



CHEEF
CALIFORNIA HUB FOR
ENERGY EFFICIENCY FINANCING

ENERGY EFFICIENCY FINANCING PROGRAMS

QUARTERLY REPORT & PROGRAM STATUS SUMMARY

FOURTH QUARTER 2023

gogreen
FINANCING™

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

901 P Street
Sacramento, CA 95814
www.treasurer.ca.gov/caeatfa/cheef

...

Please direct questions about the California Hub for Energy Efficiency
Financing Programs to gogreen@treasurer.ca.gov or (916) 651-8157.

Table of Contents

List of Tables	4-5
Introduction	5-6
Regulatory Background	5
Program Names and Public Platform	6
Reporting Updates in Response to D.21-08-006	6
Executive Summary – Q4 2023	7
GoGreen Home Energy Financing Program	8-22
Updates	8
Borrower Demographics	9
Reporting	12
GoGreen Business Energy Financing Program	23-24
Updates	23
GoGreen Affordable Multifamily Financing Program	25
Updates and Challenges	25
Nonresidential Program	26
Marketing and Outreach	27-28
Consumer Marketing	27
Contractor and Stakeholder Outreach	28
CHEEF Infrastructure	29
Contracting Updates	29
Appendices	30-55
Appendix 1: Budget and Expenditures	30
Appendix 2: Loss Reserve Account Beginning and Ending Balances	34
Appendix 3: Impact of the Credit Enhancement	38
Appendix 4: Participating Finance Company Overview	41
Appendix 5: Enrolled Finance Company Product Features	45
Appendix 6: CHEEF Infrastructure	48
Appendix 7: Program Design	49
Appendix 8: Customer-Facing Products	52
Appendix 9: Reporting Requirements	54

List of Tables

Tables 1-21: GoGreen Home Demographics and Reporting	10-23
Table 1: Race & Ethnicity of GoGreen Home Customers (Q3 2016 – Q4 2023)	10
Table 2: Household Income of GoGreen Home Customers (Q3 2016 – Q4 2023)	10
Table 3: GoGreen Home Customer Satisfaction (Q3 2016 – Q4 2023)	11
Table 4: Customer Motivation by Household Income (Q3 2016 – Q4 2023)	11
Table 5: Financing Activity	12
Table 6: Loan Loss Reserve Contributions Metrics	12
Table 7: Loans Enrolled by IOU	12
Table 8: Loan Enrollment Volume (Q3 2016 – Q4 2023)	13
Table 9: Loan Enrollment Volume Comparison (Q4 2021, Q4 2022 and Q4 2023)	13
Table 10: Loan Enrollments by Participating Lender	13
Table 11: Summary of Active Loans by Status through Dec. 31, 2023	14
Table 12: Summary of Charge-Offs, Claims Paid and Recoveries and Net Loss Rate through Dec. 31, 2023	15
Table 13: Interest Rate and Monthly Payment Benefits for Borrowers (Q3 2016 – Q4 2023)	15
Table 14: Borrower Credit Score Metrics (Q3 2016 – Q4 2023)	16
Table 15: Loan Activity by Census Tract Income and CalEnviroScreen Score	17
Table 16: Financing Feasibility Metrics	18
Table 17: Top Energy Efficiency Measures Installed (Q3 2016 – Q4 2023)	18
Table 18: Heat Pump Measures Installed (Q3 2016 – Q4 2023)	18
Table 19: Marketplace Microloan Financing Activity (All Time)	21
Table 20: Marketplace Microloan Enrolled by IOU (Q3 2021 – Q4 2023)	21
Table 21: Marketplace Microloan Borrower Credit Score Metrics (Q3 2021 – Q4 2023)	22
Table 22: Marketplace Microloan Portfolio Summary (Q3 2021 – Q4 2023)	22
Table 23: GoGreen Business Finance Agreement Status by Lender as of Dec. 31, 2023	24
Tables 24-27: CHEEF Budget	30-32
Table 24: Pilot Phase Budget from 2014 through June 30, 2022	30
Table 25: New Incremental Funding for CHEEF Expenditures in “Program Phase” (July 1, 2022 – June 30, 2027)	31
Table 26: Budget for CHEEF “Program Phase” Expenditures (July 1, 2022 – Dec. 31, 2023)	31
Table 27: CHEEF Operating Costs and Expenditures Year Over Year	32
Table 28: TECH Clean California Expenditures and Allocations (through Dec. 31, 2023)	32
Tables 29-33: Account Balances	34-37
Table 29: Balance of IOU Holding Accounts	34
Table 30: Balance of GoGreen Home-Related Accounts	35
Table 31: Balance of GoGreen Home Lender Loss Reserve Accounts	36
Table 32: Balance of GoGreen Business-Related Accounts	37
Table 33: Balance of GoGreen Business Lender Loss Reserve Accounts	37

Table 34: Impact of the Credit Enhancement on Loan Terms by GoGreen Home Lender	39
Table 35: Impact of the Credit Enhancement on Achieving Program Goals	40
Tables 36-38: Participating Financing Company Information	41-44
Table 36: Participating GoGreen Home Lenders	41
Table 37: Participating GoGreen Business Finance Companies	43
Table 38: Participating GoGreen Multifamily Finance Companies	44
Tables 39-41: Enrolled Finance Company Product Features	45-47
Table 39: Enrolled GoGreen Home Lender Product Features	45
Table 40: Enrolled GoGreen Business Finance Company Product Features	46
Table 41: Enrolled GoGreen Multifamily Finance Company Product Features	47
Tables 42-43: Reporting Requirements	54-55
Table 42: CHEEF Program Reporting Requirements from Resolution E-4900, Attachment 1	54
Table 43: CHEEF Program Reporting Requirements from D.21-08-006	55

Introduction

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. Senate Bill 32, passed in 2016, sets the goal of reducing GHG emissions to 40% below 1990 levels by 2030.

With so many headlines about electric vehicles, rooftop solar and other renewables, it is 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 them, 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 in Decision (D.)13-09-044. In its guidance decision, the CPUC acknowledged that EE measures are important tools for addressing greenhouse gas emissions, and that lowering the financial barriers to EE retrofits—particularly in underserved market sectors—is critical to reaching the state’s goals of reduced energy consumption and spreading benefits of energy efficiency to all Californians.

Regulatory Background

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.

The financing programs 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 many Californians to undertake EE retrofits. A key objective is to test whether ratepayer support for credit enhancements can lead to self-supporting EE finance programs in the future.

In D.17-03-026, the CPUC committed to continued funding for CAEATFA to administer the CHEEF Programs through the life of the pilots, and Resolution E-4900 established metrics for evaluating the Programs. In 2020, the Commission issued Resolution E-5072 transitioning the Residential Energy Efficiency Loan Assistance Program (now known as GoGreen Home Energy Financing) from a “pilot” to a “Program” and further clarifying the goals and metrics under which the CHEEF Programs would be evaluated. D.21-08-006 authorized up to \$75.2 million in incremental funding for the CHEEF Programs to support their administration through June 30, 2027, authorized CAEATFA to incorporate non-IOU ratepayer funds to support program expansion into non-IOU customer territories, and imposed new reporting requirements. D.23-08-026 authorized the CHEEF Programs to offer financing for comprehensive energy measures such as EV charging infrastructure and rooftop solar in combination with battery storage. Staff hopes to launch financing for these measures in mid-2024.

This report is prepared in alignment with D.13-09-044 and D.21-08-006, which directs CAEATFA, in conjunction with the IOUs (Pacific Gas & Electric [PG&E], Southern California Edison [SCE], San Diego Gas & Electric [SDG&E] and Southern California Gas [SoCalGas]), to issue quarterly reports on the progress of the CHEEF Programs. These reports contain quarter highlights and other items to keep interested parties informed as to the Programs’ challenges and successes.

Program Names and Public Platform

“GoGreen Financing” is the name of the website and marketing platform that has been used to publicly identify the CHEEF Programs since 2017. In Q2 2021, CAEATFA and its stakeholders began referring to the CHEEF Programs as the GoGreen Financing Programs, and the names of the individual Programs were updated to align with the platform as follows:

- **GoGreen Home Energy Financing**, or **GoGreen Home**, replaced the Residential Energy Efficiency Loan Assistance Program (REEL)
- **GoGreen Business Energy Financing**, or **GoGreen Business**, replaced the Small Business Energy Efficiency Financing Program (SBF)
- **GoGreen Affordable Multifamily Energy Financing**, or **GoGreen Multifamily**, replaced the Affordable Multifamily Energy Efficiency Financing Program (AMF)

Reporting Updates in Response to D.21-08-006

D.21-08-006 requires CAEATFA to report on several new metrics and key performance indicators, as well as those previously outlined in Resolution E-4900. Many of these metrics were already included in [quarterly reports and data summaries](#) prior to D.21-08-006. CAEATFA will continue to report on these metrics.

New metrics, including median loan size, median interest rates, and expanded reporting on geographic distribution of loans and non-energy benefits for borrowers, are now included in quarterly reports, while energy savings are covered in biannual reports. To report on ethnicity and socioeconomic data, CAEATFA has instituted a post-project survey for GoGreen Home and is collecting this data on a voluntary basis from participants.

Please see Appendix 9 for a detailed breakdown of reporting requirements and CAEATFA’s compliance status.

Executive Summary – Q4 2023

Outreach Highlights

- **CAEATFA's Executive Director and staff promoted the programs at multiple events.** Among these were a workforce development event at Lawrence Berkeley National Laboratory; the Building Electrification Summit, where staff served on a plenary panel; a conference of the American Council for an Energy Efficient Economy; the California Efficiency and Demand Council Fall Conference; the Institute of Heating and Air Conditioning Industries' annual trade show; a heat pump summit; and various live events and webinars hosted by lawmakers, chambers of commerce, state agencies and small business advocates.
- **The GoGreen Financing website was relaunched with a new look.** Featuring upbeat illustrations and animation by Studio Jeremyville, the revamped site deploys simplified messaging and a streamlined user journey to convey approachability and ease of use and is the capstone of an ambitious multimedia marketing plan undertaken in 2023 by the Statewide Marketing Implementer.

Regulatory Developments

- **The CAEATFA Board approved modifications to the GoGreen Home program intended to spur more efficient redeployment of loss reserve funding to accommodate the program's accelerating growth.** The modifications, made with lender support, targeted the loss reserve structure and the rebalancing methodology, as well as established the capacity to use external funds for interest rate buy-downs. The modifications are scheduled to take effect Jan. 1, 2024.

GoGreen Home Energy Financing Program Developments

- **GoGreen Home had its strongest quarter in program history, with lenders enrolling 743 standard loans.** Standard loan enrollments over the course of the quarter, worth a combined financed amount of more than \$15.48 million, represent the highest number of loans enrolled and the highest total amount financed in one quarter since the program's inception. Q4 saw an 11.4% increase in the number of loans from Q3 2023 and a 126.5% increase over Q4 2022. The amount financed in Q4 was 13.97% higher than in Q3 2023 and 150% higher than in Q4 2022.
- **CAEATFA welcomed City of Palo Alto Utilities (CPAU) to the GoGreen Home program.** Under the terms of a Memorandum of Agreement signed by the two parties, CPAU will provide funding for credit enhancements, enabling its customers to access financing through GoGreen Home for the first time. The first utility to join the program since its launch in 2016, CPAU could pave the way for other publicly owned utilities to join.

GoGreen Business Energy Financing Program Developments

- **GoGreen Business had its most active quarter in program history, with finance companies enrolling 13 projects representing more than \$974,000.** Previously, the most active quarter saw eight enrollments. The surge in activity brings the total amount financed since the program's inception to just over \$4 million.

GoGreen Home Energy Financing Program

Key GoGreen Home Metrics – Q4 2023 (October 1 - December 31, 2023)

743 New Loans Enrolled	\$20,830 Average Loan Size	\$15.48 million Amount Financed
----------------------------------	--------------------------------------	---

View the latest [monthly data summaries](#) for GoGreen Home.

GoGreen Home Updates

Since Q2 2022, each successive quarter has seen GoGreen Home loan enrollments outpace those of the previous quarter in number and volume. Q4 2023 was no exception. Following steady growth through six quarters, GoGreen Home lenders enrolled 743 new standard loans worth \$15.48 million, with an average project size of \$20,830. The number of Q4 loan enrollments represents an 11.4% increase compared with Q3 2023 and a 126.5% increase compared with Q4 2022, making it the highest number financed in a single quarter since the program's inception. The dollar amount financed during the quarter represents a 13.97% increase compared with Q3 and a 150% increase compared with Q4 one year ago and is the largest dollar amount financed in a single quarter. Since the program's inception in 2016, GoGreen Home has financed 4,923 standard loans at a combined value of \$93.04 million. GoGreen Home closed the quarter with eight participating lenders offering standard loans.

In Q4, 197 of the 743 projects enrolled (27%) included heat pump technologies, which support the State's efforts to decarbonize. This was the highest number of heat pump projects installed in one quarter during the program's history, and 5.9% higher than the number of heat pumps installed in Q3 2023.

While the majority of heat pump loans were supported by IOU credit enhancement funds, 46 of the 197 (23%) were supported through a partnership between CAEATFA and the TECH Clean California Initiative that allows joint IOU gas/POU electric customers to finance heat pumps and other eligible electric measures through their GoGreen Home loan without the fuel source restrictions they previously faced. Of the 46 loans that were credit enhanced, in part or in full, by TECH, 39 were TECH-only projects, meaning they could not have been financed through the program without TECH support. During Q4 CAEATFA staff took steps to preserve the availability of TECH credit enhancement dollars for decarbonization projects by excluding cool roofs from the list of measures that joint IOU gas/POU electric customers may finance.

Channel partners Lewis & Clark Bank and Enervee enrolled 197 new marketplace microloans representing \$306,290 in financing for energy-efficient appliances over the course of the quarter. Activity was on par with the Q3 total of 195 microloans representing \$318,000 in financing. There is no Q4 2022 comparison available, as marketplace microloan enrollments were paused between June 2022 and June 2023. Microloans are currently available to customers of Southern California Gas and Southern California Edison and customers who receive electric service from Pacific Gas & Electric and San Diego Gas & Electric.

Building on authorization from the CPUC to seek non-IOU ratepayer funding for the program (D. 21-08-006), in Q4, CAEATFA signed a Memorandum of Agreement with the City of Palo Alto Utilities (CPAU) to provide funding

for GoGreen Home credit enhancements. While CPAU serves a modest geographic area, it is the first non-IOU utility to join the program and therefore represents a potential growth area for the program.

Amid a year of accelerating activity for GoGreen Home and a continued low rate of charge-offs, CAEATFA took measures to extend the funding available for credit enhancements by modifying the loan loss reserve contribution structure. By reducing the contribution for lower-risk loans while continuing to offer robust contributions for higher-risk loans, staff projects the new structure will result in an average LLR contribution of 7.8% compared with the historic program average of 15.8%. This change, along with a new annual rebalancing methodology, will allow GoGreen Home to recycle and deploy credit enhancement dollars more efficiently and for more loans in the future, thereby extending their impact. The modifications are set to take effect Jan. 1, 2024.

