



RESOURCE
INNOVATION
INSTITUTE



**Efficient
Yields**

Best practices on energy,
water efficiency, and productivity

Controls & Automation Best Practices for Efficient Greenhouses & Indoor Agriculture

In partnership with



SOUTHERN CALIFORNIA
EDISON

December 13, 2022

Agenda

Introduction & Purpose	1:30
How Controls Impact CEA Crops	
Benefits of High-Performance Controls for Indoor Facilities	
CEA Controls Types	
Optimizing Controls System Design	
Best Practices for Advanced Controls & Automation for Indoor Cultivation	
Benchmarking Controls KPIs	
Maximizing Technical Assistance for Controls Projects	2:45 pm
Q&A	

SECTION 01

INTRODUCTION & PURPOSE

About RII

Objective, data-driven non-profit

Founded 2016 in Portland, Oregon

Expertise in climate policy, utility programs, green building certification, sustainable business, construction & indoor cultivation

In 2020, received 3-year grant from USDA to develop KPIs, standards & building rating system for CEA



Our Network



RII Working Groups

Multi-disciplinary body who aggregates knowledge to support producers and other stakeholders with objective and peer-reviewed data and curriculum on benchmarking resource efficiency

- **Guides** development of standards
- **Shapes** tools and resources to support best practices
- **Advocates** for informed policies, incentives and regulations

HVAC - Lighting - Utility - Water
Policy - Data - Controls - Emissions
Facility Design & Construction



ABOUT US

Peer-Reviewed Publications



Best Practices Guides for Producers



Best Practices Guides for Governments and Utilities



Industry Reports on Resource Usage



Access Your California Virtual Classroom

Continue Learning Online

Free guidance on efficient cultivation

All live workshops are available for on-demand viewing!

- Recordings of live workshops
- Tip Clips
- Downloadable resources
- SCE, PG&E and state program tools

Create an account at
resourceinnovation.org/California



Product Type

ON DEMAND

California Efficient Yields: Optimizing CEA Environments - Aligning Your HVAC Systems with Your SOPs

Faculty: Rob Eddy | Adrian Giovenco | Brian Kammers

Duration: 1.5 hours

Format: Audio and Video

Original Program Date: Nov 08, 2022

Price: \$0.00 - Non-Members Rate

More info »

Save for Later

Register



Product Type

ON DEMAND

California Efficient Yields: Lighting Best Practices for Efficient Controlled Environment Agriculture

Faculty: Kenda Branch | Rob Eddy | Casey Rivero

Duration: 1.5 hours

Format: Audio and Video

Original Program Date: Oct 18, 2022

Price: \$0.00 - Non-Members Rate

More info »

Save for Later

Register



Product Type

ON DEMAND

California Efficient Yields: Facility Design & Construction Best Practices for Efficient Greenhouses and Vertical Farms

Faculty: Brian Anderson | Rob Eddy | Holden Orler | Luis Trujillo

Duration: 2 hours

Format: Audio and Video

Original Program Date: Sep 20, 2022

Price: \$0.00 - Non-Members Rate

More info »

Save for Later

Register

Register for Upcoming Workshops

PG&E funded Workshops:

- [Retrofits for CEA](#) - Mar 14
- [Irrigation & Water Reuse](#) - Mar 28
- [Managing Peak & Renewables](#) - Apr 18
- [Case Studies in Efficiency](#) - May 2

Register and access other free resources at the

[RII catalog](#)



Purpose of Today's Workshop

Encourage cultivators to participate in SCE and California efficiency programs



Understand how hardware and software integrates with building-level controls of varying levels of sophistication and operates to optimize crop yield and quality



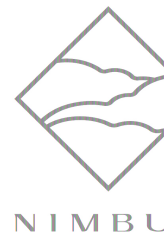
Today's Speakers



Rob Eddy



Joe Cavallero



Robert Fisher



Cesar Salaverria



A close-up photograph of a person's hand gently holding a branch of a cannabis plant. The plant has green, serrated leaves. The background is blurred, showing more of the plant. The overall tone is natural and focused on the plant itself.

