



# CHEEF

CALIFORNIA HUB FOR  
ENERGY EFFICIENCY FINANCING

ENERGY EFFICIENCY FINANCING PILOTS

# **QUARTERLY REPORT & PROGRAM STATUS SUMMARY**

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FIRST QUARTER 2021

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*"The Hub" and "CHEEF" are used interchangeably in this report as abbreviations for the California Hub for Energy Efficiency Financing.*

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## 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 upgrades.<sup>1</sup> In its guidance decision, the CPUC acknowledged that energy efficiency (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 (Hub, or 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 Hub 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<sup>2</sup>, 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 Hub financing pilots. These reports contain quarter highlights and other informational items to keep interested parties informed as to the programs' challenges and successes.

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<sup>1</sup> Decision 13-09-044

<sup>2</sup> Resolution E-4900, published December 14, 2017

## Executive Summary – Q1 2021

### Outreach Highlights

- **CAEATFA staff presented on the CHEEF in multiple virtual events** during the quarter, including webinars hosted by State Treasurer Fiona Ma for the City of Glendale and the 16<sup>th</sup> Assembly District. Staff launched a virtual meet and greet series to connect REEL lenders and contractors and presented on SBF and AMF at meetings and training sessions held by IOU and REN program implementers.

### Residential Energy Efficiency Loan (REEL) Assistance Program Developments

- **Lenders enrolled 104 loans in REEL in Q1**, demonstrating a continued trend of increased quarterly activity in the Program compared to prior years. This number of enrollments is more than double that from Q1 2020 (51) and represents a total amount financed of \$1,814,785.
- **Travis Credit Union enrolled as a participating Finance Company.** The credit union, based in Solano County, will begin its REEL participation with a soft launch and is expected to introduce its REEL product to the public later in 2021.
- **CAEATFA held a public workshop to propose modifications to REEL regulations.** As part of ongoing efforts to modify the existing regulations for the REEL Program, staff hosted a public workshop on March 12 to review proposed changes and a draft of modified regulations. The workshop was followed by a public comment period, and the proposed regulations will be submitted to the CAEATFA Board for approval in Q2.

### Small Business Energy Efficiency Financing (SBF) Program Developments

- **Renew Energy Partners enrolled as a participating Finance Company.** Renew brings a unique financing option to the Program through its efficiency-as-a-service model. Following Renew's enrollment in SBF, staff held a virtual webinar to introduce the product to the SBF Contractor and Project Developer network; over 30 guests attended.
- **Work began on modifications to the SBF regulations.** With the launch of On-Bill Repayment (OBR) functionality forthcoming, staff began working on modifications to SBF Program regulations to allow for OBR implementation, make structural improvements to streamline operations, and facilitate microloans. A public workshop to propose modifications to the regulations is expected to be held in Q2.

### Affordable Multifamily Energy Efficiency Financing (AMF) Program Developments

- **Staff fielded multiple inquiries from property owners** about the AMF Program in Q1 and facilitated conversations with participating finance companies.

### CHEEF Infrastructure and On-Bill Repayment Developments

- **CAEATFA staff worked closely with the IOUs to develop updated language for each IOU's OBR Tariff.** Modifications to the OBR Tariffs were needed to align them with the current design of OBR, update Tariff terminology to mirror terminology used in OBR rules, standardize OBR Tariff language across all four IOUs, and provide general improvements for readability.
- **Staff participated in the CPUC's Clean Energy Finance Workshop and contributed a Program Status Update to the Ruling on Track 1 Issues of the Clean Energy Financing Proceeding.** CAEATFA staff presented on two panels during the workshop and 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](#). The Ruling was released for public comment early in Q2.



REEL customer Juliana Maziarz in front of her Los Angeles home

## Residential Energy Efficiency Loan (REEL) Assistance Program

Key REEL Metrics – Q1 2021 (January 1-March 31, 2021)

<b>104</b> New REEL Loans Enrolled	<b>\$17,450</b> Average Loan Size	<b>\$1,814,785</b> Amount Financed
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[View the latest monthly data summaries](#) for the REEL Program.

### Updates

REEL lenders enrolled 104 new loans in the Program in Q1 2021, down from the previous quarter's total of 149 but more than double the number enrolled a year ago, in Q1 2020 (51). In total, 1,163 loans have been enrolled in REEL since Program inception in 2016. The average loan size increased from \$16,597 per loan in Q4 2020 to \$17,450 in Q1 2021. The loans enrolled in Q1 totaled \$1,814,785 in financing, bringing the total amount financed through REEL since Program inception to \$19,397,032.

The Program continued to reach underserved Californians at levels consistent with prior quarters. Nearly two-thirds (63%) of loans enrolled in Q1 2021 were made for upgrades to properties in Low-to-Moderate Income (LMI) census tracts; since Program inception, 57% of all loans enrolled have been made for upgrades to properties in LMI census tracts. Loan dollars issued for properties in LMI census tracts made up 57% of the total amount financed during Q1. 17% of enrolled loans were used to upgrade properties in disadvantaged communities as identified by CalEnviroScreen, a figure consistent with REEL loan enrollments in disadvantaged communities over time (18% since Program inception).

Several participating lenders lowered interest rates for their REEL products in Q1: California Coast Credit Union now offers rates ranging from 2.98% to 6.38%, Eagle Community Credit Union ranges between 3.95% and 7.95%, First US Community Credit Union lowered rates from 3.49% to 7.49%, and Matadors Community Credit Union now ranges from 3.49% to 5.49%. Further interest rate reductions are planned to take effect early in Q2.

Travis Credit Union was approved to enroll as a participating lender in REEL on March 5, offering loans of \$1,000-\$50,000 with rates between 3.99% and 8.43%. Headquartered in Solano County, Travis serves 12 counties in Northern California with a combined population of just over 7 million people, the majority of whom are PG&E customers. Travis began its REEL participation with a soft launch and is expected to introduce its REEL product to the public via GoGreenFinancing.com in the coming months.

Staff are currently working with Enervee, an IOU third-party implementer, to develop a financing product for use on the IOUs' online customer marketplaces. The product will offer microloans at the point of sale to customers purchasing energy efficiency equipment through these online marketplaces. The financing is expected to launch in SCG territory during Q3 with other IOU marketplaces to follow, and the amendments to the REEL regulations that are currently in progress will help accommodate this model.