Following CPUC authorization in August 2023 (D. 23-08-026) to allow financing of clean energy technologies, CAEATFA staff worked with the Technical Advisor in Q4 to identify new eligibility measures including rooftop solar in combination with battery storage, battery storage in cases where rooftop solar already exists, and EV charging equipment.

GoGreen Home Borrower Demographics

Total Surveys Sent	Total Number of Responses & Response Rate	Number & Rate of Very Satisfied + Satisfied
3783 – All time¹	491 (12.98%)	462 (94.09%)

During Q4, CAEATFA staff continued to survey customers with enrolled GoGreen Home loans to gather customer data as required by the CPUC in Decision 21-08-006. The GoGreen Home Post Project Survey gathers demographic and socioeconomic data, as well as information on project motivation and satisfaction, that will inform marketing efforts. The survey is sent within six weeks of loan enrollment to all customers who provide an email address on the borrower form. Participation in the survey is voluntary.

Of the customers who have responded to the survey since its launch in Q1 2023, more than half (57%) have identified as White or Caucasian, while 15% have identified as Hispanic/Latino, 6% as Asian or Asian American, and 5% as Black or African American. Nearly one-quarter (24%) of respondents have reported household income of \$100,000-\$149,000; a total of 32% reported income of under \$100,000, while 27% reported income above \$150,000. Many respondents declined to provide race or income information.

Of 491 respondents surveyed thus far, representing a 12.98% response rate, 462 (94.09%) described themselves as “very satisfied” or “satisfied” with the program when asked, “Overall, how satisfied are you with your GoGreen Home experience?” Updating old equipment and saving on energy bills are the most commonly cited motivations for undertaking a GoGreen Home project.

¹ The GoGreen Home Post Project Survey launched in Q1 2023 with an initial survey of customers of GoGreen Home’s predecessor program, the Residential Energy Efficiency Loan (REEL) Assistance Program, from inception in Q3 2016 through Q3 2021, when the program name changed. In Q2 2023, staff issued a survey of GoGreen Home borrowers from Q4 2021 through Q1 2023 before establishing a monthly cadence.

Table 1: Race & Ethnicity of GoGreen Home Customers, Q3 2016–Q4 2023

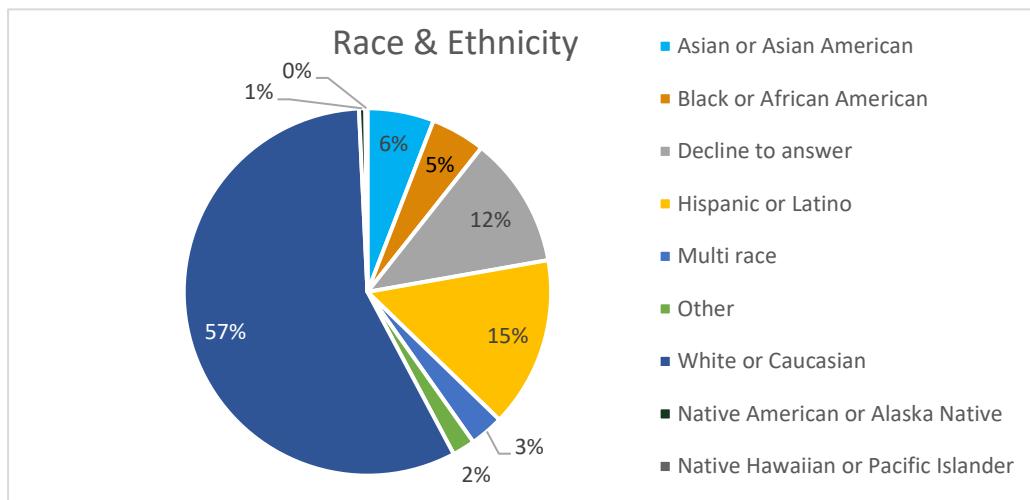


Table 2: Household Income of GoGreen Home Customers, Q3 2016 – Q4 2023

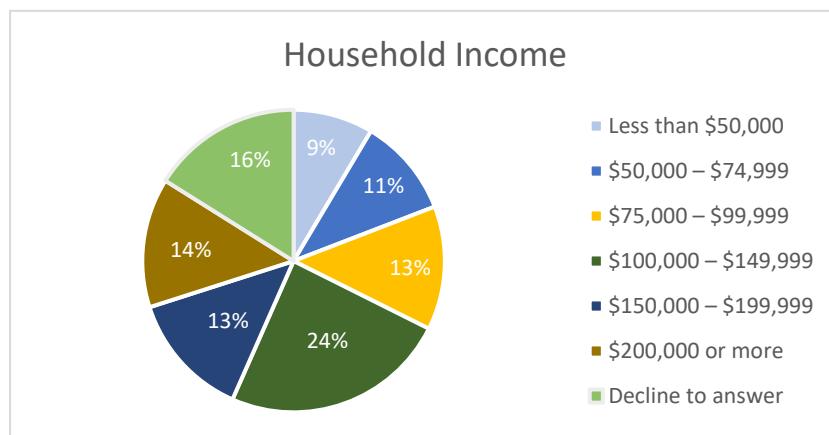
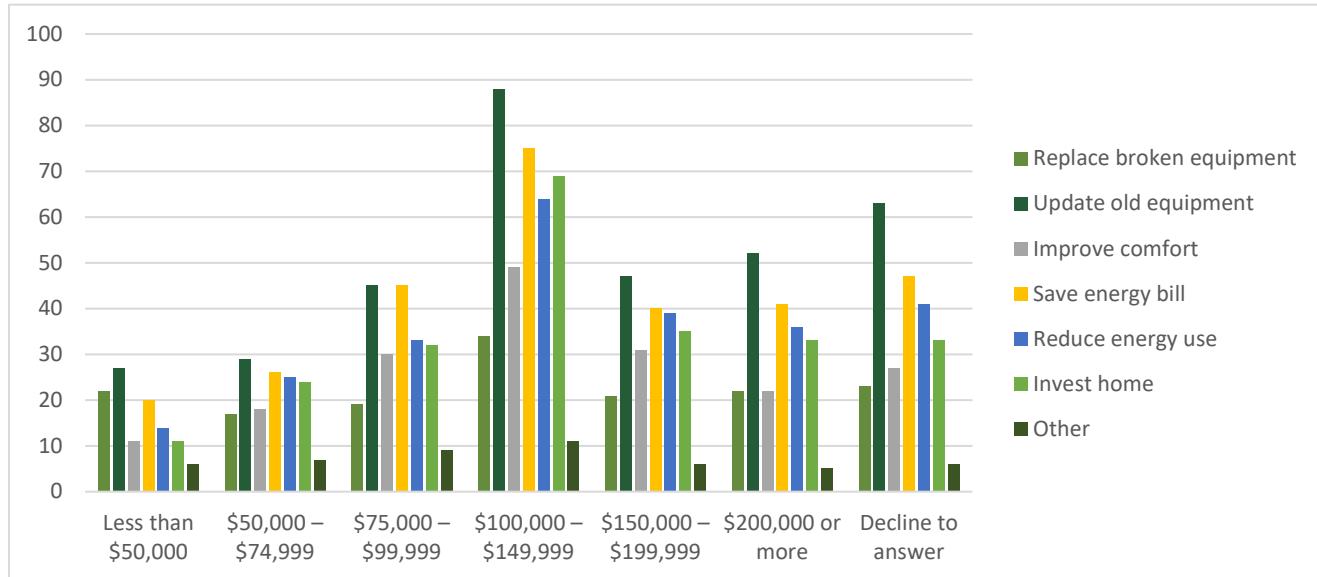


Table 3: GoGreen Home Customer Satisfaction, Q3 2016 – Q4 2023



Table 4: Customer Motivation by Household Income, Q3 2016 – Q4 2023



For information about GoGreen Home program structure and eligibility, see Appendix 7.

GoGreen Home Reporting

Data reported on pages 12-20 represents standard GoGreen Home loans enrolled through the eight participating credit union lenders. For data on marketplace microloans, see pages 21-22.

Project Enrollment and Activity Data

Table 5: GoGreen Home Financing Activity

	Q4 2023		All Time ²	
Loans Enrolled	743		4,923	
Total Amount Financed	\$15.48 million		\$93.04 million	
	Average	Median	Average	Median
Loan Size	\$20,830	\$19,000	\$18,899	\$16,408
Term Length in Months	119	120	109	120
Interest Rate³	5.25%	4.99%	5.10%	4.99%
Finance-Only Projects⁴	85%		86%	

Table 6: GoGreen Home Loan Loss Reserve Contributions Metrics

	Q4 2023	All Time
Total Loan Loss Reserve Contributions⁵ <i>All contributions made by CAEATFA to loan loss reserve accounts for all enrolled standard loans.</i>	\$2,575,017	\$14,873,689
Average Loan Loss Reserve Contribution <i>The average contribution made by CAEATFA to a loan loss reserve account upon standard loan enrollment.</i>	\$3,466 per loan	\$3,021 per loan
For every \$1 of ratepayer-funded credit enhancement, the amount of private capital leveraged is:	\$6.01	\$6.26

Table 7: GoGreen Home Loans Enrolled by IOU⁶

Utility	Loans Enrolled	
	Q4 2023	All Time
Pacific Gas & Electric	568 (\$11.72 million)	3,532 (\$64.41 million)
San Diego Gas & Electric	58 (\$1.14 million)	274 (\$5.20 million)
Southern California Edison	102 (\$2.09 million)	999 (\$19.74 million)
Southern California Gas	113 (\$2.54 million)	1131 (\$24 million)

² The date of Program inception is marked by the first loan enrollment in GoGreen Home (July 2016).

³ GoGreen Home interest rates are currently equivalent to the Annual Percentage Rate (APR) as no additional fees, such as origination fees, are charged by participating lenders for these loans. Some lenders charge a membership fee, which tends to be around \$5 and is de minimis for reporting APR.

⁴ Cases in which a borrower made upgrades using GoGreen Home without a rebate or incentive.

⁵ These contributions include those from IOU ratepayer funds as well as external funding sources, including funds from TECH Clean California.

⁶ Some properties are served by more than one IOU, meaning the total of loans enrolled per IOU will not match the total number of loans enrolled. Loans enrolled by IOU are reported regardless of what measures are installed.

Table 8: GoGreen Home Loan Enrollment Volume (Q3 2016 – Q4 2023)

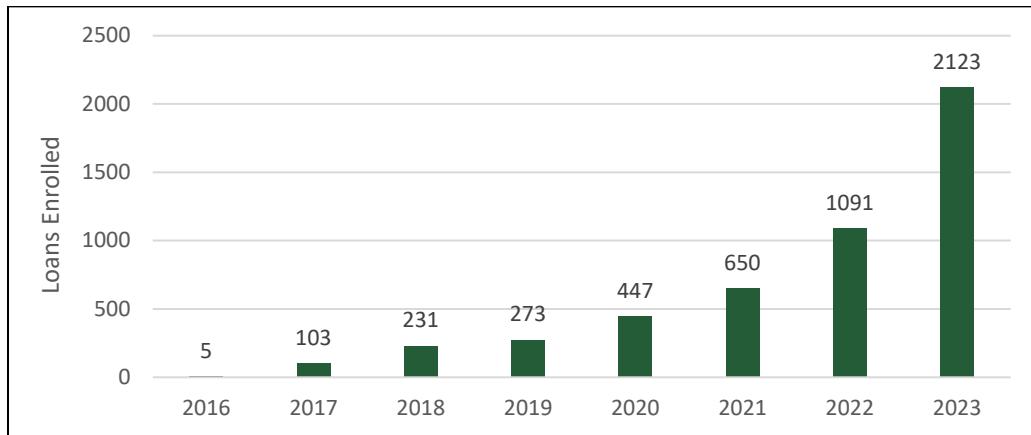


Table 9: GoGreen Home Loan Enrollment Volume Comparison (Q4 2021, Q4 2022 and Q4 2023)

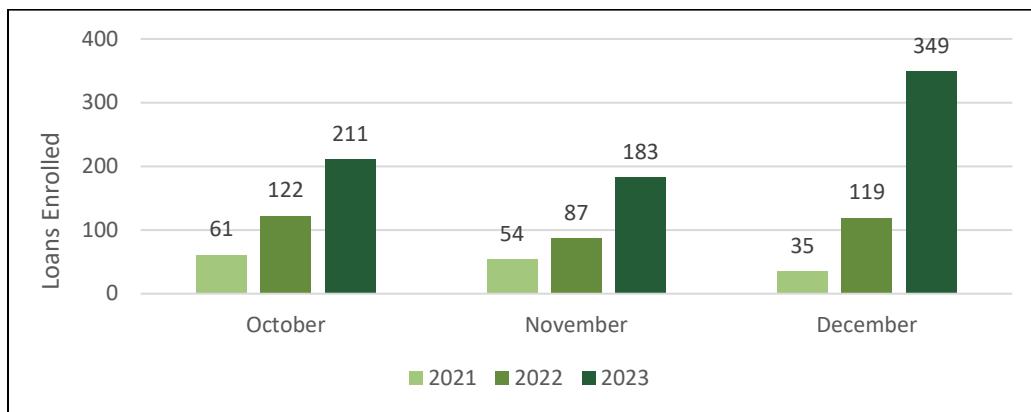


Table 10: GoGreen Home Loan Enrollments by Participating Lender

Lender	Loans Enrolled		Total Amount Financed <i>in thousands</i>	
	Q4 2023	All Time	Q4 2023	All Time
California Coast Credit Union	245	2,012	\$5,145	\$37,945
Desert Valleys Federal Credit Union	7	69	\$152	\$1,212
Diablo Valley Federal Credit Union	0	0	\$0	\$0
Eagle Community Credit Union servicing loans only as of Q1 2023	0	12	\$0	\$210
First US Community Credit Union	109	970	\$1,933	\$15,947
Matadors Community Credit Union	62	724	\$1,319	\$15,182
Pasadena Service Federal Credit Union	1	4	\$16	\$72
Travis Credit Union	318	1092	\$6,893	\$21,870
Valley Oak Credit Union	1	40	\$18	\$601
	743	4,923	\$15,477	\$93,038

Financing Data and Loan Portfolio Report

Table 11: Summary of Active GoGreen Home Loans by Status through December 31, 2023

