

ENERGY EFFICIENCY PROGRAM CONCEPTS



12/10/2020

TODAY'S OBJECTIVES

1. **Introduce** CPUC Energy Efficiency (EE) requirements
2. **Present:** 5 program concepts to include in EE application
3. **Seek:** Initial feedback on concepts to narrow focus to 2-3 concepts for application
4. **Next:** Coming back to CECAC in January with update and final proposed programs (2-3 concepts)

PROGRAMS ROADMAP PROCESS THUS FAR



PROGRAM AREAS AND GUIDING PRINCIPLES

Program Guiding Principles

- Promote equity and affordability and support disadvantaged communities
- Maximize greenhouse gas emission reductions
- Align with Climate Smart San José, the city's plan to reach the targets of the Paris Climate Agreement
- Benefit customers and the community
- Maintain or improve the financial status of SJCE

**Building
Electrification**

**Vehicle
Electrification**

**Distributed
Energy
Resources**

**Energy
Efficiency**

**Program-
Specific Rates**

Resiliency

NEAR TERM PROGRAMS (2020-2022)

ENERGY EFFICIENCY

**Elect to Administer
Energy Efficiency
Programs**

**DISTRIBUTED
ENERGY
RESOURCES**

**Disadvantaged
Community Green
Tariff**

**VEHICLE
ELECTRIFICATION**

**California
Electric Vehicle
Infrastructure
Project (CALeVIP)**

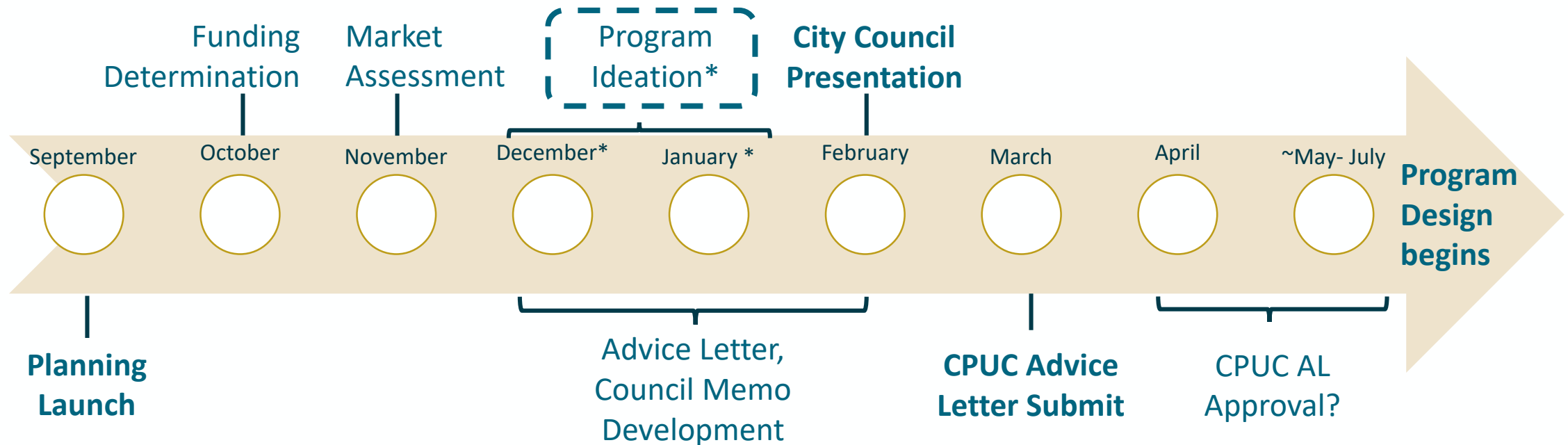
**Reviewed/
Approved**

Under Review

California Public Utilities Commission (CPUC) Funded

California Energy Commission (CEC) Co-Funded

ADVICE LETTER DEVELOPMENT TIMELINE



*CECAC Reviews

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

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

PROGRAM FUNDING & PROGRAM IDEATION

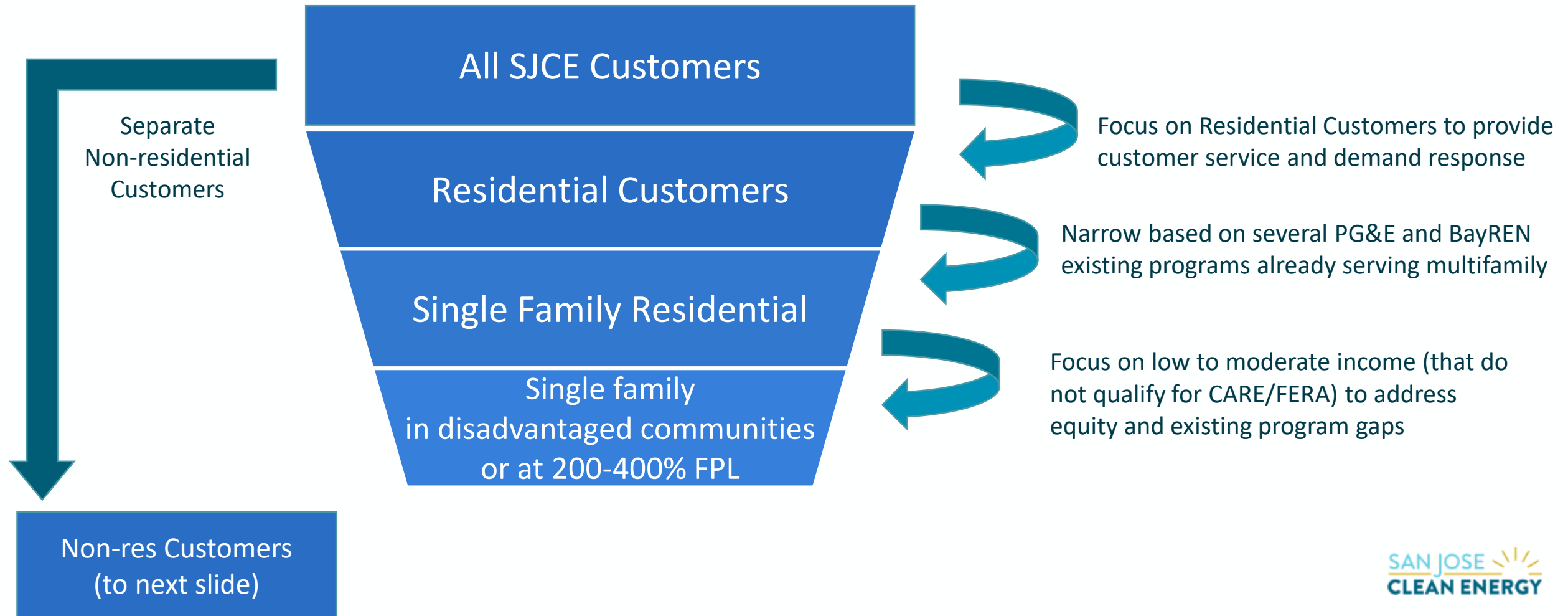
Program Funding

- 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

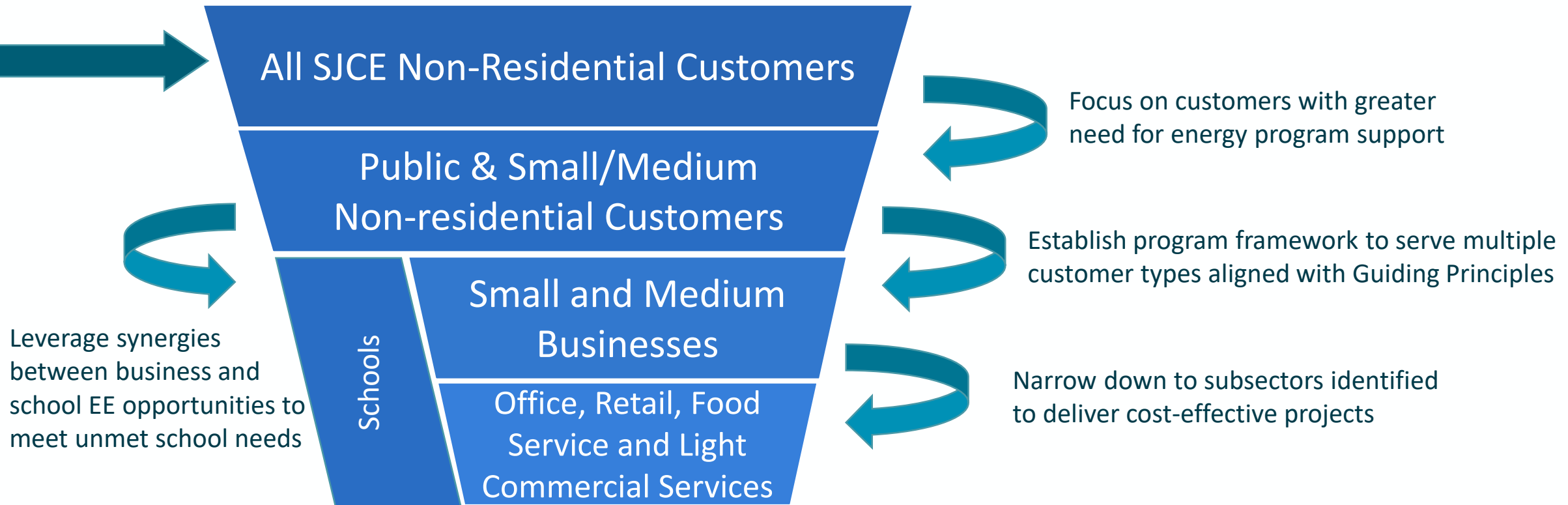
Program Ideation

- 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)



PRELIMINARY PROGRAM CONCEPTS

Concept	Customers of Primary Focus	Proposed Measures
Single Family	Low income (above CARE/FERA, below 400% Federal Poverty Level)	Weatherization; demand response; indoor air quality; appliances
Business (Office, retail)	Furniture, clothing, personal care	Lighting & HVAC; demand response
Food Service	Restaurants; small grocery; convenience stores	Lighting & HVAC plus water heating, cooking & refrigeration
Light Commercial Services	Repair & maintenance; laundry; nursing; medical & dental	Lighting & HVAC plus water heating & specialty equipment
Schools	Elementary, middle, & secondary schools	Lighting & HVAC plus water heating, refrigeration, & specialty equipment

SUMMARY OF OPTIONS

	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

- 1) *Reduce to 2-3 Programs*
 2) *Combined Portfolio TRC >1*

NEXT STEPS

Program Plan Development

1. Adjust plan based on CECAC and staff direction
2. Continue CPUC, PG&E, BayREN, and internal San Jose Coordination
3. Complete Final Funding Determination
4. Adjust budget and activities for final proposed programs



