% (depending on CE criteria met) is transferred from the REEL Program account into the respective lender's LLR Account. The ending balance on Table 10 shows the amount the lender has available to offset a borrower defaulting on a loan.

ANNUAL REBALANCE OF LENDER ACCOUNTS

D. 13-09-44 directs CAEATFA to recapture funds periodically when loans are paid off to meet the goal of developing a sustainable program, and D. 17-03-026 gives CAEATFA the ability to true up its credit enhancement funds at its discretion. CAEATFA has chosen to complete the recapture of Credit Enhancement funds through an annual rebalance. The rebalance occurs annually in August for the previous fiscal year running July 1-June 30. Recaptured funds were transferred from the Lenders LLR Account back to the Program Account.

Table 10: Balance of REEL Lender Loan Loss Reserve Accounts

	California Coast Credit Union	Matadors Community Credit Union	Valley Oak Credit Union	Desert Valleys Federal Credit Union	Eagle Community Credit Union	Pasadena Service Federal Credit Union	First U.S. Community Credit Union
Beginning Balance 10/01/2019	$541,287.15	$457,398.32	$26,381.37	$31,368.24	$24,198.55	$7,206.09	$46,775.63
Claims Paid	($20,125.53)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Loss Reserve Contributions	$104,750.56	$100,916.74	$0.00	$2,337.50	$1,800.00	$0.00	$5,256.20
Ending Balance 12/31/2019	$625,912.18	$558,315.06	$26,381.37	$33,705.74	$25,998.55	$7,206.09	$52,031.83

[18] Per the REEL Regulations, when a lender makes its first claim request within one (1) year of enrolling its first loan in the Program, the claim is paid from the Program Account. This is because the lender likely has not yet built up enough funds in their Loss Reserve Account. Subsequent claims are paid out of the lender's Loss Reserve Account.

SBF-RELATED ACCOUNTS

Loss reserve accounts for the SBF Program operate under a similar process as those for the REEL Program loss reserve accounts. Each time a finance company enrolls a project, 20% of the first $50,000 of the agreement and 5% of the next $950,000 is transferred from the SBF Program account into the respective finance company's loss reserve account. The ending balance on Table 12 shows the amount the finance company has available in the loss reserve to offset a customer defaulting on a finance agreement.

Table 11: Balance of SBF Accounts

	SBF Program	SBF Interest
Beginning Balance 10/01/2019	$371,729.93	$491.62
Contributions to Loss Reserve Accounts	($16,125.00)	$0.00
Ending Balance 12/31/2019	$355,604.93	$651.19

Table 12: Balance of SBF Lender Loss Reserve Accounts

	Ascentium Capital	DLL Financial Solutions Partner
Beginning Balance 10/01/2019	$0.00	$28,270.07
Contributions to Loss Reserve Accounts	$16,125.00	$0.00
Ending Balance 12/31/2019	$16,125.00	$28,270.07

Appendix 6: Residential Program Participating Lender Overview

There are currently seven lenders offering REEL loans. A brief introduction to the lenders is included in this section. They are listed in order of entrance to the program.

Valley Oak Credit Union was the first credit union to join as a REEL lender, submitting its application in June 2015—nearly a year before the residential program started. Valley Oak has over 6,400 members and serves Tulare and Madera counties.

Valley Oak is a Low-Income Designated credit union[19] and serves borrowers with credit scores starting at 580. Over the life of the program, Valley Oak has enrolled 13 loans, with no new enrolled loans in Q4 2019.

Matadors Community Credit Union is one of two statewide REEL lenders, meaning that it can offer loans to eligible customers anywhere in the state. Matadors has nearly 20,000 members and became a REEL lender in March 2016.

Matadors offers loans to borrowers with credit scores starting at 580. It enrolled 25 REEL loans during Q4 for a total of 205 loans since the program began.

Desert Valleys has just over 4,000 members and serves customers in portions of Kern, Inyo, and San Bernardino counties. It is a Low-Income Designated credit union and has been a REEL lender since August 2016.

Desert Valleys serves borrowers with credit scores starting at 580. Desert Valleys enrolled one new loan in Q4 2019 and has enrolled 15 loans since the program began.

California Coast Credit Union is the second of two REEL statewide lenders. Joining the REEL program in September 2016, "Cal Coast" has over 173,000 members.

Cal Coast serves borrowers with credit scores starting at 600. During Q4, it enrolled 43 loans for a total of 343 loans since becoming a REEL lender.

Eagle Community Credit Union serves Orange County residents. Eagle has just over 20,000 members. Eagle opted in to the Credit-Challenged facility by demonstrating additional benefits to credit-challenged borrowers, a new opportunity made available in September 2018 when the REEL regulations were modified. As a result, Eagle and other REEL lenders who opt in to the Credit-Challenged program receive the 20% credit enhancement for lending to borrowers with credit scores of less than 640.

Under the REEL program, Eagle serves borrowers with credit scores starting at 580. Eagle has enrolled nine total program loans, including one new loan in Q4 2019.

[19] A designation made by the National Credit Union Administration. A federal credit union can receive a Low-Income Designation (LID) when a majority of its membership qualify as Low-Income Members.

As the name implies, Pasadena Service Federal Credit Union serves members in and around the City of Pasadena as well as federal employees statewide. With over 11,000 members, Pasadena Service Federal is a REEL credit union with a Low-Income Designation.