## Regulations Modifications


Following research and planning efforts undertaken by staff in 2020, CAEATFA staff drafted proposed amendments to the existing REEL Program regulations. The proposed amendments are intended to 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 under \$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 for the Program.

A public workshop on the proposed modifications was held on March 12, followed by a week-long public comment period. CAEATFA will submit the proposed regulations to the CAEATFA Board for approval at the April 2021 Board meeting. Following Board approval, CAEATFA will utilize the emergency rulemaking process and submit the proposed regulations to the Office of Administrative Law. The regulations are expected to go into effect in May 2021.

**Table 1. Top 5 Energy Efficiency Measures Installed through REEL (Q3 2016 - Q1 2021)**

 <b>HVAC Equipment</b> 731 Projects	 <b>Windows</b> 328 Projects	 <b>HVAC Ductwork</b> 258 Projects	 <b>Insulation</b> 218 Projects	 <b>Cool Roofs</b> 174 Projects
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**Table 2. Heat Pump Measures Installed through REEL (Q3 2016 - Q1 2021)**

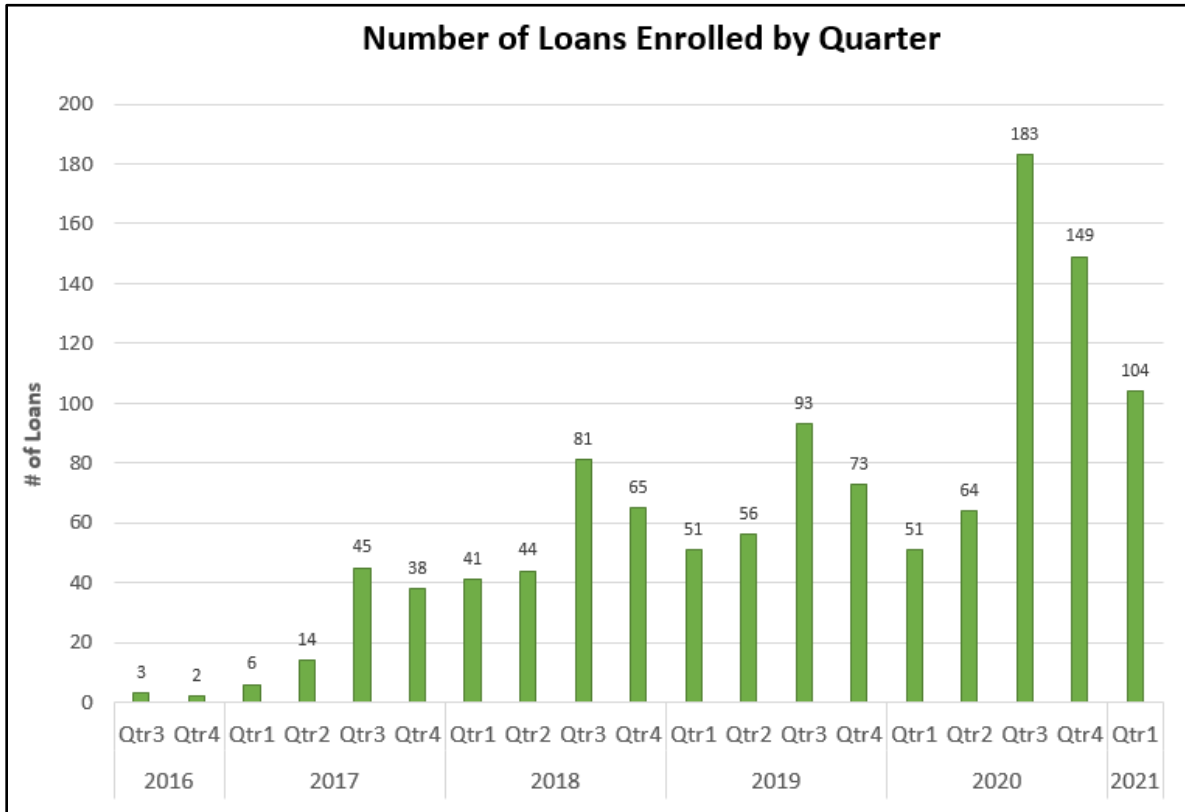
 <b>Heat Pumps</b>	
<b>Space Heating</b> 97 Projects	<b>Water Heating</b> 9 Projects

**Table 3. REEL Loans Enrolled by Lender - Q1 2021<sup>3</sup>**

Lender	Loans Enrolled	Total Financed Amount
California Coast Credit Union	70	\$1,077,672
Desert Valleys Federal Credit Union	0	\$0
Eagle Community Credit Union	1	\$19,975
First US Community Credit Union	9	\$139,455
Matadors Community Credit Union	24	\$577,683
Pasadena Service Federal Credit Union	0	\$0
Valley Oak Credit Union	0	\$0

<sup>3</sup> Travis Credit Union was approved to begin participating in the REEL Program in March 2021 and will launch their product to customers later this spring.

**Table 4. REEL Loan Activity Since Program Inception (Q3 2016 – Q1 2021)**



**Outreach**

Traffic to GoGreenFinancing.com, the customer-facing platform for the CHEEF Programs, decreased significantly in Q1 2021, due primarily to a lack of marketing promotions conducted by the four IOUs. The website saw a total of 28,658 users compared with more than 57,000 users in the prior quarter. However, the average session duration time increased from just over 1 minute to just under 2 minutes, indicating a higher level of interest among the users who visited the website.

Although Q4 2020 marked the end of a 7-month hiatus in customer-facing marketing with several marketing campaigns from the IOUs, the majority of the IOUs were unable to continue with these promotions or launch new ones in Q1. The three IOU-led marketing campaigns in Q1 were a feature on REEL in an internal SCG employee newsletter, financing messaging on SCG customer bill envelopes, and a blurb in a PG&E energy efficiency newsletter distributed to approximately 1 million customers. Burbank Water and Power, a municipal utility whose customers are also SCG customers, included a segment on REEL in a newsletter as well. The Marketing Implementer devoted its statewide marketing efforts to organic social media and paid search tactics for the SBF Program, which were the highest drivers of overall website traffic for the duration of the quarter.

