DOCKETED	
Docket Number:	16-OIR-06
Project Title:	Senate Bill 350 Disadvantaged Community Advisory Group
TN #:	243147
Document Title:	ITEM 6 CPUC CEF PPT May 20 DACAG Meeting Presentation
Description:	N/A
Filer:	Dorothy Murimi
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	5/19/2022 1:04:55 PM
Docketed Date:	5/19/2022

Clean Energy Financing Proceeding R.20-08-022

Track 2: Proposals from Stakeholders for New Financing Programs

May 20, 2022

California Public Utilities Commission

Clean Energy Financing

Goals of the Proceeding:

- Bring greater equity to energy financing
- Protect customers who engage in energy financing
- Attract the private capital needed to reach the State’s goals such as for 100 percent decarbonization by 2045 or sooner
- Expand existing energy financing programs beyond energy efficiency to include electric vehicle infrastructure, energy storage, and a full set of integrated offerings
- Develop innovative programs including new on-bill programs
- Reach a broader set of customers and market segments
- Encourage customers to invest in projects that will achieve deeper benefits in the form of energy savings or energy production

Clean Energy Financing: Tracks 1 and 2

- **Track 1** (D. 21-08-006) addressed programs administered by the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA).
  - Granted a five-year extension for the existing financing programs administered by CAEATFA
  - Authorized up to $75.2 million in additional ratepayer funding to support the extended programs

- **Track 2**
  - Directed the California utilities to propose new financing programs that meet the goals of equity, scalable energy finance, customer protection, and more
  - Invited non-utility stakeholders to propose new financing programs that do the same

These proposals will be presented today

Joint IOU Clean Energy Financing (CEF) Proposals Equity Overview

Clean Energy Financing Overview

- Clean Energy Financing (CEF) is a way to allow for larger or broader investments in multiple types of clean energy improvements through a single program. These financing programs are targeted to attract investment by third-party partners to increase their efficacy and scope.

New Financing Program Proposal Guidance

- Expand beyond energy efficiency (EE)
- Consider consumer protection measures and attracting third-party investment
- Achieve at least one of the state’s clean energy goals (reduce emissions/fossil fuel use and/or increase adoption of clean energy tech)

Financing Program Types

On-Bill Financing (OBF)

- The utility provides a loan to a customer for clean energy upgrades. Loan funding can come from multiple sources, including either the utility's own or third-party capital.
- The customer repays the cost of the upgrades through a fixed monthly loan installment on their utility bill.

Tariff On-Bill Financing (TOB)

- The utility finances the clean energy upgrades. Funding can come from multiple sources, including either the utility's own or third-party capital.
- The upgrades are paid for by a monthly tariff on the customer's utility bill.
- The tariff is not considered a customer loan and stays with the property.

On-Bill Repayment (OBR)

- A third-party lender provides a loan directly to a utility customer for clean energy upgrades per their terms.
- The utility collects repayment on behalf of the lender as a part of the monthly bill.
- Certain statewide GoGreen Financing programs utilize this program type.

Overview of IOU Proposals

	Non-Residential [1]	Residential
On-Bill Financing	PG&E SCE SoCalGas SDG&E	SoCalGas
Tariff On Bill	--	PG&E SCE
On-Bill Repayment	GoGreen Financing	GoGreen Financing

[1] Non-Residential includes industrial, commercial, government, non-profit, and other non-residential buildings

Clean Energy Financing Options (CEFO) Program Proposal

Disadvantaged Communities Advisory Group (DACAG)

5/20/2022

PG&E CEFO Proposal: DACAG Presentation

PG&E's CEFO proposal seeks to leverage **Outside Debt Funding** to create a **Finance Platform** that would enable programs to:

1. Enable **Financial Program Implementers** to develop more effective customer programs to support local communities and policy objectives
2. Address the first cost barrier by supporting turnkey projects with repayments through **Customer Financing Mechanisms (OBF and TOB)**
3. Support energy affordability for participating and non-participating customers by capturing benefits to more efficiently use customer funds

PG&E CEFO Proposal: Funding Flows

Key Takeaway: Debt funding flows into initial Finance Program costs, which repays that funding through three program inflows.

1 Funding Inflows

Outside (Non-IOU) Debt Funding

A

2 Program Outflows

Customer Projects Funded (OBF/TOB)

Program Implementation, Admin and Marketing Costs

3 Program Inflows

Net Participating Customer Repayments

Fed/State Subsidies

Program Benefits/Avoided Costs

Customer Program Funds Rate/Tax Subsidy

4 Funding Outflows

Outside Funding - Debt Repayment

Outcomes

Enable Customer Energy Improvements

Minimizing Ratepayer Subsidization (Reduced costs)

Achieve Policy Objectives

Total Capital = Total Outflows

Total Inflows = Capital Repaid

Change in Cashflows

PG&E CEFO Proposal: Customer Financing Mechanisms

Residential Customer Programs

⬇

Tariffed On-Bill (TOB)

- **New a**s-a-service tariff model - enables monthly payment options for a wider range of customers
- Finance Program Implementer (FPI) must address project performance risk over life of customer obligation
- TOB repayment risk will be modeled as a program cost and managed at the portfolio level
- Participating customer repayments made to be affordable for customer
- TOB charge is not due and payable if the customer moves – this is key to supporting residential customers, especially renters
- FPI will facilitate transfer and acceptance by subsequent customers (with IOU support)
- Will require review with lending regulators