Pasadena opted in to the REEL Credit-Challenged facility and accepts applications from customers with credit scores starting at 600. Pasadena enrolled its first loan in Q3 2018. It did not enroll any new REEL loans during Q4 and now has a total of two loans in REEL.

First U.S. Community Credit Union was the most recent REEL lender to join the program, submitting its initial lender application in June 2018. First U.S. serves 12 Northern California counties: Sacramento, Placer, Nevada, El Dorado, Amador, Yuba, Yolo, Sutter, San Joaquin, Solano, Sierra and Contra Costa.

Serving 25,000 members, First U.S. opted in to the REEL Credit-Challenged facility and considers borrowers with credit scores starting at 600. First U.S. enrolled three loans in Q4 for a total of 25 in the program.

Appendix 7: The Impact of the Credit Enhancement

The Credit Enhancement mitigates risk for lenders, yielding better loan terms for REEL customers and encouraging more energy efficiency lending that will help California achieve its greenhouse gas reduction goals

Based on CAEATFA's agreements with REEL lenders, the credit enhancement has resulted in better terms and approval rates for REEL customers. When interested financial institutions submit an application to become a lender, CAEATFA asks them to describe their most similar loan product (typically an unsecured personal loan) and to describe their current interest rate, minimum credit scores, maximum loan amounts and maximum terms for these loans. With this information, CAEATFA is able to ensure that the final and approved REEL product has appropriate benefits for borrowers.

Because lenders are free to set their own underwriting criteria within the program guidelines, individual products vary from lender to lender. The table below gives some highlights of changes that resulted as a result of the credit enhancement. When a range is stated below, it generally ties back to the borrower's credit score.

Improvements:	California Coast Your best interest.	Matadors Community Credit Union	Valley Oak Credit Union Rooted in Your Growth	Desert Valleys Federal Credit Union	Eagle Community Credit Union	FirstUS Community Credit Union	Pasadena Service Federal Credit Union
	STATEWIDE LENDERS		REGIONAL LENDERS				
Interest Rate	Reduction ranged from 598 – 1298 bps[20]	Reduction ranged from 416 – 466 bps	Reduction ranged from 164 - 614 bps	Reduction ranged from 849 – 900 bps	Reduction ranged from 675 – 975 bps	Reduction ranged from 350 – 700 bps	Reduction ranged from 300 – 600 bps
Minimum Credit Score	No change from existing 600	Reduced from 660 to 580	No change from existing 580[21]	No change from existing 580[16]	No change from existing 580[16]	Reduced from 640 to 600	Reduced from 640 to 600
Maximum Loan Amount	Increased from $20,000 to $50,000	Increased from $15,000 to $50,000	Increased from $20,000 to $50,000	Increased from $2,500 to $50,000	Increased from $25,000 to $50,000	Increased from $25,000 to $50,000	Increased from $20,000 to $30,000
Maximum Loan Term	Increased from 5 years up to 15	Increased from 5 years up to 15	Increased from 5 years up to 15	Increased from 5 years up to 15	Increased from 5 years up to 15	Increased from 5.5 years up to 15	Increased from 5 years up to 15
The interest rates reflected in this table are effective as of January 21, 2020.							

[20] bps = Basis point, a common unit of measure for interest rates. A single basis point is equal to 1/100th of 1%, so 100 bps = 1%

[21] 580 is the REEL program minimum

The provision of a credit enhancement is at the heart of the Hub's financing program design. As the table on the previous page shows, REEL lenders have made improvements to their existing underwriting criteria as a result of the loan loss reserve that significantly benefit potential borrowers. For example, a borrower with a lower credit score can get a loan from California Coast Credit Union with an interest rate of 7.90% through the REEL Program—nearly 1300 basis points lower than California Coast's ordinary rate on an unsecured personal loan. Moreover, that borrower can stretch out payments on the REEL loan over a term of up to 15 years, as opposed to having to pay it back in five years, as is the case with California Coast's non-REEL unsecured loans. The extended payback period available to REEL borrowers translates to lower monthly payments, a key factor in keeping loans affordable.

How the Credit Enhancement Helps Achieve Program Goals

The Credit Enhancement is more than just a financial mechanism. For Hub programs, it means the difference between achieving program goals—increasing the availability of lower-cost financing for energy investments throughout California, including for underserved borrowers—and not. Consider these potential outcomes for a borrower wishing to access $25,000 to upgrade their home's energy efficiency:

BORROWER WITH . . .	Without REEL	With REEL
…a lower credit score of 600	Borrower would be unlikely to qualify for a personal loan. **No program goals achieved.**	Borrower may qualify for a REEL loan with a term of 10 or 15 years, paying 9.15% or less. **PROGRAM GOALS ACHIEVED**
…a higher credit score of 700	Borrower could likely take out a personal loan, paying the nationwide average of 12%[22]. Since lenders seldom make unsecured personal loans for longer than 5 years, **the resulting payment on a $25,000 loan would be $556.** Borrower may not be able to afford the high monthly payment. **No program goals achieved.**	Borrower could likely take out the necessary REEL loan, paying the REEL average 7% interest for 15 years. **The resulting monthly payment would be a manageable $225.** **PROGRAM GOALS ACHIEVED**

[22] Credit Union National Association Monthly Credit Union Estimates, Oct. 2019