Following the Marketing Implementer’s hiring of a subcontractor to conduct market research and analysis for Program marketing in Q4, Lux Insights and Stoke Strategy (the selected subcontractor) began working on deliverables and reached several initial milestones in the research process. More information on this activity can be found in the SBF section of this report.



### Contractor Outreach

A total of 509 contractors were enrolled in the REEL Program at the end of Q1 2021. Over the course of the quarter, 22 new REEL Contractors joined in the Program. Four Contractors were suspended from enrolling new projects and three were removed from the Program during routine quality checks; the permanent Contractor removals were made due to disciplinary action taken against their licenses.

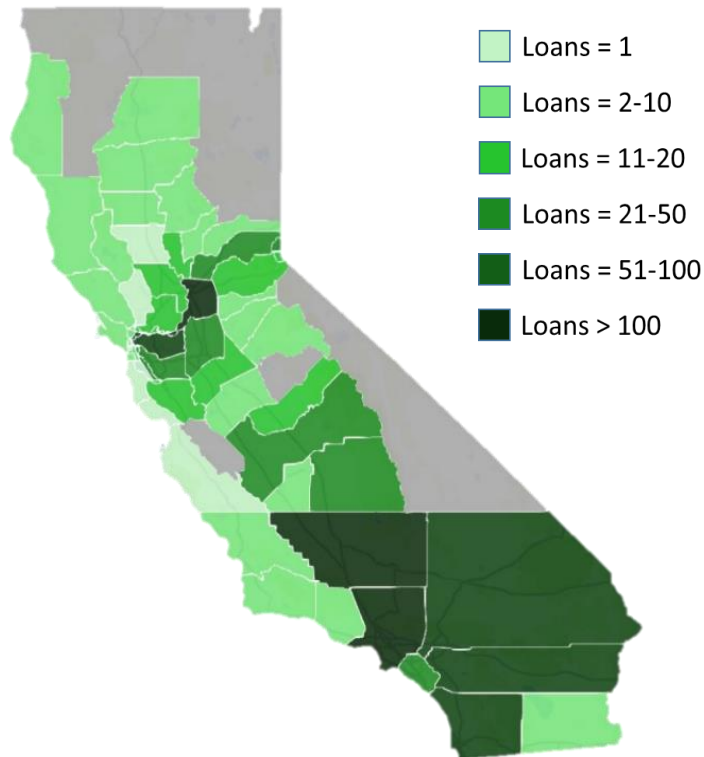
Over the course of the quarter, CAEATFA staff coordinated with the Contractor Manager to facilitate “meet and greet” webinars between participating Contractors and their local REEL Lenders. Regionally-based outreach to enrolled contractors provided information about REEL Lenders in their area and invited them to join a webinar to meet lending staff. Emailed invitations to contractors included a testimonial from a participating Contractor

who spoke positively about the experience of building a working relationship with a local REEL Lender and referring customers to that lender. In total, 5 of these webinars were held over the course of the quarter.

### 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 Q1 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 Q1 2021)

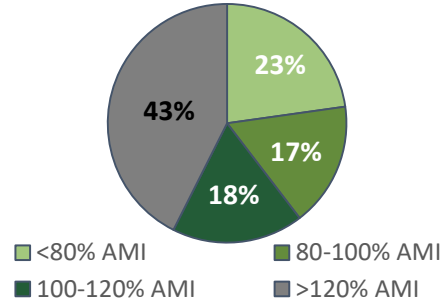
**\$19,397,032**  
Total Amount Financed

**1,163**  
Total Loans Enrolled

**\$2,950,977**  
Total Loan Loss Reserve Contributions

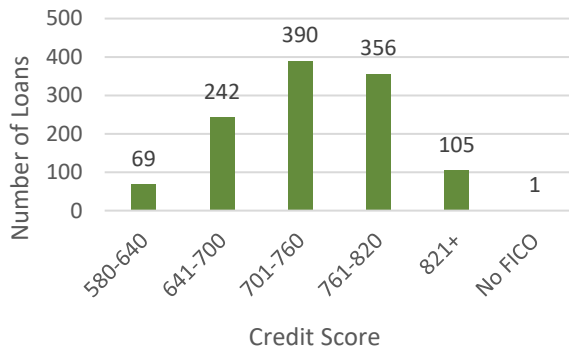
**87%** **Finance-Only Projects**  
*Cases in which borrower made upgrades using REEL without a rebate or incentive*

Percentage of Loans Made to Upgrade Properties by **Census Tract Income**<sup>4</sup>

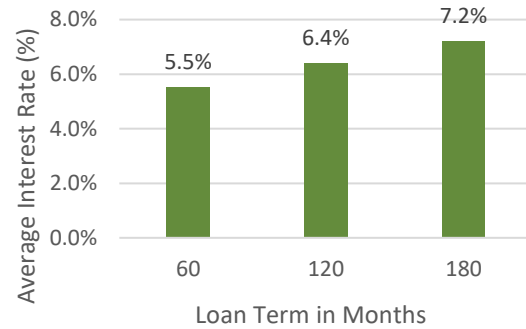


## REEL Borrower Data

### REEL Borrower Credit Scores

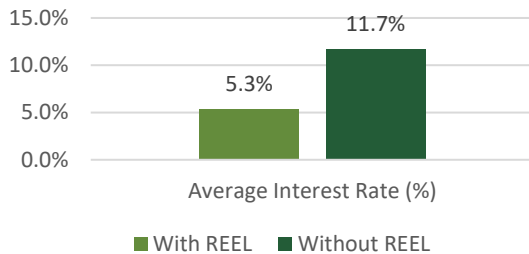


### REEL Average Interest Rate by Term Length

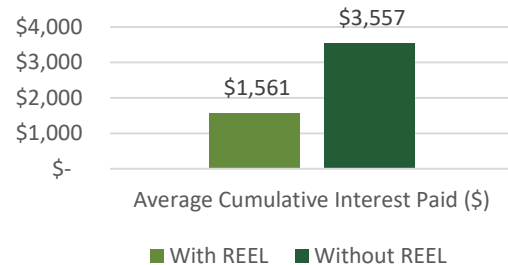


## Financing Comparison: Borrower Outcomes With vs. Without REEL

### Average Interest Rate for terms up to 60 months<sup>5</sup>



### Cumulative Average Interest Paid for terms up to 60 months<sup>4</sup>



[Click here](#) to view data summaries for the REEL Program, published on a monthly basis.

