

ENERGY EFFICIENCY PROGRAM OPTIONS

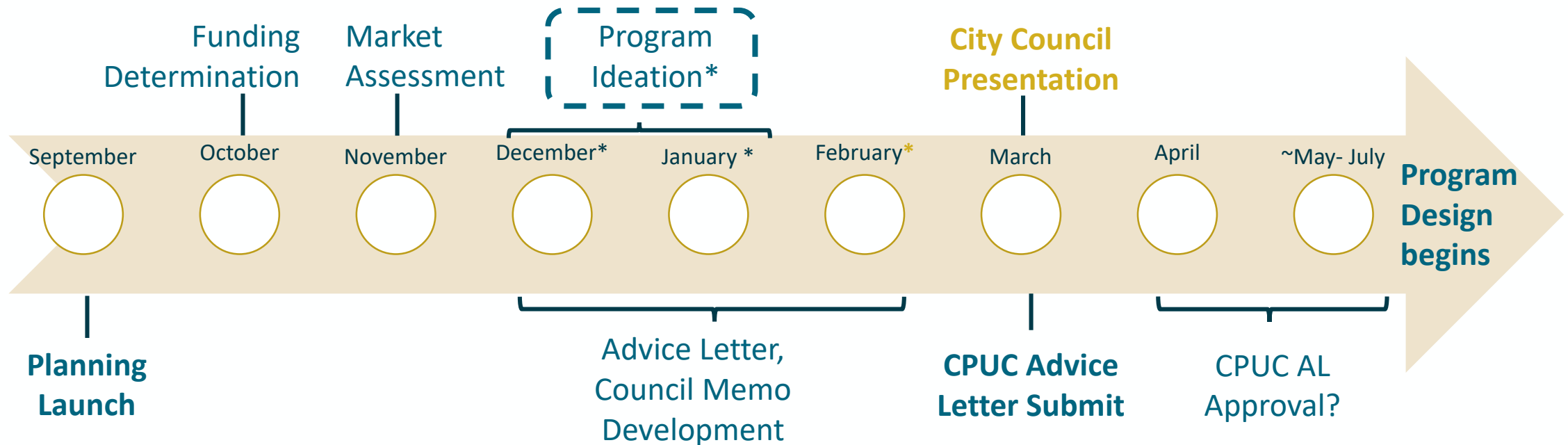


1/14/2021

TODAY'S OBJECTIVES

1. **Present:** 3 programs to include in EE application
2. **Seek:** Feedback on current programs options to narrow focus to 2 programs for application
3. **Next:** Return to CECAC 2/11 for final recommendations before 3/9 City Council presentation

ADVICE LETTER DEVELOPMENT TIMELINE



*CECAC Reviews

CPUC COST EFFECTIVENESS REQUIREMENTS

Cost Effectiveness

Costs

- Administration
- Implementation
- Marketing
- Incentives
- Measure Costs

Benefits

- Energy Savings
- Avoided grid costs
- Avoided GHGs

- Total Resource Cost Test (TRC)
- Program Administrator Test (PAC)

- 3-Year program plan and budget
- Cost effectiveness with Total Resource Cost > 1.0
- Can reapply every three years
- \$1.7 million per year estimated budget

INITIAL OPTIONS PRESENTED LAST TIME

	Potential TRC	Relative Cost of Proposed Measures	Program Costs/Level of Effort	Energy Efficiency Benefit	Additional SJCE Benefit
Single Family	TRC <1	High	High	Low	Strong Equity focus
Business (office, retail)	TRC >1	Low	Moderate	Moderate	Local Business Support
Food Service	TRC >1+	Moderate	High	High	Local Business Support
Light Commercial Services	TRC >1+	Moderate	High	High	Local Business Support
Schools	TRC >1	Moderate	High	Moderate	Support Local Schools

UPDATES SINCE LAST MEETING

1. No change in funding determination thus far (\$1.7 million)
2. Ran concepts quantitatively through cost effectiveness test model
3. Determined low income single-family home weatherization/retrofit program is not cost effective *enough*
4. Business, Food Service and light commercial segments now combined into one program as “light-medium commercial”
5. Commercial kitchen cooktop measures removed due to lack of cost effectiveness