APPENDIX

Market Assessment Data

Draft Proposed Measure Lists

Program Concept Examples and Comparisons

FUNDING DETERMINATION METHODOLOGY

How eligible funds for Elect to Administer programs are calculated

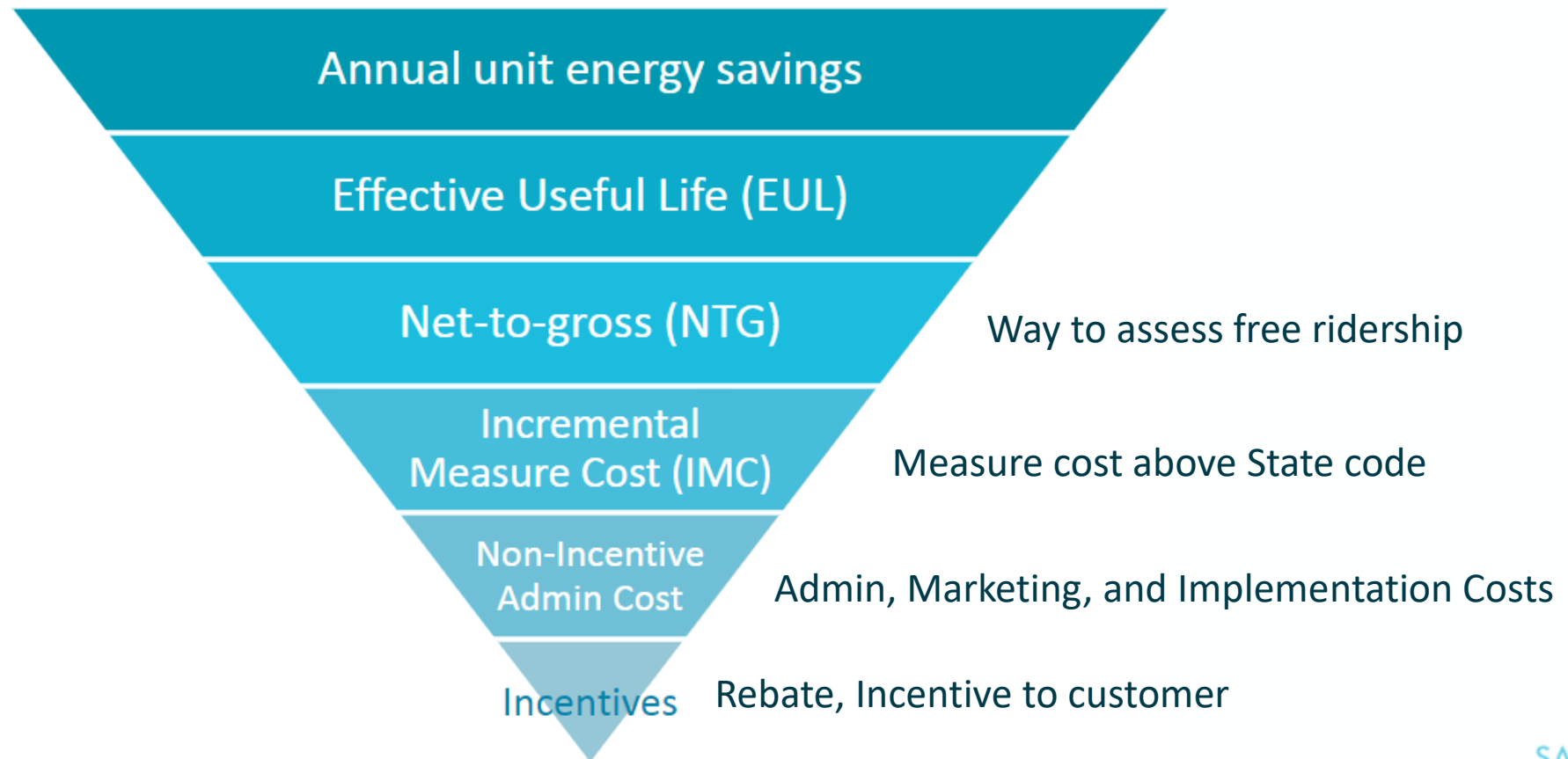
Based on:

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:



SINGLE FAMILY PROGRAM SUMMARY

	Single Family Moderate Income Electric Ready Low TRC (high cost and effort; societal benefit)
# of Accounts	~320,000
Measures	Weatherization; demand response; indoor air quality; appliances
Theoretical Cost-Effectiveness	Limited potential for deep energy savings with TRC >1
Benefits and Opportunities	<ul style="list-style-type: none">• Serve low income customers (200-400% FPL) that do not qualify for CARE/FERA that are not typically participating in other energy programs• Make existing building loads as efficient as possible, with load shifting options• Save people energy and make them more comfortable• Decrease the required size (and cost) of (electric) appliances when customers upgrade
Challenges	TRC likely to limit percent of portfolio funds for these projects

NON-RES PROGRAMS COMPARISON

	BUSINESS	FOOD SERVICE	LIGHT COMMERCIAL	SCHOOLS Higher effort More benefit
		Higher effort, More benefit		
# of Accounts	3,020	2,822	1,358	302
Measures	Lighting & hvac; demand response	Business measures plus water heating & refrigeration	Business measures plus water heating & process loads	lighting, hvac, water heating , refrigeration, & process loads
Theoretical Cost-Effectiveness	Some potential for TRC>1	Better potential for TRC>1		Better potential for TRC>1
Benefits and Opportunities	Allows build out of more tailored business offerings	More fuel substitution options; Each offers multiple unique community and industry engagement opportunities		Community engagement; Unmet capital improvement needs
Challenges	Much of low hanging fruit already picked	Significant issues of renter/owner split incentive; customer needs good measure ROI		Public school procurement & project requirements/timelines