<sup>4</sup> Low-to-Moderate Income (LMI) census tracts are those with median family incomes <120% of Area Median Income.

<sup>5</sup> 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.

REEL Loan Portfolio Report

**Table 5. Summary of REEL Loans with Status of Paid in Full, Current or Past Due through Mar. 31, 2021**

	Number of Loans	Original Total Principal Amount	Outstanding Total Principal Amount
<b>Paid in Full</b>	<b>219</b>	<b>\$3,346,701</b>	<b>\$0</b>
California Coast Credit Union	125	\$1,697,476	\$0
Desert Valleys Federal Credit Union	10	\$120,784	\$0
Eagle Community Credit Union	2	\$30,193	\$0
First US Community Credit Union	10	\$122,739	\$0
Matadors Community Credit Union	70	\$1,348,453	\$0
Pasadena Service Federal Credit Union	1	\$19,319	\$0
Valley Oak Credit Union	1	\$7,737	\$0
<b>Current</b>	<b>928</b>	<b>\$15,741,297</b>	<b>\$13,518,594</b>
California Coast Credit Union	531	\$8,402,612	\$7,089,166
Desert Valleys Federal Credit Union	15	\$316,478	\$262,999
Eagle Community Credit Union	8	\$152,750	\$120,303
First US Community Credit Union	71	\$1,009,375	\$882,899
Matadors Community Credit Union	272	\$5,413,474	\$4,795,506
Pasadena Service Federal Credit Union	2	\$36,505	\$32,826
Valley Oak Credit Union	29	\$410,103	\$334,894
<b>60 Days Past Due</b>	<b>1</b>	<b>\$10,328</b>	<b>\$9,178</b>
California Coast Credit Union	1	\$10,328	\$9,178
<b>Total</b>	<b>1,148</b>	<b>\$19,098,326</b>	<b>\$13,527,772</b>

**Table 6. Summary of REEL Charge-Offs, Claims Paid and Recoveries through Mar. 31, 2021**

	Number of Loans	Charge-Off Amount at Time of Claim	Claims Paid <sup>6</sup>	Recoveries Paid to Program
<b>Charged Off</b>	<b>15</b>	<b>\$281,330</b>	<b>\$253,197</b>	<b>(\$42,525)</b>
California Coast Credit Union	14	\$269,749	\$242,774	(\$42,525)
First US Community Credit Union	1	\$11,581	\$10,423	\$0

<b>Net Credit Enhancement Funds Expended</b> ( <i>Claims Paid minus Recoveries Paid to Program</i> )	<b>\$210,672</b>
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<sup>6</sup> 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 Q1 2021

<b>7</b> Total Projects Enrolled	<b>\$1,479,104</b> Total Amount Financed	<b>70</b> Enrolled Contractors and Project Developers	<b>4</b> Participating Finance Companies
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### Updates

After a challenging year for the SBF Program due to COVID-related economic uncertainty and restrictions on business operations, two new projects entered the pre-approval phase in Q1 2021. One project will install LED lighting measures at a grocery store in Placer County, and the other will bring efficient refrigeration to a dairy farm in Kings County. The two projects, totaling nearly \$178,000 in financing, are expected to be completed and enrolled in the Program in coming months.

After applying in Q4 2020, Renew Energy Partners was approved to join SBF as the fourth participating Finance Company. Renew's Efficiency Service Agreements (ESAs) will allow SBF customers to make upgrades potentially off-balance sheet and with immediate cash-flow benefits. The product will be available for projects between \$250,000 and \$5 million and offers payback terms up to 10 years. To introduce this product to SBF Contractors and Project Developers, CAEATFA staff held a well-attended virtual "meet and greet" webinar with staff from Renew to describe the financing and answer questions. DLL, another participating Finance Company, lowered their financing minimum per project to \$5,000, which will allow for smaller projects to receive financing through the Program.

Work began on market research for customer-facing marketing of the SBF Program (and the CHEEF Programs as a whole) this quarter after the Marketing Implementer brought on Lux Insights and Stoke Strategy as a marketing strategy subcontractor in coordination with CAEATFA and the IOUs. Over the next several months, Lux and Stoke will conduct market research and analysis of the small business sector, identify key customer segments and targeting methods, and develop positioning and messaging within the existing marketing budget. Market research is expected to be completed in mid-Q2.

Work also began on research and design for modifications to the SBF regulations that will enable On-Bill Repayment (OBR) functionality, streamline operations through structural improvements, and make changes that will better facilitate microlending opportunities through the Program. Staff are preparing to hold a public workshop to propose modifications to the regulations in Q2.

While there were few IOU-led marketing campaigns in Q1, the Marketing Implementer devoted 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. Over the course of the quarter, these tactics consistently drove the most user traffic to the website out of any marketing campaigns in effect during that time.



10:01 AM · Mar 23, 2021 · Hootsuite Inc.

*Screenshot of a GoGreen Financing Twitter post used in Q1 2021*

**Table 7. SBF Finance Agreement Status by Lender as of March 31, 2021**

	Finance Agreements Enrolled	Total Amount Financed
<b>Alliance Funding Group</b>	0	\$0
<b>Ascentium Capital</b>	4	\$350,891
<b>DLL Financial Solutions Partner</b>	3	\$1,128,213
<b>Renew Energy Partners</b>	0	\$0

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



*Image from GoGreen Financing digital campaign*

## **Affordable Multifamily Energy Efficiency Financing (AMF) Program**

### **Updates**

During the course of the quarter, staff received several inquiries about the AMF Program from property owners, one of which progressed into discussions with a participating Finance Company regarding financing for the project. Staff also participated in a meeting coordinated by SCE with a large affordable multifamily property owner and presented AMF as a tool to assist in financing their energy efficiency needs. Aside from these efforts, CAEATFA staff continued ongoing outreach efforts by presenting during multiple webinars, including virtual presentations for staff of SoCalREN and SCG programs.

Staff are also investigating ways to improve financing offerings under AMF. The credit enhancement enables some lenders to lend to AMF properties, but for this particular market, it is not an effective tool to sufficiently lower interest rates. Because AMF properties have very tight operating margins, cash flow generated from savings usually needs to cover monthly financing repayments, and interest rates are a primary determinant of whether or not projects “pencil out.” To that end, CAEATFA staff believe that an interest rate buy-down, subordinate debt, or co-lending option with below-market capital will be necessary to allow for lower interest rates that will render more projects feasible. Staff contributed suggestions on this issue as part of a Program Status Update for an upcoming Ruling in the CPUC’s Clean Energy Financing Proceeding.