SECTION 02

HOW CONTROLS IMPACT CEA CROPS



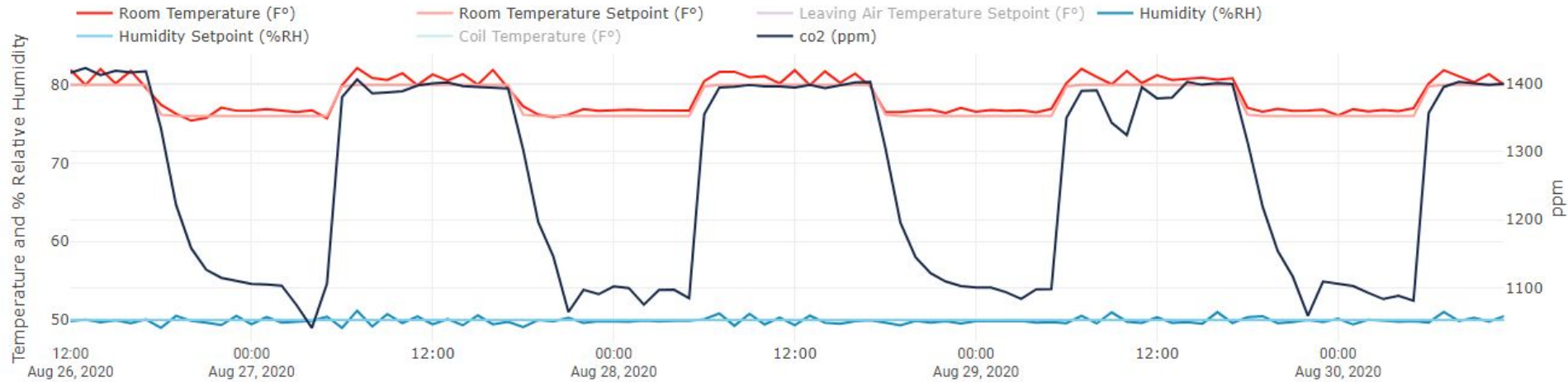
Evolution of Environmental Controls

- Manual
- Thermostats/Humidistats
- Step Controllers with Equipment Integration
- Microprocessor Controls with Feed Forward Logic



Uniform Conditions Achievable

Uniform conditions = Uniform Crop = Predictable Yields and Timing





SECTION 03

BENEFITS OF HIGH PERFORMANCE CONTROLS



Benefits of Controls

Increase Productivity & Efficiency

- Continual Improvement to stay competitive
 - Consistent yields
 - Verifiable results
 - Reduced operating costs
- Automate Systems
- Predictive Troubleshooting
- Pest Control
- Advanced Alarming & Remote Login
- Labor Tracking & Energy Tracking

Figure 5. Failed perimeter valve resulting in poor temperature control in morning hours. No alarm was triggered.



HVAC Controls: Value Proposition

Optimize environmental conditions for plants

- Proper temperature (space, relative & leaf), humidity, airflow, CO2 levels
- Optimal plant growth, control mold, mildew and other pests
- ROI plus visibility of data to create a more stable operation

Reduce operating costs while maximizing efficiency and productivity



Lighting Controls: Value Proposition

Dial in the most important variable for plants

Provide with granularity:

- Proper light levels
- Optimal spectra for cultivars
- Preferred photoperiod by stage of development
- Desired DLI to empower plant growth

Provide plants with the exact intensity and quantity of light while minimizing energy consumption and lowering bills



Water Controls: Value Proposition

Reduce Labor, Improve Safety and Mixing Errors

- Supply water treatment
- Monitoring EC, pH, O₂
- Automated fertilizer dosing and acidification
- Precision irrigation
- Remediation of irrigation water and condensate from dehumidification/cooling
- Proper mixing of supply and remediated water



Lower water consumption smart irrigation and remediation

Carbon Dioxide Enrichment: Value Proposition

- For tightly sealed facilities, needed to maintain at least 400ppm for normal Ps
- 800-1200ppm often used to increase Ps and yield
- Light and temperature need to be elevated to increase yield
- *CO2 can be used with low light and cool temps to maintain a normal Ps rate while saving energy*
- Caution: CO2 cannot be used while venting



A photograph of a greenhouse interior. Rows of green plants are visible in the foreground and middle ground. Above the plants, there are long, horizontal strips of artificial lighting, likely LED, which are illuminated. The background shows the structural framework of the greenhouse, including metal beams and a translucent covering. The overall lighting is dim, with the primary light source being the artificial strips.