PG&E CEFO Proposal: Customer Financing Mechanisms

Non-Res Customer Programs

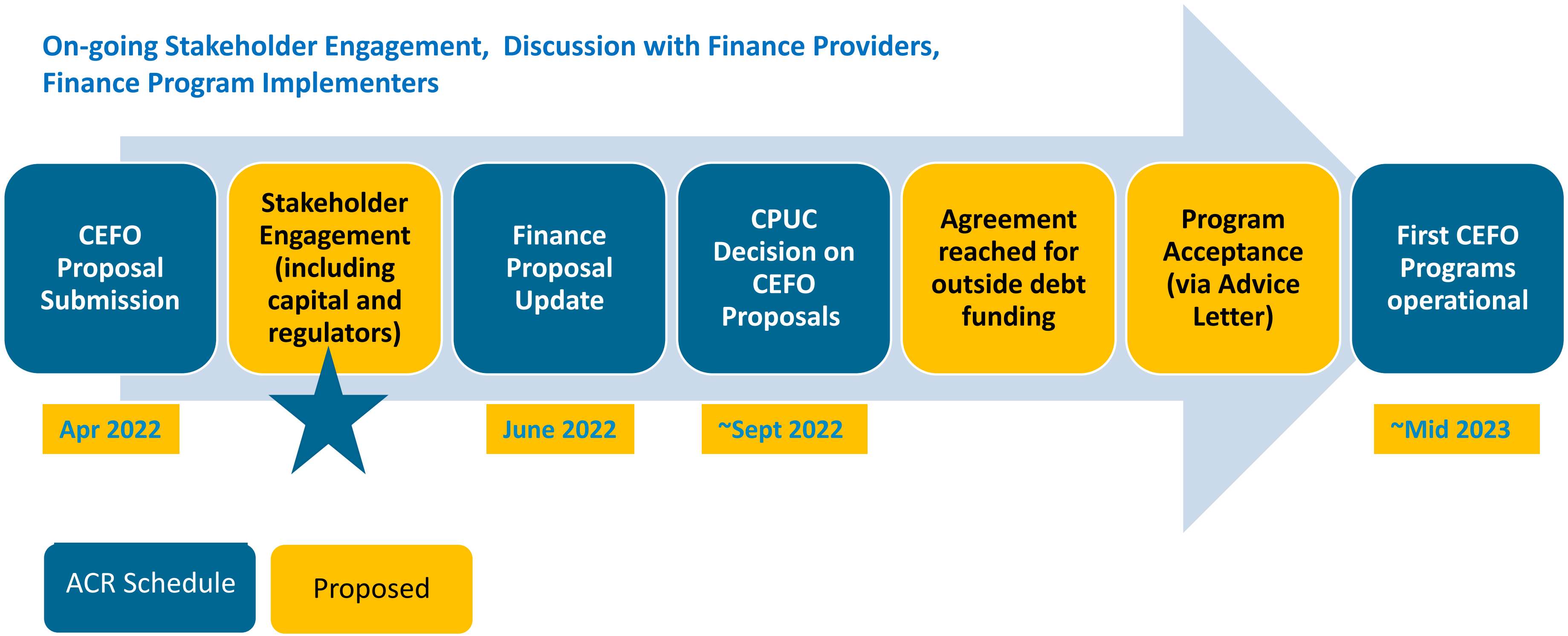
↓

Expanded On-Billing Financing (OBF)

- **PG&E's Existing** OBF program will be expanded using outside funding
- Expanded to other non-residential PG&E customer programs (where risk capital can be provided)
- Increased available capital for EE OBF, removing loan limits for customers/projects.
- Able to combine different technology types under a single loan agreement
- OBF loan repayment risk is a program cost
- Will require review with lending regulators

PG&E CEFO Proposal: Process and Timeline

Key Takeaway: PG&E envisions co-creating a transparent CEFO program proposal with stakeholders



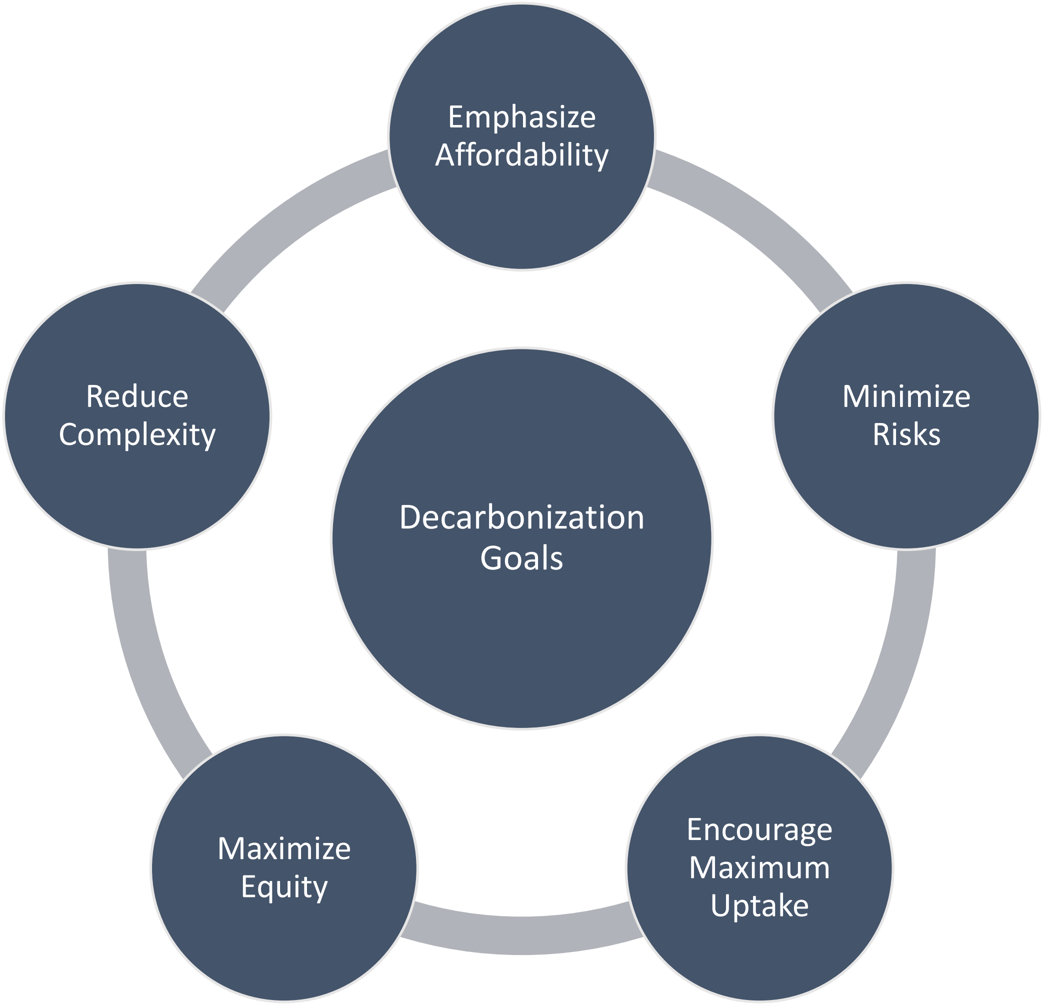
SCE Clean Energy Financing Proposals

Delia Williams

May 20, 2022

Key Design Principles

1) Emphasize affordability
2) Encourage maximum impact and uptake
3) Reduce complexity
4) Minimize customer and utility risk
5) Maximize equity and inclusion



Overview of SCE's Proposals

Expansion of Existing Non-Residential On-Bill Financing (OBF)

- Expand current OBF program to allow loans for clean energy technologies outside of energy efficiency (e.g., electrification) to allow for deeper retrofits and additional customer benefit and GHG savings.
- Projects could include EV charging, energy efficiency or building electrification
- Continue to use ratepayer funds to pay financing costs.