UPDATED PROGRAMS

	Measures	TRC	Annual Budget	Annual Net kWh Savings	Annual CO2 MT Savings
Single Family	Electric Appliances	0.21	\$254,548	42,765	26
Small-Medium (SM) Commercial Only	HVAC, Refrigeration	1.16	\$1,442,437	4,573,057	1052
SM Commercial + Schools	HVAC, Refrigeration, Water Heating	1.24	\$1,442,437	2,854,022	962
Single Family + SM Commercial + Schools	Electric Appliances, HVAC, Refrigeration, Water Heating	1.11 (Combined)	\$1,696,985	2,854,022	987
Single Family + SM Commercial Only	Electric Appliances, HVAC, Refrigeration,	1.05 (Combined)	\$1,696,985	4,615,822	1078

← SJCE Preference

SINGLE FAMILY PROGRAM - ENERGY EFFICIENT-ELECTRIC APPLIANCES

- **Targeted Customers:** (250 households per year) single family low income- 200% of Federal Poverty Level to 80% of Area Median Income (family of 3 = \$43,440 - \$100,950)
- **Measures:** Refrigerator, Dryer, Smart Thermostat, Dishwasher, Smart Power Strip, Washing Machine, Room Air Conditioner
- **Benefits**
 - Aligns well with BayREN Electrification program offerings
 - Targets key low-income bracket not served by PG&E programs
 - Focuses on energy savings and products customers will see/use
- **Weaknesses**
 - Customer acquisition challenges with lower kWh savings

SMALL-MEDIUM COMMERCIAL PROGRAM

- **Targeted Customers:** (325 sites per year)
Medical/Dental/Nursing offices, a few large hospitals, small-medium retail stores, restaurants and convenience stores
- **Measures:** HVAC system and components, refrigerated display cases
- **Benefits**
 - High program kWh energy savings
- **Weaknesses**
 - More difficult customer acquisition volumes
 - None or limited net therm (gas) savings

SM COMMERCIAL + SCHOOLS PROGRAM

- **Targeted Customers:** (103 sites per year) School districts, Junior Colleges in San Jose
- **Measures:** HVAC system and components, refrigerated display cases, and water heating components
- **Benefits**
 - Build relationships with multiple customer segments for future programs
 - Higher net therm (gas) savings
 - More achievable customer acquisition volume
 - Leverage existing relationship with schools
- **Weaknesses**
 - Negative initial response on potential school district interest

NEXT STEPS

1. Return to CECAC to present final recommendation 2/11
2. Complete City Council Memo for 3/9 meeting
3. Complete CPUC Advice Letter for late March submission.