### **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, Ascentium Capital began offering financing through AMF, and the CPUC extended the pilot period for the Program through mid-2022. Staff hope that the available financing options will allow property owners to make energy upgrades and that the additional time allowed in the pilot phase will facilitate projects, or help reveal additional needs for property owners that the Program is not able to fulfill.

*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 Hub's offerings.

## On-Bill Repayment (OBR)

CAEATFA staff worked closely with the IOUs during Q1 to develop updated language for each IOU's OBR Tariff. Modifications to the OBR Tariffs were needed to align them with the current design of OBR, update Tariff terminology to mirror terminology used in OBR rules, standardize OBR Tariff language across all four IOUs, and provide general improvements for readability.

Three of the four IOUs (SCE, SDG&E, and SoCalGas) submitted Advice Letters seeking CPUC approval of the modified Tariff language. CAEATFA anticipates CPUC approval of the Advice Letters and modified OBR Tariffs in early Q2.

CAEATFA staff also made progress toward drafting regulations describing the rules that will govern OBR. CAEATFA anticipates holding a public hearing covering the OBR regulations in Q2 and, pending approval by the CAEATFA Board, submitting the regulations to the Office of Administrative Law in Q3.

As part of the CPUC's new 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 is a product of the CPUC's Decision 13.09.044 to authorize OBR for 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 due to its potential for encouraging program uptake and reducing default rates. SBF, AMF, and the Nonresidential Program (should it be developed) will include OBR as a key feature.

## CHEEF Infrastructure

### Contracting Updates

Following an RFP process and selection in Q4 2020, Zions Bank began serving as the Trustee Bank for the CHEEF Programs on January 1, 2021. The Trustee Bank holds ratepayer funds provided by the IOUs to serve as credit enhancements under the various programs. The contract has a term of three years, with a not-to-exceed amount of \$360,000 and no option to extend the term length. Staff were able to seamlessly transition banking operations between the prior and current Trustee Bank with no interruptions to normal Program processes.

The contract for the Technical Advisor, Energy Futures Group (EFG), was extended on March 10, 2021 using the option for a one-year extension outlined in the contract. This extension is for time only and will not affect the total cost of the contract. The contract for EFG now ends on March 13, 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.

In Q1 2021, CAEATFA staff participated in a CPUC-hosted workshop on the Proceeding and presented on the CHEEF Programs during two panels. The first panel served as an introduction to the workshop and focused on lessons learned from the past 10 years of clean energy financing, and the second panel discussed policy considerations needed for financing based on findings from CAEATFA staff's administration of the CHEEF Programs. After the workshop, staff attended a Prehearing Conference held by the CPUC.

Staff also contributed a [Program Status Update](#) to the CPUC's Ruling on Track 1 Issues of the Clean Energy Financing Proceeding, which is expected to be released early in Q2. The in-depth Program Status Update discussed program design considerations for REEL, SBF, and AMF, 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 in non-IOU territories, should it be approved by the CPUC.

# 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 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.

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 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.
- **Low-to-Moderate Household Income** – Borrower’s household income is at or below 120% of the AMI for the Metropolitan Area, County or State.
- **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 that they have the funds in their loss reserve account.

REEL launched in July 2016, and the current Program regulations were adopted in September 2018. CAEATFA staff are working on modifications to the regulations expected to take effect 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 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.

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 that 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 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.

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 Hub 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**

								
	STATEWIDE LENDERS			REGIONAL LENDERS				
Interest Rate	Reduction ranged from 690 - 1650 bps <sup>7</sup>	Reduction ranged from 641 - 891 bps	Reduction ranged from 333 - 783 bps	Reduction ranged from 949 - 1200 bps	Reduction ranged from 704 - 1179 bps	Reduction ranged from 226 - 1000 bps	Reduction ranged from 450 - 850 bps	Reduction ranged from 200 – 300 bps
Minimum Credit Score	No change from existing 600	Reduced from 660 to 580	No change from existing 580 <sup>8</sup>	No change from existing 580	No change from existing 580	Reduced from 640 to 600	No change from existing 600	Reduced from 680 to 600
Maximum Loan Amount	Increased from \$30,000 to \$50,000	Increased from \$15,000 to \$50,000	Increased from \$20,000 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
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	Increased from 5 years to 15	No change from 15 years

*The interest rates reflected in this table are effective as of March 31, 2021.*

<sup>7</sup> 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%

<sup>8</sup> 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 6.38% through the REEL Program—1,450 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 Hub 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:

<b>BORROWER...</b>	<b>Without REEL</b>	<b>With REEL</b>
...with a credit score of 580	Borrower would be <b>unlikely to qualify</b> for a personal loan.	Borrower may qualify for a REEL loan with a <b>term of 5, 10 or 15 years</b> , 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 700, borrower could likely take out a personal loan, paying the <b>nationwide average of 10.7%</b> <sup>9</sup> . The resulting payment on a \$25,000 loan would be <b>\$540 per month</b> . Borrower may not be able to afford the high monthly payment.	Borrowers with credit scores of 580 and above would likely qualify for a REEL loan, with interest as low as 3.49% for a 5-year term. Borrower’s payment on this loan would be <b>\$455 each month</b> , an \$85 monthly savings from a standard unsecured personal loan.
...wants lowest monthly payment	Unsecured personal loans with 15-year terms are largely <b>unavailable in today’s market</b> .	Borrower can spread out monthly payments up to 15 years with a REEL loan, making a \$25,000 loan with a 15-year term rate of 5.49% only <b>\$204 per month</b> . Borrower would save \$336 monthly compared to a 5-year unsecured personal loan.