Establish New Residential-Only Tariffed On-Bill Program (TOB)

- Residential customers, owners, or tenants with owner consent, can finance a broad range of clean energy technologies (e.g., electrification), where costs are recovered via a utility tariff attached to the site meter.
- Projects could include energy efficiency or building electrification
- SCE proposes a phased approach, with plans to scale, to allow for modest initial investment to ensure viability before undertaking large scale risk and incorporate lessons learned into future designs.

Equity Features - TOB

Equity

Low-income CARE/FERA residential customers will only participate starting in Phase 2, after the program methodology has been refined.

Renters will not be required to pay the project tariff after they move

Tariff recovery charges will have a cash positive goal, reducing the customer's overall energy costs from multiple sources

Free upgrades and incentives will be applied first

Eligibility will be determined by utility bill payment history and a positive cash flow assessment screening for the project

Credit history and debt-to-income ratios will not be considered

Other Proposed Consumer Protections – TOB Program

- Robust notice requirements will apply to subsequent occupants of sites with a tariff-on-bill charge
- A capable and proven program operator with high standards and quality assurance process for vendors and contractors will be selected
- All program contractors and vendors will be fully trained to explain program terms, conditions, and obligations to residential customers
- The Program Operator will ensure that products are appropriate and functioning according to equipment and labor warranties throughout the tariff recovery

Other Proposed Consumer Protections – TOB Program

A bill savings analysis will be conducted to estimate cash flow is likely positive prior to program enrollment

A customer dispute resolution process will be developed

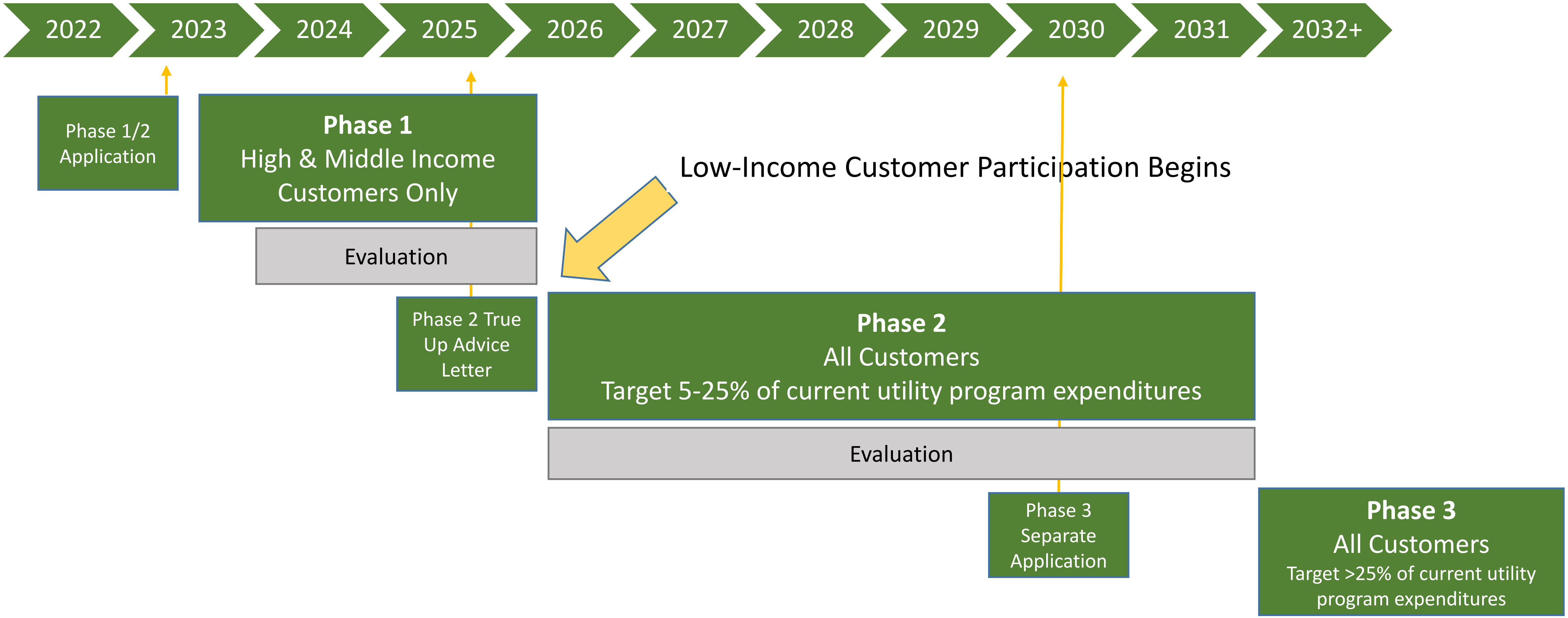
Landlords will be required to pay for necessary maintenance of equipment via co-pay or warranty, not the tenant. Both landlord and tenant must consent to the project

Customers must file their own application to ensure understanding of terms. Implementers will not be allowed to submit applications on behalf of customers

ESJ Community Outreach - TOB

SCE	Program Operator	Community Based Organizations	Program Materials	Marketing Efforts
Coordination with existing programs to leverage outreach and design elements that target ESJ communities	Development of a community outreach plan with special attention to ESJ communities	Participation in program outreach and potential case management or application assistance services	Development of program materials both for program promotion and educational purposes	Execution of marketing campaigns, through social media, bill inserts, and SCE's company website

Conceptual Timeline for TOB



Questions/Answers

QUESTIONS

SCE welcomes questions and feedback on our proposal.

CONTACT US

Please email SCE's Regulatory Case Manager at Luis.Gutierrez@sce.com

THANK YOU

CLEAN ENERGY FINANCING PROGRAM PROPOSALS 2022

DISADVANTAGED COMMUNITIES ADVISORY GROUP

May 20th, 2022

SoCalGas™

Proposal 1: Expand Existing Nonresidential OBF Program (OBF+)

» **Financing available to all clean energy technologies:**
- Energy Efficiency (available today)
- Distributed Energy
  - Combined Heat to Power, Waste Heat to Power, Fuel Cells
- Microgrid & Resiliency
  - Digester, Biogas Conditioners, Renewable Fuel Technology
- Renewable Natural Gas (“RNG”), Compressed Natural Gas (“CNG”), Hydrogen
  - Heavy Duty Trucks & Refueling Stations; RNG interconnections

» **Program Details:**
- 0% interest; unsecured loan
- No fees
- Monthly loan repayment added to customer utility bill
- No credit/income verification

» **Risks:**
- Measures will require larger loan limits; up to $5 million

» **Benefits:**
- Established program with general market awareness
- Low default rates; less than 1%