APPENDIX

Cost Effectiveness Details

Program Measure Details

Market Assessment Approach

FUNDING DETERMINATION METHODOLOGY

How eligible funds for Elect to Administer programs are calculated

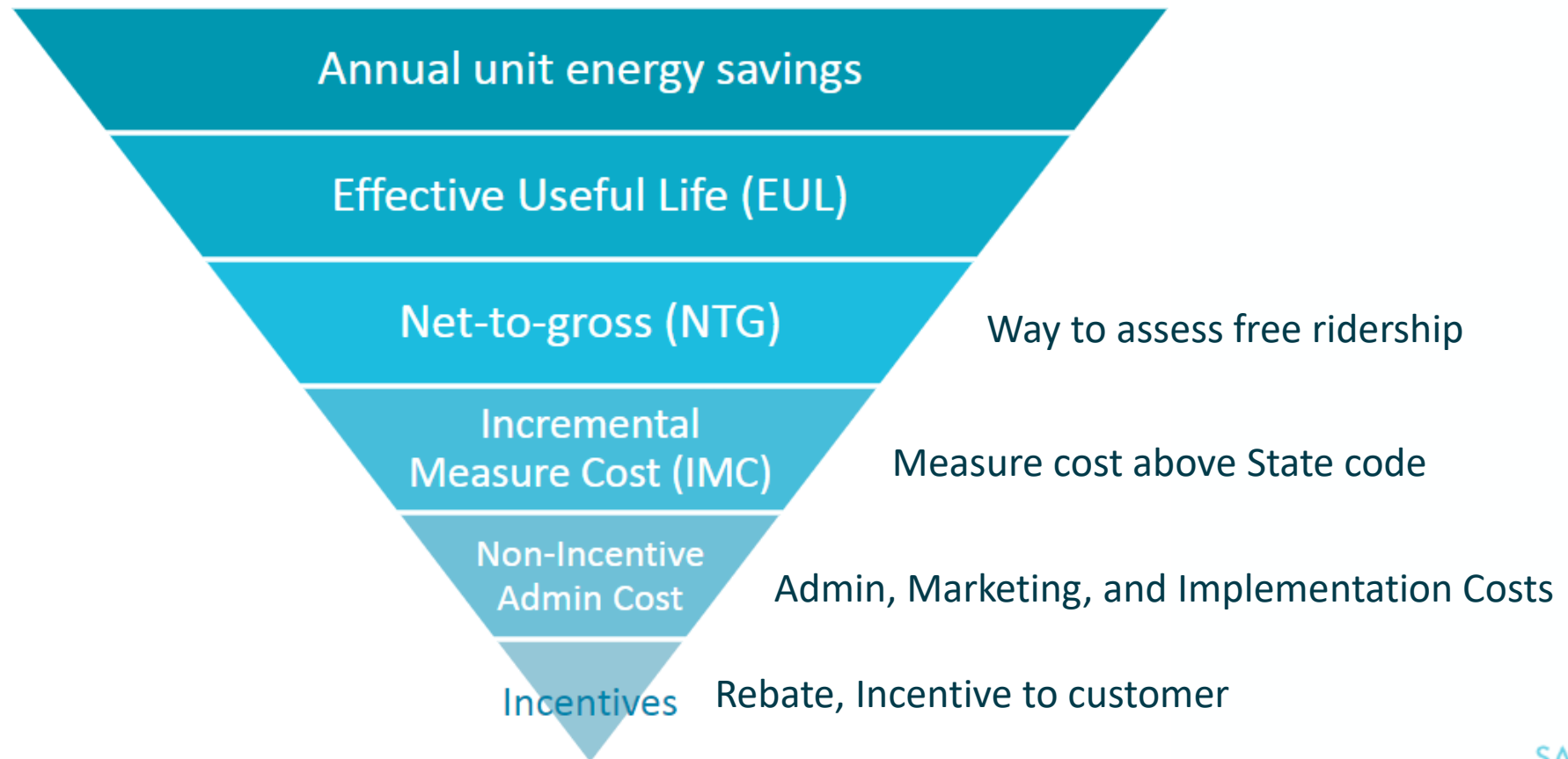
Based on:

1. SJCE Public Purpose Program Charges
2. % of PG&E program funding that is “local”, or per CPUC terms is not:
 - 1) Available statewide or
 - 2) Available across all PG&E territory

Calculated using the PG&E programs approved and operating during the year of the submitted ETA application

WHAT INPUTS DRIVE COST EFFECTIVENESS

Inputs that *generally* impact the TRC the most:



PROGRAM MEASURE DETAILS (SINGLE FAMILY)

Program Concept	Measure Description	CET Volume	CET Normalizing Unit	Incremental Measure Cost	Unit Incentive Amount	Incentive %
Res	Electric Clothes Dryer, Residential	50	Each	\$84.00	\$84.00	100%
Res	Electric Clothes Washer, Residential	50	Each	\$78.74	\$78.74	100%
Res	Smart Power Strips	250	Each	\$51.21	\$51.21	100%
Res	Electric Dishwasher, Residential	50	Each	\$144.00	\$144.00	100%
Res	Smart Thermostat, Residential	250	Each	\$142.46	\$142.46	100%
Res	Electric Refrigerator or Freezer, Residential	50	Each	\$52.00	\$52.00	100%
Res	Electric Room Air Conditioner, Residential	50	Each	\$22.00	\$22.00	100%

PROGRAM MEASURE DETAILS (COMMERCIAL + SCHOOLS)

Customer Type	Measure Description	Number of Sites	CET Volume	CET Normalizing Unit	Assumptions (Average NormUnit/Site)
Commercial	Variable Speed Drive for HVAC Fan Controls	100	1,500	Rated-HP	15
Commercial	Economizer Controls, Commercial	20	500	Cap-Tons	25
Commercial	Enhanced Ventilation for Packaged HVAC	40	1,000	Cap-Tons	25
Commercial	Supply Fan Controls, Commercial	40	1,000	Cap-Tons	25
Commercial	Bare Suction Line Insulation	25	2,500	Len-ft	100
Commercial	Medium Display Case With Doors	25	500	Len-ft	20
Commercial	Low-Temperature Display Case With Doors	25	500	Len-ft	20
School	Variable Speed Drive for HVAC Fan Controls	3	750	Rated-HP	250
School	HVAC Occupancy Sensor, Classroom	1	500	Cap-Tons	475
School	Economizer Controls, Commercial	3	1,500	Cap-Tons	475
School	Enhanced Ventilation for Packaged HVAC	3	1,500	Cap-Tons	475
School	Supply Fan Controls, Commercial	2	1,000	Cap-Tons	475
School	Recirculation Pump Timer, Commercial	3	3	Each	1