SECTION 04

CEA CONTROLS TYPES

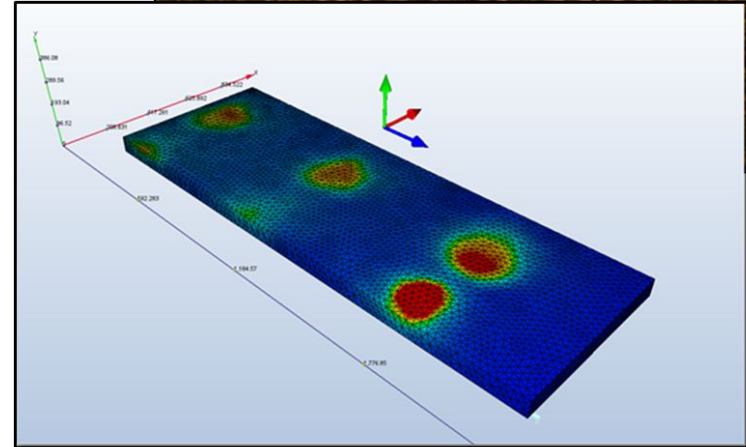
Traditional Indoor HVAC Systems

Non-Integrated Systems

- Standalone Dehumidifiers
- Air Conditioning Units
 - RTU's, Splits, VRF, or CW FCU's
- Oscillating Wall Fans

Considerations

- A/C units must overcome heat rejected by dehumidifiers
- Standard commercial HVAC cannot handle unique load profiles
- Difficult to control/integrate; lack of homogeneity



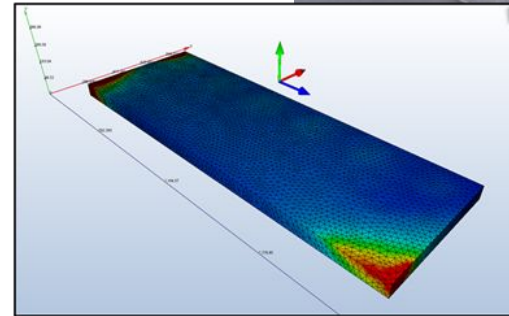
High-Performance Indoor HVAC Systems

Integrated Systems

- One system to handle cooling, heating, and dehumidification.
- System types include: DX w/ reheat, desiccants, and CW/HW

Considerations

- Purpose built for indoor horticulture
- Modulating components to match load profiles
- Proper room airflow design for good mixing & homogeneity
- Opportunities for energy efficiency



Considerations for Lighting Controls

- Wired vs wireless control systems
- PAR sensor placement
- Resolution & accuracy
- Integration or standalone
- Maintenance