This means that for a borrower with a **credit score of 700, seeking \$25,000** for home energy upgrades:

	<b>Without REEL</b>	<b>With REEL</b>
<b>Financing Product</b>	Unsecured personal loan	REEL loan
<b>Interest Rate</b>	10.7%	5.49%
<b>Term Length</b>	5 years	15 years
<b>Monthly Payment</b>	<b>\$540</b>	<b>\$204</b>

<sup>9</sup> [Credit Union National Association Monthly Credit Union Estimates, March 2021](#)

## 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. 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 1/1/2021	\$740.61	\$729.81	\$729.00	\$734.36
Release of Credit Enhancement (CE) Funds from IOUs	\$0.00	\$0.00	\$0.00	\$0.00
Transfer of Funds to REEL Program Account	\$0.00	\$0.00	\$0.00	\$0.00
Interest Accrued	\$0.13	\$0.13	\$0.13	\$0.13
Ending Balance 3/31/2021	\$740.74	\$729.94	\$729.13	\$734.49

### REEL-Related Accounts

There are two REEL-related accounts<sup>10</sup> 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 (1/1/2021)	\$299,762.60	\$6,446.19
Credit Enhancement (CE) Funds Released from IOUs	\$0.00	\$0.00
Contributions to Lender Loss Reserve Accounts	(\$290,796.62)	\$0.00
Funds Recaptured from Annual Rebalance	\$0.00	\$0.00
Net Interest Earned	\$36.39	\$1.14
Net Interest Swept <sup>11</sup>	(\$36.39)	\$456.58
Ending Balance (3/31/21)	\$8,965.98	\$6,903.91

<sup>10</sup> Through December 2020, CAEATFA also administered a REEL Reservation Account at the Trustee Bank. However, CAEATFA decided not to open this account at Zions Bank when it became the new Trustee Bank in January 2021, as this account had remained unused and CAEATFA intends to remove Pre-Approvals and Reservations from REEL in its upcoming update to the REEL Program regulations.

<sup>11</sup> Interest earned in all REEL-related accounts is swept on a monthly basis into the REEL Interest account. For Q1 2021, interest earned on REEL-related accounts totaled \$457.72, of which \$36.39 was earned and swept from the REEL Program account, \$420.19 was earned and swept from the seven REEL Lender LLR accounts, and \$1.14 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
Beginning Balance 1/1/2021	\$1,154,858.23	\$857,100.88	\$72,005.09	\$51,364.27	\$24,198.55	\$9,206.09	\$155,602.52
Claims Paid	(\$34,770.58)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Loss Reserve Contributions	\$169,766.76	\$93,978.43	\$0.00	\$21.56 <sup>12</sup>	\$3,995.00	\$0.00	\$23,034.87
Ending Balance 3/31/2021	\$1,289,854.41	\$951,079.31	\$72,005.09	\$51,385.83	\$28,193.55	\$9,206.09	\$178,637.39

<sup>12</sup> Desert Valleys did not enroll any new loans in Q1. However, one previous-enrolled loan was miscalculated, and in Q1 received an adjustment to its Loss Reserve Contribution in the amount of \$21.56 (representing \$196 in additional loan principal at a contribution rate of 11%).

## 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 11 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 1/1/2021	\$283,472.09	\$831.38
Contributions to Loss Reserve Accounts	\$0.00	\$0.00
Net Interest Earned	\$49.86	\$0.14
Net Interest Swept <sup>13</sup>	(\$49.86)	\$70.35
Ending Balance 3/31/2021	\$283,472.09	\$901.87

**Table 13. Balance of SBF Lender Loss Reserve Accounts<sup>14</sup>**

	Ascentium Capital	DLL Financial Solutions Partner
Beginning Balance 1/1/2021	\$37,617.24	\$78,910.67
Claims Paid	\$0.00	\$0.00
Contributions to Loss Reserve Accounts	\$0.00	\$0.00
Ending Balance 3/31/2021	\$37,617.24	\$78,910.67

<sup>13</sup> Interest earned in all SBF-related accounts is swept on a monthly basis into the SBF Interest account. For Q4 2020, interest earned on SBF-related accounts totaled \$70.49, of which \$49.86 was earned and swept from the SBF Program account and \$20.49 was earned and swept from the two funded SBF Finance Company LLR accounts, and \$0.14 was earned in the SBF Interest account.

<sup>14</sup> Loss reserve accounts exist for SBF's four participating Finance Companies. Account activity will be reported for the third and fourth 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 Hub Expenditures (September 2014 through March 31, 2021)**

Item	Original Authorized Budget
<b>Hub Administration (CAEATFA)</b>	
<i>Start-up costs, Hub administration, direct implementation, outreach and training</i>	
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 <sup>1</sup>	8,360,000
Credit Enhancement funds allocated to CAEATFA for FYs 20-22, if needed, per Resolution E-5072	7,700,000
<b>Subtotal allocated to Hub administration costs (CAEATFA)</b>	<b>23,060,000</b>
Expended through 3/31/21 <sup>2</sup>	(13,118,345)
Hub Administration funds remaining	9,941,655
<b>Marketing, Education, Outreach (MEO)</b>	
Statewide MEO plan initial allocation <sup>3</sup>	8,000,000
Expended through 9/30/20 <sup>4</sup>	(7,954,727)
ME&O funds remaining	45,273
<b>Credit Enhancement</b>	
Initial allocation per D.13.09.044	42,900,000
Earmarked by IOUs for Admin and Direct Implementation per PIPs <sup>5</sup>	(9,863,976)
Funds allocated to CAEATFA for administration, if needed, for FYs 20-22, per Res. E-5072 <sup>6</sup>	(7,700,000)
<b>Subtotal Credit Enhancement funds after administration</b>	<b>25,336,024</b>
Funds expensed as claims payments to lenders (less recoveries)	(210,672)
Credit Enhancement funds remaining in budget	25,125,352
Currently encumbered as of 3/31/21 <sup>7</sup>	(2,696,890)
Unencumbered Credit Enhancement funds available	22,428,462
<b>IOU Administration</b>	
<i>Start-up costs, On Bill Repayment (OBR) build-out, direct implementation</i>	
Administration, general overhead and direct implementation per PIPs	9,863,976
IT costs	8,000,000
<b>Subtotal allocated for IOU Administration</b>	<b>17,863,976</b>
Expended <sup>8</sup>	(17,863,976)
IOU Administration funds remaining	-
<b>Hub Pilot Reserve</b>	
Initial allocation	9,344,931
Allocated to CAEATFA for administration in November 2016	(8,360,000)
<b>Reserve funds remaining after administrative allocation</b>	<b>984,931</b>
<b>Total Original Authorized Budget (total of gray rows)</b>	
	<b>75,244,931</b>
<b>Total of Original Budget Expended</b>	
	<b>(39,147,720)</b>
<b>Total Original Budget Remaining</b>	
	<b>36,097,211</b>