» **Funding Source:**
- Cap-and-Trade Funds

Proposal 2: Extend OBF to Residential Customers (OBF Consumer)

» **Financing Clean Energy measures:**
  - Water Heating, Furnaces, Solar Thermal, Pool Heaters, Fuel Cells

» **Program Details:**
  - 0% interest; unsecured loan
  - Bill neutrality/loan terms not exceed equipment EUL
  - No fees
  - 100% Financing
  - Monthly loan repayment added to customer utility bill
  - Approval based on account establishment and utility payment history

» **Benefits:**
  - Equitable
  - Reach disadvantaged communities
  - Remove barriers to affordable financing

» **Risks:**
  - Potential for higher default rates

» **Funding Source:**
  - Cap-and-Trade Funds

Consumer Protections

1 What measures are included to protect customers against unfavorable finance arrangements through outside lenders?

- Requesting funding from Cap-and-trade funds; SoCalGas will be the lender

2 What measures are included to protect customers against assuming excessive unmanageable debt under credit enhancement?

- Customer will be made aware of financing terms and conditions through loan disclosures/agreement
- Transparency of loan terms with customers
- No financing charge or fees

3 How is debt load projected to increase across the DAC vs non-DAC customer populations

- Participating customers will be incurring new debt
- Utilize program customer credit requirements for qualifying
- Manage program with industry acceptable lending default rates

4 What measures are included to ensure effective ME&O in DACs?

- Tailor education and awareness in disadvantaged communities
- Create program collateral material for customer distribution
- Include content on SoCalGas website
- Educate contractors and third-party programs

Consumer Protections

5 How are program participants targeted?

- Customers and business within ESJ communities will be contacted via available marketing channels
- Leverage existing EE programs as opportunity to build awareness of financing options

6 Is there a guarantee of a lower bill? If so, what are the details of that guarantee?

- Approval based on bill neutrality (OBF-Consumer only)
- Program intent is for bills to be lower or the same, however energy usage will vary by customer; therefore, there is no guarantee that bills will not increase

Additional Questions & Considerations

Q: What barriers to CEF adoption in ESJ Communities do you see that should be taken into consideration as part of our program design?

- OBF would exclude customers such as renters who do not have the utility bill in their name
- Eligibility criteria (good credit standing) may also exclude certain ESJ communities
- Lack of CBO support in all ESJ Communities in service territory

Q: How can CEF programs best protect renters and ensure that equipment maintenance responsibilities remain with landlords?

- There is currently no distinction made between owners and renters, the customer of record would be responsible for equipment maintenance

Q: What measures would you recommend to protect low-income customers from financing projects that are beyond their means?

- OBF-Consumer focuses on bill neutrality, therefore if they have been able to make payments currently, and are aware of repayment terms **prior** to enrolling, projects should be within their means

Clean Energy Financing Proposal

Heat Pump Water & Space Heating, and Electric Panel Upgrade Financing for Business Customers

Jon Kochik, Customer Programs, Solutions Manager
Athena Besa, Customer Programs, Strategy Advisor

The Path to Net Zero: A Decarbonization Roadmap for California

Electric Sector

Clean, reliable electricity will help enable decarbonization across the economy

Transportation

Switch to electric vehicles drives decarbonization

Buildings

Use of electric space and water heating reduces emissions

Industry

Electrification of select industrial processes reduces emissions

Proposed Program – Business Customer Clean Energy Financing (BCCEF)

Clean Energy Focus

- Building decarbonization - transition from natural gas to electric
- Heat pumps for water heating and space conditioning
- Panel upgrades to support future electrification

Customer Target

- Small and medium businesses (83%)
- 11,500 businesses in SDG&E DACs
- 50% of program focused on Hard to Reach and Disadvantaged Communities
- Outreach and education

Financing Mechanism

- On-Bill Financing
- 0% interest, no fees
- Eligible based on standing with SDG&E
- Incentives to balance costs
  - Energy Efficiency
  - Infrastructure (Panel Upgrade)
  - Energy Credit

Addressing Equity and Disadvantaged Communities

Proposal Features	Benefits for DACs and ESJ Communities
Targets small and hard-to-reach businesses	Funding reserved specifically for small business customers who often have low participation
Zero-percent interest loan	Reduces up-front cost, no added cost to borrow
Qualification based on paying energy bill	Does not require credit score or income verification
Monetary incentives to transition from natural gas to electric	Reduces total customer cost of project
Customer outreach and education	Increases awareness of benefits of newer heat pump technologies
Implementors conduct project cost reviews with customer	Provides clear understanding of costs and benefits of projects
Directly aligned with State of CA and regional clean energy goals	Contributing to the clean energy transition, with low out-of-pocket costs

Questions?

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Athena Besa, Customer Programs, Strategy Advisor

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Timeline

- May 12: Joint IOUs Workshops #2
- May (Various): IOUs individual Community Meeting
- June 15: Revised proposals and IOU Reports on Community Meeting and Workshop
- July or August: Possible Workshop #4 if needed
- June-Sept: Comments/replies; Option for evidentiary hearings
- September: Proposed Decision
- October: Decision

Requested DACAG Feedback

The IOU CEF proposals would particularly benefit from DACAG input on the following issues:

- What barriers to CEF adoption in ESJ Communities do you see that should be taken into consideration as part of our program design?
- How can CEF programs best protect renters and ensure that equipment maintenance responsibilities remain with landlords?
- What measures would you recommend to protect low-income customers from financing projects that are beyond their means?

Appendix

What We Do Today:
SoCalGas has financed energy efficiency equipment since 2005

	Description	Financing Programs
Ratepayer Funded	Administered since 2005 Available for Nonresidential and Multifamily customers Finance lending exemption granted by Dept. of Corporations	**On-Bill Financing** ▪ $5.5 million loan pool collected through transportation rates ▪ Only available for EE equipment participating in SoCalGas rebate programs ▪ 0% interest rate; up to 15-year payback period depending on customer and equipment ▪ Monthly loan payment added to customer gas bill ▪ To Date: 109 enrolled loans / 1 default / $4.8 million in total loans disbursed
Private Capital - Credit Enhancements Ratepayer Funded	Administered by CAEATFA, program funded by ratepayers • 70% of loan must be used for EE upgrades • 30% can be applied to non-EE equipment	**GoGreen-Home** ▪ Launched in 2016 ▪ Loans up to $50k ▪ $30M funded ▪ 1,800 loans enrolled ▪ 550 enrolled contractors ▪ 9 approved lenders **GoGreen-Business** ▪ Launched in 2019 ▪ Loans up to $5M ▪ On-Bill Repayment (“OBR”) feature launched 2022 ▪ 10 enrolled loans ▪ 5 approved lenders **GoGreen-Multifamily** ▪ Launched in 2019 ▪ Loans up to $10M ▪ OBR feature 2022 ▪ 0 enrolled loans ▪ 2 approved lenders