Feed-Forward Controls for Lighting

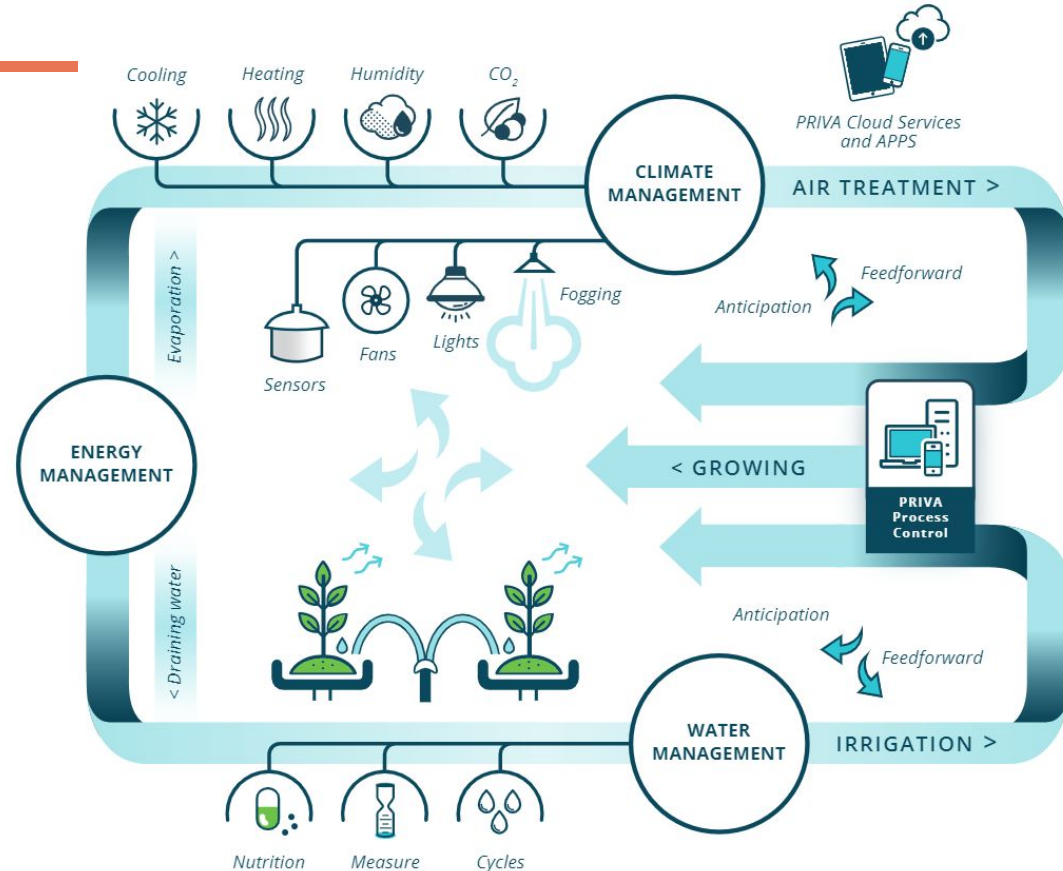
Lighting Benefits from Predictive Controls

- Predictive controls and cost-effectiveness
 - Predictive response to weather
 - Manage peak energy demand and rates
 - Shade control integration
 - DLI based or PAR based lighting activation
 - Dimming
 - Irrigation trigger based on light, weight, soil
 - Irrigation to avoid excess water and fertilizer



Fully Integrated Controls

- **Feedback**
 - Reacting to a change
- **Feed forward (integrated)**
 - Acting preemptively and predictively
- **Integration benefits**
 - Reduce wear and tear
 - Improve control
 - Save energy
 - Save water
 - Real time data for troubleshooting



SECTION 05

OPTIMIZING DESIGN OF CONTROLS SYSTEM

Integrated Design: New Build

Considerations

- Think about controls early during equipment purchasing, not after
- Advocate for the long term value
- Build team representative understands integration
- Clear owner project requirements

Steps

- Finding the right vendor(s)
- Budget for it
- Investor buy in

Integrated Design: Retrofit

Considerations / Steps

- Careful equipment selections with future integration in mind
- Budget for it
- Find the right consultant
 - List of your equipment
 - Discuss specific equipment with contractors

Designing Lighting Controls Systems

Planning Lighting Controls

- Facility location
- Crop being grown
- Growing seasons
- Cost vs. performance
- Perpetual harvest
- Maximizing production
- Balancing efficiency
- Training considerations

Provide plants with the exact intensity and quantity of light while minimizing energy consumption and lowering bills



HVAC Controls Parameters

- VPD Controls
- Dial in energy-efficient VPD setpoint ranges

Airflow Controls

- Sizing for cultivation can range from 10 to 20 ACH, with some cases as high as 30 - 40 ACH

Understand energy savings potential of strategies and data needed to validate performance

Table 5: Climate and Airflow Controls Parameters Measured by Cannabis Cultivators