	Number of Loans	Original Total Principal Amount	Outstanding Total Principal Amount
Paid in Full	907	\$14,129,524	\$0
California Coast Credit Union	525	\$7,790,202	\$0
Desert Valleys Federal Credit Union	15	\$183,774	\$0
Eagle Community Credit Union	6	\$123,792	\$0
First US Community Credit Union	99	\$1,415,590	\$0
Matadors Community Credit Union	187	\$3,509,250	\$0
Pasadena Service Fed. Credit Union	1	\$19,319	\$0
Travis Credit Union	63	\$963,236	\$0
Valley Oak Credit Union	11	\$124,360	\$0
Current	3931	\$77,490,942	\$65,637,763
California Coast Credit Union	1435	\$29,295,876	\$24,000,474
Desert Valleys Federal Credit Union	51	\$980,317	\$780,615
Eagle Community Credit Union	6	\$86,556	\$53,971
First US Community Credit Union	867	\$14,483,260	\$11,943,356
Matadors Community Credit Union	518	\$11,340,349	\$9,280,522
Pasadena Service Fed. Credit Union	3	\$52,378	\$39,303
Travis Credit Union	1025	\$20,824,828	\$19,274,928
Valley Oak Credit Union	26	\$427,377	\$264,595
30 DPD	14	\$232,896	\$198,537
California Coast Credit Union	5	\$62,625	\$42,760
Desert Valleys Federal Credit Union	1	\$5,500	\$3,578
Matadors Community Credit Union	5	\$119,247	\$112,965
Travis Credit Union	2	\$35,593	\$33,240
Valley Oak Credit Union	1	\$9,931	\$5,994
60 DPD	4	\$71,449	\$56,348
California Coast Credit Union	2	\$45,744	\$32,860
First US Community Credit Union	2	\$25,705	\$23,488
90 DPD	1	\$8,398	\$6,141
California Coast Credit Union	1	\$8,398	\$6,141
120 DPD	1	\$30,860	\$30,647
Travis Credit Union	1	\$30,860	\$30,647
Total	4923	\$93,037,529	\$65,952,300

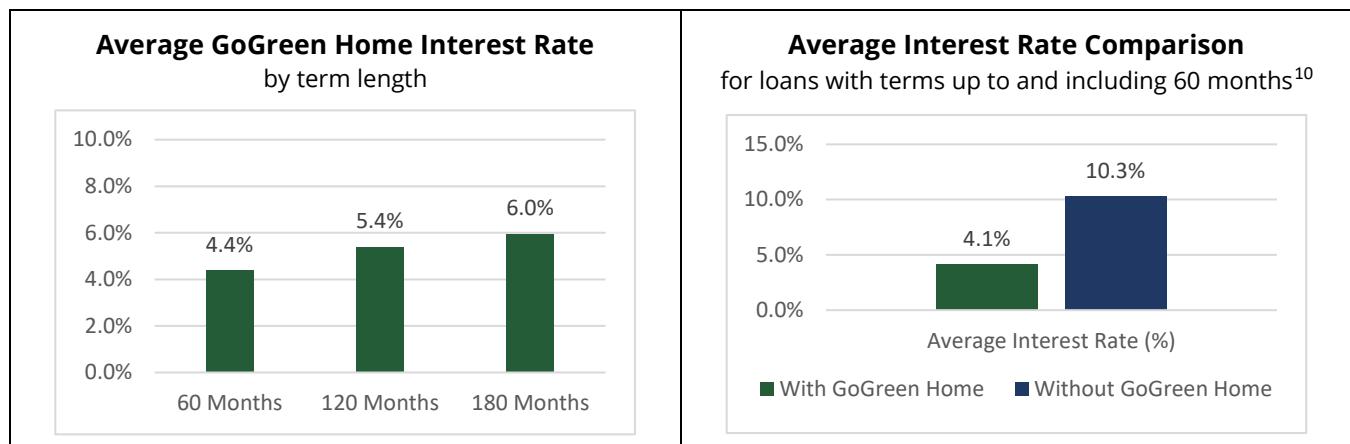
Table 12: Summary of GoGreen Home Charge-Offs, Claims Paid, Recoveries and Net Loss rate through December 31, 2023

	Number of Loans	Charge-Off Amount at Time of Claim	Claims Paid ⁷	Recoveries Paid to Program
Charged-Off	65	\$941,862	\$715,675	(\$102,042)
California Coast Credit Union	44	\$662,350	\$482,640	(\$102,042)
First US Community Credit Union	2	\$21,527	\$19,375	\$0
Matadors Community Credit Union	14	\$175,568	\$158,011	\$0
Valley Oak Credit Union	2	\$28,132	\$25,318	\$0
Desert Valleys Federal Credit Union	2	\$39,853	\$17,342	\$0
Travis Credit Union	1	\$14,432	\$12,988	\$0

Cumulative Net Loss Rates by Years of Seasoning (Standard Loans)⁸						
Seasoned 0 Years	Seasoned 1 Year	Seasoned 2 Years	Seasoned 3 Years	Seasoned 4 Years	Seasoned 5 Years ⁹	Seasoned 6 Years
0.26%	0.83%	1.38%	2.92%	3.60%	4.72%	0.90%

Net Credit Enhancement Funds Expended (Claims Paid minus Recoveries Paid to Program)	\$613,633
---	------------------

Table 13: Interest Rate and Monthly Payment Benefits for GoGreen Home Borrowers (Q3 2016 – Q4 2023)



⁷ Through GoGreen Home, 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 GoGreen Home Lenders were paid on the claim.

⁸ CAEATFA has adjusted loss rate reporting to align with methodology used by the State and Local Energy Efficiency Action Network (SEE Action) in their 2021 report: *Long-Term Performance of Energy Efficiency Loan Portfolios*. Prepared by: Jeff Deason, Greg Leventis, and Sean Murphy of Lawrence Berkeley National Laboratory. “The **cumulative gross loss rate** is the total dollars charged off after some number of years for loans originated at least that long ago (but not past their term) as a share of the original balance of those loans.” The Cumulative Net Loss Rates shown here are calculated for each year of seasoning (i.e., how much time has passed since the program issued the loan), and reflect recoveries made after charge-off, for all standard loans.

⁹ Vintages are pooled by the fiscal year that financings enrolled in the Program. Charge-offs of any of the 25 loans enrolled in the vintage for the first fiscal year of the Program (FY 16-17) can disproportionately affect the Cumulative Net Loss Rate for that period.

¹⁰ These charts compare interest rates between GoGreen Home loans and the equivalent non-GoGreen Home signature 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-GoGreen Home loans.

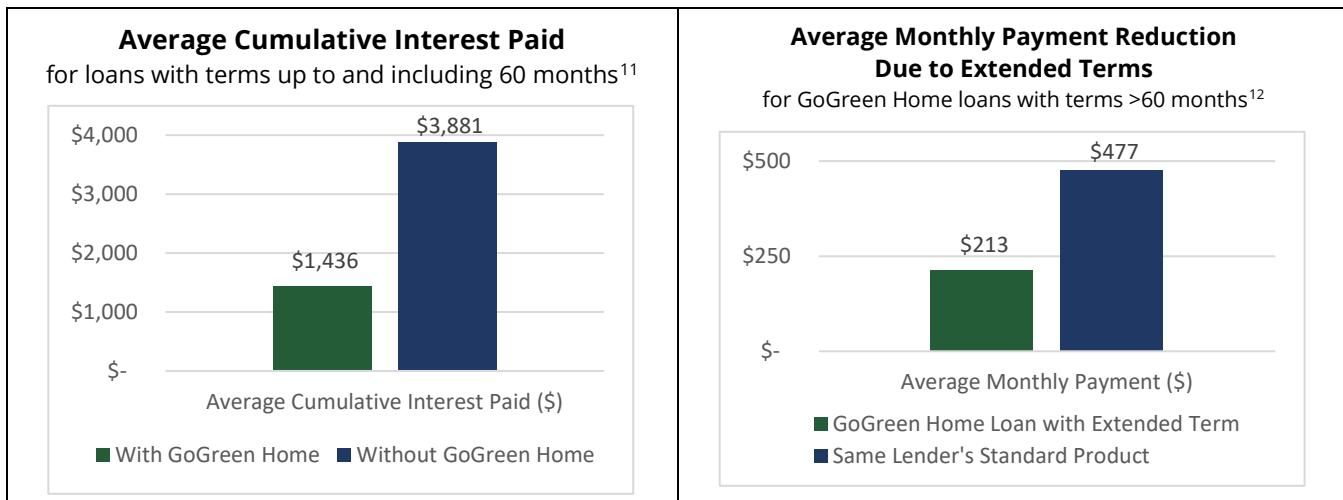
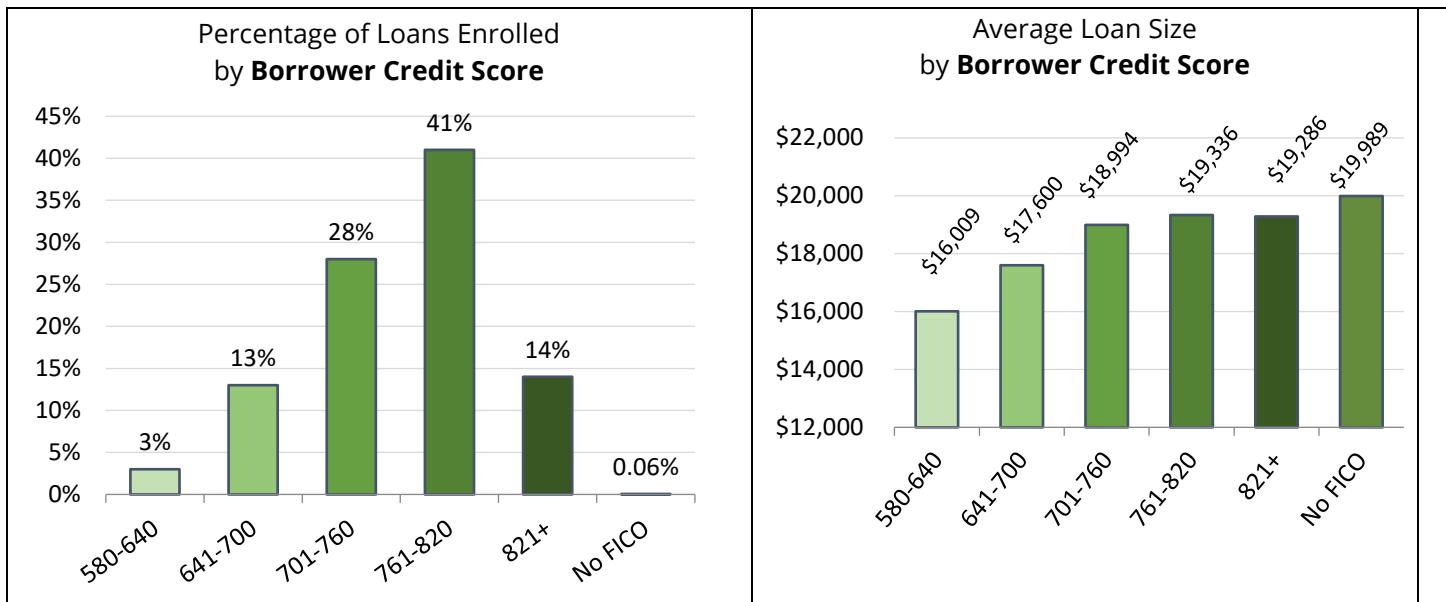


Table 14: GoGreen Home Borrower Credit Score Metrics (Q3 2016 – Q4 2023)

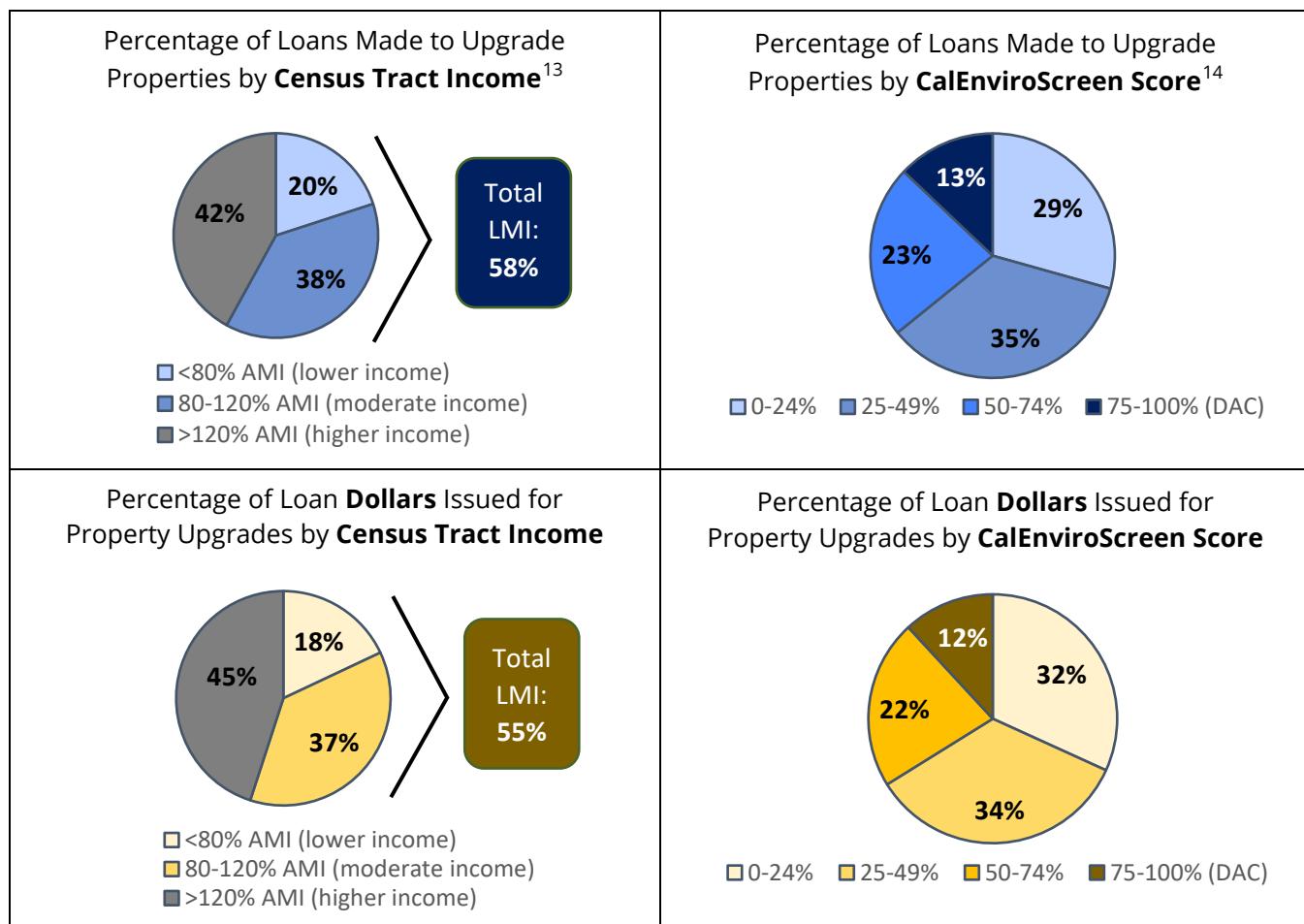


¹¹ These charts compare actual interest rates between GoGreen Home loans and the interest rates of equivalent non-GoGreen Home signature products offered by the Program's participating lenders (as reported by the lenders to CAEATFA), using a data set for loans with terms up to 60 months for borrowers who would have qualified for non-GoGreen Home loans.

