



➔ Agriculture Energy Efficiency Program

Southern California Edison



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General Program Information

This webinar is designed to inform, educate, and solicit feedback from key stakeholders about Southern California Edison's (SCE's) Agriculture Energy Efficiency (AgEE) Program.

→ Purpose





- Implementation lead
- Budget management and incentive payments
- Marketing
- Information technology

- Lead outreach to the Controlled Environment Agriculture, Winery, and Non-Dairy Animal customer segments
- Industry partner engagement and outreach

- Woman-Owned Business
- Technical/engineering for Controlled Environment Agriculture
- Industry partner engagement and outreach

- Program-wide engineering support
- Custom and NMEC energy savings calculations
- Lead outreach to the Dairy Animal customer segment

→ AgEE Team



ICF Team



Karla Hendrickson
Program Director



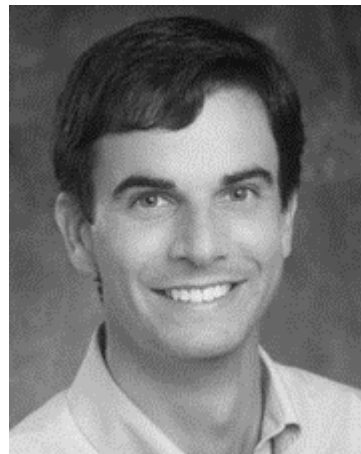
Caleb Hayhoe
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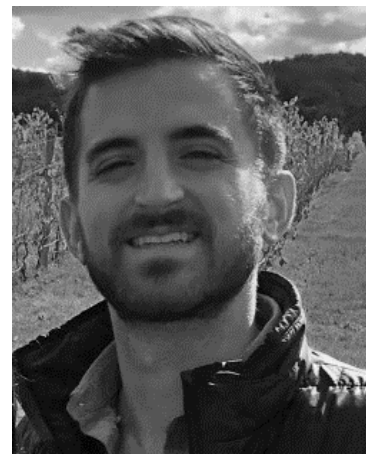
Victor Vargas
IT Solutions Lead



Amanda Tutera
Marketing Lead



Kyle Clark
Strategic Advisor



Ben Cooper
Deputy Program
Manager



Dr. Nadia Sabeh
Founder



Eric Noller
Dairies and Post-
Harvest Processing
Expert



Program Type

- Resource Program

Program Cycle Period

- Four years (2022–2025)

Target Sector and Segments

- Agriculture (NAICS Code 11)
- Key Segments: Controlled Environment Agriculture, Non-Dairy Animal Production, Dairy Animal Production, Irrigated Crops, Cold Storage and Post Harvest Processing

Incentive Path(s) offered

- Downstream/Direct Install

Key Performance Metrics

- Goal Accomplishment
- Cost Effectiveness
- Marketing Initiatives
- Enrollment in Hard-to-Reach/Disadvantaged Communities (HTR/DAC)
- Energy (kW and kWh)

→ AgEE Program Summary



Program Budget for Four-Year Cycle: **\$11,499,813**

Program Savings Goals	2022	2023	2024	2025	Total
Gross Demand Reduction (kW)	1,953	2,374	1,071	1,083	6,481
Net Demand Reduction (kW)	1,390	1,693	932	943	4,959
Gross Energy Savings (kWh)	7,884,658	9,314,141	8,803,225	8,809,001	34,811,025
Net Energy Savings (kWh)	5,555,650	6,666,480	6,666,344	6,666,666	25,555,140

→ Budget & Savings Goals



Measure Specifics

Measure	Measure Sizes	Incentive
Glycol Pump VFD	3hp – 25hp	\$1,500 – \$5,000 / unit
High-Low Bay LED Horticultural Lighting	4500 lumens – 65,900 lumens 130 LPW – 150+ LPW	\$30 – \$55 / unit
Efficient Ag Ventilation Fans	24 – 48 inch VSD	\$200 / unit \$195 / hp for VSD
Dust Collection Fan VSD	VFD on 10hp – 150hp motor	\$2,000 – \$15,000 / unit
VFD on Ag Well and Booster Pumps	<75 hp – 600hp	\$75 – \$200 / hp
Enhanced VFD on Ag Well and Booster Pumps	<75 hp – 600hp	\$150 / hp