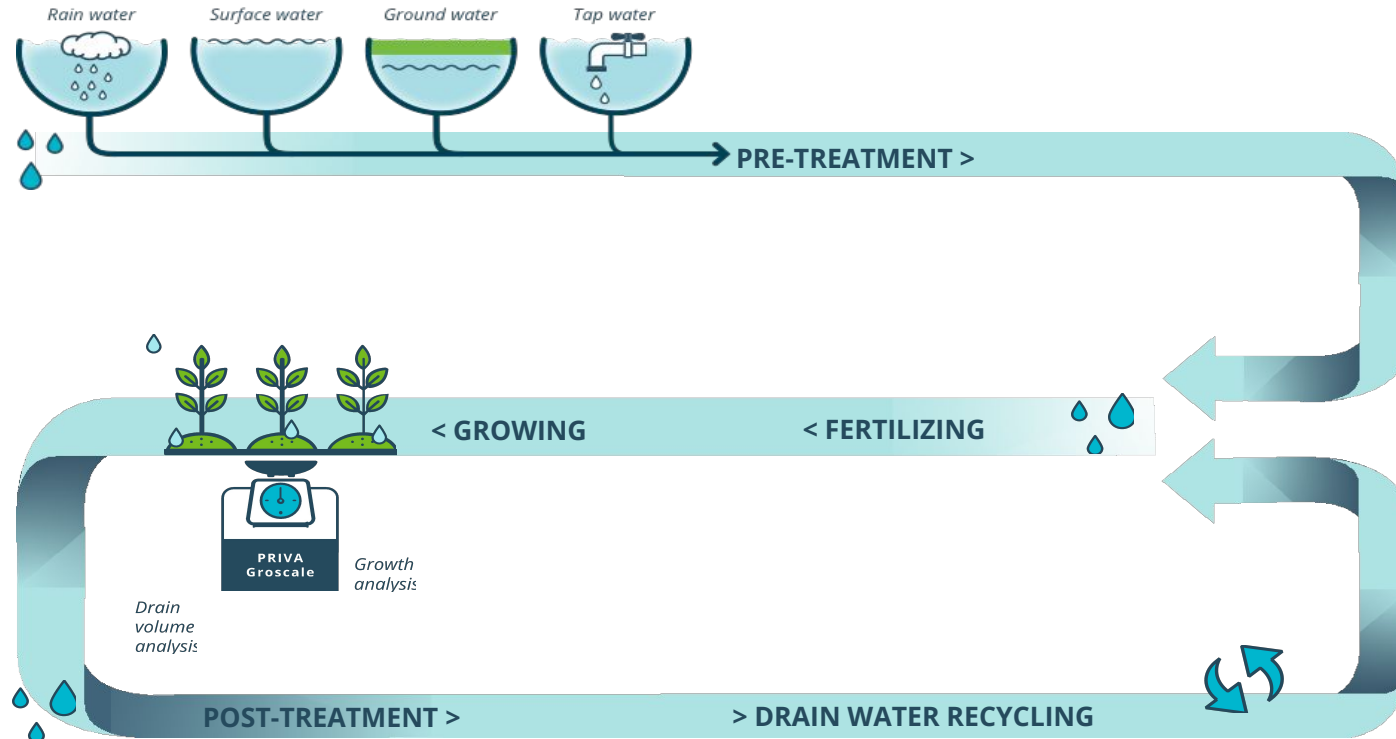
Climate and Airflow Data Collected ⁷	Percentage of Growers Collecting, 2020
Space Temperature	85%
Relative humidity	72%
CO2 concentration	66%
Leaf temperature	31%
Air speed	19%

Table 6: VPD Targets for Cannabis Cultivation

Cannabis Growth Stage	Target VPD Range (kPa)
Flower/Bloom/Mother	1.0 - 1.5
Vegetative	0.8 - 1.1
Clone/Seedling	0 - 0.2

Figure data source: Cannabis Business Times

Water Controls: Water Recycling



An aerial photograph of a city grid, showing streets and green spaces, viewed through a window with a dark grid pattern. The image is used as a background for the title slide.