¹² This chart compares monthly payments between GoGreen Home loans with terms greater than 60 months and what monthly payments would have been if the borrower had used the same lender's non-GoGreen Home signature product limiting them to shorter term lengths. Loans from one participating lender who currently offers signature products with terms greater than 60 months are excluded from this comparison. Signature product terms from participating lenders are updated quarterly.

How GoGreen Home Serves the Underserved

Table 15: Loan Activity by Census Tract Income and CalEnviroScreen Score



¹³ Low-to-Moderate Income (LMI) census tracts, for the purpose of this reporting and providing a 20% loss reserve contribution for the lender, includes tracts with median income that falls below 120% of the Area Median Income (AMI).

¹⁴ [CalEnviroScreen](#) is a pollution burden mapping tool that uses environmental, health, and socioeconomic data to produce scores for every census tract in California; CAEATFA is reporting loans for properties in tracts scoring in the top quartile (75-100%) as loans for projects in disadvantaged communities (DACs). This data uses the most recent version of CalEnviroScreen available at the time of publication.

Table 16: GoGreen Home Financing Feasibility Metrics

Access to Credit: Borrower Credit Score of 580-640 Lenders typically require borrowers to have a minimum credit score of around 640 for unsecured loans of any significant value. Through GoGreen Home, lenders are able to approve loans for borrowers with credit scores as low as 580.	Loans Enrolled to Borrowers with <640 Credit Score	
	13 Q4 2023	156 All Time

Affordable Monthly Payments: Term Lengths >5 Years The vast majority of lenders typically offer a maximum term length of 5 years for unsecured loans. Through GoGreen Home, lenders are able to extend terms out to 15 years, which significantly lowers monthly payments for borrowers.	Loans Enrolled to Borrowers with Term Lengths >5 Years	
	498 Q4 2023	3,027 All Time

Access to Capital: Loan Amounts >\$25,000 Sufficient access to capital is needed for deeper energy retrofits. While lenders typically limit unsecured loans to about \$25,000, most lenders are able to offer up to \$50,000 for all borrowers through GoGreen Home.	Loans Enrolled to Borrowers with Total Financed Amount >\$25,000	
	197 Q4 2023	1,008 All Time

Measures Installed

Table 17: Top Energy Efficiency Measures Installed through GoGreen Home (Q3 2016 – Q4 2023)

 HVAC Equipment 3,246 Projects	 Windows 906 Projects	 HVAC Ductwork 726 Projects	 Insulation 544 Projects	 Cool Roofs 840 Projects
--	---	---	--	--

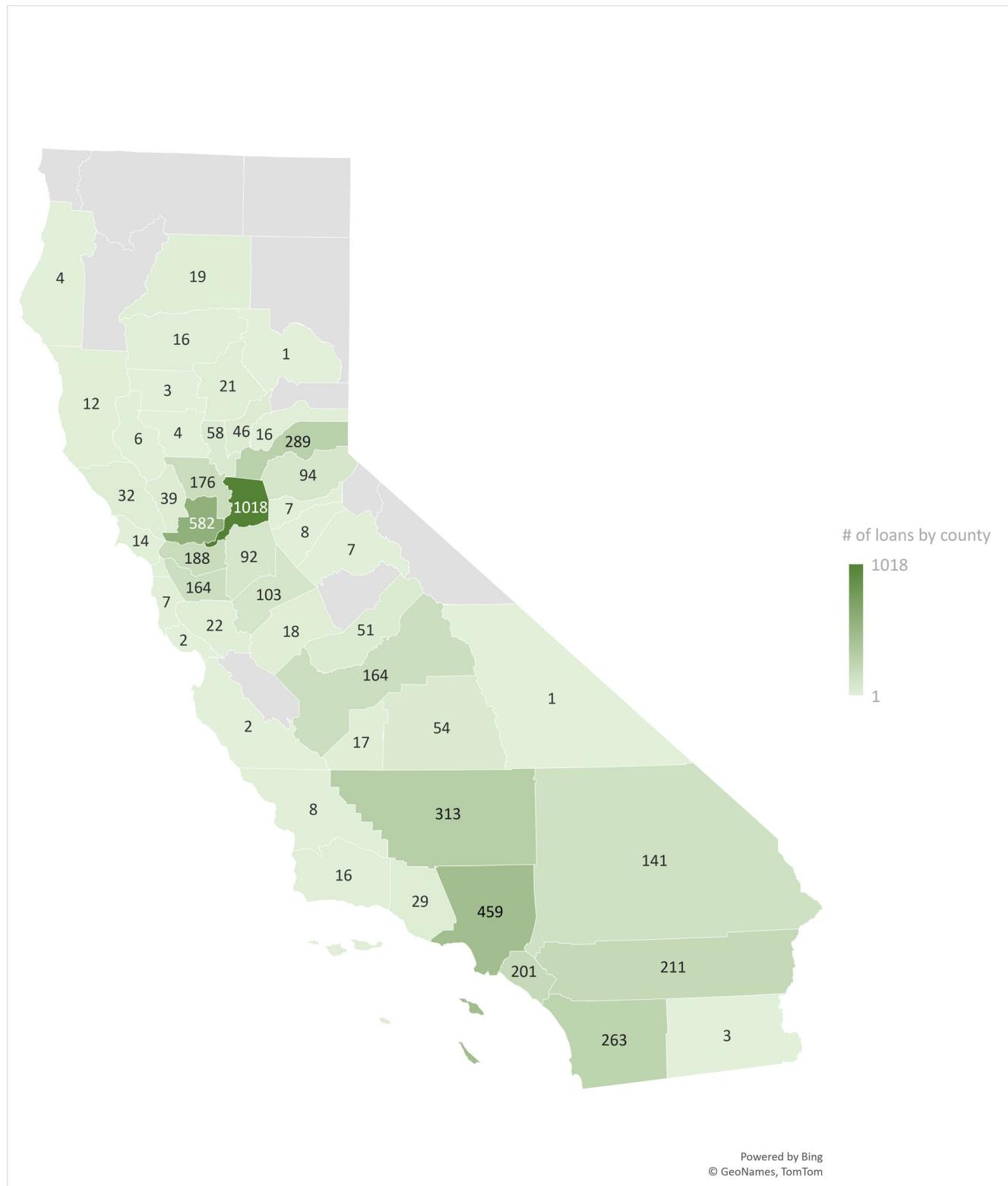
Table 18: Heat Pump Measures Installed through GoGreen Home (Q3 2016 – Q4 2023)

 Heat Pumps			
Space Heating		Water Heating	
188 Projects Q4 2023	956 Projects All Time	21 Projects Q4 2023	114 Projects All time

Maps

Map of GoGreen Home Loans Enrolled by County (Q3 2016 – Q4 2023)

Of the 10 counties where GoGreen Home has enrolled 0 loans, IOU service is limited or nonexistent in eight: Alpine, Del Norte, Lassen, Modoc, Mono, Sierra, Siskiyou, and Trinity.

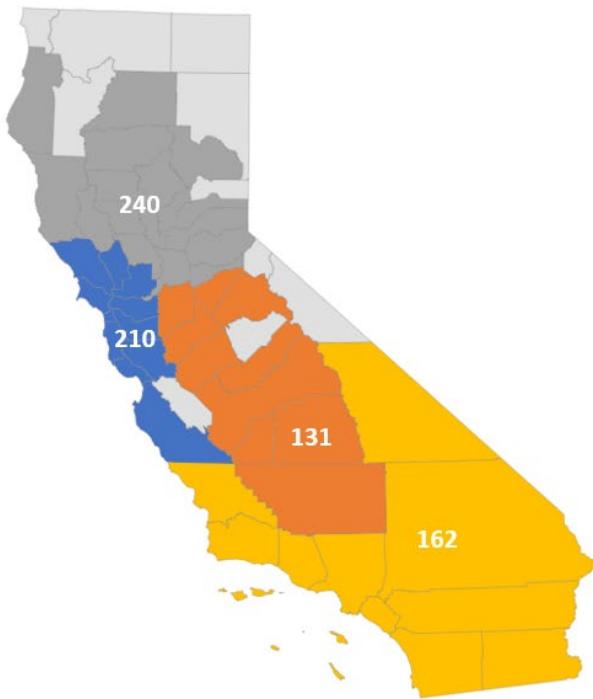


Maps of GoGreen Home Loans Enrolled by Region (Q3 2016 – Q4 2023)

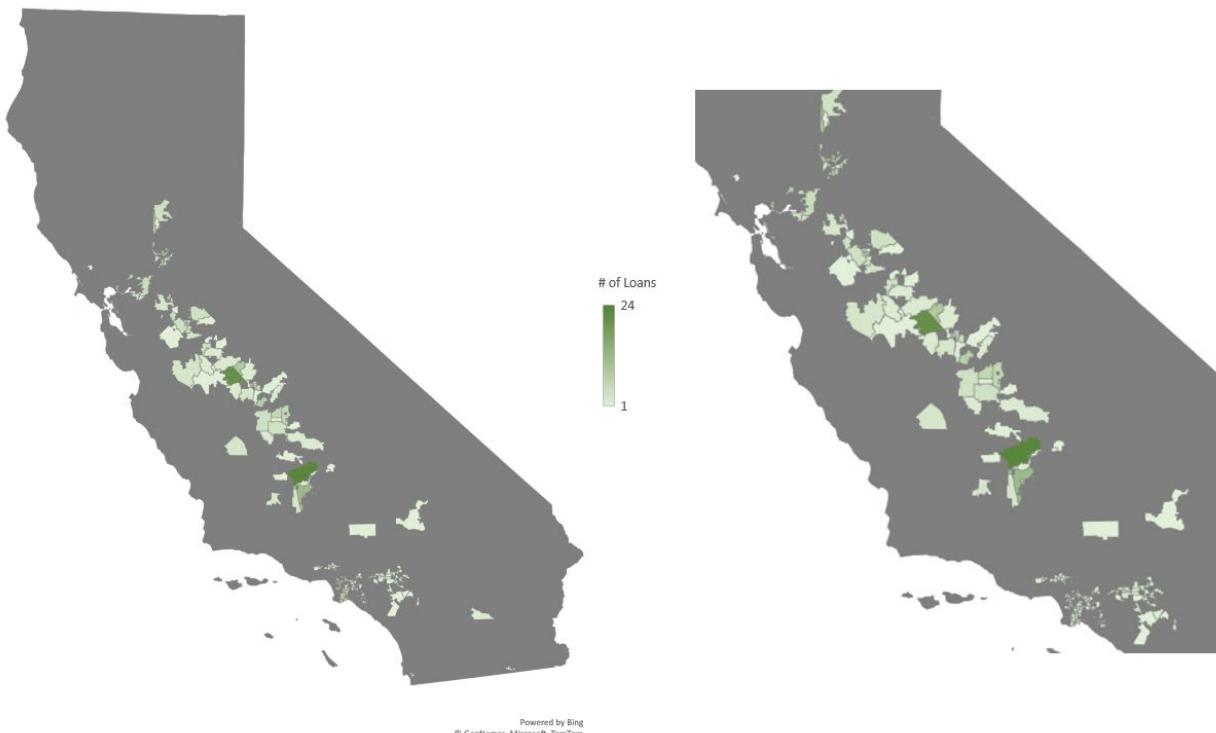
Loans by Region (Q3 2016 – Q4 2023)



Loans by Region (Q4 2023)



Map of GoGreen Home Loans for Properties in Disadvantaged Communities¹⁵ by Zip Code (Q3 2016 – Q4 2023)



¹⁵ For reporting purposes, CAEATFA considers properties in zip codes in the top quartile (75-100%) of CalEnviroScreen scores to be disadvantaged communities (DACs). This data uses the most recent version of CalEnviroScreen available at the time of publication.

Marketplace Microloan Reporting

This section reports on microloans enrolled by Enervee and its lender partners through the utility marketplaces. Microloans, per the GoGreen Home regulations, are limited to \$5,000, and are reported separately so as not to skew data presented for full-size (“standard”) loans.

Between Q3 2021 and Q2 2022, Enervee and One Finance offered a product with a 60-month term length and a single interest rate of 9.02% for customers making purchases on the SoCalGas utility marketplace.¹⁶ In Q2 2022, Enervee paused microloan financing in order to onboard a new lender to replace One Finance; activity resumed in Q2 2023 with Lewis & Clark Bank. Together Enervee and Lewis & Clark offer a 60-month term with a single interest rate of 9.99% for borrowers making purchases on the SoCalGas utility marketplace; additionally, customers who receive electricity from PG&E, SCE and SDG&E may finance appliances through Eco Financing. In Q4 2023, 197 microloans were enrolled for an all-time total of 959.

Table 19: Marketplace Microloan Financing Activity (All Time)

Microloans Enrolled	959 ¹⁷		
Total Amount Financed	\$1,473,507		
Loan Size	\$1,537 <i>Average</i>	\$1,272 <i>Median</i>	
Borrower Relationship to Property	611 <i>Owners</i>	348 <i>Renters/Lessees</i>	
Total Loan Loss Reserve Contributions	\$276,351		
Average Loan Loss Reserve Contribution	\$288 per microloan		
Top 3 Appliances Purchased	352 <i>Dryer</i>	262 <i>Washer</i>	214 <i>Refrigerator</i>

Table 20: Marketplace Microloan Enrolled by IOU

Utility	Loans Enrolled	
	Q4 2023	All Time
Southern California Edison	164 (\$262,571)	375 (\$631,276)
Southern California Gas	33 (\$43,719)	584 (\$842,231)

¹⁶ One Finance’s offer of marketplace microloans ended in June 2022. Enervee’s loan enrollments resumed in June 2023 through a new lender, Lewis & Clark Bank.

¹⁷ As part of this financing option, customers may return their appliance within the supplier’s return window. In the event of a return, their debt obligation becomes cancelled, and therefore the total number of microloans reported as enrolled each month will include a small percentage of loans that will be cancelled. CAEATFA processes these removals on an ongoing basis as needed, and the “All Time” totals reflect any previously enrolled loans that have since been cancelled.