Meeting ESJ Action Plan 2.0 Goals

- Plan for all workshops to include representation from ESJ communities, CBOs, and consumer advocate groups
  - Sharing in a public forum and incorporating feedback into proposal design allows entities not normally able to formally contribute to the Rulemaking to be heard and participate
- Increasing investment in clean energy resources such as water heating, furnaces, solar thermal, pool heaters, and fuel cells to benefit ESJ communities with the goal of improving local air quality and public health
- Striving to improve access to transportation services for ESJ communities (OBF+ Only)
  - Affordable and accessible financing for RNG, CNG, and hydrogen fueled technologies will be made available in ESJ communities
    - Positive impact to heavy duty trucking and refueling stations

Meeting ESJ Action Plan 2.0 Goals

- Increasing climate resiliency by prioritizing businesses and customers located within ESJ communities such as DAC, tribal lands, low-income customers, and census tracts
  - Providing access and education are key to ensure that these communities understand how to prepare for climate resilience and can benefit from the technologies offered
- Enhancing outreach and public participation opportunities for ESJ communities by working with network of CBOs to provide access and education, as well as holding workshops to allow CBOs, local governments, and tribal organizations to provide feedback
- Incorporation of consumer protection measures and disclosures
- Continuing to work with diverse contractors and installers to meet supplier diversity contracting goals
- Refining evaluation, measurement, and verification criteria using feedback received to help monitor and evaluate ESJ efforts
  - Can also be used to improve training and staff development related to ESJ issues

Consistency with ESJ Action Plan 2.0

Goal 1: Incorporate equity & access – SCE's CEF program will be open to ESJ customers, including customers with lower credit scores, customers with low incomes, and customers who are unbanked, to ensure access.

Goal 2: Increase investment in clean energy resources to improve public health and air quality - Reducing dependence on fossil-fueled combustion appliances and vehicles will improve local air quality.

Goal 3: Improve access to high-quality water, communications, and transportation services – OBF will facilitate investment in ZEV charging infrastructure, which should facilitate additional clean transportation services.

Goal 4: Increase climate resiliency – Increased weatherization and the installation of more efficient space cooling appliances will reduce the cost of remaining cool during extreme heat events.

Consistency with ESJ Action Plan 2.0

Goal 5: Enhance outreach and public participation – SCE will solicit input from local ESJ community organizations in its service territory on its CEF proposal.

Goal 6: Ensure safety and consumer protection – SCE's CEF programs contain multiple consumer protection features.

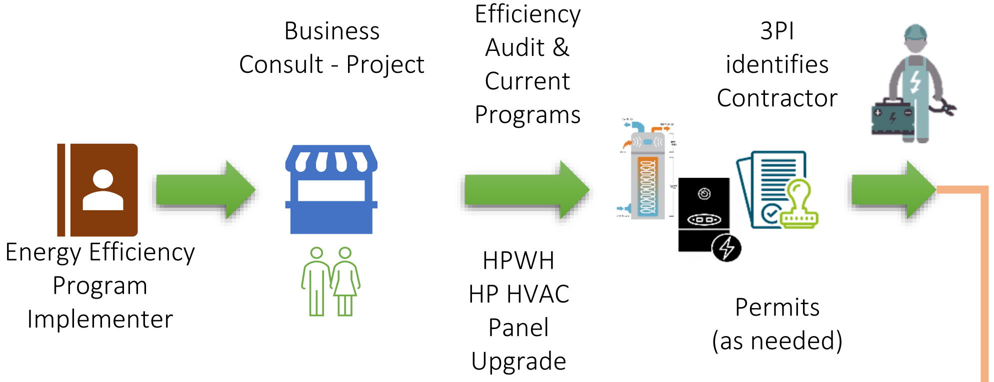
Goal 7: Promote high road career paths and economic opportunities – Financing options will leverage existing energy efficiency, building electrification, and ESA programs which contain workforce opportunities.

Goal 8: Improve CPUC training and staff development on ESJ issues – SCE will coordinate with CPUC Energy Division staff on CEF program development and design features, including those intended to protect ESJ customers.

Goal 9: Monitor efforts to evaluate how they are achieving their objectives – Each CEF program will contain metrics to assess the effectiveness of the program and allow for design changes as needed.