SECTION 06

BEST PRACTICES FOR ADVANCED CONTROLS

Monitoring, Calibration, Commissioning

Monitoring

- You can't manage what you don't measure...but you can't measure what you don't monitor
- Make data to support savings claims

Calibration

- Ensure sensor accuracy so systems respond to actual environmental conditions
- Configure response times to reduce short-cycling

Commissioning

- Functionally test HVAC sequences of operation to ensure persistent energy savings



Figure credit: Gro iQ / InfiSense

Commissioning Begins in Design-Phase

Early Engagement to Plan Controls

- Design for annual production
 - All seasons and consistent production
- Analyze supplemental lighting needs
- Understand interactive effects on systems:
 - Power
 - HVAC and humidity management
 - Water
- Plan your controls system *response to conditions outside of target ranges and power losses*

	Average Daily DLI	Delivered Avg DLI	Required DLI
Month	Hagerstown, MD		
January	14.6	10.22	36.78
February	20.6	14.42	32.58
March	28.7	20.09	26.91
April	35.4	24.78	22.22
May	41.4	28.98	18.02
June	44.1	30.87	16.13
July	43.5	30.45	16.55
August	39.1	27.37	19.63
September	31.2	21.84	25.16
October	23.2	16.24	30.76
November	16.1	11.27	35.73
December	13.2	9.24	37.76

A man wearing a black cap and a dark t-shirt is operating a black scissor lift. He is positioned in the center of the frame, reaching up towards the top of a tall server rack. The server racks are made of metal and have many horizontal slots, some of which are filled with green plants. The background is a dense array of these server racks, creating a sense of depth and scale. The lighting is somewhat dim, with the primary light source coming from the front, highlighting the man and the lift.

SECTION 07

BENCHMARKING CONTROLS KPIS

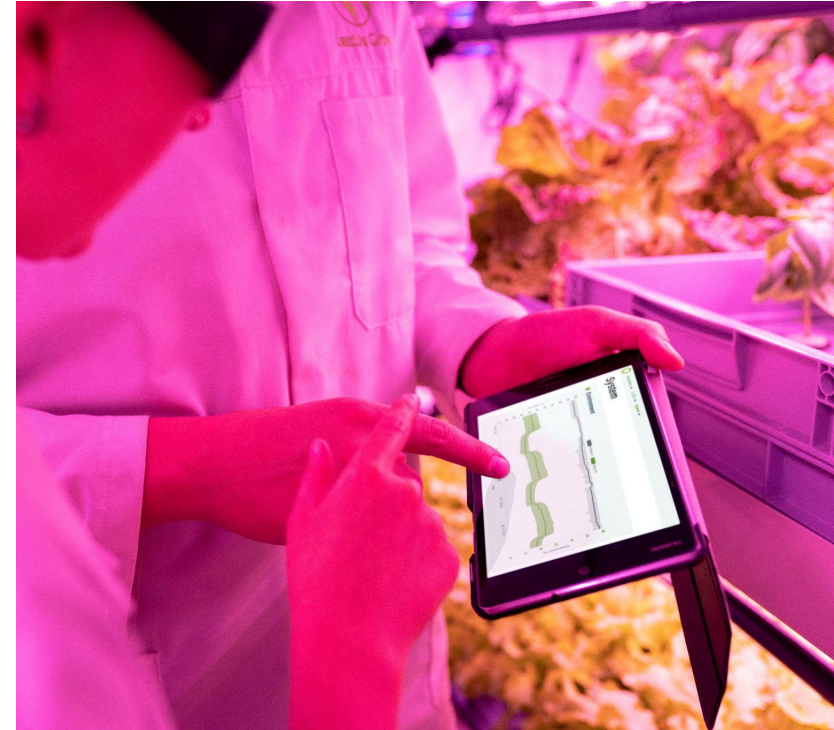
Document Baselines

You Can't Manage What You Don't Measure

Benchmark your production environments to create baselines for resource efficiency:

- Energy
- Water
- Emissions

Understand how your facility performs compared to your key performance targets



Facility Performance Snapshots

Key Performance Indicators for CEA

Quantify performance of CEA facilities using specialized key performance indicators for:

- Efficiency (kBtu/ft² canopy)
- Productivity (kBtu/lb harvest)
- Annual Facility Energy Use (kWh/day)

Understand how system operation affects facility lighting, HVAC, and energy KPIs

Calculated PowerScore

#47974088-21, Indoor, Grantsville, MD, Climate Zone 5A, July 2020 - June 2021

[Get Verified](#)