## 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 March 31, 2021, CAEATFA had expended \$13,118,345 of the \$23.1 million allocated for Hub 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 Hub 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 March 31, 2021, the Marketing Implementer spent \$400,085; \$174,582 was spent in Q4 2020 and \$225,503 was spent in Q1 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 Hub programs leverage private capital through participating Finance Companies. Each Finance Company enrolls in a Hub 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
- **4 participating SBF Finance Companies:** 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 Hub 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 Q1 21
	September 2016	Statewide	185,000	671	70
	September 2016	Portions of Inyo, Kern, San Bernardino	4,000	25	0
	March 2018	Orange	20,000	10	1
	June 2018	12 in Northern California	25,000	82	9
	March 2016	Statewide	20,000	342	24
	April 2018	Pasadena, statewide federal employees	11,000	3	0
	April 2021	12 in Northern California	135,000	0	0
	August 2015	Madera, Tulare, specific employer groups in Kings & Fresno	6,700	30	0

**Table 16. Participating SBF Finance Companies**









	Date Enrolled in SBF	Products Offered	Financing Limits	Total SBF Projects Enrolled
	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	3
	January 2021	Energy 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	Energy service agreements	\$250,000 - \$10 million	0
	September 2020	Equipment finance agreements	\$10,000 - \$250,000	0

Appendix 6: Enrolled Finance Company Product Features

Table 18. Enrolled REEL Lender Product Features

		<b>Residential Energy Efficiency Loan (REEL) Approved Lenders</b> <i>Financing for single-family residential units</i>				
	Lending Area	APR <sup>1</sup> (03/19/2021)	Loan Size	Minimum Credit Score	Pre-Approval	Contact Info
<b>STATEWIDE LENDERS</b>						
Available to borrowers in:						
	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 <a href="mailto:energy@calcoastcu.org">energy@calcoastcu.org</a>
	Anywhere in California	3.49% - 5.49% <sup>2</sup>	\$2,500 - \$50,000	580	Within 24 hrs <sup>3</sup>	(818) 993-6328, option 4 MCCU Consumer Lending <a href="mailto:energy@matadors.org">energy@matadors.org</a>
<b>REGIONAL LENDERS<sup>4</sup></b>						
Available to borrowers in:						
	Indian Wells Valleys, Searles Valley, Kern River Valley, Bishop, Barstow, and parts of Kern and Inyo counties <sup>5</sup>	4.00% - 8.00%	\$2,500 - \$50,000	580	Within 24 hrs <sup>3</sup>	(866) 743-6497 Eric Bruen <a href="mailto:REEL@desertvalleys.org">REEL@desertvalleys.org</a>
	Orange County	3.95% - 7.95%	\$2,500 - \$50,000	580	Within 24 hrs <sup>3</sup>	(949) 639-7819 Bob Thompson <a href="mailto:bthompson@eaglecu.org">bthompson@eaglecu.org</a>
	Sacramento, Placer, Nevada, El Dorado, Amador, Yuba, Yolo, Sutter, San Joaquin, Solano, Sierra, and Contra Costa counties <sup>6</sup>	3.49% - 7.49% <sup>2</sup>	\$2,500 - \$50,000	600	Within 24 hrs <sup>3</sup>	(800) 556-6768 x2009 First US Consumer Lending <a href="mailto:energy@firstus.org">energy@firstus.org</a>
	Pasadena, Covina, Vernon, and the greater San Gabriel Valley	4.99% - 8.10%	\$2,500 - \$30,000	600	Within 24 hrs <sup>3</sup>	(877) 297-4707 PSFCU Lending <a href="mailto:lending@myspsfcu.org">lending@myspsfcu.org</a>
	Tulare County and Madera County <sup>7</sup>	5.62% - 8.12%	\$1,500 - \$50,000	580	Within 24 hrs <sup>3</sup>	(559) 688-5996 x2315 Kiersty Vaughan <a href="mailto:kvaughan@valleyoak.org">kvaughan@valleyoak.org</a>






✓ **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](http://GoGreenFinancing.com)


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

03/19/2021



Table 19. Enrolled SBF Finance Company Product Features

		Small Business Energy Efficiency Financing Program (SBF) Participating Finance Companies			
					
		Equipment finance agreements	Equipment leases, service agreements <sup>1</sup> , and loans	Equipment leases	Energy service agreements
Contact		Josh Patton (281) 902-1969 <a href="mailto:joshpatton@ascantiumcapital.com">joshpatton@ascantiumcapital.com</a> <a href="http://Ascantium.info/GoGreen19">Ascantium.info/GoGreen19</a>	David Ingram (610) 386-5836 <a href="mailto:d Ingram@leasedirect.com">d Ingram@leasedirect.com</a>	David Goldstein (714) 450-1026 <a href="mailto:dgoldstein@alliancefunds.com">dgoldstein@alliancefunds.com</a>	Michael Savage (888) 938-6256 x703 <a href="mailto:msavage@renewep.com">msavage@renewep.com</a>
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 <sup>2</sup>	Progress payments up to 50%, escrow funding up to 90% <sup>2</sup>	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		<ul style="list-style-type: none"> <li>Payments as low as \$29 / month for the first 3 or 6 months of the term</li> </ul>	<ul style="list-style-type: none"> <li>DLL can bill for and collect regular service and maintenance charges for contractor</li> </ul>	<ul style="list-style-type: none"> <li>Cannabis operations may qualify</li> <li>Lease reamortization option after 5 years</li> </ul>	<ul style="list-style-type: none"> <li>Monthly payment is less than the savings, so project results in positive cash flow from day one</li> <li>Ongoing service and maintenance included</li> </ul>
CUSTOMER ELIGIBILITY					
Tenant occupants permitted		✓	✓ <sup>3</sup>	✓ <sup>3 4</sup>	✓
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
<p><sup>1</sup> Service agreements require a minimum of \$50,000 and at least a 36-month term.  <sup>2</sup> Contractors must pass credit check.  <sup>3</sup> If financing term is less than or equal to time remaining on occupancy lease.  <sup>4</sup> Limited to measures not affixed to property.</p>					
					<a href="http://GoGreenFinancing.com">GoGreenFinancing.com</a>
<p>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.</p>					

