CHEEF
CALIFORNIA HUB FOR
ENERGY EFFICIENCY FINANCING

ENERGY EFFICIENCY FINANCING PILOTS

QUARTERLY REPORT & PROGRAM STATUS SUMMARY

SECOND QUARTER 2021

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 Programs to:

CHEEF@treasurer.ca.gov

(916) 651-8157

Table of Contents

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, and the equipment and appliances vital to businesses and households, are in need of energy upgrades.

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

With this awareness, the California Public Utilities Commission (CPUC) allocated funds to launch several pilot programs designed to attract private capital to finance energy efficiency (EE) upgrades.[1] In its guidance decision, the CPUC acknowledged that EE measures are important tools for addressing greenhouse gas emissions, and that lowering the barriers to EE 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 EE upgrades and established the California Hub for Energy Efficiency Financing (CHEEF) to administer the new programs. The CPUC requested that the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) assume the administration of the CHEEF and directed the investor owned utilities (IOUs) and CPUC staff to assist CAEATFA with implementation.

A core feature of the financing programs is to incentivize private finance companies to enter the EE market and improve terms or expand credit criteria for the financing of EE projects by providing a credit enhancement funded with IOU EE ratepayer funds. Financing that covers 100% of project costs removes the upfront cost barrier for Californians to undertake EE retrofits. A key objective is to test whether transitional ratepayer support for credit enhancements can lead to self-supporting EE finance programs in the future.

In a separate document[2], the CPUC further clarified the goals and metrics under which the financing pilot programs would be evaluated. The financing pilots should be scalable, be leveraged by private capital, support EE upgrades, reach underserved Californians, and produce energy savings.

This report is prepared in response to D. 13-09-044, which directs CAEATFA, in conjunction with the IOUs (Pacific Gas & Electric [PG&E], Southern California Edison [SCE], San Diego Gas & Electric [SDG&E] and SoCalGas [SCG]), to issue quarterly reports on the progress of the CHEEF 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

Executive Summary – Q2 2021

Outreach Highlights

- **CAEATFA staff participated in several webinars and outreach events to promote the CHEEF Programs.** These events included an Earth Day webinar for customers in BayREN territory, a virtual presentation on financing decarbonization at the American Council for an Energy-Efficient Economy (ACEEE) Finance Forum, and small business seminars hosted by State Treasurer Fiona Ma for the Cupertino Chamber of Commerce and the Rural County Representatives of California (RCRC).

Residential Energy Efficiency Loan (REEL) Assistance Program Developments

- **161 loans, worth a total financed amount of $2,868,607, were enrolled in REEL in Q2.** This volume continues significant Program growth from the prior quarter and years; loan enrollments increased by 152% between Q2 2020 (during which 64 loans were enrolled) and Q2 2021.
- **Modifications to the REEL regulations took effect.** Following a workshop and public comment period in Q1, new regulations for the REEL Program were approved by the Office of Administrative Law on May 24, making effective several changes including the flexibility to support a variety of finance company business models, new eligible efficiency measures, a pathway for microloans, and a framework to allow for operational improvements such as batch enrollment.

Small Business Energy Efficiency Financing (SBF) Program Developments

- **An interest rate buy-down (IRBD) promotional pilot was launched.** This promotion will allow participating Contractors and Project Developers to secure an interest rate as low as 0% for their customers and was designed to encourage activity from Participating Contractors who have not yet enrolled projects in the Program.
- **Accessity joined the Program as its fifth participating Finance Company.** Accessity will also serve as the first SBF microlender, offering loans between $500 and $5,000. Accessity will initially enroll loans in SBF through an IOU third-party implementer program in SDG&E territory that is expected to launch later this year.
- **Staff held a public workshop on modifications to the SBF regulations.** The workshop introduced proposed modifications to the Program regulations that would facilitate the launch and implementation of On-Bill Repayment (OBR) functionality, make structural improvements to streamline operations, and facilitate microlending. Following a public comment period, the CAEATFA Board approved the regulations on June 15, and the Office of Administrative Law is expected to approve them in Q3.
- **The Contractor Manager hosted a contractor roundtable** to share details on resources accessible through the SBF Program, the IRBD promotion, and project quoting tools available from participating Finance Companies.

CHEEF Infrastructure Developments

- **CAEATFA, the IOUs, and the Marketing Implementer agreed on new names for the Programs.** REEL will become *GoGreen Home Energy Financing*, SBF will become *GoGreen Business Energy Financing*, and AMF will become *GoGreen Multifamily Energy Financing*. These changes are intended to make the value and purpose of the Programs clear to participants, while easing confusion by aligning the Programs with the GoGreen Financing platform, which participants organically associate with the Programs. The name change updates to forms, websites, and other materials will be made in phases beginning in Q3.
- **Staff contributed a Program Status Update to the Ruling on Track 1 Issues of the Clean Energy Financing Proceeding.** CAEATFA staff prepared an in-depth Program Status Update discussing program design considerations, lessons learned from implementation, and next steps for use in the Commission's Ruling on Track 1 Issues, which was released for public comment this quarter. Following opening and reply comments from parties, a Proposed Decision on this track of the Proceeding is expected in Q3.

REEL customer Juliana Maziarz in front of her Los Angeles home

Residential Energy Efficiency Loan (REEL) Assistance Program

Key REEL Metrics – Q2 2021 (April 1-June 30, 2021)

161	$17,817	$2,868,607
New REEL Loans Enrolled	Average Loan Size	Amount Financed

View the latest monthly data summaries for the REEL Program.

Updates

As the annual "busy season" for REEL Contractors began, loan enrollments in the Program increased, culminating in 161 new REEL loans enrolled between April 1 and June 30, 2021. Program activity in Q2 surpassed activity in both the prior quarter and in Q2 of the prior year: Q1 2021 saw 104 loans enrolled, while Q2 2020 saw 64 loans enrolled. In total, 1,324 loans have now been enrolled in REEL since Program inception in 2016.

The average loan size remained relatively consistent, increasing slightly to an average of $17,817 per loan in Q2 from $17,450 in Q1. Most significantly, a total amount of $2,868,607 was financed through the Program in Q2, a 58% increase over the total financed amount in Q1 2021 ($1,814,785) and a 161% increase above the total amount financed in Q2 2020 ($1,100,217). The total amount financed through REEL between Program inception and the end of Q2 is $22,265,638.

Of the loans enrolled in Q2 2021, 50% were made for upgrades to properties in Low-to-Moderate Income (LMI) census tracts, compared with 63% in Q1 and 56% since Program inception. Loan dollars issued for properties in LMI census tracts made up 46% of the total amount financed during Q2, versus 57% of the total amount financed during Q1. Despite the slight reduction in loans for properties in LMI census tracts, the percentage of loans used to upgrade properties in disadvantaged communities as identified by CalEnviroScreen remained relatively consistent: 16% of loans enrolled in Q2 went to these property types, compared with 17% in Q1 and 18% since Program inception.

Following interest rate reductions across four participating Finance Companies in Q1, First US Community Credit Union lowered rates again and now offers rates between 2.95% and 7.49%. Travis Credit Union, which was approved to enroll in REEL in Q1, completed its planned soft launch and transitioned to full visibility among REEL customers in Q2. Headquartered in Solano County, Travis serves 12 counties in Northern California and offers REEL loans up to $50,000 with rates ranging from 3.99% to 8.43%.

CAEATFA staff continued working with Enervee, an IOU third-party implementer, to develop a financing product for use in the IOUs' online customer marketplaces. The product will offer microloans (loans up to $5,000) at the point of sale to customers purchasing energy efficient equipment through these online marketplaces. The financing is expected to launch in SoCalGas territory during Q3, with other IOU marketplaces to follow.

Regulations Modifications

Proposed amendments to the REEL regulations were approved by the Office of Administrative Law on May 24, 2021. This followed a public workshop, a public comment period, and CAEATFA Board approval in Q1. The amendments allow for participation from a wider variety of lenders with different business models, will ease operations for lenders, support high-volume loan enrollment and facilitate automated reporting. They add new eligible measures, improve rules around safety testing and create a streamlined pathway for microloans up to $5,000. Additionally, the changes allow lenders to receive a credit enhancement for the financing of measures that correspond to a non-IOU fuel source, should CAEATFA receive approval from the CPUC to incorporate non-ratepayer funding; the CPUC is taking up CAEATFA's request to incorporate non-ratepayer funding for REEL as part of the Clean Energy Financing Proceeding.