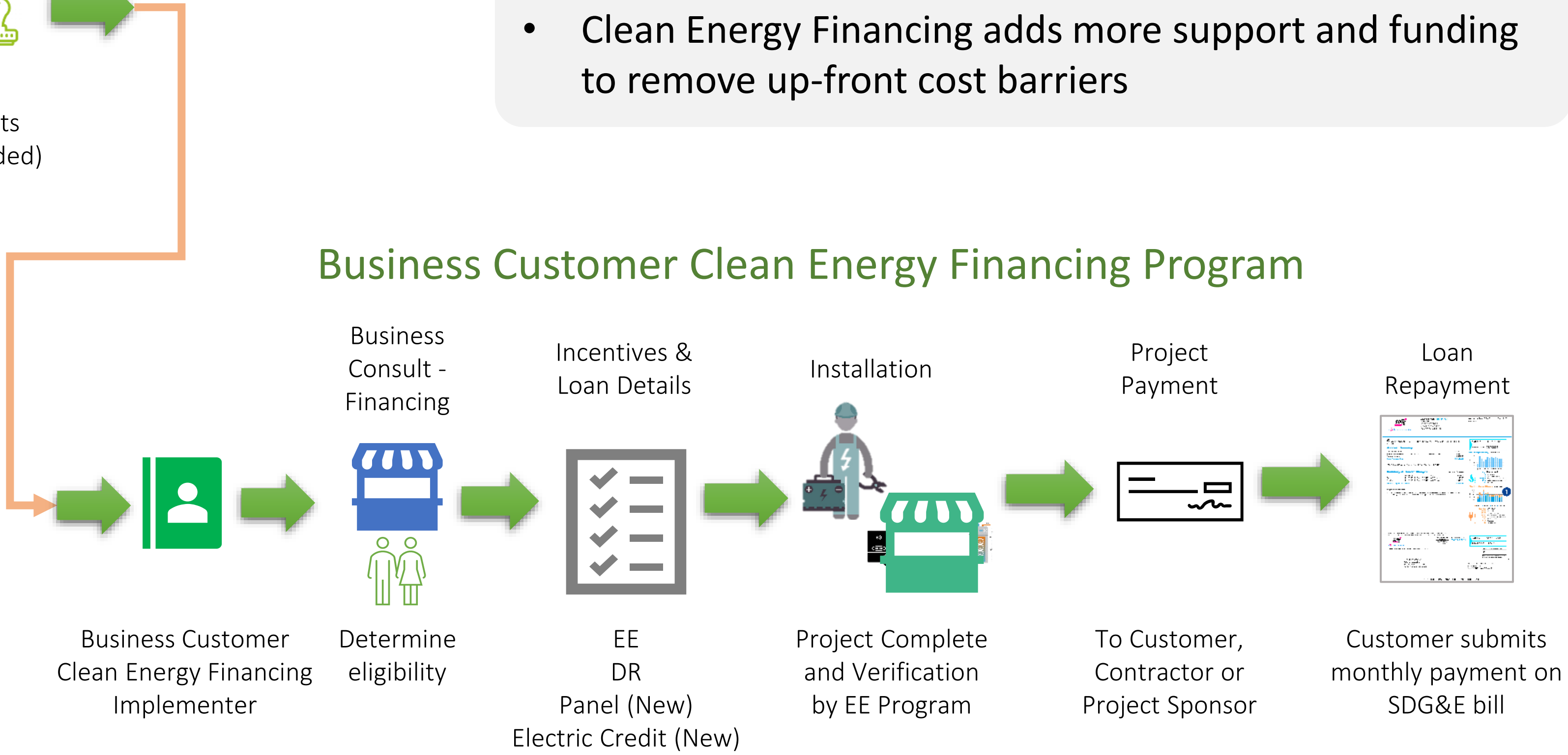
Business Customer Journey

Energy Efficiency Program



- Customers must participate in EE program with fuel-substitution measures
- Will leverage EE rebates, and DR as applicable
- Clean Energy Financing adds more support and funding to remove up-front cost barriers

Business Customer Clean Energy Financing Program



Consumer Protections

1 What measures are included to protect customers against unfavorable finance arrangements through outside lenders?

- SDG&E's proposed program will be funded through public purpose funds vs. outside lenders
- Utilizing established OBF program requirements
- 0% Financing
- No costs

2 What measures are included to protect customers against assuming excessive unmanageable debt under credit enhancement?

- SDG&E’s proposed program does not utilize credit enhancement.
- Customer will be made aware of financing terms and conditions through loan disclosures/agreement
- Transparency of loan terms with customers
- No financing charge or fees

3 How is debt load projected to increase across the DAC vs non-DAC customer populations

- Participating customers will be incurring new debt
- All customers have access to zero percent financing with no fees in order to limit customer debt to only the equipment and installation costs

4 What measures are included to ensure effective ME&O in DACs?

- Target program education and awareness for hard-to-reach customers
- Create program collateral material for customer distribution. Include content on SDG&E website
- Educate contractors and third-party programs
- Include key performance indicators to measure ME&O effectiveness

Consumer Protections

5 How are program participants targeted?

- SDG&E is specifically targeting small and medium business customers based on energy consumption, with a dedicated focus on hard-to-reach customers.

6 Is there a guarantee of a lower bill? If so, what are the details of that guarantee?

- SDG&E is not guaranteeing a lower bill. Energy savings and bill impact will depend on individual customer's usage and other considerations.

7 How does this program fit into the CPUC's ESJ Action Plan?

- SDG&E's proposed program was designed to align with the ESJ Action Plan, including a particular focus on hard-to-reach customers. For more information, refer to SDG&E's proposal filing.

Questions SDG&E would like the DACAG to consider in advance of the 5/20 meeting.

Barriers to participation: Based on their knowledge of the disadvantaged communities, what barriers to participation should SDG&E/IOUs anticipate in different customer segments? As SDG&E develops the Program with a third-party implementer, what are specific actions that should be considered to overcome these barriers to participation?

- Non-Residential buildings:
  - Small Business
  - Community Based Organizations
- Non-English-speaking communities
- Persons with access and functional needs

Tenant Occupied Spaces: SDG&E believes that the proposed Program can support business tenants/renters accessing clean energy investments, however building owners/landlords will need to be engaged.

- What is the best way to engage groups that represent business tenants/renters in your communities for feedback on program design?
- What is the best way to engage building owners that are active in your communities?
- Who should be consulted to ensure that tenants are not burdened with financial obligations that should be the responsibility of building owners?

Community Based Organizations/Community Stakeholders: Are there specific local stakeholders that SDG&E should connect with to educate on the benefits of the Program to help spread the word through grassroots channels?

Customer Bill Protection: What organizations should SDG&E work with to ensure that customers are current on their utility bill before and during their enrollment in the program, and understand the financial obligation that they are entering.

Diverse Suppliers: How can SDG&E enable diverse suppliers in these disadvantaged communities to participate in the proposed program, either as third-party implementer of the program or other contributor; in addition to SDG&E's existing supply management program and processes to reach diverse suppliers?

Diverse Workforce: What organizations or programs should SDG&E direct third-party implementers to connect to engage with to fill workforce needs?

A CCA Proposal for a Tariffed On-Bill Investment Pilot

Presented by

Silicon Valley Clean Energy

In partnership with TECH Clean California

Partner Profiles

- **Silicon Valley Clean Energy**
    - Public agency serving 13 jurisdictions in Santa Clara County
    - 270,000 residential and commercial customers
    - 715+ MW renewable + storage PPAs under contract
    - $77M in on-bill customer savings, $28M invested in customer programs
- **TECH Clean California**
    - $120 million initiative to drive market adoption of heat pumps and heat pump water heaters for existing homes in CA
    - Authorized by SB 1477, funded by gas IOU ratepayers under the auspices of the CPUC
    - Key activities include incentives, workforce training, consumer inspiration campaign, and 6 pilots, including Tariffed On-Bill investments

Presentation Outline

1. What is Tariffed On-Bill Investment? How Does It Work?
2. Customer Protections
3. Questions and Next Steps

SILICON VALLEY CLEAN ENERGY TECH CLEAN CALIFORNIA

What is Tariffed On-Bill Investment? How Does It Work?