Table 21: Marketplace Microloan Borrower Credit Score Metrics (Q3 2021 – Q4 2023)

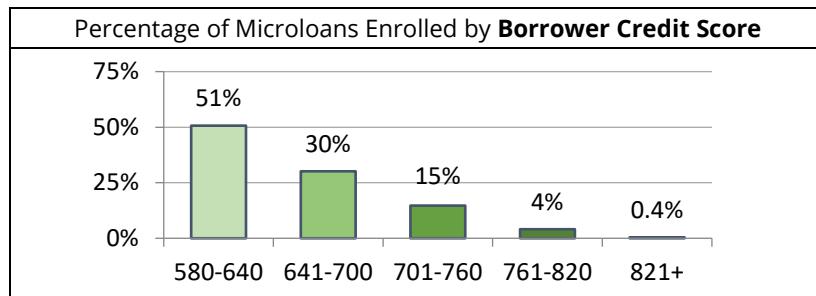


Table 22: Marketplace Microloan Portfolio Summary (Q3 2021 – Q4 2023)

Marketplace Microloan Portfolio Summary as of December 31, 2023		
Paid in Full	119 Loans	\$151 K
Current Outstanding ¹⁸	574 Loans	\$714 K
30-60 Days Past Due	50 Loans	\$63 K
90-120 Days Past Due	62 Loans	\$82 K
Charged Off	154 Loans	\$178 K

¹⁸ Reflects the outstanding, unpaid principal balance for the 574 microloans.

GoGreen Business Energy Financing Program

Key GoGreen Business Metrics – Program Inception through Q4 2023

13 Projects Enrolled in Q4	\$974,534 Amount Financed in Q4	14 Financing Agreements Pre-Approved ¹⁹	\$2.05 million Total Amount Pre-Approved for Financing
39 Total Projects Enrolled	\$4.04 million Total Amount Financed	150 Enrolled Contractors and Project Developers	8 Enrolled Finance Companies

[View the GoGreen Business quarterly data summaries.](#)

GoGreen Business Updates

Thirteen new projects, representing nearly \$975,000 in upgrades, were enrolled in GoGreen Business during Q4, bringing the total amount financed since program inception in 2019 to \$4.04 million. It was the busiest quarter in program history; previously, the most active quarter saw eight project enrollments. The quarter closed with 14 preapproved financing agreements representing \$2.05 million in projects; these are anticipated to be completed and enrolled in future quarters.

The Go Low Rates marketing promotion, or “Go Low,” which offers an interest rate buy-down (IRBD) for projects financed by one of the promotion’s three participating lenders, continued driving activity in Q4, with 6 projects reserving IRBD funds over the course of the quarter. Through Go Low, up to \$10,000 is available to buy down interest rates for eligible projects; depending on project size and at the lender’s discretion, this can result in 0% interest financing.

With OBR functionality currently available in three of the four IOU service areas (SCE, SoCalGas and SDG&E), staff continued to coordinate with PG&E on finalizing the tariff governing OBR availability in the utility’s service area. CAEATFA staff hopes to launch OBR in PG&E territory in 2024.

Following CPUC approval of CAEATFA’s request to finance comprehensive clean energy measures, CAEATFA staff worked with the Technical Advisor during Q4 to identify new measures such as rooftop solar with battery storage, EV charging, and anaerobic digesters, with an eye toward launching in mid-2024.

¹⁹ Projects that have been pre-approved for GoGreen Business have passed a preliminary evaluation and are expected to be enrolled in the program after further development, installation, and review.

Table 23: GoGreen Business Finance Agreement Status by Lender as of December 31, 2023

	Finance Agreements Enrolled	Total Amount Financed
Accessity²⁰	0	\$0
Alliance Funding Group	0	\$0
Ascentium Capital	14	\$899 K
DLL Financial Solutions Partner	5	\$1,226 K
Prime Capital Funding	0	\$0
Renew Energy Partners	0	\$0
Travis Credit Union	0	\$0
Verdant Commercial Capital	20	\$1,914 K
	39	\$4,039K

For information about GoGreen Business program structure and eligibility, see Appendix 7.

²⁰ Accessity enrolled in GoGreen Business as a Participating Finance Company in Q2 2021. Accessity planned to offer loans through the Program via SDG&E's Small Commercial Program, operated by Willdan. However, in Q1 2022, the SDG&E program was closed due to low activity. CAEATFA staff are discussing alternate options for a GoGreen Business product offering with Accessity.

GoGreen Affordable Multifamily Energy Financing Program

GoGreen Multifamily Updates and Challenges

Since launching the program in Q2 2019, staff has worked diligently with affordable multifamily property owners and program partners to identify and overcome barriers, within the allowable framework of CPUC Decisions, to undertaking energy upgrades. To date, no projects have been enrolled in the GoGreen Multifamily program.

In Q4 2022 staff began exploring options for incorporating energy financing for affordable multifamily properties into the GoGreen Business program, which already serves market-rate properties, in order to streamline administration and simplify messaging, while continuing to serve both the affordable and market-rate multifamily sectors. As part of this effort, in Q4 2023, staff confirmed willingness by three additional GoGreen Business-enrolled lenders to offer financing for affordable multifamily properties, and created a new lender chart reflecting the terms of all five finance companies: Ascentium Capital, DLL, Prime Capital, Renew Energy Partners, and Verdant Commercial Capital (see Table 40).

Concurrently with these efforts, staff has continued to maintain communications with program partners to work toward facilitating projects.

For information about GoGreen Multifamily program structure and eligibility, see Appendix 7.

Nonresidential Program

The Nonresidential Program was originally authorized in 2013 as an OBR program for large commercial and public buildings, with no credit enhancement. The launch of this program was thus dependent upon the development of OBR functionality, a complex feature that took several years to develop and was made available in 2022. However, D.17-03-026 from the CPUC required all CHEEF programs to be launched by the end of 2019, at which time OBR was not yet developed. The Nonresidential Program was effectively canceled at that point.

In Q2 2022, as part of the Clean Energy Financing Proceeding (R.20.08.022), CAEATFA formally requested that the CPUC reauthorize the Nonresidential Program to allow large commercial and nonresidential entities to access GoGreen Financing. CAEATFA proposed that a reauthorized program could support financing for properties in the large commercial and MUSH (municipal, university, schools, and hospitals) sectors by allowing these types of facilities to use the existing On-Bill Repayment (OBR) infrastructure for their financing without a credit enhancement.

In Q3 2023, the CPUC issued [Decision 23-08-026](#) declining to reauthorize the program, citing a lack of demonstrated demand in these sectors for financing absent a credit enhancement. In its decision not to reauthorize the Nonresidential Program, the CPUC alluded to the 2019 deadline and subsequent Commission decisions to focus on programs that were launched by the deadline.



Screenshot from GoGreenFinancing.com

Marketing and Outreach

Consumer Marketing

In mid-October the Statewide Marketing Implementer, Riester, finalized and launched a revamped consumer-facing dual-language (English/Spanish) website. Featuring a streamlined user journey with clear calls to action, the website was the crowning piece of a comprehensive 2023 “Green Means Go” marketing plan that included video and digital assets by Studio Jeremyville, an extensive audio campaign, PR support, and a television spot on energy-saving tips for winter that aired in early December. The website’s colorful, animated style and simplified messaging build on the existing Jeremyville assets and tie the visual components of the campaign together. The website and accompanying videos and digital assets will form the foundation for marketing campaigns in 2024 and beyond.

The IOUs continued actively marketing the programs in Q4, collectively driving more than 283,000 new users to the site over the course of the quarter. In December, SDG&E concluded a five-month cobranded, bilingual residential and business campaign using the new Green Means Go assets that yielded 28 million impressions with a .36% click-through rate. GoGreen Home materials received roughly 20 million of those impressions, and GoGreen Business the remaining 8 million. Over the course of the campaign (July 17-Dec. 17), SDG&E marketing drove more than 325,000 new users to the website. SDG&E marketing staff noted strong performance of Spanish materials, in particular the videos.

In early November, SoCalGas launched an intensive month-long bilingual campaign anchored by programmatic display and paid social media, with resources allocated evenly between GoGreen Home and GoGreen Business. Of the total of 25 million impressions delivered, GoGreen Home garnered 14 million impressions and GoGreen Business some 11 million, with an overall click-through rate of 1.83%. The SoCalGas campaign drove 247,000 new users to the website. Like SDG&E, SoCalGas used the Green Means Go assets created by Riester and noted similarly strong performance of Spanish-language videos and social media ads.

In mid-November SCE concluded a four-month residential and business paid social media campaign using Green Means Go assets that drove more than 3 million impressions and 14,000 new users to the site.

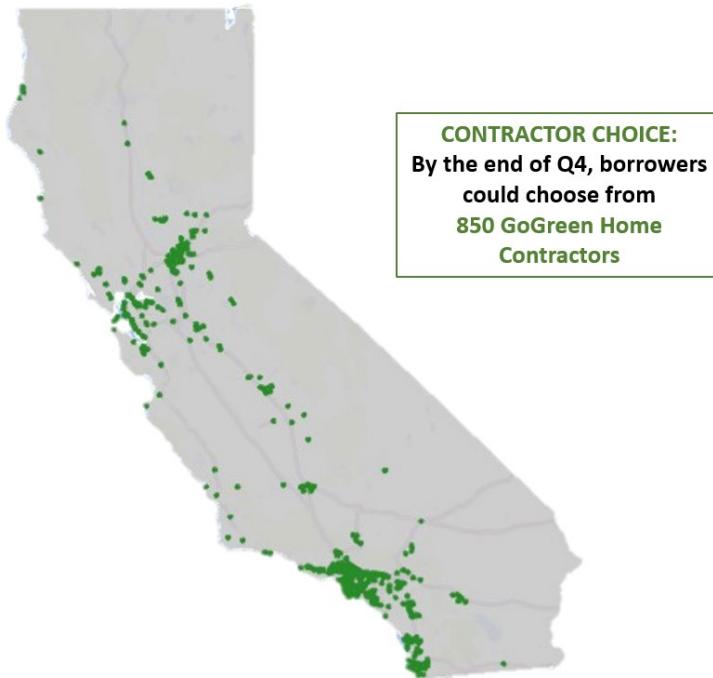
PG&E did not conduct any GoGreen Financing marketing activities in Q4. During that time PG&E's website drove 1200 new users to GoGreenFinancing.com.

CAEATFA staff promoted GoGreen Business at an event of the Northern California Small Business Development Centers hosted by Google, presenting alongside representatives from the Office of Small Business, the Secretary of State, and other programs in the State Treasurer's Office; staff also promoted GoGreen Business at a small business services summit in Fremont, hosted by District 10 Senator Aisha Wahab, and at the Hayward Chamber of Commerce Latino Business Roundtable.

Contractor and Stakeholder Outreach

Contractor Manager EGIA continued outreach to contractors via newsletters featuring program updates and contractor education. At the end of Q4, a total of 850 contractors were enrolled in GoGreen Home, and borrowers could choose from 150 contractors and project developers enrolled in GoGreen Business.

CAEATFA staff hosted a booth at the 2024 Institute of Heating and Air Conditioning Industries conference in Pasadena to share information with contractors about GoGreen Home and GoGreen Business. Staff also attended multiple events for contractors and stakeholders, including a workforce development event at Lawrence Berkeley National Laboratory; the Building Electrification Summit, where staff served on a plenary panel; a conference of the American Council for an Energy Efficient Economy; the California Efficiency and Demand Council Fall Conference; and a heat pump summit for contractors.



CHEEF Infrastructure

Contracting Updates

With the three-year contract for the Trustee Bank set to expire on Dec. 31, 2023, CAEATFA issued an RFP for a Trustee to hold ratepayer funds provided by the IOUs to serve as Credit Enhancements under the programs. CAEATFA provides direction to the Trustee Bank to transfer Credit Enhancement funds between various accounts. The CAEATFA Board approved Zions Bank to serve a second term as the Trustee Bank; the three-year contract term will begin on Jan. 1, 2024.

Appendices

Appendix 1: Budget and Expenditures

Budgetary Authorization

D.13-09-044 directed the IOUs to allocate a total of \$75.2 million to finance the programs over the initial period ending June 30, 2022, referred to as the “Pilot Phase” below. In August 2021, the CPUC issued Decision D.21-08-006 authorizing up to an additional \$75.2 million in incremental funds to support existing CHEEF programs for an additional five-year period from July 1, 2022 through June 30, 2027 (FY 22-26), referred to below as the “Program Phase.”

As of June 30, 2022, a total of \$26.9 million of the original \$75.2 million authorized for the Pilot Phase period remained which had not been either expended or allocated as loan loss reserves. After carrying over the remaining \$26.9 million in authorized funds from the Pilot Phase budget into the Program Phase, the IOUs are authorized to collect up to \$48.3 million in incremental funding from IOU ratepayers to support the CHEEF programs through June 30, 2027. Table 23 provides a final breakdown of the original Pilot Phase budget allocations, expenditures, and remaining funds to carry over to the Program Phase. Table 24 shows incremental funding needed for the Program Phase budget through the end of FY 26.

Table 24: Pilot Phase Budget from 2014 through June 30, 2022

Item	Original Authorized Budget
CHEEF Administration (CAEATFA)²¹	
<i>Start-up costs, Hub administration, direct implementation, outreach, and training</i>	
Allocated to CAEATFA for administration of the CHEEF	23,060,000
Expended through 6/30/22	(17,674,005)
Net CHEEF administration funds available to carry over to "Program Phase": FY 22-26 budget	5,385,995
Marketing, Education, Outreach (ME&O)	
<i>Statewide ME&O plan initial allocation</i>	
Statewide ME&O plan initial allocation	8,000,000
Expended through 9/30/20	(7,954,727)
Net ME&O funds available to carry over to "Program Phase": FY 22-26 budget¹	45,273
Credit Enhancement (CE)	
<i>Funds available for CEs after allocations for IOU and CAEATFA administration²</i>	
Funds available for CEs after allocations for IOU and CAEATFA administration ²	25,336,024
Funds expensed for loan losses from claims ³	(252,467)
CE funds encumbered as of 6/30/22 ⁴	(5,070,010)
Unallocated CE funds available to carry over to "Program Phase": FY 22-26 budget	20,013,547
IOU Administration	
<i>Start-up costs, On Bill Repayment (OBR) build-out, direct implementation</i>	
Allocated for IOU administration ⁵	17,863,976
Expended through 6/30/22 ⁶	(17,863,976)
Net IOU administration funds available to carry over to "Program Phase": FY 22-26 budget	-
CHEEF Pilot Reserve	
Net pilot reserve funds available to carry over to "Program Phase": FY 22-26 budget⁷	984,931
Total Original Authorized Budget from "Pilot Phase" through FY 21	75,244,931

²¹ Total CHEEF Administration spend was previously reported as \$17,234,807 as of the end of the Pilot Phase period on the Quarter 2 2022 report. Due to a lag in invoice submittals, CAEATFA received an additional total cost of \$439,197 after the start of the Program Phase period, which CAEATFA allocated to the Pilot Phase budget. This brings the total CHEEF Administration spend for the Pilot Phase to \$17,674,005.