Table 1. Top 5 Energy Efficiency Measures Installed through REEL (Q3 2016 – Q2 2021)

HVAC Equipment	**Windows**	**HVAC Ductwork**	**Insulation**	**Cool Roofs**
836 Projects	367 Projects	296 Projects	248 Projects	196 Projects

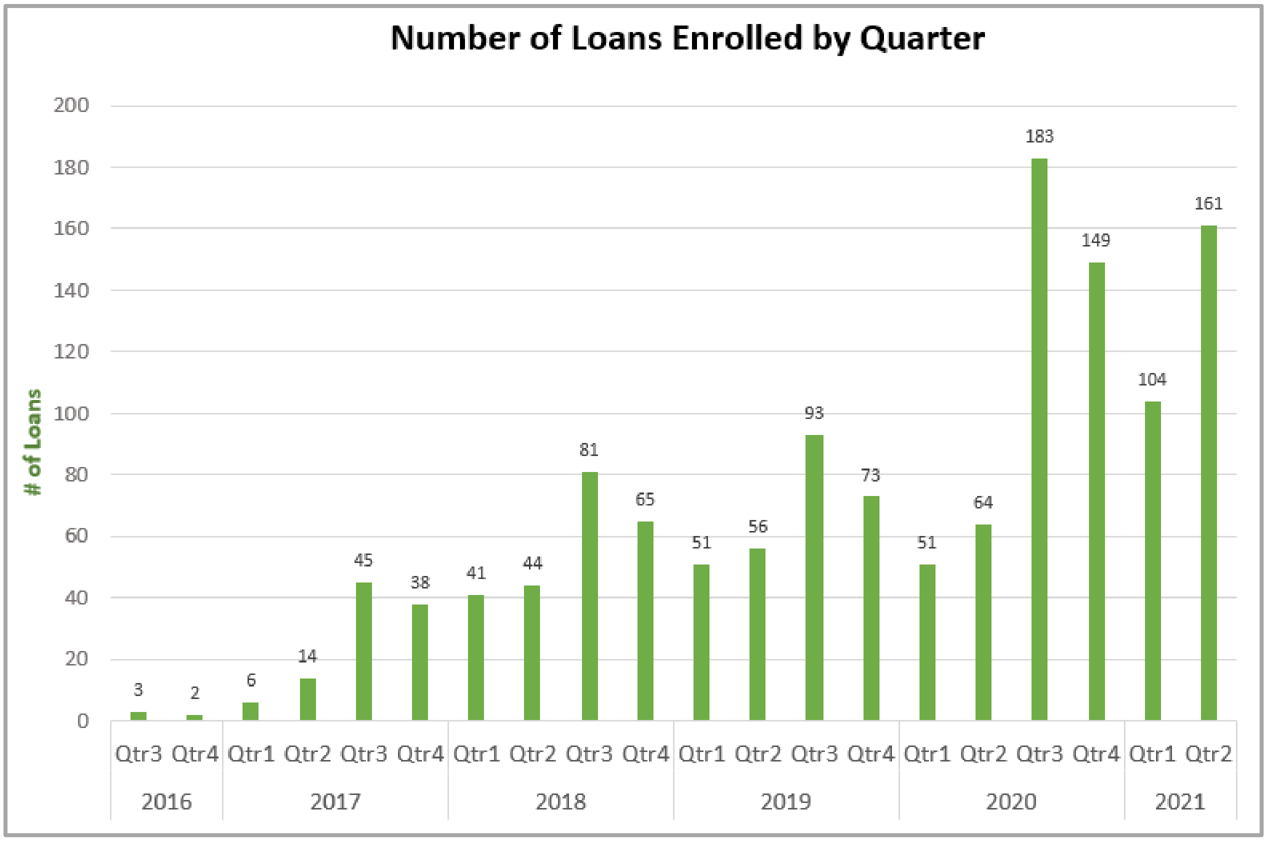
Table 2. Heat Pump Measures Installed through REEL (Q3 2016 – Q2 2021)

Heat Pumps	
Space Heating	**Water Heating**
111 Projects	11 Projects

Table 3. REEL Loans Enrolled by Lender – Q2 2021

Lender	Loans Enrolled	Total Financed Amount
California Coast Credit Union	100	$1,691,425
Desert Valleys Federal Credit Union	1	$12,800
Eagle Community Credit Union	1	$10,216
First US Community Credit Union	11	$158,426
Matadors Community Credit Union	37	$838,814
Pasadena Service Federal Credit Union	0	$0
Travis Credit Union	8	$113,562
Valley Oak Credit Union	3	$43,363
	161	$2,868,607

Table 4. REEL Loan Activity Since Program Inception (Q3 2016 – Q2 2021)



Outreach

Traffic on GoGreenFinancing.com, which serves as the public platform for the CHEEF Programs, decreased again in Q2: the website saw 18,348 total users throughout the quarter, compared with 28,658 users in Q1. There are several possible reasons for this decline, namely the lack of marketing campaigns being conducted by the four IOUs and the statewide Marketing Implementer. Nevertheless, the average session duration time per visitor increased from just under 2 minutes to nearly 3 minutes, indicating higher levels of interest and engagement among the users who did visit the website. Longer session duration points toward marketing efforts reaching individuals who are actively interested in exploring their EE financing options.

The customer-facing marketing campaigns led by the IOUs and Marketing Implementer in Q2 were limited due to budget constraints and pending results from an ongoing marketing strategy development process. SoCalGas was the most active IOU in terms of marketing, featuring energy efficiency financing in residential Home Energy Reports distributed to 450,000 customers and continuing to include messaging on EE financing on bill envelopes received by 3.2 million customers. SoCalGas and SCE both ran organic social media posts about REEL on their social media channels as well. The Marketing Implementer continued its organic social media as well as paid search tactics for the SBF Program.

Lux Insights and Stoke Strategy, the selected subcontractor to the Marketing Implementer for the aforementioned research and strategy development, continued their work and began translating research insights into strategy components. Key elements of their work will be to identify target audiences to help reach Californians who need EE financing most and to investigate the user journey and conversion process to increase the percentage of website visitors that progress into a financing agreement. More information on this activity can be found in the SBF section of this report.

Contractor Outreach

A total of 520 contractors were enrolled in the REEL Program at the end of Q2 2021. Over the course of the quarter, 19 new REEL Contractors joined the Program. Four Contractors were suspended from enrolling new projects and five were removed from the Program as part of routine compliance checks for active licenses. The Contractor suspensions were made due to untimely license renewals, and the permanent Contractor removals were made due to disciplinary action taken against their licenses by the Contractor State Licensing Board.

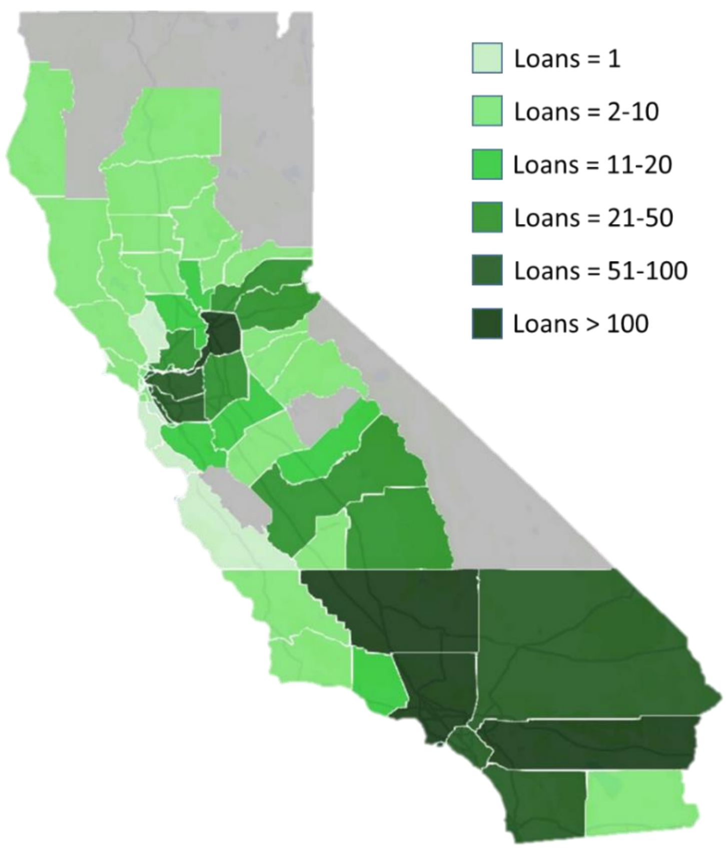
Outreach to contractors during Q2 included monthly newsletters, primarily focused on explaining changes to contractor processes following approval of the new REEL regulations, and a promotion in PG&E's Comfortable Home Rebates program newsletter.