➔ Measure and Incentive Details **Deemed**

Measure	Measure Examples	Incentive per kWh	Incentive per kW
Lighting	<ul style="list-style-type: none"> • Lighting controls • Horticulture lighting • Exterior LED lighting • Interior high/low bay LED lighting 	\$0.15	\$150
HVAC	<ul style="list-style-type: none"> • Horticulture HVAC system improvement • HVAC controls and VFDs • HVAC retro-commissioning • Chiller (HVAC) compressor – VFD • Ventilation fan – VFD • Efficient dehumidification system 		
Refrigeration	<ul style="list-style-type: none"> • Refrigeration system insulation • Refrigeration system controls and VFDs • Condenser fan – VFD • Chiller (process) compressor – VFD • Evaporator coil fan – VFD • Efficient refrigeration condensing unit • Oversized air-cooled condenser • Efficient refrigeration compressors 		

➔ Measure and Incentive Details **Custom + NMEC**

Measure	Measure Examples	Incentive per kWh	Incentive per kW
Irrigation	<ul style="list-style-type: none"> • Sprinkler/flood to drip irrigation • Distribution uniformity improvement • Irrigation scheduling 	\$0.15	\$150
Compressed air	<ul style="list-style-type: none"> • Compressed air controls • Compressed air system optimization 		
Pumping	<ul style="list-style-type: none"> • Pump controls and VFDs • Pumping system retro-commissioning • Agricultural pumping system upgrades • VFD on Ag well pump serving non-pressurized system (add-on equipment) • VFD on Ag pump serving non-pressurized system • Milk transfer pump – VFD • Vacuum pumps – VFD • Milking vacuum pumps – VFD 		
Wastewater	<ul style="list-style-type: none"> • Wastewater system controls and VFDs • High efficiency blowers • High efficiency pumps • High efficiency aerators • Wastewater treatment management system • Wastewater chemically enhanced primary treatment/sedimentation 		

➔ Measure and Incentive Details **Custom + NMEC***

Basic Requirements for All Measures

- Customers must meet [general program eligibility](#) requirements to apply for AgEE Program incentives
- All equipment must be new electric powered equipment
- Qualifying equipment must be purchased and installed between July 5, 2022, and December 31, 2025. The purchase date of the equipment must be within the calendar year that the application is submitted unless indicated otherwise.
- All required efficiencies must exceed Title 20 and 24 standards.

Access to Increased Incentives

- Customers who are [classified as Hard-to-Reach \(HTR\)](#) or who [are located within a Disadvantaged Community \(DAC\)](#) as defined by CalEnviroScreen 3.0 will receive a higher incentive

→ Measure and Incentive Eligibility



Delivery Details

Training and education on broader participation benefits

- Energy savings
- Non-energy benefits (e.g., increased yield, worker safety, etc.)
- Building energy assessments
- Energy benchmarking
- Technical support in selecting the most beneficial measures
- Ongoing guidance regarding measure installation and usage
- Financing assistance
- Support in gaining access to additional grant funding and financing options
- Dedicated outreach and increased incentives for DAC and HTR customers

→ Program Delivery and Customer Services



- AgEE will develop a Trade Ally Network to connect customers with installation contractors who understand the specific needs of Agriculture businesses
- Customers may select the licensed contractor of their choice – the Trade Ally Network will be provided as a service to customers

Contractor Eligibility Requirements

Have

Current, valid Contractors State License Board (CSLB) license
Proof of current liability insurance
Current w-9
Additional certification (e.g., CALCTP) as defined by CPUC
Workforce Standards

Comply

OSHA safety requirements as established by the governing statutes, standards or regulations