Total of Original Authorized Budget Expended or Allocated	(48,815,185)
Total remaining from original funds authorized in D.13-09-044	26,429,746

Table 25: New Incremental Funding for CHEEF Expenditures in "Program Phase" (July 1, 2022 – June 30, 2027)

Item	FY 22-26 Authorized Budget
Total Budget authorized in D.21-08-006 for CHEEF "Program Phase": FY 22-26	75,174,526
Original funds available to carry over to "Program Phase": FY 22-26 budget	(26,429,746)
Total new incremental funding for the CHEEF programs needed through FY 26⁸	48,744,780

Table 25 provides an itemized breakdown of initial allocations for the \$75.2 million Program Phase budget, current expenditures, and remaining balance. As of Dec. 31, 2023, CAEATFA had expended \$5,017,862 of the \$23.3 million allocated for CHEEF administration, direct implementation, and outreach to finance companies and contractors.

Table 26: Budget for CHEEF "Program Phase" Expenditures (July 1, 2022 – December 31, 2023)

Item	FY 22-26 Authorized Budget
CHEEF Administration, Direct Implementation, Outreach and Training	
Allocation for CAEATFA administration of the CHEEF ⁹	23,255,041
Expended through 12/31/23 ¹⁰	(5,017,862)
CHEEF Administration funds remaining	18,237,179
Marketing, Education, Outreach (ME&O)	
Allocation for Statewide ME&O	8,000,000
Expended through 12/31/23 ¹¹	(2,764,304)
ME&O funds remaining	5,235,696
Credit Enhancement (CE)	
Allocation	43,919,485
Total CE funds released to CAEATFA from IOUs as of 12/31/23 ¹²	(8,470,456)
CE budget funds that remain available for release from IOUs	35,449,029
Total Authorized Budget for FY 22-26	75,174,526
Total FY 22-26 Budget Expended or Released	(16,252,622)
Total FY 22-26 Budget Remaining	58,921,904

The total cost of operating the CHEEF was \$5,851,297²² over the past four quarters (Q1 2023 through Q4 2023). This includes CAEATFA personnel costs, overhead costs such as rent and services received from the State Treasurer's Office and other state agencies, operating expenses, expenditures for CHEEF contracted vendors, and Statewide Marketing Implementer expenditures. Relative to CHEEF program participation over this period, this means that there was \$0.13 in program spending for each \$1.00 in private capital leveraged and \$0.78 in program spending for each \$1.00 in CE funds allocated. This represents a 39% decrease in

²² The total cost for operating the CHEEF includes personnel costs, overhead, expenditures for CHEEF contracted vendors, and Statewide Marketing Implementer expenditures. To improve accuracy of actual operating costs, infrequently or periodically invoiced costs (e.g., CHEEF portion of annual rent expenses) are assigned or prorated for the applicable month(s) in which services were rendered, or estimated based on anticipated costs if not yet invoiced. As a result, this total may deviate from the actual expenditures paid in the period shown in Table 25.

administrative spending per dollar of private capital leveraged and a 41% decrease in administrative spending per dollar of CE funds allocated compared with the four quarters before that (Q1 2022 through Q4 2022). See Table 27 for details.

Table 27: CHEEF Operating Costs and Expenditures Year Over Year

	Q1 2022 – Q4 2022	Q1 2023 – Q4 2023
CHEEF Expenditures	\$4,464,574	\$5,851,297
Private Capital Leveraged	\$21,376,276	\$46,302,773
CHEEF Cost Per Dollar of Private Capital Leveraged	\$0.21	\$0.13
Credit Enhancement Funds Allocated	\$3,421,104	\$7,538,114
CHEEF Cost Per Dollar of Credit Enhancement	\$1.31	\$0.78

Beginning in Q2 2022, CAEATFA began extending electric measure eligibility to IOU gas customers who receive electric service from a non-IOU provider. In accordance with Decision D.21-08-006 and cost allocation methodology subsequently approved by the CPUC, CAEATFA separately tracks the cost allocations associated with this extension of eligibility for GoGreen Home and entered into an agreement with Energy Solutions under the TECH Clean California Initiative to fund those costs with non-IOU PPP funds. Table 27 provides a summary of the current expenditures and Credit Enhancement contributions.

Table 28: TECH Clean California Expenditures and Allocations (through December 31, 2023)

Administrative Costs	
Start-up and fixed costs (e.g., initial outreach, accounting set-up, reporting)	\$40,980
Variable, per loan costs (e.g., loan reviews, processing & compliance verifications)	\$26,888
Administrative Total	\$67,868
Credit Enhancement Allocations	
Currently encumbered as of 12/31/23	\$1,201,281

Budget End Notes

1. Net ME&O funds are the \$8 million initially allocated for statewide ME&O minus \$7,954,727 expended by the Marketing Implementer through 9/30/2020, as reported to CAEATFA. The previous contract for the Marketing Implementer administered by SoCalGas ended on 9/30/2020. Resolution E-5072 permitted a new contract to be issued with spending at previous levels and using funding from other energy efficiency funding already approved and unutilized, under which the Marketing Implementer spent an additional \$1,484,643 from 10/1/2020 through 6/30/2022. Additionally, the initial allocation for ME&O also included \$2 million to CAEATFA for outreach to finance companies and contractors and is included in the total allocated to CAEATFA administration of the CHEEF.
2. Initial CE allocation per D.13.09.044 was \$42.9 million. Program Implementation Plans (PIPs) filed by the IOUs and CHEEF in 2014 and 2015 earmarked \$9,863,976 for Admin and Direct Implementation by the IOUs, and Resolution E-5072 allowed CAEATFA to re-allocate \$7.7 million of CE funds for CAEATFA administrative purposes while awaiting an initial long-term budget from the CPUC.
3. Funds expensed are claims paid out when a lender submits a claim for an enrolled loan default minus subsequent recoveries reimbursed back to the program.
4. Credit Enhancement funds are allocated to Lender Loss Reserve accounts and recaptured for future redeployment when loans are paid off.

5. Net IOU administration funds are the \$9,863,976 earmarked in the Program Implementation Plans (PIPs) filed by the IOUs and CEEF in 2014 and 2015 for Admin and Direct Implementation by the IOUs, plus an additional \$8 million allocated for IOU IT costs.
6. CAEATFA does not have access to IOU expense details and assumes that all originally allocated IOU administration funds were 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 CEEF Programs using their Annual Budget Advice Letter, or separate advice letter processes, and include funds in future business plan filings.
7. Net pilot reserve funds are the initial allocation of \$9,344,931 minus \$8.36 million re-allocated to CAEATFA administration of the CEEF, as authorized by the Joint Ruling of Assigned Commissioner and Administrative Law Judge on Financing Pilots and Associated Marketing Education and Outreach Activities, November 2016.
8. This represents the maximum incremental funding from IOU ratepayer customers for implementation of the CEEF programs through 6/30/2027, as directed in Decision D.21-08-006. The joint IOU and CAEATFA budget Advice Letter 5883G, submitted 10/8/2021 and accepted by the CPUC effective 11/08/2021, approved an incremental funding request of \$51,187,749 based on the spending and loan activity forecasts through 6/30/2022 that were made at that time. Actual expenditures turned out to be lower.
9. Funds were authorized per Joint Advice Letter 5883G, filed October 8, 2021 and accepted November 8, 2021.
10. Quarterly expenditures are based on good faith estimates due to a lag in invoice submittals.
11. The contract for the statewide Marketing Implementer is administered by SoCalGas, and numbers reflect data reported to CAEATFA.
12. Once released to CAEATFA, 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. Encumbered CE funds from the Program Phase budget are intermixed with previously encumbered CE funds from the Pilot Phase budget, so CE funds under the Program Phase budget are expressed according to their release to CAEATFA from the IOUs. For more detail, see Table 12 (Summary of Charge-Offs, Claims Paid and Recoveries) and Appendix 2 (Loss Reserve Account Beginning and Ending Balances).

Appendix 2: 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 29: Balance of IOU Holding Accounts

	SoCalGas	PG&E	SCE	SDG&E
Beginning Balance (10/1/2023)	\$868	\$3,549	\$1,140	\$875
Release of CE Funds from IOUs	\$250,000	\$750,000	\$500,000	\$250,000
Transfer of CE Funds to GoGreen Home Account	\$(250,000)	(\$700,000)	(\$500,000)	(\$200,000)
Transfer of CE Funds to GoGreen Business Account	\$0	(\$50,000)	\$0	(\$50,000)
Transfer of CE Funds to Operational Reserve Fund Account	\$0	\$0	\$0	\$0
Interest Accrued	\$85	\$258	\$222	\$162
Ending Balance (12/31/2023)	\$954	\$3,806	\$1,362	\$1,037

GoGreen Home-Related Accounts

There are two GoGreen Home-related accounts administered by CAEATFA:

- The **GoGreen Home Program Account** holds the available portion of the requested CE funds that are used to credit enhance projects enrolled in the Program. Once a project is enrolled in the 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 Program, and those funds are available to be released to the holding account when needed, then transferred to the Program account.
- The **GoGreen Home Interest Account** holds the interest swept²³ from the GoGreen Home Program Account and all the GoGreen Home Lender Loan Loss Reserve Accounts. See Table 29.

²³ Interest earned in all GoGreen Home-related accounts is swept on a monthly basis into the GoGreen Home Interest account. For Q4 2023, interest earned on GoGreen Home-related accounts totaled \$149,279 of which \$5,655 was earned and retained in the GoGreen Home Interest account, \$3,636 was earned and swept from the GoGreen Home Program account, and \$139,988 was earned and swept from the nine GoGreen Home Lender LLR accounts.

Table 30: Balance of GoGreen Home-Related Accounts

	GoGreen Home Program	GoGreen Home Interest
Beginning Balance (10/1/2023)	\$204,031	\$378,767
Credit Enhancement (CE) Funds Released from IOUs	\$1,650,000	\$0
Contributions to Lender Loss Reserve Accounts	(\$2,221,749)	\$0
Funds Recaptured from Recoveries	\$0	\$0
Funds Recaptured from Annual Rebalance	\$0	\$0
Funds Transferred from Other Accounts²⁴	\$530,000	(\$530,000)
Net Interest Earned	\$3,636	\$5,655
Net Interest Swept	(\$3,636)	\$147,845
Ending Balance (12/31/23)	\$162,282	\$2,267

²⁴ Due to increased loan volume in Q4, \$530,000 were transferred on December 26 and 29, 2023 from the GGH Interest Account to the GGH Program Account to ensure liquidity for new loss reserve contributions while awaiting new CE funding requests. The funding contribution percentages laid out in the Implementation Agreement will be used to calculate how much of the \$530,000 will be allocated to each IOU and will be applied towards that IOU's CE funding cap.

GoGreen Home Lender Loan Loss Reserve Accounts

Each time a lender enrolls a project, a loss reserve contribution of either 11% or 20% (depending on whether the loan was made to an underserved borrower) is transferred from the GoGreen Home Program Account into the respective lender's 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 appears 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 31: Balance of GoGreen Home Lender Loss Reserve Accounts²⁵

	California Coast Credit Union	Desert Valleys Federal Credit Union	Eagle Community Credit Union	First U.S. Community Credit Union	Matadors Community Credit Union	One Finance	Pasadena Service Federal Credit Union	Travis Credit Union	Valley Oak Credit Union	Lewis & Clark Bank
Beginning Balance 10/1/2023	\$3,944,737	\$113,564	\$16,101	\$2,042,329	\$1,631,440	\$76,407	\$7,301	\$2,572,900	\$62,170	\$81,569
Claims Paid	(\$46,698)	(\$17,342)	\$0	\$0	(\$43,479)	(\$27,202)	\$0	(\$12,988)	\$0	\$0
Loss Reserve Contributions²⁶	\$800,177	\$18,618	\$0	\$306,162	\$217,863	\$0	\$1,746	\$1,227,338	\$3,600	\$57,689
Other - Transfers/Errors in Period²⁷	(\$2,000)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Interest Earned	\$53,796	\$1,548	\$214	\$27,842	\$21,744	\$1,001	\$97	\$35,899	\$847	\$1,220
Net Interest Swept	(\$51,796)	(\$1,548)	(\$214)	(\$27,842)	(\$21,744)	(\$1,001)	(\$97)	(\$35,899)	(\$847)	(\$1,220)
Ending Balance 12/31/2023	\$4,698,216	\$114,841	\$16,101	\$2,348,491	\$1,805,824	\$49,205	\$9,047	\$3,787,250	\$65,770	\$139,257

²⁵ Diablo Valley Community Credit Union has not yet enrolled a project and therefore is not included in this chart.

²⁶ A net total of \$2,633,194 in Loss Reserve Contributions were made in Q4 2023, of which \$2,221,749 were IOU PPP funds from the GoGreen Home Program Account and \$411,446 were from credit enhancement funds provided by the TECH Clean California Initiative in accordance with CPUC-approved cost allocation methodology.

²⁷ Zions Bank incorrectly characterized a loan enrollment transaction that caused an error sweep of \$2,000 from California Coast Credit Union Loss Reserve Account. The transaction correction will be reflected in the Q1 2024 report.

GoGreen Business-Related Accounts

Loss reserve accounts for GoGreen Business operate under a similar process as those for GoGreen Home 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 GoGreen Business Program account into the respective finance company's loss reserve account. The ending balance in the table below shows the amount the finance company has available in the loss reserve to offset a customer defaulting on a finance agreement.

Table 32: Balance of GoGreen Business-Related Accounts

	GoGreen Business Program	GoGreen Business Interest
Beginning Balance 10/1/2023	\$299,211	\$23,109
Credit Enhancement funds released from IOUs	\$100,000	\$0
Contributions to Loss Reserve Accounts	(\$118,956)	\$0
Net Interest Earned	\$3,884	\$340
Net Interest Swept²⁸	(\$3,884)	\$7,793
Ending Balance 12/31/2023	\$280,255	\$31,241

Table 33: Balance of GoGreen Business Lender Loss Reserve Accounts²⁹

	Ascentium Capital	DLL Financial Solutions Partner	Verdant Commercial Capital
Beginning Balance 10/1/2023	\$110,368	\$25,477	\$108,353
Claims Paid	(\$83,313)	(\$0)	\$0
Contributions to Loss Reserve Accounts	\$0	\$11,610	\$107,347
Net Interest Earned	\$1,437	\$521	\$1,951
Net Interest Swept	(\$1,437)	(\$521)	(\$1,951)
Ending Balance 12/31/2023	\$27,055	\$37,086	\$215,699

²⁸ Interest earned in all GoGreen Business-related accounts is swept on a monthly basis into the GoGreen Business Interest account. For Q4 2023, interest earned on GoGreen Business-related accounts totaled \$8,133 of which \$340 was earned and retained in the GoGreen Business Interest account, \$3,884 was earned and swept from the GoGreen Business Program account, and \$3,909 was earned and swept from the three funded GoGreen Business Finance Company LLR accounts.

²⁹ Loss reserve accounts exist for all eight Finance Companies participating in GoGreen Business. Account activity will be reported for the remaining Finance Companies upon enrollment of their first financing agreement with the Program.

Appendix 3: 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 GoGreen Home, the longest-running CEEEF Program.

Based on CAEATFA's agreements with GoGreen Home lenders, the credit enhancement has resulted in better terms and approval rates for 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 GoGreen Home product offers appropriate benefits for borrowers in exchange for lender access to the credit enhancement.