Map of Enrolled REEL Loans by County

The map below shows the number of REEL loans enrolled, by county, from the start of the program through the end of Q2 2021.

Number of REEL Loans Enrolled

by County



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

REEL Portfolio Facts and Figures
(Program Inception through Q2 2021)

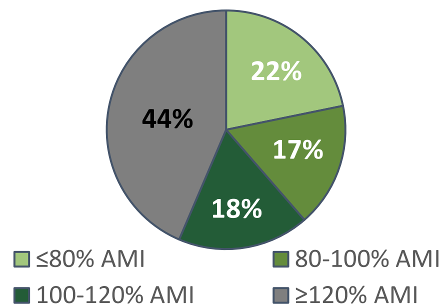
$22,265,638
Total Amount Financed

1,324
Total Loans Enrolled

$3,386,147
Total Loan Loss Reserve Contributions

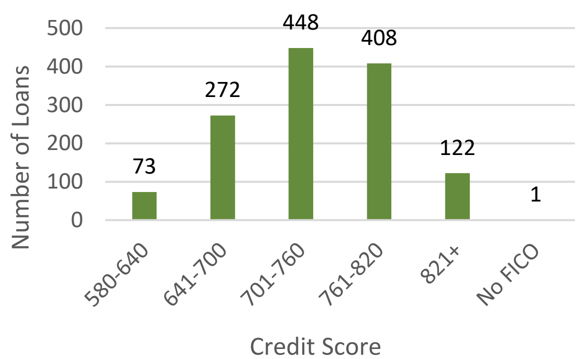
87% **Finance-Only Projects**
Cases in which borrower made upgrades using REEL without a rebate or incentive

Percentage of Loans Made to Upgrade Properties by Census Tract Income[3]

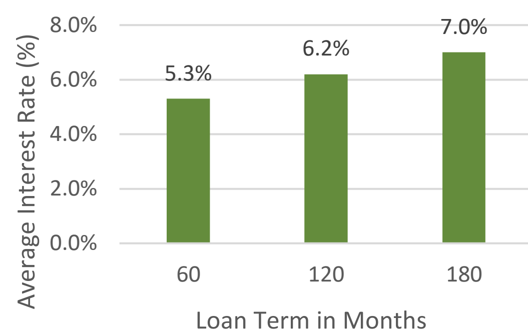


REEL Borrower Data

REEL Borrower Credit Scores

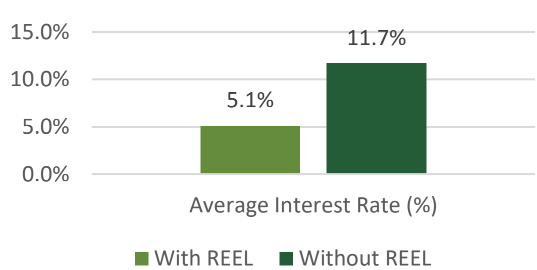


REEL Average Interest Rate by Term Length

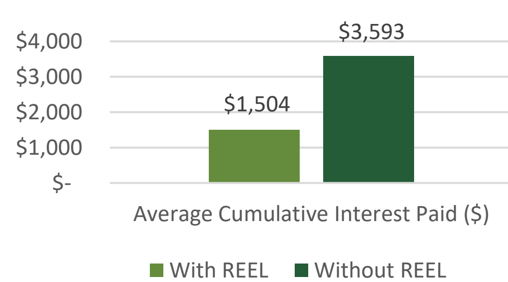


Financing Comparison: Borrower Outcomes With vs. Without REEL

Average Interest Rate
for terms up to 60 months[4]



Cumulative Average Interest Paid
for terms up to 60 months[4]



Click here to view monthly data summaries for the REEL Program.

[3] Low-to-Moderate Income (LMI) census tracts are those with median family incomes <120% of Area Median Income.
[4] These charts compare 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 for borrowers who would have qualified for non-REEL loans.

Table 5. Summary of REEL Loans with Status of Paid in Full, Current or Past Due through June 30, 2021

	Number of Loans	Original Total Principal Amount	Outstanding Total Principal Amount
Paid in Full	**278**	**$4,443,487**	**$0**
California Coast Credit Union	165	$2,402,591	$0
Desert Valleys Federal Credit Union	10	$120,784	$0
Eagle Community Credit Union	3	$35,956	$0
First US Community Credit Union	15	$181,966	$0
Matadors Community Credit Union	81	$1,654,205	$0
Pasadena Service Federal Credit Union	1	$19,319	$0
Valley Oak Credit Union	3	$28,666	$0
Current	**1,026**	**$17,452,348**	**$15,055,505**
California Coast Credit Union	589	$9,347,133	$7,990,978
Desert Valleys Federal Credit Union	16	$329,278	$263,399
Eagle Community Credit Union	8	$157,204	$124,886
First US Community Credit Union	75	$1,089,593	$954,398
Matadors Community Credit Union	298	$5,946,536	$5,235,061
Pasadena Service Federal Credit Union	2	$36,505	$32,070
Travis Credit Union	8	$113,562	$109,768
Valley Oak Credit Union	30	$432,537	$344,945
30 Days Past Due	**2**	**$39,784**	**$32,149**
California Coast Credit Union	1	$31,789	$25,576
First US Community Credit Union	1	$7,995	$6,573
60 Days Past Due	**1**	**$10,328**	**$9,078**
California Coast Credit Union	1	$10,328	$9,078
90 Days Past Due	**1**	**$10,986**	**$9,946**
First US Community Credit Union	1	$10,986	$9,946
Total	**1,308**	**$21,956,933**	**$15,106,679**

Table 6. Summary of REEL Charge-Offs, Claims Paid and Recoveries through June 30, 2021

	Number of Loans	Charge-Off Amount at Time of Claim	Claims Paid[5]	Recoveries Paid to Program
Charged Off	**16**	**$282,060**	**$253,197**	**($54,628)**
California Coast Credit Union	15	$270,480	$242,774	($54,628)
First US Community Credit Union	1	$11,581	$10,423	$0

Net Credit Enhancement Funds Expended *(Claims Paid minus Recoveries Paid to Program)*	**$198,569**

[5] 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-Eligible Principal amount may be less than the Total Principal Amount. The Claims Paid column reflects the amount that REEL Lenders were paid on the claim.

Image from GoGreen Financing digital campaign

Small Business Energy Efficiency Financing (SBF) Program

Key SBF Metrics – Program Inception through Q2 2021

8	$1,494,890	78	5
Total Projects Enrolled	Total Amount Financed	Enrolled Contractors and Project Developers	Participating Finance Companies

Updates

A lighting project for a grocery store in Placer County that was pre-approved in Q1 enrolled in the SBF Program in Q2. One additional project was pre-approved in Q2 and is expected to enroll in the Program in the coming months.

Accessity, previously known as Accion serving Southern California, applied and was approved to enroll as the fifth participating SBF Finance Company this quarter. As the first Community Development Financial Institution (CDFI) and microlender to participate in SBF, Accessity's enrollment marks the fulfillment of a long-time goal of reaching very small and underserved businesses through the Program. Accessity will offer traditional loans between $500 and $5,000, meeting a critical need in the energy efficiency marketplace for small-sum financing. Accessity will offer loans through the Program via an affiliation with an IOU program in SDG&E territory with plans to launch during Q3. At some point in the future, Accessity hopes to offer financing to IOU customers throughout more of Southern California.

In Q2, Frontier Energy, the Contractor Manager, launched an interest rate buy-down (IRBD) promotional pilot with a small budget of up to $50,000. The pilot will allow participating Contractors and Project Developers to secure an interest rate as low as 0% for customers with qualifying projects, while funds last; for Contractors who enroll more than one project via this promotion, the rate for subsequent customers will be 1.99%. The promotion is valid for projects up to $30,000 and terms up to 36 months, with larger amounts and longer terms available as long as the buy-down remains under a threshold cost limit. The IRBD was designed to attract new project enrollments to the Program, encourage Contractors and Project Developers to work directly with participating Finance Companies, and potentially integrate IRBDs for their customers into their own project processes using their own funds in the future. Ascentium Capital and DLL are both offering the promotion. The Contractor Manager held a contractor roundtable webinar to promote the IRBD and included promotion details in several newsletters.