Whole Facility

Energy

45th percentile

Non-Electric Efficiency 188 kBtu / sq ft  30% better  71st percentile

Emissions Efficiency 13.4 kg CO₂e / sq ft  31% better  100th percentile

Lighting Efficiency 2,820 kWh / day  87% better  81st percentile

HVAC Efficiency 392 kBtu / sq ft  0% change  3rd percentile

Water

94th percentile

Water Efficiency 0.523 gal / sq ft  8.2% worse  97th percentile

Waste

68th percentile

Waste Efficiency 0.24 lbs / sq ft  0% change  80th percentile

Year-Over-Year



24.4% better

Select a second PowerScore for comparison snapshot or [add another](#):

#47974085-21, Motown Gro

Overall: Middle-of-the-Pack

Your operation's overall performance within the data set of indoor facilities in PowerScore's Ranked Data Set:



45th
percentile

Come back to check your PowerScore regularly to see how your rank changes as more facilities benchmark their performance!

Oldies

Facility

Canopy Productivity 0.243 kg / sq ft  0% change  50th percentile

Data Driven Growing = Resource Efficiency

Track and steer cropping inputs impact on yield

- Energy efficiency
- Water efficiency
- Nutrients efficiency
- CO2 efficiency

Understand how each input impacts your yield and profitability



A close-up photograph of several ripe, red tomatoes hanging from a green vine. The tomatoes are in sharp focus, while the background is a soft, out-of-focus green. The overall image has a dark, moody aesthetic with a green color overlay.

SECTION 08

MAXIMIZING TECHNICAL ASSISTANCE

Statewide Programs for Producers

California Energy Design Assistance (CEDA)

- Statewide Program serving PG&E, SCE, SoCal Gas, SDGE
 - Program participants receive the following complimentary services:
 - Comprehensive Whole Building Energy Analysis
 - Assistance identifying and evaluating energy-saving measures
 - Analysis of energy costs and paybacks
 - Incentives for New Construction and Major Renovations projects
 - CEDA Pathways: Mixed Fuels or All-Electric
 - Mixed Fuels for customers who want the option of both gas and electricity
 - All-Electric program option offers higher incentives if customers do not install gas service
 - Learn more: CaliforniaEDA.com

California Department of Tax and Fee Administration (CDTFA)

- Cannabis producers qualify for some Equipment Exemptions under agricultural programs
- Learn more: cdtfa.ca.gov/industry/cannabis.htm

Tool Lending Libraries

Wide selection of energy and building measurement tools to customers and professionals working on energy efficiency, demand reduction and demand response projects in California.

- FREE tool lending program
- Assistance in tool selection
- SCE service area: sce.myturn.com/library
- PG&E service area: pge.myturn.com/library

SCE Summer Reliability Program

Christopher Scott, B.A., PMC
Southern California Edison

Presented December 13, 2022

SCE's Summer Reliability Program (SRP) offers a new Energy Efficiency approach to support 2022 & 2023 Grid Reliability

- Governor Newsom issues an Emergency Proclamation to **free up energy supply to meet demand** during extreme heat events and wildfires that are becoming more intense and to expedite deployment of clean energy resources for 2022 and 2023.
- CPUC authorized (D.21-12-011) up to \$150M in funding for the electric IOUs to develop and deploy a **two-year local Market Access Program (MAP)** across each IOU service territory.
- The program is designed to facilitate and promote **expedited installation and review** of energy efficiency measures that are incremental to the existing EE portfolio.
- SCE, Trade Professionals and Customers will need work together to **achieve the demand reduction** targets in the program.

2022 – 2023 Budget		
SCE	SDG&E	PG&E
~\$60 M	~\$22.8 M	~\$63 M

Metric	2022	2023
Peak, Net Peak kW (4:00 – 9:00 PM)	~1,190	~6,820

- **APPLICATIONS WILL NEED TO BE SUBMITTED BY -JUNE 1, 2023, SO SCE CAN RESERVE FUNDS.** ⁴⁵
- **PROJECTS MUST BE INSTALLED AND FULLY COMMISSIONED SO THE PROJECT INSTALLATION REPORT CAN BE SUBMITTED TO SCE NO LATER THAN AUGUST 1, 2023.**

Summer Reliability Program Approach

Population Normalized Metered Energy Consumption (NMEC) Platform which includes:

- Participation Criteria for “TradePros” to be able to submit projects
- **Performance based Compensation Structure**
- Program Level **M&V Plan** to identify customer groups who can participate
- Population NMEC Model that **Measures Savings after installation**
 - An **Estimation Tool** is available within the application to estimate energy savings and compensation to reserve funds

*More information on Population NMEC is available in the California Public Utilities Commission Rulebook for Programs and Projects Based on Normalized Metered Energy Consumption (CPUC NMEC Rulebook V2.0).