CPUC ENERGY EFFICIENCY PROGRAM REQUIREMENTS

- “Elect to Administer” (ETA) through Advice Letter
- Lancaster Choice Energy, Redwood Coast Energy Authority, CleanPowerSF, EBCE applied or applying for funds

Programs shall:

1. Advance cost-effective electricity savings and benefits
2. Accommodate need for statewide and regional programs
3. Meet CPUC audit and reporting requirements

PROGRAM FUNDING & PROGRAM IDEATION

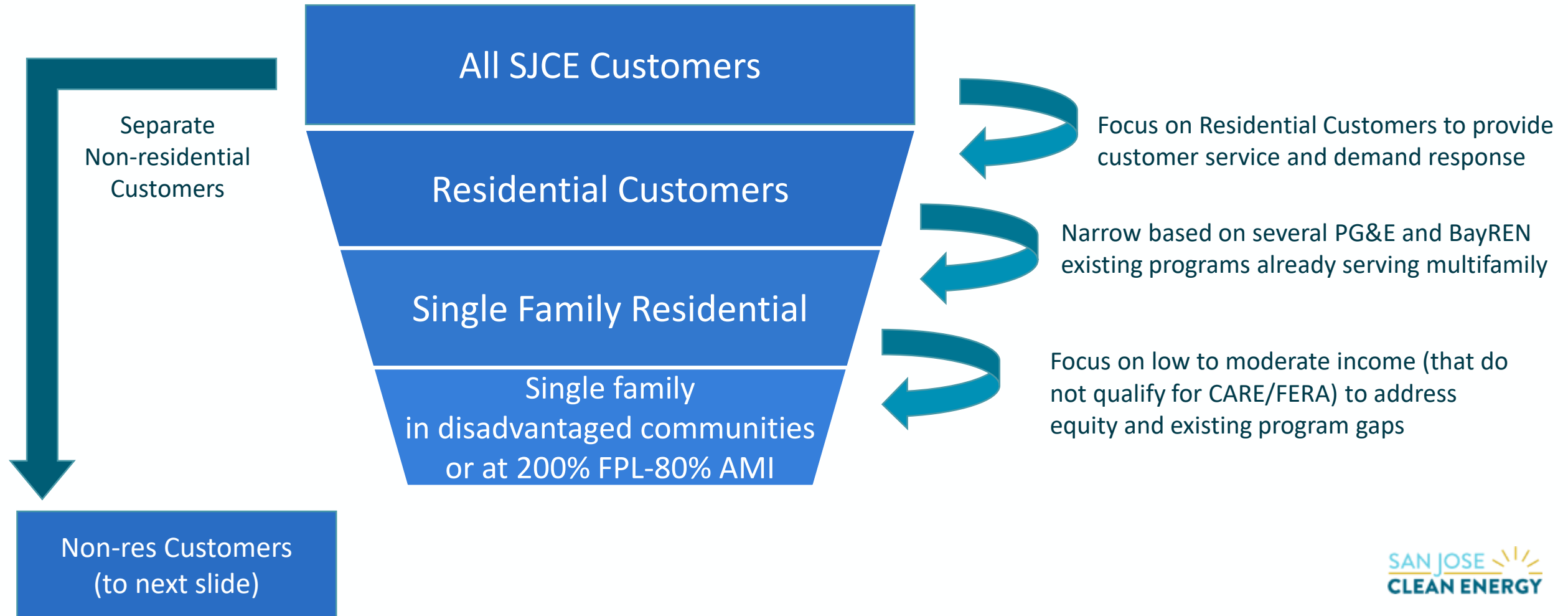
Program Funding

- Current estimate:
\$1.7 million/year
- Application total @ 3 years:
\$5.1 million
- Eligible budget may increase
 - Pending PG&E 2021 Implementation Plan Review
 - Early January 2021 check point

Program Ideation

- Goals and objectives:
 - Engage local communities to promote equity
 - Focus on local businesses
 - Maximize energy savings and GHG reduction; electrification
- Complement EE programs at BayREN and PG&E
- Balance portfolio scope and scale to achieve required **TRC (1 or better)**

PROGRAM CONCEPT FILTERING (1 OF 2)



PROGRAM CONCEPT FILTERING (2 OF 2)