Regulations Modifications

Over the course of the quarter, staff finalized draft proposed modifications to the SBF regulations that will enable On-Bill Repayment (OBR) functionality, add new eligible efficiency measures, and make changes that will better facilitate microlending opportunities through the Program. A public workshop to discuss the changes was held on May 21, followed by a public comment period. Staff then made additional changes to the proposed modifications based on stakeholder input and presented the regulations to the CAEATFA Board on June 15. Staff have received approval of the regulations from the Board and expect approval from the Office of Administrative Law early in Q3, which would then make the proposed regulations effective.

Outreach

While there were few IOU-led marketing campaigns in Q2, the Marketing Implementer continued to devote its paid statewide digital communications efforts entirely to SBF. Tactics included paid search (which directs customers who enter relevant terms, such as "commercial HVAC," in a search engine to GoGreenFinancing.com) and organic social media posts.

Lux Insights and Stoke Strategy, the subcontractor appointed by the Marketing Implementer to conduct market research and develop new marketing strategies for the CHEEF Programs, completed their market research phase in Q2. The market research, which included in-depth interviews and an online survey that together reached more than 300 participants, delivered many insights on the energy efficiency financing priorities of small businesses, how best to reach them, and what types of messaging resonate most with them. In Q3, the subcontractor will transition insights gathered from the market research into new messaging and strategy guidelines that the Marketing Implementer and IOUs can begin leveraging in their marketing campaigns.

Table 7. SBF Finance Agreement Status by Lender as of June 30, 2021

	Finance Agreements Enrolled	Total Amount Financed
Accessity[6]	0	$0
Alliance Funding Group	0	$0
Ascentium Capital	4	$350,891
DLL Financial Solutions Partner	4	$1,143,999
Renew Energy Partners	0	$0
	8	$1,494,890

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

[6] Accessity enrolled in the SBF Program as a Participating Finance Company in Q2 2021. Accessity will offer loans through the Program via an affiliation with an IOU program in SDG&E territory that plans to incorporate financing.

Image from GoGreen Financing digital campaign

Affordable Multifamily Energy Efficiency Financing (AMF) Program

Updates

Staff continued research and outreach efforts related to the AMF Program this quarter. Highlights included attending sessions of the ACEEE Forum and the Better Buildings Initiative Summit focused on multifamily properties.

As the CPUC's Clean Energy Financing Proceeding moved forward, staff continued to explore new financing mechanisms for AMF. Under current Program guidelines, the credit enhancement enables some lenders to lend to AMF properties, but for this particular market it has not proven to be an effective tool to sufficiently lower interest rates. Because AMF properties have very tight operating margins, interest rates, and the resultant monthly payments, are a primary determinant of whether or not projects "pencil out."

CAEATFA staff therefore believe that an interest rate buy-down, subordinate debt, or co-lending option with below-market capital will be necessary to sufficiently reduce interest rates as to render more projects feasible. Staff suggested these mechanisms as part of the Proceeding, and expects deliberation regarding their potential in Q3.

Challenges

Property owners in the affordable multifamily sector must navigate complex debt structures and arduous project development processes to complete energy efficiency upgrades. In Q4 2020, the CPUC extended the pilot period for the Program through mid-2022. Staff hoped that the additional time allowed in the pilot phase would facilitate projects or help reveal additional needs for property owners that the Program is not able to fulfill. Indeed, as noted above, challenges with interest rates continue to hamper project feasibility.

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), a complex feature that is moving toward implementation. CPUC Decision 17-03-026 required all pilots to be launched by the end of 2019, and since OBR was not yet developed, CAEATFA staff made the decision in 2019 to redirect resources to the SBF and AMF Programs.

The Nonresidential Program was originally authorized as an OBR program for large commercial or public buildings, with no credit enhancement. In the event that CAEATFA is authorized to develop the Nonresidential Program in the future, prior work can be leveraged to ultimately establish this program. While developing the SBF Program design and regulations, CAEATFA staff anticipated how the Nonresidential Program would be incorporated into the CHEEF's offerings.

On-Bill Repayment (OBR)

Three of the four IOUs (SCE, SDG&E, and SoCalGas) submitted Advice Letters seeking CPUC approval of the modified Tariff language in Q1. The CPUC approved the Advice Letters and modified OBR Tariffs in Q1, paving the way for OBR implementation to begin with the IOUs who submitted them.

As described in the SBF Program section above, CAEATFA staff also made progress toward implementing new regulations describing the rules that will govern OBR. CAEATFA held a public workshop covering the OBR regulations in Q2, and following a public comment period, the proposed regulations were approved by the CAEATFA Board. Staff expects to submit and receive approval from the Office of Administrative Law to enact the new regulations in early Q3, with roll-out of OBR functionality to follow later this year.

As part of the CPUC's Clean Energy Financing Proceeding (R.20-08-022), there has been much discussion of potential future "Tariffed On-Bill" (TOB) financing programs. The Tariffed On-Bill concept is unrelated to the CHEEF's "On-Bill Repayment" (OBR) program, which was authorized in CPUC Decision 13.09.044 to authorize OBR for eligible private capital, third-party lending programs. OBR functionality will allow borrowers to repay energy efficiency financing through their utility bills, a convenience that many consumers find attractive. The CPUC considers OBR functionality to be a critical component of the CHEEF Programs to test its potential for encouraging program uptake and reducing default rates. SBF, AMF, and the Nonresidential Program (should it be developed) are planned to include OBR as a repayment feature.

CHEEF Infrastructure

Contracting Updates

The contract for the Contractor Manager, Frontier Energy, was extended on May 24, 2021 using the option for a one-year extension outlined in the contract. This extension is for time only, does not allocate new funds, and will not affect the total cost of the contract. The contract for Frontier Energy now ends on May 28, 2022 with no additional extensions remaining.

Updates on CPUC Clean Energy Financing Proceeding

In Q3 2020, the CPUC released a new Order Instituting Rulemaking (OIR) to investigate and design clean energy financing options for electricity and natural gas customers (R. 20-08-022). The rulemaking will address statewide financing options for clean energy investments and, among other topics, provide long-term direction on the scope of CHEEF Programs and on budget and administration.

Following participation in a CPUC workshop and Prehearing Conference in Q1, the CPUC released its Ruling on Track 1 Issues of the Clean Energy Financing Proceeding early in Q2. Included in this Ruling was a Program Status Update provided by CAEATFA staff discussing in-depth design considerations for the three financing Programs, lessons learned from implementation, and next steps. The update also included a proposal for the incorporation of non-ratepayer funding into the CHEEF that would allow the Programs to be offered to non-IOU customers and for customers making energy upgrades related to a non-IOU fuel source, should the CPUC approve it. During Q2, opening and reply comments in response to the Ruling were accepted. A Proposed Decision is expected to follow in the coming months.

Forthcoming Program Name Changes

Under the guidance of research conducted by the marketing strategist, CAEATFA, the IOUs, and the Marketing Implementer worked together to develop new names for the three CHEEF Programs that align with their public-facing platform, GoGreen Financing. Changing the Program names is an important step in eliminating complexity for Program participants, who in many cases organically refer to the Programs as “GoGreen Programs” or similar. The current names and abbreviations for the Programs do not communicate their value to participants and are difficult to use in practice; referring to these Programs by their new names will make their purpose and relevance clearer to Program participants while easing confusion during the loan enrollment process.

All parties agreed to update the current program names as follows:

- **GoGreen Home Energy Financing** will replace the Residential Energy Efficiency Loan Assistance Program
- **GoGreen Business Energy Financing** will replace the Small Business Energy Efficiency Financing Program
- **GoGreen Multifamily Energy Financing** will replace the Affordable Multifamily Energy Efficiency Financing Program

As the current Program names are often referred to by their abbreviations (REEL, SBF and AMF), the new Program names will use GoGreen Home, GoGreen Business, and GoGreen Multifamily as shorthand.

The Program names will be updated in all public-facing materials beginning in Q3, with the majority of updates expected to be completed by the end of October. Staff will take a phased approach to the updates, beginning with Program forms and resources, information on the State Treasurer’s Office website, and the GoGreen Financing website with updates to the materials and websites used by participating finance companies, contractors, and utilities to follow.