How the Credit Enhancement Makes Financing Feasible for Borrowers

Lenders have made improvements to their existing underwriting criteria as a result of the credit enhancement (which takes the form of a loan loss reserve) that significantly benefit potential borrowers. Private capital leveraged through the Program not only offers improved rates and terms, but often renders energy efficiency projects feasible. Monthly payments are reduced by more than \$300 on average for borrowers who take advantage of the 15-year term length offered by the majority of participating lenders, when compared with a standard 5-year unsecured loan. Coupled with lower interest rates and broader approval criteria, this greatly enhances the appeal and viability of financing for most borrowers and frequently makes the difference between completing or not completing an energy retrofit. This example illustrates these features in practice, using current rates and terms from a Participating Finance Company:

	Without GoGreen Home	With GoGreen Home
Loan Details	Borrower has a credit score of 600 and seeks \$15,000	
Financing Product	Unsecured personal loan	GoGreen Home Energy Loan
Interest Rate	21.88%	7.88%
Term Length	5 years	15 years
Monthly Payment	\$413	\$142

Feasibility of financing is measured in a number of ways:

- **Access to credit:** Lenders typically require borrowers to have a minimum credit score of around 640 for unsecured loans of any significant value. Through GoGreen Home, lenders are able to approve loans for borrowers with credit scores as low as 580.
- **Affordable monthly payments:** The vast majority of private lenders typically offer a maximum term length of 5 years for unsecured loans. Through GoGreen Home, lenders are able to extend terms out to 15 years, which significantly lowers monthly payments for borrowers.
- **Access to capital:** Sufficient access to capital is needed for deeper energy retrofits. While lenders typically limit unsecured loans to about \$25,000, most lenders are able to offer up to \$50,000 for all borrowers through GoGreen Home.

See Table 16 (Financing Feasibility Metrics) in the GoGreen Home reporting section for tracking of GoGreen Home loans enrolled that demonstrate these criteria.

Table 34: Impact of the Credit Enhancement on Loan Terms by GoGreen Home Lender

Because lenders are free to set their own underwriting criteria within program guidelines, individual products vary from lender to lender. The table below provides 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.

	Interest Rate	Minimum Credit Score	Maximum Loan Amount	Maximum Loan Term
STATEWIDE LENDERS				
California Coast Credit Union	<i>Reduced by:</i> 50 – 1600 basis points (bps) ³⁰	No change from existing 600	<i>Increased:</i> \$30,000 to \$50,000	<i>Increased:</i> 5 years to 15 years
Matadors Community Credit Union	<i>Reduced by:</i> 491 – 741 bps	<i>Reduced:</i> 660 to 580	<i>Increased:</i> \$15,000 to \$50,000	<i>Increased:</i> 5 years to 15 years
REGIONAL LENDERS				
Desert Valleys Federal Credit Union	<i>Reduced by:</i> 749 – 1100 bps	No change from existing 580	<i>Increased:</i> \$15,000 to \$50,000	<i>Increased:</i> 5 years to 15 years
Diablo Valley Federal Credit Union	<i>Reduced by:</i> 300 - 1224 bps	No change from existing 580	<i>Increased:</i> \$15,000 to \$50,000	<i>Increased:</i> 5 years to 15 years
First US Community Credit Union	<i>Reduced by:</i> 404 – 1004 bps	<i>Reduced:</i> 640 to 580	<i>Increased:</i> \$25,000 to \$50,000	<i>Increased:</i> 5 years to 15 years
Lewis & Clark Bank	<i>Reduced by:</i> With Autopay, 2000 bps; without Autopay, 1790 bps	<i>Reduced:</i> 640 to 580	No change from existing \$5,000	No change from existing 5 years
Pasadena Service Federal Credit Union	<i>Reduced by:</i> 350 – 850 bps	No change from existing 600	<i>Increased:</i> \$20,000 to \$50,000	<i>Increased:</i> 5 years to 15 years
Travis Credit Union	<i>Reduced by:</i> 100 – 300 bps	<i>Reduced:</i> 680 to 600	<i>Increased:</i> \$35,000 to \$50,000	No change from existing 15 years
Valley Oak Credit Union	<i>Reduced by:</i> 333 – 783 bps	No change from existing 580	<i>Increased:</i> \$20,000 to \$50,000	<i>Increased:</i> 5 years to 15 years
<i>The interest rates reflected in this table are effective as of December 31, 2023.</i>				

³⁰ "bps" = Basis point, a common unit of measure for interest rates. A single basis point is equal to 1/100th of 1% (e.g., 100 bps = 1%).

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:

Table 35: Impact of the Credit Enhancement on Achieving Program Goals

	Without GoGreen Home	With GoGreen Home
Borrower has a credit score of 600	Borrower would be unlikely to qualify for a personal loan.	Borrower may qualify for a GoGreen Home loan with a term of 5, 10 or 15 years, paying an interest rate as low as 4.99% for a 5-year term and 6.99% for 15 years.
Borrower wants a 5-year repayment term	Assuming a credit score of 600, borrower could take out a personal loan with a rate of 21.88% ³¹ using a GoGreen Home lender's market-rate product. The resulting payment on a \$25,000 loan would be \$689 per month. Borrower may not be able to afford the high monthly payment.	Assuming a credit score of 600, borrower could qualify for a GoGreen Home loan with interest as low as 5.88% for a 5-year term using the same lender's GoGreen Home product. Borrower's payment on a \$25,000 loan would be \$482 each month, a \$207 monthly savings from the lender's market-rate product.
Borrower wants the 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 through GoGreen Home. Assuming a credit score of 600, a \$25,000 loan with a 15-year term could receive a rate as low as 7.88% from the same GoGreen Home lender, resulting in payments of only \$237 per month, a reduction of \$452 per month from the lender's 5-year market-rate product.

³¹ The rate of the equivalent non-GoGreen Home signature loan product offered by a Participating Finance Company.

Appendix 4: 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:

- **11 participating GoGreen Home Lenders:** California Coast Credit Union, Desert Valleys Federal Credit Union, Diablo Valley Federal Credit Union, Eagle Community Credit Union (servicing loans only), First US Community Credit Union, Matadors Community Credit Union, One Finance (servicing loans only), Pasadena Service Federal Credit Union, Travis Credit Union, Lewis & Clark Bank, and Valley Oak Credit Union
- **8 participating GoGreen Business Finance Companies:** Accessity, Alliance Funding Group, Ascentium Capital, DLL Financial Solutions Partner, Prime Capital Funding, Renew Energy Partners, Travis Credit Union and Verdant Commercial Capital
- **2 participating GoGreen Multifamily Finance Companies:** Ascentium Capital and Renew Energy Partners

Table 36: Participating GoGreen Home Finance Companies

	Date Enrolled	Areas Served	Type of Institution	Total Loans Enrolled	Loans Enrolled in Q4 2023
 CALIFORNIA COAST Your best interest. SM	September 2016	Statewide	Credit Union (185,000 members)	2,012	245
 DESERT VALLEYS FEDERAL CREDIT UNION	September 2016	Portions of Inyo, Kern, and San Bernardino counties	Credit Union (4,000 members)	69	7
 diablo valley federal credit union	August 2023	Central Contra Costa County	Credit Union (2,400 members)	0	0
 EAGLE COMMUNITY CREDIT UNION	March 2018	Servicing loans only	Credit Union (20,000 members)	12	0
One Finance with  Enervee	July 2021	Servicing loans only	FinTech	496	0
Lewis & Clark Bank with  Enervee	Feb 2023	SoCalGas & Southern California Edison territories	Bank	463	197

 First US Community Credit Union	June 2018	12 counties in Northern California	Credit Union (25,000 members)	970	109
 Matadors Community Credit Union	March 2016	Statewide	Credit Union (20,000 members)	724	62
 Pasadena Service Federal Credit Union	April 2018	Pasadena and neighboring parts of LA County, statewide federal employees	Credit Union (11,000 members)	4	1
 TRAVIS CREDIT UNION	March 2021	12 counties in Northern California	Credit Union (135,000 members)	1,092	318
 Valley Oak CREDIT UNION Rooted in Your Growth™	August 2015	Madera and Tulare counties, employer groups in Kings & Fresno	Credit Union (6,700 members)	40	1

Table 37: Participating GoGreen Business Finance Companies

	Date Enrolled	Areas Served	Type of Institution	Products Offered	Financing Limits	Total Projects Enrolled
 accessibility	May 2021	Southern California (San Diego County)	Community Development Financial Institution (CDFI)	Loans	\$500 - \$5,000	0
 Alliance	May 2019	Statewide	Specialty Finance Company	Equipment leases	\$10,000 - \$5 million	0
 ascentium CAPITAL	March 2019	Statewide	Specialty Finance Company	Equipment finance agreements	\$20,000 - \$2 million	14
 dL financial solutions partner	March 2019	Statewide	Specialty Finance Company	Equipment leases, service agreements, loans	\$5,000 - \$5 million	5
 PRIME CAPITAL	February 2022	Statewide	Specialty Finance Company	Equipment leases, loans	\$100,000 - \$5 million	0
 RenewEnergy PARTNERS	January 2021	Statewide	Specialty Finance Company	Efficiency service agreements	\$250,000 - \$5 million	0
 TRAVIS CREDIT UNION	February 2022	12 Counties in Northern California	Credit Union	Loans	\$100,000 - \$350,000	0
 VERDANT COMMERCIAL CAPITAL	March 2022	Statewide	Specialty Finance Company	Equipment finance agreements, leases	\$25,000 - \$5 million	20

Table 38: Participating GoGreen Multifamily Finance Companies

Note: The two finance companies listed below were formally enrolled in the GoGreen Multifamily program. Three other finance companies have indicated willingness to finance upgrades for affordable multifamily properties; these are shown on Table 40.

	Date	Areas Served	Type of	Products	Financing	Total
	August 2020	Statewide	Specialty Finance Company	Equipment finance agreements	\$10,000 - \$250,000	0
	August 2019	Statewide	Specialty Finance Company	Efficiency service agreements	\$250,000 - \$10 million	0

Appendix 5: Enrolled Finance Company Product Features

Table 39: Enrolled GoGreen Home Lender Product Features

 gogreen FINANCING™					
<h1>GoGreen Home Energy Financing</h1>					
LENDING OPTIONS FOR RESIDENTIAL ENERGY UPGRADES					
STATEWIDE LENDERS	Available to borrowers in:	APR ¹ (10/01/2022)	LOAN SIZE	MINIMUM CREDIT SCORE	PRE-APPROVAL
	Anywhere in California	3.98% - 5.48% ² Terms beyond 30 months: 4.38% - 7.88%	\$2,500 - \$50,000	600	Instant pre-approval for qualified borrowers (up to \$25,000)
	Anywhere in California	4.99% Terms beyond 60 months: 5.99% - 6.99%	\$2,500 - \$50,000	580	Within one business day
REGIONAL LENDERS	Available to borrowers in:				
	Indian Wells Valley, Searles Valley, Kern River Valley, Bishop, Barstow, and parts of Kern and Inyo counties Valley	6.00% - 9.00% Terms beyond 60 months: 7.00% - 10.00%	\$2,500 - \$50,000	580	Within one business day
	Central Contra Costa County	3.75% - 7.99% Terms beyond 60 months: 4.75% - 8.99%	\$2,500 - \$50,000	580	Within one business day
	Sacramento, Placer, Nevada, El Dorado, Amador, Yuba, Yolo, Sutter, San Joaquin, Solano, Sierra, and Contra Costa counties ³	3.95% - 5.95% Terms beyond 36 months: 4.75% - 8.75%	\$2,500 - \$50,000	580	Within one business day
	Pasadena, Covina, Vernon, and the greater San Gabriel Valley	4.99% - 7.49% Terms beyond 60 months: 5.99% - 8.10%	\$2,500 - \$30,000	600	Within one business day
	Alameda, Colusa, Contra Costa, Merced, Napa, Placer, Sacramento, San Joaquin, Solano, Sonoma, Stanislaus, and Yolo counties	3.99% - 7.99% Terms beyond 48 months: 4.99% - 8.99%	\$1,000 - \$50,000	600	Instant pre-approval for qualified borrowers
	Tulare County and Madera County ⁴	5.62% - 8.12%	\$1,500 - \$60,000	580	Within one business day
<small>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 30-month rates limited to \$15,000 or \$30,000, depending on credit score. 3 Existing and retired federal employees throughout the State of California are also eligible. 4 Valley Oak can lend to select employee groups in Kings and Fresno counties. Please see Valley Oak's website for membership details.</small>					
START TODAY! GoGreenFinancing.com					
<small>10/01/2023</small>					

Table 40: Enrolled GoGreen Business Finance Company Product Features

 gogreen FINANCING™		<h1>GoGreen Business Energy Financing</h1> <p>ENERGY EFFICIENCY FINANCING OPTIONS FOR COMMERCIAL RETROFITS</p>		
		Interest rates as low as 0% For business upgrade projects, GoGreen Financing is providing select participating lenders with up to \$10,000 to apply toward lowering your interest payments. That means you could pay as little as 0%. Find your "GO LOW" business finance partner in the list below.		
	FINANCING AVAILABLE	FEATURES	A GREAT OPTION FOR	CONTACT
	\$20K – \$2M Equipment finance agreements 12 - 60 months	Rapid credit approvals (within 2 hours up to \$350K) Reduced interest rates – as low as 0% Will extend terms to 72 months if needed for cash flow		When you want to get started on your project right away.
	\$10K – \$5M Equipment leases 12 - 120 months	12-month minimum time in business Cannabis grow operations may qualify Credit approval within 24 hours (up to \$300K)	New businesses looking to save energy.	David Goldstein (714) 450-1026 dgoldstein@alliancefunds.com
	\$5K – \$5M Equipment leases, service agreements, loans 12 - 84 months	Reduced interest rates – as low as 0% Multiple financing mechanisms to meet your needs Will extend terms to 10 years if needed for project cash flow		Small projects (starting at \$5K) and when you need low monthly payments.
	\$100K – \$5M Equipment leases, loans 36 - 120 months	On-bill repayment option Cannabis industry customers may qualify Extended terms out to 10 years	Large projects and when you want affordable monthly payments.	Scott Pinckard (630) 200-7376 scottpinckard@primecapitalfunding.com
	\$250K – \$5M Efficiency service agreements 60 - 120 months	Energy savings guaranteed to exceed payments – your project pays for itself On-bill repayment option Ongoing service and maintenance included	A major retrofit that will yield significant energy savings.	Nathan Montgomery (888) 938-6256 projects@renewep.com
	\$150K – \$350K Loans 84 - 120 months	Low interest rate of a regulated depository Property owners and commercial real estate investors eligible Benefits of credit union membership	Customers in Northern California seeking the personalized service of a credit union.	Frank Suarez (707) 392-9767 fsuarez@traviscu.org
	\$25K – \$5M Equipment finance agreements, leases 12 - 84 months	On-bill repayment option Reduced interest rates – as low as 0% Rapid credit approvals (within 2 hours up to \$250K)		When you want the convenience of on-bill repayment and want to start your project right away.
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.				08/02/2023

Table 41: Enrolled GoGreen Multifamily Finance Company Product Features

 GoGreen Multifamily Energy Financing Energy Efficiency Financing Options for Market-Rate and Affordable Multifamily Property Retrofits							
	Products ¹	Financing Available	Term Length	Will finance in-unit improvements	On-Bill Repayment	A Good Fit for Properties Seeking...	Contact
	Equipment Finance Agreements	\$20K - \$2M	12 – 60 months (84 months on case-by-case basis)	Yes	No	Quick payback and competitive rates	Kristin McRoberts (714) 309-5301 kristinmroberts@ascentiumcapital.com
	Loans, Leases, Service Agreements	\$5K - \$5M	12 – 84 months (120 months on case-by-case basis)	Yes	No	Quick payback or low monthly payments; ongoing service and maintenance	Mike Ossolinski (610) 316-5695 mossolinski@leasedirect.com
	Equipment Leases, Loans	\$100K - \$5M	36 – 120 months	Yes	Yes	Option to pay down principal	Scott Pinckard (630) 200-7376 scottpinckard@primecapitalfunding.com
	Efficiency Service Agreements	\$250K - \$5M	60 – 120 months	Some master-metered	No	Guaranteed savings on the bill and ongoing service and maintenance ²	Nathan Montgomery (888) 938-6256 projects@renewep.com
	Equipment Finance Agreements, Leases	\$25K - \$5M	24 – 84 months	Yes	Yes	Flexible approvals	Jonathan Wickersham (248) 860-0013 jwickersham@verdantcc.com

¹ All listed finance companies offer financing for distributed generation and storage such as solar panels and batteries. However, finance companies will not receive a credit enhancement for that portion of their financing. As such, these installations may be financed at the discretion of the finance company.
² Please note properties which already have HUD-backed financing cannot be considered.