TOB Investments vs. On-Bill Financing

		OBF	TOB
Program Attributes	• Cost recovery is through a fixed charge on the utility bill	✔	✔
	• Participant accepts an opt-in utility tariff <u>tied to the location</u>		✔
	• Charge applies automatically to successor customers until cost recovery is complete		✔
	• Estimated savings <u>must exceed</u> cost recovery charges		✔
Customer Benefits	• No upfront participant cost for cost effective upgrades	✔	?
	• No credit or income qualification required		✔
	• Renters are eligible		✔
	• Estimated savings <u>exceed</u> cost recovery charges		✔
	• Payments end if upgrade fails and is not repaired		✔

SILICON VALLEY CLEAN ENERGY TECH CLEAN CALIFORNIA

TOB Pilot Proposal

- 500 heat pumps, 500 heat pump water heaters, EE improvements as needed
- Target high energy users
  - Space heating: >400 Therms per year
  - Space cooling: >1,600 kWh per year
  - Water heating: >360 Therms per year
- Customer eligibility: Independent of income or credit standing but subject to good utility bill payment history
- Year 1: focus on middle-income single-family customers with aging mechanical systems
- Year 2: expand outreach to lower income tiers and multifamily

Capital Source	Amount
Utility incentives	5,685,000
TOB contribution	$5,657,969
Participants and/or ratepayers	4,776,101
Total Investment	**$16,119,070**
Customer bill savings	$7,259,670
Bill savings net of cost recovery charges	$1,601,701
Avoided equipment replacement costs	$10,087,000

SILICON VALLEY CLEAN ENERGY TECH CLEAN CALIFORNIA

Customer Protections

Customer Protections: Planning and Post-Retrofit Phase

- **Project Planning Phase Protections**
  - Program Operator develops project scope or budget, not the installing contractor
  - Adopt best practices & QA protocols for developing savings estimates
  - Build in 20% buffer between expected annual savings and Program Service Charge

- **Post-Retrofit Protections Under Consideration**
  - Customer owns upgrades. No liens, no threat of repossession or foreclosure.
  - Customer-specific limited savings prediction guarantee based on end-use submetered results (to distinguish performance issues from confounding changes in customer behavior and lifestyle)
  - Investigate causes of mispredictions in pilot projects and incorporate lessons learned into revised program protocols

Tenant Protections

Design principles:

- Landlord must consent to let the utility program sponsor install upgrades.
- Landlords continue to have a fiduciary duty to provide space heating and hot water services to tenants.

Recommendations:

- Require landlord copayments for space heating and hot water upgrades
- Apply waterfall provisions for landlord copay, incentives, and TOB Program Service Charge structured to minimize tenant obligations, maximize benefits

Questions and Next Steps

Some Outstanding Questions

1. How should we weigh considerations of (a) enabling residents in equity-targeted communities to "move to the front of the line" for clean energy investments, versus (b) shielding vulnerable households from program delivery models that have not yet been fully field tested in California?

2. How might we structure an appealing offer to landlords without enabling them to outsource their statutory obligations to provide heat and hot water to their tenants?

3. Should low-income customers be discouraged or prevented from installing air conditioning, knowing that their bills will probably go up as a result?

4. Should a landlord of a multifamily property be required to get consent from 100% of the tenants before proceeding with a retrofit in which tenants would be charged a fraction of their bill savings to help cover investment costs?

Procedural Next Steps & Timeline

- April 15. SVCE & TECH jointly submitted TOB Pilot proposal to CPUC Clean Energy Finance proceeding R.20-08-022)
- Additional proposals submitted from PG&E, SCE, SDG&E, SCG, CAEATFA, and LGSEC (SBCE)
- May: stakeholder workshops
- June 15: Submit revised proposals, as necessary
- Q4: CPUC decision on proposals
- Q1, 2023: Finalize prep and potential launch

Thank You!

For more information, contact:

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CHEEF CALIFORNIA HUB FOR ENERGY EFFICIENCY FINANCING

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Clean Energy Financing Technology Expansion

DACAG Meeting
May 20, 2022

GoGreen Financing increases access to affordable clean energy financing options

- **Facilitates attractive financing options for customers** for behind-the-meter improvements
- **Leverages private capital** using a credit enhancement
  - Enables lenders to lower interest rates, extend payback terms, and broaden approval criteria
- **Authorized by the CPUC**, administered by CAEATFA (an agency of the State Treasurer's Office) – operational since 2016

GoGreen Home *2,000+ loans enrolled*	• **Owners and renters of single-family homes (inc. manufactured homes, condos, multiplexes)** • **Microloans for appliances reaching underserved borrowers**
GoGreen Business	• Small businesses and nonprofits, owners or tenants • On-bill repayment option available
GoGreen Multifamily	• Affordable multifamily properties where >50% units are LMI-restricted • Interest rate buy-down promotion lowers rate to 0%

Clean Energy Financing Proposal: Leverage more private capital toward more of the State’s goals

Expand the GoGreen Financing Programs to support financing of **comprehensive clean energy technology**

- Move beyond the silos of Energy Efficiency and Demand Response to also support state goals of decarbonization, GHG reduction and resiliency
- Potential measures may include battery storage, EV charging, combined heat and power, etc.

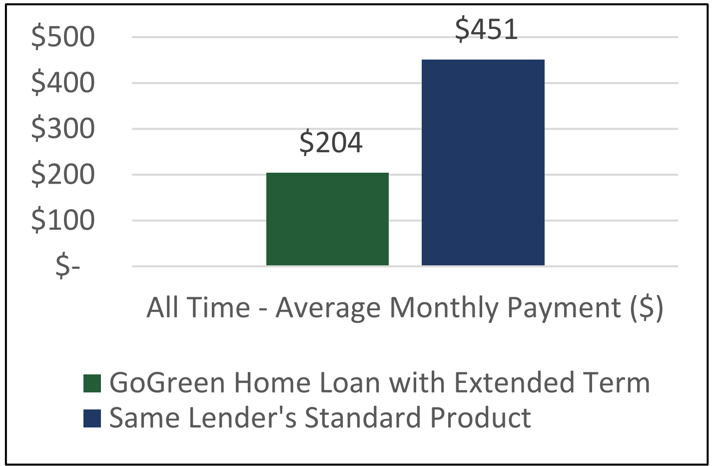
Re-authorize CAEATFA to develop the **Public Buildings/Large Commercial Program**

- Allow on-bill repayment without a credit enhancement for large commercial and public buildings

Consumer protections are built into program design

Average Monthly Payment Reduction Due to Extended Terms

for GoGreen Home loans with terms >60 months



Compares monthly payments between GoGreen Home loans with terms >60 months and what monthly payments would have been for the same lender's non-GoGreen Home signature product, which is limited to 60 months

- Existing consumer protection measures will continue if proposal is approved:
  - No property liens – loans are unsecured or equipment-secured
  - Interest rates capped at US Treasury + 750 basis points; lenders must show how credit enhancement reduces rates from their non-GoGreen products
  - Debt-to-income maximum of 55% to prevent customers from taking on debt they cannot repay (for loans >$5,000)
  - Credit enhancement allows lenders to offer extended terms, which significantly reduces monthly payments, thus reducing risk of default
  - No risk of utility disconnection for off-bill repayment products
  - Lenders have "skin in the game" on every loan made; encourages them to make loans customers can repay
- 7 years of lending, 2,000+ loans enrolled, 25 defaults
  - Higher defaults expected for marketplace microloans as product reaches credit-challenged borrowers