Appendices

Appendix 1: Program Design

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 CHEEF 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.

CHEEF staff strive to make REEL financing available to underserved borrowers while also ensuring that credit is extended appropriately and without unintended negative consequences for the borrower. REEL loans are approved for customers with the cash flow to repay them, and customers who are eligible for free services are directed to them rather than encouraged to take on debt.

In keeping with the CPUC's directive that a third of credit enhancement funds should support loans to Low-to-Moderate Income (LMI) customers, when REEL launched, the program provided a 20% loan loss reserve contribution for loans to LMI borrowers and an 11% loan loss reserve contribution to non-LMI borrowers. In 2018, reflecting the fact that lenders had a difficult time determining "household" income and lenders were more sensitive to credit scores than income status when approving or not approving loans, CAEATFA added an additional methodology to determine LMI eligibility and offered the 20% loan loss reserve contribution to credit-challenged customers. Currently, a 20% credit enhancement is provided for loans in which:

- **Property is in a LMI Census Tract** – Area Median Income (AMI) of the property census tract does not exceed 120% of the AMI for the Metropolitan Area, County, or State.
- **Borrower's Household Income is Low-to-Moderate**– Borrower's household income is at or below 120% of the AMI for the Metropolitan Area, County, or State.
- **Borrower is 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).

At the same time that the Program seeks to make financing available to underserved customers, REEL is a debt program, and borrowers, no matter their income or credit score, need to have adequate monthly cash flow to repay loans to avoid negative consequences. This is achieved through required debt-to-income limits and the fact that lenders have "skin in the game" on every loan that they issue. Lenders are able to access up to 90% of the claim-eligible charged-off principal amount in the event of a default provided they have the funds in their loss reserve account.

REEL launched in July 2016, and the current Program regulations were adopted in May 2021. Program regulations may be viewed on the CAEATFA website.

SBF

The Small Business Energy Efficiency Financing (SBF) Program provides financing to help small business property owners as well as tenants upgrade their equipment or 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: Employ 100 or fewer individuals; receive annual revenue of less than $15 million*;* and/or fall within SBA size guidelines (annual revenue limits up to $41.5 million, depending on industry).

Business owners are able to finance 100% of project costs and may finance a single measure project or a comprehensive and deep energy retrofit. 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. This includes any measure that qualifies for an IOU, REN or CCA program.
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).

As with all CHEEF 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.

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 finance up to $5 million. Available financing options are viewable on the GoGreen Financing website.

For participating finance companies, up to $1 million of the financed amount is eligible to receive a credit enhancement in the form of a loss reserve contribution, as follows:

- The first $50,000 of claim-eligible financing will receive a loss reserve contribution at 20%
- Remainder (up to an additional $950,000) will receive a loss reserve contribution at 5%
- Maximum loss reserve contribution per agreement will be $57,500

Lenders are able to access up to 90% of the claim-eligible charged-off principal amount in the event of a default provided they have the funds in their loss reserve account.

SBF launched in July 2019, and current Program regulations went into effect in January 2020. SBF Program regulations may be viewed on the CAEATFA website.

AMF

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. The financed amount may include non-energy efficiency improvements; solar photovoltaic and distributed generation may be financed but will not receive a credit enhancement.

Key AMF Program features include:

- 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 energy service agreements and savings-based payment agreements. Available financing options are viewable on the GoGreen Financing website.

As with all CHEEF 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.

The Affordable Multifamily Financing (AMF) Program regulations went into effect in June 2020. AMF Program regulations may be viewed on the CAEATFA website.

Nonresidential

Like all the CHEEF financing programs, the Nonresidential Program is intended to encourage growth in private market lending to support energy efficiency improvements, 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: Impact of the Credit Enhancement

The credit enhancement mitigates risk for lenders, yielding better loan terms for customers and encouraging more energy efficiency lending that will help California achieve its greenhouse gas reduction goals. The information below is based on the REEL Program, the longest-running CHEEF Program.

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 program guidelines, individual products vary from lender to lender. The table below gives some highlights of changes that resulted from the credit enhancement. When a range is stated below, it generally ties back to the borrower's credit score.

Table 8. Impact of the Credit Enhancement by REEL Lender

	California Coast	Matadors Community Credit Union	Desert Valleys Federal Credit Union	Eagle Community Credit Union	FirstUS Community Credit Union	Pasadena Service Federal Credit Union	Travis Credit Union	Valley Oak Credit Union
	STATEWIDE LENDERS		**REGIONAL LENDERS**					
Interest Rate	Reduction ranged from 690 - 1650 bps[7]	Reduction ranged from 641 - 891 bps	Reduction ranged from 949 - 1200 bps	Reduction ranged from 704 - 1179 bps	Reduction ranged from 280 - 1100 bps	Reduction ranged from 450 - 850 bps	Reduction ranged from 200 - 300 bps	Reduction ranged from 333 – 783 bps
Minimum Credit Score	No change from existing 600	Reduced from 660 to 580	No change from existing 580[8]	No change from existing 580	Reduced from 640 to 580	No change from existing 600	Reduced from 680 to 600	No change from existing 580
Maximum Loan Amount	Increased from $30,000 to $50,000	Increased from $15,000 to $50,000	Increased from $15,000 to $50,000	Increased from $25,000 to $50,000	Increased from $25,000 to $50,000	Increased from $20,000 to $30,000	Increased from $35,000 to $50,000	Increased from $20,000 to $50,000
Maximum Loan Term	Increased from 5 years to 15	Increased from 5 years to 15	Increased from 5 years to 15	Increased from 5 years to 15	Increased from 5 years to 15	Increased from 5 years to 15	No change from 15 years	Increased from 5 years to 15

The interest rates reflected in this table are effective as of June 30, 2021.

[7] 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%

[8] 580 is the REEL program minimum

The provision of a credit enhancement is at the heart of the CHEEF'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 4.38% through the REEL Program—1,650 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, which 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 CHEEF programs, it means the difference between achieving program goals—increasing the availability of attractive financing for energy investments throughout California, including for underserved borrowers—and not. The table below demonstrates the impact of the credit enhancement in several scenarios:

BORROWER...	Without REEL	With REEL
...with a credit score of 600	Borrower would be **unlikely to qualify** for a personal loan.	Borrower may qualify for a REEL loan with **a term of 5, 10 or 15 years**, paying an interest rate as low as 3.49% for a 5-year term and 5.49% for 15 years.
...wants a 5-year repayment term	Assuming a credit score of 600, borrower could take out a personal loan with a rate of 20.88%[9] using a REEL lender's market rate, non-REEL product. The resulting payment on a $25,000 loan would be **$675 per month.** Borrower may not be able to afford the high monthly payment.	Assuming a credit score of 600, borrower could qualify for a REEL loan with interest as low as 4.38% for a 5-year term, using the same lender's REEL product. Borrower's payment on a $25,000 loan would be **$465 each month**, an $210 monthly savings from the lender's non-REEL product.
...wants lowest monthly payment	Unsecured personal loans with 15-year terms are largely **unavailable in today's market**.	Borrowers can spread out monthly payments up to 15 years with a REEL loan. Assuming a credit score of 600, a $25,000 loan with a 15-year term could receive a rate as low as 6.38% from the same REEL lender, resulting in payments of only **$216 per month**, a reduction of $459 per month compared with a 5-year loan using the lender's non-REEL product.

This means that for a borrower with a **credit score of 600, seeking $25,000** for home energy upgrades:

	Without REEL	With REEL
Financing Product	Unsecured personal loan	REEL loan
Interest Rate	20.88%	6.38%
Term Length	5 years	15 years
Monthly Payment	**$675**	**$216**

[9] The rate of the equivalent non-REEL signature loan product offered by a Participating Finance Company

Appendix 3: Loss Reserve Account Beginning and Ending Balances

IOU Holding Accounts

The IOUs release funds into their respective holding accounts upon approval of CAEATFA staff request. On March 19, 2021, staff made a request for additional funds to be released. CAEATFA staff coordinates with the IOUs to ensure acceptance of the funds from the IOUs and transfer of these funds to the appropriate Program account.