**Table 20. Enrolled AMF Finance Company Product Features**





## Affordable Multifamily Financing Program Product Features

	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	<ul style="list-style-type: none"> <li>Similar to a lease, but ownership resides with customer throughout term</li> <li>48-hour credit approval</li> </ul>	<ul style="list-style-type: none"> <li>Service payments based on savings</li> <li>Potential off-balance sheet treatment</li> <li>Installation and maintenance included</li> </ul>
Collateral	UCC-1 Fixture Filing, no property lien	UCC-1 Fixture Filing, no property lien
<b>What can be financed*</b>		
Energy efficiency & demand response	✓	✓
Soft costs	✓	✓
Non-energy saving measures	✓	✓
Distributed generation & battery storage	✓	✓
	<b>Josh Patton</b> 281-902-1969 <a href="mailto:joshpatton@ascentiumcapital.com">joshpatton@ascentiumcapital.com</a>	<b>Michael Savage</b> 888-938-6256 x703 <a href="mailto:msavage@renewep.com">msavage@renewep.com</a>

\*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

## Appendix 7: 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 administrator of the Hub, 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 Hub 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

<i>Organization</i>	Concord Servicing Corporation
<i>Duties</i>	The Master Servicer plays a key role in the daily administration of the programs, accepting loan enrollment applications and processing on-bill repayment transactions.
<i>Contract Term</i>	10/22/20 – 7/31/22
<i>Notes</i>	Option for two one-year extensions.

### Trustee Bank

<i>Organization</i>	Zions Bank
<i>Duties</i>	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.
<i>Contract Term</i>	1/1/21 – 12/31/23
<i>Notes</i>	No option for extension.

### Contractor Manager

<i>Organization</i>	Frontier Energy
<i>Duties</i>	The Contractor Manager recruits, enrolls, trains, and supports contractors and conducts quality control oversight of projects not participating in an IOU rebate/incentive program.
<i>Contract Term</i>	6/4/19 – 5/28/21
<i>Notes</i>	Option for a one-year extension.

## Marketing Implementer

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<i>Organization</i>	Center for Sustainable Energy
<i>Duties</i>	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.
<i>Contract Term</i>	10/1/20 – 9/30/22
<i>Notes</i>	The CPUC's Resolution E-5072 approved continued marketing activity for the CHEEF Programs. This contract has an option for a one-year extension.

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## Technical Advisor

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

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<i>Organization</i>	Energy Futures Group (EFG)
<i>Duties</i>	Provides technical assistance for program research development and implementation.
<i>Contract Term</i>	3/13/19 – 3/13/22
<i>Notes</i>	A one-year extension of the contract was approved on 3/10/21.

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## 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](http://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](http://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

The image shows two screenshots from the GoGreenFinancing.com website. The left screenshot is a table titled "Residential Energy Efficiency Loan (REEL) Approved Lenders" with columns for Lending Area, APR, Loan Size, Minimum Credit Score, Pre-Approval, and Contact Info. The right screenshot shows the "Find a contractor" search tool with a search bar, dropdown menus for Service Type and Other Languages, and a Search button.

Lending Area	APR (Variable)	Loan Size	Minimum Credit Score	Pre-Approval	Contact Info
<b>STATEWIDE LENDERS</b>					
Available to borrowers in:					
<b>CALIFORNIA COAST 2016</b>	Anywhere in California	6.38% - 8.88%	\$2,500 - \$50,000	600	Instant pre-approval for qualified borrowers up to \$25,000 (866) 468-4637 C2U Energy Group See Web & Video <a href="http://www.calcoast2016.com">www.calcoast2016.com</a>
<b>Reason Contracting Credit Union</b>	Anywhere in California	5.99% - 7.99%	\$1,500 - \$50,000	640	Within 24 hrs (811) 993-4328, option 3 MCU Consumer Lending <a href="http://www.reasoncu.com">www.reasoncu.com</a>
<b>REGIONAL LENDERS*</b>					
Available to borrowers in:					
<b>RESERVE VALLEYS REEL ENERGY EFFICIENCY LOAN</b>	Inland Empire, Valley, San Bernardino, Kern, Santa Barbara, San Luis Obispo, and parts of Kern and Inyo Counties**	5.26% - 6.01%	\$2,500 - \$50,000	580	Within 24 hrs (949) 743-5457 EAG Bank <a href="http://www.reservevalleys.com">www.reservevalleys.com</a>
<b>EAGLE ENERGY EFFICIENCY LOAN</b>	Orange County	4.99% - 6.99%	\$2,500 - \$50,000	580	Within 24 hrs (949) 639-3818 EAG Bank <a href="http://www.eagleenergy.com">www.eagleenergy.com</a>
<b>FIRST US CONSUMER CREDIT UNION</b>	San Bernardino, Placer, Nevada, El Dorado, Amador, Yuba, Yuba, Sutter, San Joaquin, Siskiyou, Sierra, and Contra Costa counties†	5.99% - 6.49%	\$2,500 - \$50,000	600	Within 24 hrs (833) 556-6764 (TOLL FREE) First US Consumer Lending <a href="http://www.firstus.com">www.firstus.com</a>
<b>Reason Contracting Credit Union</b>	Petaluma, Contra, Yuba, and Georgetown San Joaquin Valley	6.49% - 6.99%	\$2,500 - \$50,000	600	Within 24 hrs (877) 297-4767 PFC 24 LENDING <a href="http://www.reasoncu.com">www.reasoncu.com</a>
<b>Valley Oak</b>	Yuba County and Yuba County	7.45% - 9.55%	\$1,500 - \$50,000	580	Within 24 hrs (530) 688-5966, 42115 NORTH VALLEY <a href="http://www.valleyoak.com">www.valleyoak.com</a>

✓ 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](http://GoGreenFinancing.com)

\* APR is annual percentage rate. Rates are subject to change and may vary. Check with lender for the most up to date rate information. † Only certain business hours. ‡ Repayment requires auto debit (E) membership fee. †† Please see "Reason Valley" website for membership details. ††† Lending and related federal employees throughout the State of California are also eligible. †††† Valley Oak also can lend to select employer groups in Kings and Fresno counties. Please see Valley Oak website for membership details. 9/15/2019

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