PORTFOLIO OPTION “A”

Use base Business offering with higher potential TRC in Food Service/Light Commercial to balance Portfolio

	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	TRC >1+	Moderate	High	High	Local Business Support
Schools	TRC >1	Moderate	High	Moderate	Support Local Schools

PORTFOLIO OPTION “B”

Use base Business offering with Schools to drive sufficient projects to balance Portfolio.

	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	TRC >1+	Moderate	High	High	Local Business Support
Schools	TRC >1	Moderate	High	Moderate	Support Local Schools

SUMMARY OF PROGRAM OPPORTUNITIES

Program Area	Program Opportunity
Single Family	<ul style="list-style-type: none"> • Equity: Help low to moderate income customers save energy and increase comfort • Electrification: Make existing building loads more efficient for electrification • Community Benefits: Leverage PG&E, and other weatherization and healthy homes programs
Business	<ul style="list-style-type: none"> • Community Benefits: Help commercial customers with cost effective EE • Streamline program delivery with simple menu of opt-in services • Community Engagement: Work with local business communities
Food Service	<ul style="list-style-type: none"> ○ Electrification: Meet water heating, process loads, & hvac with electrification ○ Community Engagement: Focused outreach and project channels within tough-to-reach communities
Light Commercial	
Schools	<ul style="list-style-type: none"> • Leverage business offering to meet school retrofit needs within new sector • Obstacle: Completed projects reliant on school procurement cycles

FOOD SERVICE + GROCERY CONCEPT EXAMPLE

- Deemed and custom rebates
 - Point of sale incentives
 - Dealer/distributor discounts
- Unique marketing channels
 - Business district and community outreach
 - Vendor and industry relationships

Customer Type	Number of Accounts	Average Use/Customer	
		Electric	Gas
Full-Service Restaurants, Cafeterias, Grill Buffets, & Buffets	112	150,652	10,262
Caterers	42	126,715	3,149
Snack, Nonalcoholic Beverage Bars	365	54,238	1,108
Limited-Service Restaurants	672	101,260	5,318
Restaurants, Other Eating Places	34	55,176	6,549
Food Services-Drinking Places	1,307	54,193	5,299
Fresh Food Markets (Meat, Seafood, Farm)	18	121,585	1,223
Grocery, Convenience, Food & Beverage Stores	153	116,811	130
Other Specialty Food Stores	72	30,981	1,499
Confectionery and Nut Stores	14	24,239	527

PROGRAM MEASURE EXAMPLES

- Residential

- Water heaters
- Heat pump space heaters
- Faucet aerators
- Insulation
- Appliances

- Non-Residential

- HVAC controls
- Air conditioners
- LED lighting
- Food preparation equipment
- Ozone washing machines
- Pipe insulation

MARKET ASSESSMENT DRILLDOWN EXAMPLE

2019		
	NAICS Category Description	# of Customers (Count of SAIDs)
2019	Manufacturing	908
2019	Other	5,870
2019	Information	2,869
2019	Healthcare_SocialService	2,079
2019	Utilities	789
2019	Professional Scientific Tech	155
2019	Retailers	2,980
2019	Public Administration	314
2019	Accommodation & Food Services	2,838
2019	Wholesale_Trade	564
2019	Education	682

2019 Top Retailers Subcategories		
	NAICS Subcategory Description	# of Customers (Count of SAIDs)
2019	Depart Stores-exc Discount	1
2019	Department Stores.	29
2019	Discount Department Stores	1
2019	New Car Dealers	49
2019	Gasoline Stations	9
2019	All Other General Merchandise Stores.	114
2019	Family Clothing Stores	67
2019	Office Supply-Stationery Store	9
2019	Other Gasoline Stations	183
2019	Convenience Stores	141