Table 9. Balance of IOU Holding Accounts

	SCG	PG&E	SCE	SDG&E
Beginning Balance (4/1/2021)	$740.74	$729.94	$729.13	$734.49
Release of Credit Enhancement (CE) Funds from IOUs	$250,000.00	$250,000.01[10]	$250,000.00	$250,000.00
Transfer of Funds to REEL Program Account	($250,000.00)	($250,000.00)	($250,000.00)	($250,000.00)
Interest Accrued	$3.65	$2.59	$1.94	$1.80
Ending Balance (6/30/2021)	$744.39	$732.54	$731.07	$736.29

REEL-Related Accounts

There are two REEL-related accounts administered by CAEATFA:

- The **REEL Program Account** holds the available portion of the requested CE funds that are used to credit enhance projects 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 Loan Loss Reserve (LLR) Account. 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 Interest Account** holds the interest swept from the REEL Program Account, the REEL Reservation Account and all the REEL Lender Loan Loss Reserve Accounts.

Table 10. Balance of REEL-Related Accounts

	REEL Program	REEL Interest
Beginning Balance (4/1/2021)	$8,965.98	$6,903.91
Credit Enhancement (CE) Funds Released from IOUs and Transferred from IOU Holding Accounts	$1,000,000.00	$0.00
Contributions to Lender Loss Reserve Accounts	($435,170.12)	$0.00
Funds Recaptured from Recoveries	$12,102.95	$0.00
Net Interest Earned	$79.32	$2.14
Net Interest Swept[11]	($79.32)	$876.40
Ending Balance (6/30/21)	$585,898.81	$7,782.45

[10] Includes $0.01 used as test deposit prior to full release of funds.

[11] Interest earned in all REEL-related accounts is swept on a monthly basis into the REEL Interest account. For Q2 2021, interest earned on REEL-related accounts totaled $878.54, of which $79.32 was earned and swept from the REEL Program account, $797.08 was earned and swept from the eight REEL Lender LLR accounts, and $2.14 was earned in the REEL Interest account.

REEL Lender Loan Loss Reserve Accounts

Each time a lender enrolls a project, a loss reserve contribution of either 11% or 20% (depending on whether or not the loan was made to an underserved borrower) is transferred from the REEL Program Account into the respective lender's Loan Loss Reserve (LLR) Account. The ending balance on the table below 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; the rebalance will appear in the Q3 report. Recaptured funds are transferred from the Lenders LLR Accounts back to the Program Account. Claims made by a Lender during the fiscal year reduce the amount of funds recaptured.

Table 11. Balance of REEL Lender 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	Travis Credit Union
Beginning Balance 4/1/2021	$1,289,854	$951,079	$72,005	$51,386	$28,194	$9,206	$178,637	$0
Claims Paid	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Loss Reserve Contributions	$267,733	$113,662	$7,819	$1,408	$1,124	$0	$26,124	$17,301
Net Interest Earned	$400	$293	$22	$16	$9	$3	$55	$0
Net Interest Swept	($400)	($293)	($22)	($16)	($9)	($3)	($55)	($0)
Ending Balance 6/30/2021	$1,557,587	$1,064,741	$79,824	$52,794	$29,317	$9,206	$204,762	$17,301

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 12. Balance of SBF-Related Accounts

	SBF Program	SBF Interest
Beginning Balance 4/1/2021	$283,472.09	$901.87
Contributions to Loss Reserve Accounts	($3,157.20)	$0.00
Net Interest Earned	$83.88	$0.29
Net Interest Swept[12]	($83.88)	$119.34
Ending Balance 6/30/2021	$280,314.89	$1,021.50

Table 13. Balance of SBF Lender Loss Reserve Accounts[13]

	Ascentium Capital	DLL Financial Solutions Partner
Beginning Balance 4/1/2021	$37,617.24	$78,910.67
Claims Paid	$0.00	$0.00
Contributions to Loss Reserve Accounts	$0.00	$3,157.20
Net Interest Earned	$11.45	$24.01
Net Interest Swept	($11.45)	($24.01)
Ending Balance 6/30/2021	$37,617.24	$82,067.87

[12] Interest earned in all SBF-related accounts is swept on a monthly basis into the SBF Interest account. For Q2 2021, interest earned on SBF-related accounts totaled $119.63, of which $83.88 was earned and swept from the SBF Program account, $35.46 was earned and swept from the two funded SBF Finance Company LLR accounts, and $0.29 was earned in the SBF Interest account.

[13] Loss reserve accounts exist for SBF's five participating Finance Companies. Account activity will be reported for the remaining Finance Companies upon enrollment of their first financing agreement with the Program.

Appendix 4: Budget

Budget authorization information and end notes follow on the subsequent page.

Table 14. Budget for CHEEF Expenditures (September 2014 through June 30, 2021)

Item	Original Authorized Budget
CHEEF Administration (CAEATFA) ***Start-up costs, Hub administration, direct implementation, outreach and training***	
Allocation per D.13.09.044 for CAEATFA implementation	5,000,000
CAEATFA outreach and training to finance companies and contractors	2,000,000
Reserve fund allocation to CAEATFA in November 2016[1]	8,360,000
Credit Enhancement funds allocated to CAEATFA for FYs 20-22, if needed, per Resolution E-5072	7,700,000
Subtotal allocated to CHEEF administration costs (CAEATFA)	23,060,000
Expended through 6/30/21[2]	(13,829,449)
CHEEF Administration funds remaining	9,230,551
Marketing, Education, Outreach (MEO)	
Statewide MEO plan initial allocation[3]	8,000,000
Expended through 9/30/20[4]	(7,954,727)
ME&O funds remaining	45,273
Credit Enhancement	
Initial allocation per D.13.09.044	42,900,000
Earmarked by IOUs for Admin and Direct Implementation per PIPs[5]	(9,863,976)
Funds allocated to CAEATFA for administration, if needed, for FYs 20-22, per Res. E-5072[6]	(7,700,000)
Subtotal Credit Enhancement funds after administration	25,336,024
Funds expensed as claims payments to lenders (less recoveries)	(198,569)
Credit Enhancement funds remaining in budget	25,137,455
Currently encumbered as of 6/30/21[7]	(3,135,217)
Unencumbered Credit Enhancement funds available	22,002,238
IOU Administration ***Start-up costs, On Bill Repayment (OBR) build-out, direct implementation***	
Administration, general overhead and direct implementation per PIPs	9,863,976
IT costs	8,000,000
Subtotal allocated for IOU Administration	17,863,976
Expended[8]	(17,863,976)
IOU Administration funds remaining	-
CHEEF Pilot Reserve	
Initial allocation	9,344,931
Allocated to CAEATFA for administration in November 2016	(8,360,000)
Reserve funds remaining after administrative allocation	984,931
Total Original Authorized Budget (total of gray rows)	**75,244,931**
Total of Original Budget Expended	**(39,846,721)**
Total Original Budget Remaining	**35,398,210**

Budgetary 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 14 provides an itemized breakdown of these allocations, current expenditures and remaining balance. As of June 30, 2021, CAEATFA had expended $13,829,449 of the $23.1 million allocated for CHEEF Administration, Direct Implementation, and outreach to finance companies and contractors.

Budget End Notes

1. Funds were authorized per the Joint Ruling of Assigned Commissioner and Administrative Law Judge on Financing Pilots and Associated Marketing Education and Outreach Activities, November 2016.
2. Quarterly expenditures are based on good faith estimates due to a lag in invoice submittals.
3. The initial allocation for ME&O also included $2 million to CAEATFA for outreach to finance companies and contractors, and is depicted in the Subtotal Allocated to CHEEF Administration Costs (CAEATFA).
4. The contract for the statewide Marketing Implementer is administered by SoCalGas, and numbers reflect data reported to CAEATFA. The previous contract for the Marketing Implementer ended on 9/30/20. Resolution E-5072 permitted a new contract to be issued, keeping spending at current levels with funding from energy efficiency funding already approved and unutilized. From October 1, 2020 through June 30, 2021, the Marketing Implementer spent $632,731; $174,582 was spent in Q4 2020, $225,503 was spent in Q1 2021, and $232,646 was spent in Q2 2021.
5. Program Implementation Plans (PIPs) were filed by the IOUs and CHEEF in 2014 and 2015.
6. Resolution E-5072 allows CAEATFA to re-allocate up to $7.7 million of Credit Enhancement funds for administrative purposes should funding become exhausted before a new long-term budget is allocated by the CPUC.
7. Credit Enhancement funds are allocated to Lender Loss Reserve accounts and recaptured when loans are paid off. They may also be paid out if a lender submits a claim for a default. For more detail, see tables 9-13.
8. CAEATFA does not have access to IOU expense details and assumes that all originally allocated administration funds have been spent. Decision 17.03.026 approved additional expenditures of up to $500,000 per year, per IOU (and $800,000 for SoCalGas) from 2017 through 2020, using funding from energy efficiency funding already approved or for incremental funding, subject to the Advice Letter process. Resolution E-5072 authorized the IOUs to continue supporting the CHEEF Programs using their Annual Budget Advice Letter or separate advice letter processes and include funds in future business plan filings.