Attend

All required program training

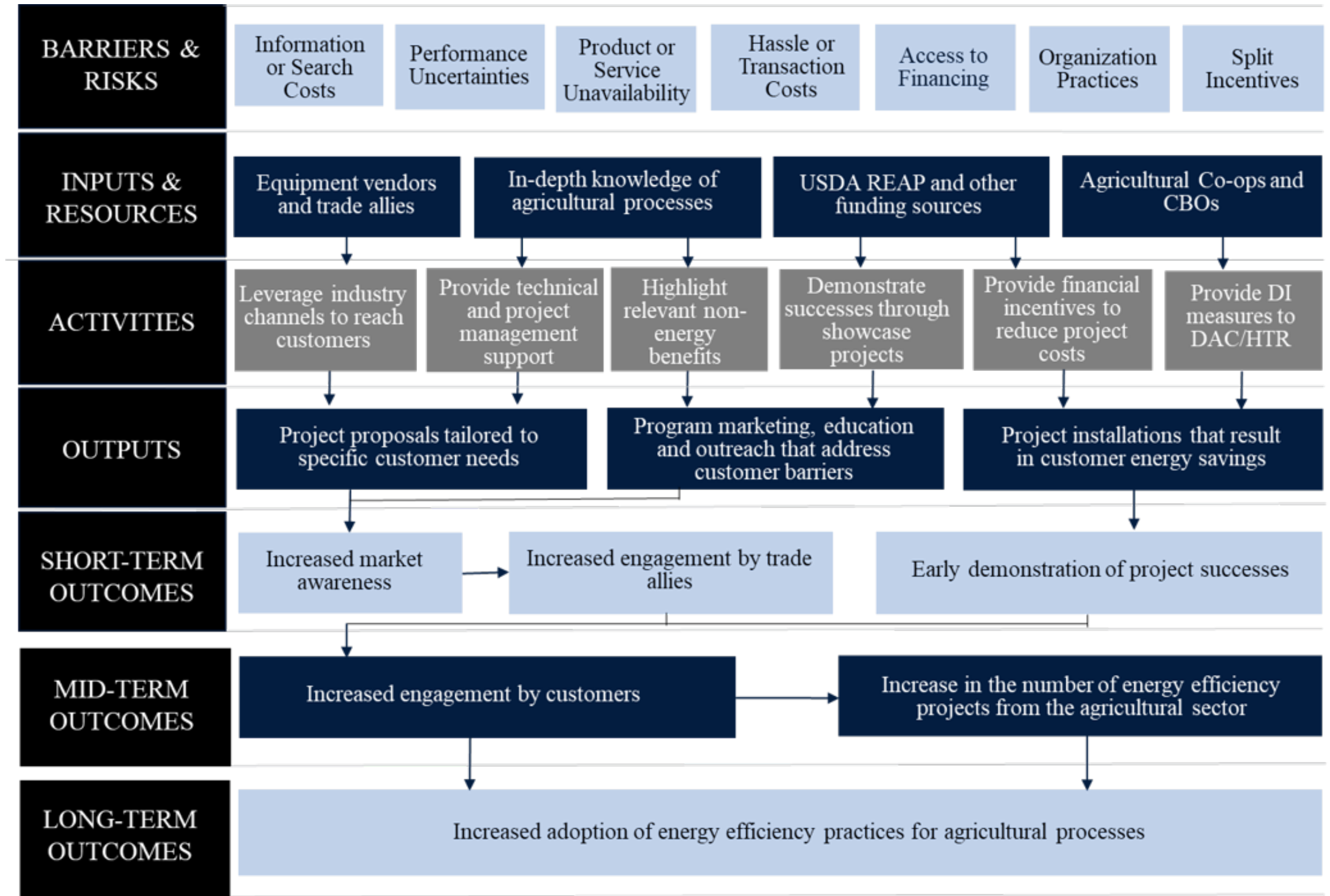
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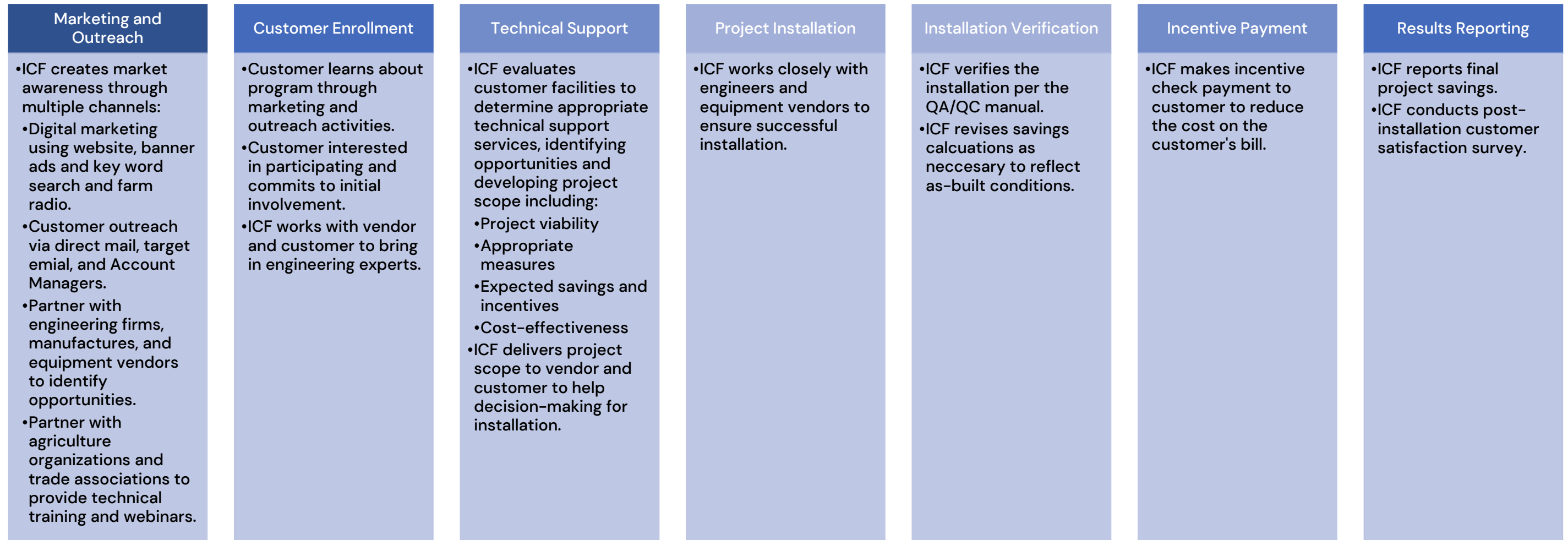
Specified program complaint/dispute resolution procedures
Specified program standards for all work performed
Program quality assurance procedures