10/01/2023

Appendix 6: 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

<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. In Q2 2023, CAEATFA exercised the option to extend the contract for one year, through 7/31/2024.

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>	Electric & Gas Industries Association (EGIA)
<i>Duties</i>	The Contractor Manager recruits, enrolls, trains, and supports contractors and conducts quality control oversight of projects enrolled in the GoGreen Financing Programs.
<i>Contract Term</i>	5/29/22 – 5/28/25
<i>Notes</i>	This contract was approved by the Department of General Services on 5/31/22. This contract has an option for up to two one-year extensions.

Marketing Implementer

<i>Organization</i>	Riester
<i>Duties</i>	The Marketing Implementer is responsible for leading statewide marketing campaigns and administers GoGreenFinancing.com, 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.
<i>Contract Term</i>	7/1/22 – 6/30/25
<i>Notes</i>	This contract has an option for up to two one-year extensions.

Technical Advisor

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

<i>Organization</i>	Energy Futures Group (EFG)
<i>Duties</i>	Provides technical assistance for program research development and implementation.
<i>Contract Term</i>	4/19/22 – 4/18/25
<i>Notes</i>	This contract does not have an option for extension.

Appendix 7: Program Design

GoGreen Home Energy Financing

The GoGreen Home Energy Financing Program (GoGreen Home) 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, condominium, 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).

Previously, when lending to IOU gas customers who receive electric service from a non-IOU provider, lenders were limited in terms of the credit enhancement they would receive; only 30% of the “claim-eligible loan amount” (the portion of the loan that could be recouped through the loss reserve in the event of a default) could finance electric measures. Beginning in Q2 2022, funding from CAEATFA’s agreement with Energy

Solutions under the TECH Clean California Initiative expands financing eligible for the credit enhancement to include any electric measure for a customer who receives gas service from an IOU.

The fuel source-related limitation described above still applies for loans made to IOU electric customers who receive gas from a non-IOU provider: in these cases, no more than 30% of the “claim-eligible” financed amount may be used to fund the installation of gas measures.

CAEATFA staff strive to make GoGreen Home financing available to underserved borrowers while also ensuring that credit is extended appropriately and without unintended negative consequences for the borrower. GoGreen Home 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 GoGreen Home 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 into 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, GoGreen Home is a debt-based financing 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 can 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.

GoGreen Home launched in July 2016, and the current Program regulations were adopted in May 2021. Current Program regulations may be viewed on [the CAEATFA website](#).

GoGreen Business Energy Financing

The GoGreen Business Energy Financing Program (GoGreen Business) provides financing to help small business property owners and tenants upgrade their equipment or buildings. Financing through GoGreen Business 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 GoGreen Business:

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 GoGreen Business, 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, GoGreen Business 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. Several Finance Companies offer the option to repay financing through the utility bill using the program's On-Bill Repayment functionality. 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.

GoGreen Business launched in July 2019, and current Program regulations went into effect in August 2022. Program regulations may be viewed on [the CAEATFA website](#).

GoGreen Affordable Multifamily Energy Financing

GoGreen Affordable Multifamily Energy Financing (GoGreen Multifamily) 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.

GoGreen Multifamily 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 GoGreen Business. 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 GoGreen Multifamily 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 GoGreen Business, GoGreen Multifamily 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.

GoGreen Multifamily regulations went into effect in June 2020. Program regulations may be viewed on [the CAEATFA website](#).

Nonresidential Program

Launch of the Nonresidential Program, originally authorized in 2013, was dependent on the development of On-Bill Repayment (OBR) functionality, which was not available until 2022. Because D.17-03-026 from the CPUC required all CHEEF programs to be launched by the end of 2019, the Nonresidential Program was effectively canceled at that point.

In Q2 2022, CAEATFA submitted a proposal to the CPUC for reauthorization of a Public Buildings and Large Commercial Program modeled after the Nonresidential Program, which was authorized in 2013. In Q3 2023, the CPUC responded with Decision 23-08-026 declining to reauthorize the program.

Appendix 8: Customer-Facing Products

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

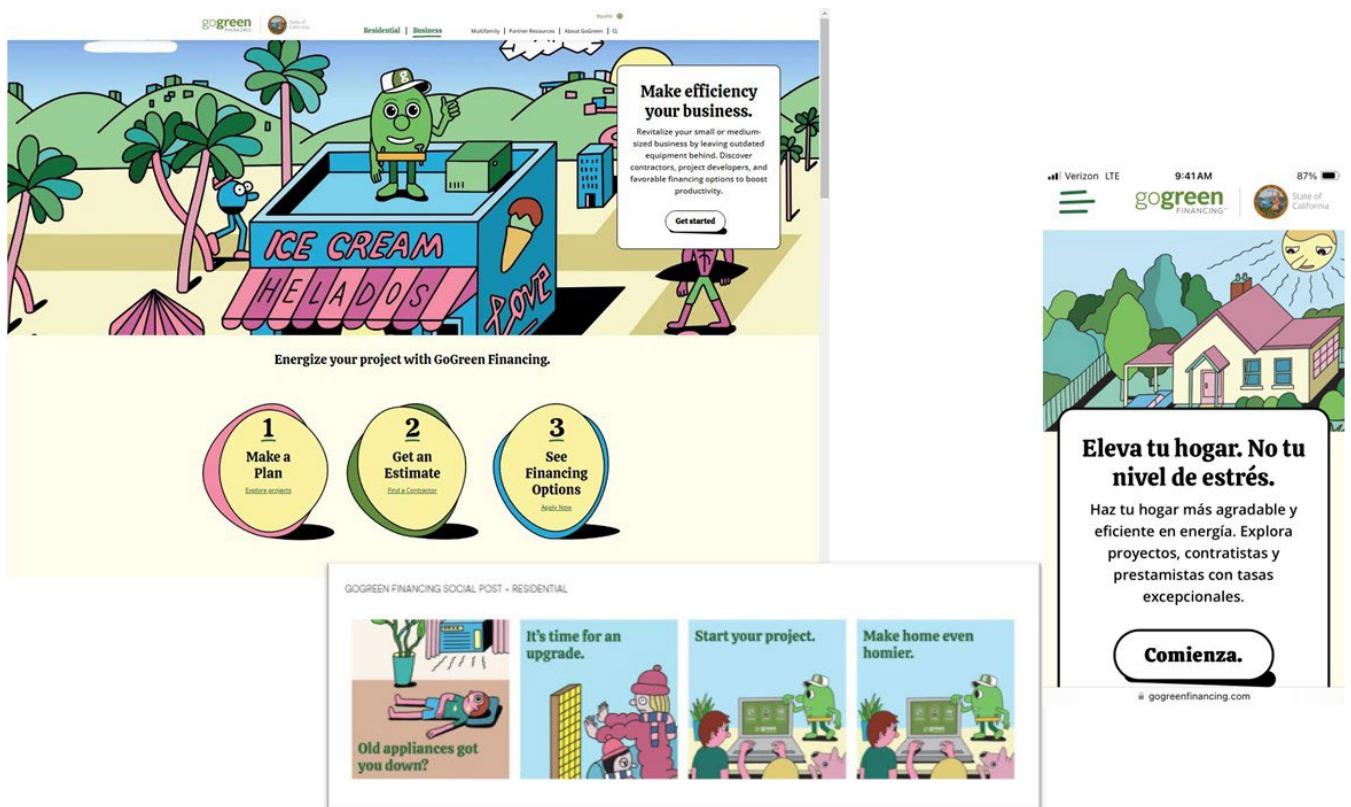


Maintained by the Marketing Implementer, Riester, with input and direction from CAEATFA and the IOUs, GoGreen Financing (www.gogreenfinancing.com) serves as the primary customer-facing platform for the financing programs. The platform was translated into Spanish in November 2020 (www.gogreenfinancing.com/es), and was relaunched with a new look and feel and a simplified user journey in October 2023.

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

- Pages that allow potential GoGreen Home borrowers to find a local participating contractor, review the rates of participating lenders, and apply for a GoGreen Home loan online through the participating lender's website

- Pages that allow potential GoGreen Business customers to find a participating contractor or project developer, review the products offered by participating finance companies, and apply for a GoGreen Business finance agreement through the participating finance company's website
- Program descriptions and benefits of GoGreen Multifamily and information about products offered by participating finance companies
- Partner resources for interested contractors and finance companies, including:
 - Customer-facing flyers and online platform, available in both English and Spanish
 - Finance company comparison charts
 - GoGreen Home and GoGreen Business case studies



Clockwise from top: Screenshot from GoGreen Business main page on GoGreenFinancing.com; mobile view of GoGreen Home main page in Spanish; GoGreen Home social media carousel post.

Appendix 9: Reporting Requirements

CPUC Decision 21-08-006 requires CAEATFA to report on metrics and key performance indicators from the CHEEF Programs, including performance metrics previously adopted for financing evaluations in Attachment 1 of Resolution E-4900. The tables below outline these reporting requirements and CAEATFA's compliance with them.

Table 42: CHEEF Program Reporting Requirements from Resolution E-4900, Attachment 1

	Current Reporting Status	Target Reporting Timeframe	Notes
Number of loans issued: <ul style="list-style-type: none">Monthly growthTotal amount financedGeographic distribution of loans	Included in quarterly reports and monthly data summaries	Reporting pre-dates requirement	
Private capital participation: <ul style="list-style-type: none">Number of participating lendersTypes of financial institutions participatingAmount of private capital attracted	Included in quarterly reports and monthly data summaries	Reporting pre-dates requirement	
Reach to underserved Californians: <ul style="list-style-type: none">Credit scores of loan recipientsPayback term lengthPercentage of participants deemed "underserved" by CalEnviroScreen dataWhether participants would have qualified for or been able to accept loans from existing programs	Included in quarterly reports and monthly data summaries	Reporting pre-dates requirement; additional data on participant qualification added in Q3 2021	New data has been added to the quarterly reports and monthly data summaries as of September 2021 to provide insight into whether financing would have been feasible for borrowers without the program and the products borrowers would have been able to qualify for from participating lenders without the CHEEF Programs.
Energy savings³²: <ul style="list-style-type: none">Through customer meter dataThrough NMEC analysisComparison of energy savings from other loan programs	Included in a standalone, bi-annual report	Q2 2022	The first GoGreen Home Deemed Energy Savings Report was published in April 2022, with biannual updates following. CAEATFA will not be able to provide an NMEC analysis until limitations with the IOUs' ability to share actual energy usage data and challenges around data security are resolved.

³² D.21-08-006 allows for flexibility in how CAEATFA reports on this metric; while all three metrics adopted in Resolution E-4900 are required for formal evaluations of the Programs, D.21-08-006 asks CAEATFA to report on "annual estimated energy savings from installed measures."

Table 43: CHEEF Program Reporting Requirements from D.21-08-006

	Current Reporting Status	Expected Reporting Timeframe	Notes
Customer participation	Included in quarterly reports	Reporting pre-dates requirement	Several data points are provided, including loan volume and enrollment maps.
Loan performance statistics	Included in quarterly reports and monthly data summaries	Reporting pre-dates requirement	Currently reported for GoGreen Home, as other programs have not yet experienced any defaults or recoveries.
Costs associated with service of non-IOU customers	Included in quarterly reports	Q1 2022	Reporting began in Q1 2022, when the first expenses supported by a non-IOU funding source (in this case, TECH Clean California) were paid.
Administrative costs of the CHEEF (in nominal dollars and as a % of program spending)	Included in quarterly reports	Reporting pre-dates requirement for nominal dollar; improvements coming in Q3 2022	Administrative costs have been reported as part of the budget table in Appendix 1. Administrative costs as a percentage of Program spending can be derived from the budget table, but will be shown more clearly as new budget reporting is developed.
Annual estimated energy savings from installed measures	Included in a standalone, bi-annual report	Q2 2022	The first GoGreen Home Deemed Energy Savings Report was published in April 2022, with the second report published in September 2022. The report will be updated on a bi-annual basis.
Annual estimated non-energy benefits from installed measures	Financial benefits are currently reported	Reporting pre-dates requirement	Interest rate savings and monthly payment reductions due to the credit enhancement are currently reported for GoGreen Home (see Table 13).
Geographic breakdown of financing that includes, to the extent possible, ethnicity and socioeconomic data of loan recipients	Included in quarterly reports as of Q1 2023	Q1 2023	Staff launched a post-project customer survey to collect this data (to the extent possible) in Q1 2023. The survey is voluntary and goes to GoGreen Home customers who provide an email address on the borrower form.
Mean and median loan values	Included in quarterly reports and monthly data summaries	Reporting pre-dates requirement for mean values; median values included as of Q3 2021	
Mean and median Annual Percentage Rates (APRs)	Included in quarterly reports and monthly data summaries	Reporting pre-dates requirement for mean values; Q3 2021 for median values	GoGreen Home interest rates are currently equivalent to the APR as no additional fees are charged by participating lenders for these loans.