Appendix 5: Participating Finance Company Overview

All CHEEF programs leverage private capital through participating Finance Companies. Each Finance Company enrolls in a CHEEF program through an application process and subsequently receives credit enhancements for the financing they enroll that meets program criteria. There are currently:

- **8 participating REEL Lenders:** California Coast Credit Union, Desert Valleys Federal Credit Union, Eagle Community Credit Union, First US Community Credit Union, Matadors Community Credit Union, Pasadena Service Federal Credit Union, Travis Credit Union and Valley Oak Credit Union
- **5 participating SBF Finance Companies:** Accessity, Alliance Funding Group, Ascentium Capital, DLL Financial Solutions Partner and Renew Energy Partners
- **2 participating AMF Finance Companies:** Ascentium Capital and Renew Energy Partners

The tables below provide details on the qualities of these participating Finance Companies and their involvement with the CHEEF programs to date.

Table 15. Participating REEL Lenders

	Date Enrolled in REEL	Counties Served	Number of Credit Union Members	Total REEL Loans Enrolled	REEL Loans Enrolled in Q2 21
California Coast — Your best interest.℠	September 2016	Statewide	185,000	771	100
Desert Valleys Federal Credit Union	September 2016	Portions of Inyo, Kern, San Bernardino	4,000	26	1
Eagle Community Credit Union	March 2018	Orange	20,000	11	1
First US Community Credit Union	June 2018	12 in Northern California	25,000	93	11
Matadors Community Credit Union	March 2016	Statewide	20,000	379	37
Pasadena Service Federal Credit Union	April 2018	Pasadena, statewide federal employees	11,000	3	0
Travis Credit Union	April 2021	12 in Northern California	135,000	8	8
Valley Oak Credit Union — Rooted in Your Growth™	August 2015	Madera, Tulare, specific employer groups in Kings & Fresno	6,700	33	3

Table 16. Participating SBF Finance Companies

	Date Enrolled in SBF	Products Offered	Financing Limits	Total SBF Projects Enrolled
	May 2021[14]	Loans	$500 - $5,000	0
	May 2019	Equipment leases	$10,000 - $5 million	0
	March 2019	Equipment finance agreements	$10,000 - $2 million	4
	March 2019	Equipment leases, service agreements, loans	$5,000 - $5 million	4
	January 2021	Efficiency service agreements	$250,000 - $5 million	0

Table 17. Participating AMF Finance Companies

	Date Enrolled in AMF	Products Offered	Financing Limits	Total AMF Projects Enrolled
	August 2019	Efficiency service agreements	$250,000 - $10 million	0
	September 2020	Equipment finance agreements	$10,000 - $250,000	0

[14] Accessity will begin offering loans in the Program via a utility program in SDG&E territory that will add a financing option in Q3.

Appendix 6: Enrolled Finance Company Product Features

Table 18. Enrolled REEL Lender Product Features

gogreen FINANCING™

GoGreen Home Energy Financing

Lending options for residential energy upgrades

✓ No closing costs or annual fees ✓ No collateral required ✓ Terms up to 15 years Start today! GoGreenFinancing.com

	Lending Area	APR[1] (09/13/2021)	Loan Size	Minimum Credit Score	Pre-Approval	Contact Info
STATEWIDE LENDERS	**Available to borrowers in:**					
California Coast Credit Union	Anywhere in California	2.98% - 6.38% 2.98% rate limited to $30,000 and 30-month term	$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	3.49% - 5.49% Limited-time offer: $200 cash back on Energy Efficiency loans	$2,500 - $50,000	580	Within one business day	(818) 993-6328, option 4 MCCU Consumer Lending energy@matadors.org
REGIONAL LENDERS	**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	4.00% - 8.00%	$2,500 - $50,000	580	Within one business day	(866) 743-6497 Eric Bruen REEL@desertvalleys.org
Eagle Community Credit Union	Orange County	3.95% - 7.95%	$2,500 - $50,000	580	Within one business day	(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[2]	2.95% - 7.49% 2.95% rate limited to 36-month term	$2,500 - $50,000	580	Within one business day	(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	4.99% - 8.10%	$2,500 - $30,000	600	Within one business day	(877) 297-4707 PSFCU Lending lending@mypsfcu.org
Travis Credit Union	Alameda, Colusa, Contra Costa, Merced, Napa, Placer, Sacramento, San Joaquin, Solano, Sonoma, Stanislaus, and Yolo counties[3]	3.99% - 7.99%	$1,000 - $50,000	600	Instant pre-approval for qualified borrowers	(707) 392-9277 Carla Eaton ceaton@traviscu.org
Valley Oak Credit Union	Tulare County and Madera County[4]	5.62% - 8.12%	$1,500 - $50,000	580	Within one business day	(559) 688-5996 x2315 Kiersty Vaughan kvaughan@valleyoak.org

[1] APR = Annual percentage rate. May include .5% auto-pay discount. Rates are subject to change at any time. Check with lender for the most up-to-date rate information. [2] Existing and retired federal employees throughout the State of California are also eligible. [3] Available to homeowners who receive gas and electric service from PG&E. [4] Valley Oak can lend to select employee groups in Kings and Fresno counties. Please see Valley Oak's website for membership details.

09/13/2021

Table 19. Enrolled SBF Finance Company Product Features[15]

gogreen FINANCING™

Small Business Energy Efficiency Financing Program (SBF)

Participating Finance Companies

	ascentium CAPITAL	dLL financial solutions partner	AFG Alliance FUNDING GROUP	RenewEnergy PARTNERS
	Equipment finance agreements	**Equipment leases, service agreements[1], and loans**	**Equipment leases**	**Energy service agreements**
Contact	Josh Patton (281) 902-1969 joshpatton@ascentiumcapital.com Ascentium.info/GoGreen19	David Ingram (610) 386-5836 dingram@leasedirect.com	David Goldstein (714) 450-1026 dgoldstein@alliancefunds.com	Michael Savage (888) 938-6256 x703 msavage@renewep.com
Amount available	$10,000 - $2,000,000	$5,000 - $5,000,000	$10,000 - $5,000,000	$250,000 - $5,000,000
Term	12 - 60 months Up to 84 months if required for project cash flow	12 - 84 months Up to 120 months if required for project cash flow	12 - 120 months	60 - 120 months
FEATURES				
Contractor prefunding	Prefunding up to 95% of financed amount[2]	Progress payments up to 50%, escrow funding up to 90%[2]	Progress payments up to 50%: 30% prior to delivery and 20% upon delivery	Prefunding up to 50%, milestone payments also negotiable
Generation and storage measures financeable	✓	✓		✓
Credit approval process	Approval within 2 business hours and no financials required (up to $250,000)	Approval within 24 business hours (up to $250,000) and no financials required (up to $125,000)	Approval within 24 hours and no financials required (up to $300,000)	Full underwrite required
Other features	• Payments as low as $29 / month for the first 3 or 6 months of the term	• DLL can bill for and collect regular service and maintenance charges for contractor	• Cannabis operations may qualify • Lease reamortization option after 5 years	• Monthly payment is less than the savings, so project results in positive cash flow from day one • Ongoing service and maintenance included
CUSTOMER ELIGIBILITY				
Tenant occupants permitted	✓	✓[3]	✓[3 4]	✓
Minimum months in business	12 months (up to $100,000) Greater amounts require 18+ months in business	18 months	Varies Please inquire for details	36 months

1 Service agreements require a minimum of $50,000 and at least a 36-month term.
2 Contractors must pass credit check.
3 If financing term is less than or equal to time remaining on occupancy lease.
4 Limited to measures not affixed to property.

GoGreenFinancing.com

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.

3/18/2021

[15] While Accessity enrolled in the SBF Program in Q2, their financing is not yet available as they will be offering it through an IOU third-party program in SDG&E territory that has not yet incorporated financing.