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Reaching underserved communities and meeting ESJ plan goals

- Robust ME&O efforts target underserved communities
  - Statewide marketing and contractor outreach focuses on Central Valley
  - GoGreenFinancing.com limits bureaucratic interactions and make loan enrollment easy to navigate
  - Broad contractor network with capacity to serve 99% of Californians in 13 languages
    - Full website available in Spanish, with plans to translate into more
    - 200+ Spanish-speaking contractors, 6 Spanish-speaking lenders
- Program expansion works toward ESJ Action Plan goals
  - Comprehensive measures will help ESJ communities access clean energy resources for resiliency and local air quality/public health
  - CAEATFA has and will continue to share lessons learned with CPUC

GoGreen Home Outcomes

Standard Loans

56%
loans made to upgrade properties in LMI census tracts

24%
loans enrolled to borrowers with <700 FICO

16%
loans made to upgrade properties in DACs by CalEnviroScreen score

Marketplace Microloans

50%
loans made to borrowers with <640 credit score

26%
loans made to renters

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Thank You

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Decarbonization Incentive Rate (DIR) Financing Proposal

Developed by Local Government Sustainable Energy Coalition
and Santa Barbara Clean Energy

Order Instituting Rulemaking to Investigate and Design Clean Energy Financing Options for Electricity and Natural Gas Customers.

May 20, 2022

Proposal: Offer Marginal Cost-Based Rates to Incremental Electricity Loads Prompted by Fuel Switching

Customers who trade their natural gas-, fossil methane-, or propane-powered appliances for electric models would be provided with a discounted rate for the incremental (additional) electricity consumed.

These new loads would be exempt from the power cost indifference adjustment (PCIA) stranded asset charge to recover legacy generation costs.

- Community Choice Aggregators (CCA), for example, would not have to pass on PCIA charges to DIR-eligible load.

Costs for incremental service are best represented by the marginal costs developed by utilities and other parties in General Rate Case (GRC) Phase II cases or California Public Utilities Commission's (CPUC) Avoided Cost Calculator.

California has adopted marginal cost-based electricity rate discounts previously to incentivize beneficial choices.

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Incremental Load Induced by Decarbonization Would be Eligible for Lower Rates

For bundled Southern California Edison (SCE) customers, average rate would go from 17.62 cents per kilowatt-hour (kWh) to 12.95 cents, 26.5% less. Residential rates would decrease from 22.44 cents to 15.22 cents, 32.2% less.

- Tiered rates pose a significant barrier to electrification and would cause the effective discount to be greater than estimated here.
- These estimates were based on average electricity rate; added demand would be charged at the much higher Tier 2 rate. The decarb allowance could be introduced as a new Tier 0 below the current Tier 1.

Incremental electricity use would be determined through regulatory vetted sources.

- Building energy use: California Energy Commission's Title 24 building efficiency and Title 20 appliance standard assumptions, adjusted by climate zone.
- Vehicle energy use: based on average annual vehicle miles traveled in a designated region (e.g., county, city or zip code) as calculated by the California Air Resources Board for use in its EMFAC air quality model or from the Bureau of Automotive Repair Smog Check odometer records

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Pilot Sponsor: Santa Barbara Clean Energy (SBCE)

- Single City CCA with a goal of reaching carbon neutrality by 2035
- Almost 20% CARE customers, with significant renter population.
- Leverage DIR to help incentivize the switch to all electric buildings for all income levels

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How it Would Work

1. Customer Installs Electrification Measure (possibly with TOB)
2. Customer pays reduced rate for added load, realizes bill benefits, enrolls in LSE program
3. CCA/IOU leverages installed technology for RA, LCR, DR value
4. CCA/IOU reinvests value gained into electrification programs

Santa Barbara CLEAN ENERGY
CHOOSING RENEWABLE ELECTRICITY
LOCAL GOVERNMENT SUSTAINABLE ENERGY COALITION
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Participant Eligibility

Single family residential customers receiving electric service at a location with a meter.

Customer must have maintained an active utility account for the previous 24 months and had service at the premises to be retrofitted for least 12 months

Renters may participate in the program as long as the building owner agrees to permit SBCE to install upgrades that replace fossil fueled appliances with electrical units in the building. The owner will be required to maintain upgrades.

Eligible measure installation is confirmed

Customer must be in good payment standing from when the customer's program application is approved through the funding of the investment.

Customers must voluntarily opt to receive program services.

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Metrics and Key Performance Indicators

Affordability:

- Ability of pilot measures to keep customer cost neutral (or save money) on monthly energy bills.
- Customer benefits demonstrated and quantified so that they can be leveraged to attract third party capital.
- Projected annual and lifetime emissions and utility bill savings (using meter-based data whenever appropriate and feasible) relative to fuel switched.

Maximum Impact, Uptake, Reduced Complexity:

- Ability of granular customer data to be used to estimate customer uptake or measure interest.
- Number of high gas users converted to electric space heating and cooling.
- Number of TOB/DIR participants, level of interest, ease of pilot enrollment.
- Market share for eligible technologies.
- Cost per metric ton of avoided GHG emissions (using meter-based data whenever appropriate and feasible).

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Metrics and Key Performance Indicators

Minimizing Risk:

- Customer energy bills at least net neutral to fuel switching, considering costs of intervention.

Equity and Inclusion:

- Number of Spanish-speaking customers engaged and enrolled in the pilot.
- Number of CARE households served.
- Number and percentage of workers involved in implementation that are disadvantaged or otherwise underrepresented.
- Expected first-year GHG and utility bill savings for equity-targeted participants.
- Number of residential equity-targeted households receiving upgrades that are expected to improve home comfort, safety, and health outcomes.
- Number of residential equity-targeted households that could not be served due to the need for additional home repairs.
- Customer comprehension of program offers and satisfaction with program outcomes.
- Effectiveness of marketing and outreach campaigns based on engagement metrics.

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Pilot Timeline

- 30-90 days after decision: SCE and SBCE work together to develop DIR rate
- 90 days after decision: SCE finalizes DIR rate, issues associated Advice Letter
- 150 Days after decision: SBCE finalizes eligible measures and marketing plan
- 160 Days after decision: SBCE finalizes outreach plan, begins customer engagement
- 400 Days after decision: First 100 DIR customers enrolled, initial evaluation assessment conducted
- 520 Days after decision: 300 Pilot measures installed, program fully subscribed
- 600 Days after decision: program evaluation report issued

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Thanks!

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