→ Contractor Eligibility



Program Logic Model





Program Process Flow

Key Customer Details

- Agriculture customers under NAICS code 11
- Valid SCE service account
- Largest concentration in the San Joaquin Valley, followed by Ventura, Riverside, and San Bernardino counties

Key Customer Groups

- HTR/DACs
- Estimated % of savings goals
 - 5% from HTR
 - 32.5% from DACs

Customer Types

- Controlled Environment Agriculture
- Non-Dairy Animal Production
- Dairy Animal Production
- Irrigated Crops
- Cold Storage and Post Harvest Processing

→ AgEE Program Targets



Colleges & Universities

- Cal Poly San Luis Obispo, UC Santa Barbara, California State University Extension System

Farmer Trade Associations

- Farm Bureau, California Certified Organic Farmers

Industry Associations

- Western United Dairymen, California Growers Association, California Fresh Fruit Association, Wine Institute, California Cannabis Industry Association, Plant California Alliance

Government Agencies & Affiliated Groups

- California Department of Food and Agriculture, local Chambers of Commerce, local USDA offices

Service Providers for Farmers

- Farm Credit

Equipment Manufacturers & Distributors

- Horticultural Lighting, HVAC Systems, Lighting and HVAC controls, Pumping Systems

→ AgEE Program Partners



Objectives

- Communicate the benefits of program participation to identified eligible customers
- Empower the outreach team with promotional tools and materials
- Support engagement efforts with California's extended agriculture community

Tactics and Resources



24/7 digital access via website with key program information



Email newsletter to promote incentives, services, events, and technologies that may be available during the program period



Direct mail to targeted customers, including customers located within ZIP codes classified as Disadvantaged Communities



Informational collateral in English, Spanish, Simplified Chinese, and other languages as necessary



Industry engagement including event sponsorship, trade advertising, and association participation

→ AgEE Program Marketing





Stakeholder Questions & Comments



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