Table 20. Enrolled AMF Finance Company Product Features

gogreen FINANCING™

Affordable Multifamily Financing Program Product Features

	ascentium CAPITAL	RenewEnergy PARTNERS
	Equipment finance agreements	**Energy service agreements**
Amount available	$10,000 - $250,000	$250,000 - $10,000,000
Terms	12-84 months	60-120 months
Fees	$195 ($295 if prefunding)	No upfront fees Early termination fees apply
Features	• Similar to a lease, but ownership resides with customer throughout term • 48-hour credit approval	• Service payments based on savings • Potential off-balance sheet treatment • Installation and maintenance included
Collateral	UCC-1 Fixture Filing, no property lien	UCC-1 Fixture Filing, no property lien
What can be financed*		
Energy efficiency & demand response	✓	✓
Soft costs	✓	✓
Non-energy saving measures	✓	✓
Distributed generation & battery storage	✓	✓
	Josh Patton 281-902-1969 joshpatton@ascentiumcapital.com	**Michael Savage** 888-938-6256 x703 msavage@renewep.com

*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.

1/25/2021

GoGreenFinancing.com

California Alternative Energy and Advanced Transportation Financing Authority

Appendix 7: CHEEF 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 administrator of the CHEEF, CAEATFA is responsible for developing uniform program requirements, standardized documentation and processes, and acting as a central entity to facilitate investment in energy efficiency projects and implementation of the programs.

Key infrastructure elements needed to implement the CHEEF include a Master Servicer, Trustee Bank, Contractor Manager, Marketing Implementer, and Technical Advisors. Below are descriptions of each of these roles and information regarding their current status.

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	10/22/20 – 7/31/22
Notes	Option for two one-year extensions.

Trustee Bank

Organization	Zions 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	1/1/21 – 12/31/23
Notes	No option for extension.

Contractor Manager

Organization	Frontier Energy
Duties	The Contractor Manager recruits, enrolls, trains, and supports contractors and conducts quality control oversight of projects not participating in an IOU rebate/incentive program.
Contract Term	6/4/19 – 5/28/22
Notes	A one-year, no-cost extension of the contract was approved on 5/24/21.

Marketing Implementer

Organization	Center for Sustainable Energy
Duties	The Marketing Implementer is responsible for leading statewide marketing campaigns and administers GoGreen Financing, the customer-facing platform for information on CHEEF programs. The contract for the Marketing Implementer is held by SoCalGas and is not administered by CAEATFA nor represented in CAEATFA's administrative costs. However, the Marketing Implementer works closely with CAEATFA and the IOUs to manage customer marketing for the programs. The Center for Sustainable Energy (CSE) has served as the Marketing Implementer since 2014.
Contract Term	10/1/20 – 9/30/22
Notes	The CPUC's Resolution E-5072 approved continued marketing activity for the CHEEF Programs. This contract has an option for a one-year extension.

Technical Advisor

The Technical Advisor provides expertise to CAEATFA in the development and implementation of the CHEEF programs.

Organization	Energy Futures Group (EFG)
Duties	Provides technical assistance for program research development and implementation.
Contract Term	3/13/19 – 3/13/22
Notes	A one-year, no-cost extension of the contract was approved on 3/10/21. There are no additional extensions remaining.

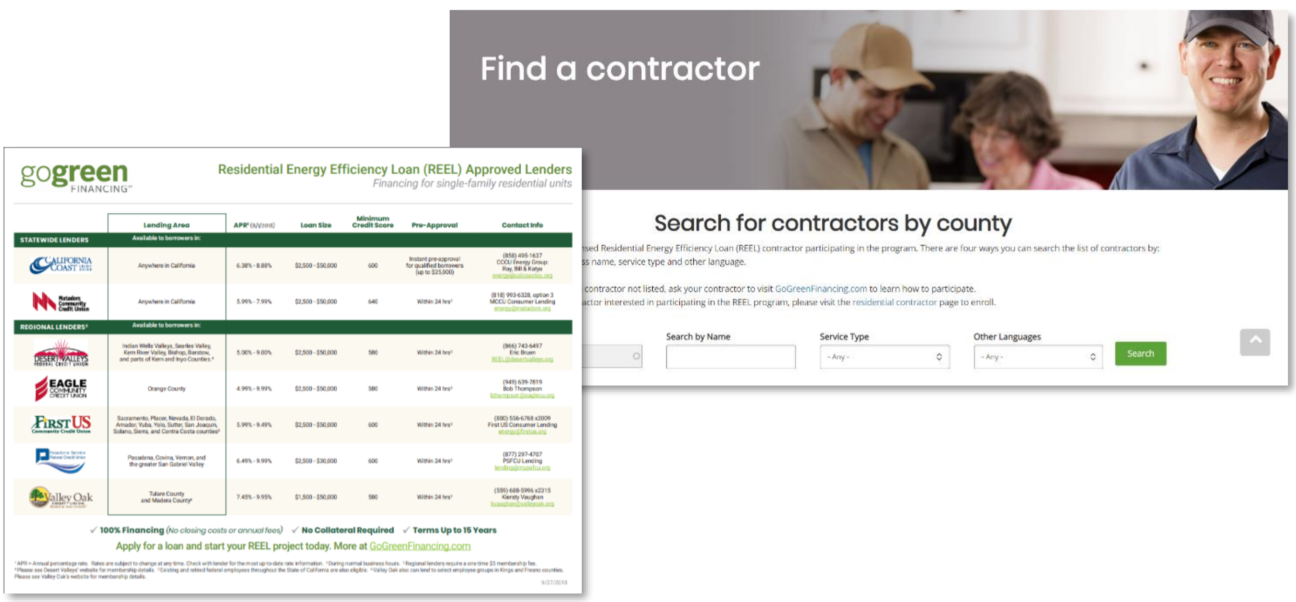
Appendix 8: Customer-Facing Products

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

Designed and implemented by the 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 platform for the financing programs. The platform was translated into Spanish in November 2020 (www.gogreenfinancing.com/es).

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 finance agreement through the participating Finance Company's website
- Program descriptions and benefits of the AMF Program and information about products offered by participating Finance Companies
- Partner resources for interested contractors, finance companies, local governments and nonprofits (some of which are available to these organizations to co-brand), including:
  - Customer-facing REEL and SBF flyers, available in both English and Spanish
  - Finance company comparison charts for REEL and SBF
  - PowerPoint Presentations
  - Partner talking points
  - REEL case studies



gogreen FINANCING™

Residential Energy Efficiency Loan (REEL) Approved Lenders

Financing for single-family residential units

	Lending Area	APR[1] (8/1/2018)	Loan Size	Minimum Credit Score	Pre-Approval	Contact Info
STATEWIDE LENDERS	Available to borrowers in:					
California Coast Credit Union	Anywhere in California	6.38% - 8.88%	$2,500 - $50,000	600	Instant pre-approval for qualified borrowers (up to $25,000)	(858) 495-1637 CCCU Energy Group: Ray, Bill & Katya energy@calcoastcu.org
Matadors Community Credit Union	Anywhere in California	5.99% - 7.99%	$2,500 - $50,000	640	Within 24 hrs[2]	(818) 993-6328, option 3 MCCU Consumer Lending energy@matadors.org
REGIONAL LENDERS[3]	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.[4]	5.00% - 9.00%	$2,500 - $50,000	580	Within 24 hrs[2]	(866) 743-6497 Eric Bruen REEL@desertvalleys.org
Eagle Community Credit Union	Orange County	4.99% - 9.99%	$2,500 - $50,000	580	Within 24 hrs[2]	(949) 639-7819 Bob Thompson bthompson@eaglecu.org
First US Community Credit Union	Sacramento, Placer, Nevada, El Dorado, Amador, Yuba, Yolo, Sutter, San Joaquin, Solano, Sierra, and Contra Costa counties[5]	5.99% - 9.49%	$2,500 - $50,000	600	Within 24 hrs[2]	(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	6.49% - 9.99%	$2,500 - $30,000	600	Within 24 hrs[2]	(877) 297-4707 PSFCU Lending lending@mypsfcu.org
Valley Oak Credit Union	Tulare County and Madera County[6]	7.45% - 9.95%	$1,500 - $50,000	580	Within 24 hrs[2]	(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] During normal business hours. [3] Regional lenders require a one-time $5 membership fee. [4] Please see Desert Valleys' website for membership details. [5] Existing and retired federal employees throughout the State of California are also eligible. [6] Valley Oak also can lend to select employee groups in Kings and Fresno counties. Please see Valley Oak's website for membership details.

9/27/2018

Screenshots of the REEL lender chart and Find a Contractor tool from GoGreenFinancing.com