Summer Reliability Program Approach continued

Trade Professional (TradePro, vendor, implementer, ESCO, contractor, etc.) Model

- TradePros will develop projects to submit through a **simplified application process** for **expedited review**
- Performance **compensation paid to the TradePro**

Customer Benefits

- Simplified participation process with **program submittal handled by the TradePro**
- SRP **does not follow the ex-ante process**
 - **No CPUC review**
 - **Utilizes existing baseline**
 - Residential and Commercial **whole building measures**
 - Each measure must be submitted on the application with specified technical requirements⁴⁷
 - Customer load shape and measure EULs (effective useful life) will affect compensation
- Projects submitted through a simplified process for expedited review to allow for **quick installation**
- **SRP** was developed for projects with **reduced scope**, short installation timeframes and **high volume**

Compensation Structure

Performance Only

- For each project group, SCE will issue **payment based on three 4-month periods (n=3 total payments)**.
- Each payment is estimated to be equal to -65% of the confirmed Total System Benefit (TSB) based on ex-post savings measured at the meter and the weighted average EUL of the projects in the group (the longer the EUL, the greater the savings potential).
- **Compensation = TSB x Discount Factor + Peak kW Kicker**
 - TSB: The electrical energy benefits realized during Peak, Net-Peak and Non-Peak hours.
 - Peak hours are 4–7 PM, Net-Peak hours are 4–9 PM
 - ❖ Monday – Friday (business day, non-holiday)
 - ❖ June – September
 - Non-Peak hours are all other hours January – December
 - Discount Factor (-35%): An adjustment to the TSB dollar value, including program administration costs, reporting, engineering, M&V costs, Net to Gross, and any reductions when analyzed against the Population (NMEC) group.
 - Projects will be compensated based on the TSB with **Peak and Net Peak savings being weighted more heavily**.

Summer Reliability Customer Eligibility Requirements (additional requirements apply)

- The customer is **individually metered** and has adequate **pre-installation billing history** on the revenue (billing) meter.
- Customers must pay the Public Purpose Program (PPP) surcharge on the meter in which the project is being proposed.
- Customers with **distributed generation** (solar, battery storage, etc.) are **ineligible**.
 - SCE may also elect to flag sites as ineligible based on recent energy efficiency participation if the recent project is expected to confound the Population NMEC measurement.
- Tenants/Renters must have **written authorization** from the property owner or property management company to implement the upgrades.
- The customer must agree to provide **all required documentation** and **access to the facility** for project-related audits, inspection or data gathering by SCE or by the CPUC.
- Commercial energy efficiency projects must **reduce at least 5%** of the customer's metered annual electrical usage at the project site.
- Residential energy efficiency projects must reduce **at least 3%** of the customer's metered annual electrical usage at the project site.
- ✓ Trade Professionals and their contractors and/or subcontractors are responsible for, at their own expense, obtaining and maintaining licenses and permits required by any federal, state, local, or other relevant governing or regulatory bodies (including but not limited to Title 24 permits) needed to perform program work. As such, proof of permit closure is required for all applicable projects.

Target Customer Segments and Measure Opportunities

Market Sectors

- SCE analyzed certain market sectors which are expected to have a better correlation with a Population NMEC measurement methodology, to reduce implementation risk, and provide an opportunity for expedited installations.
- This list is not exhaustive and other sectors may be added.
 - Per Decision 16-08-019 Industrial NMEC projects **are not** eligible outside of SEM (strategic energy management)

Commercial

- Supermarkets and Other Grocery (except Convenience) Stores, Other Grocery and Related Product Wholesalers
- Limited-Service Restaurants (fast food)
- Department Stores
- Drugs and Druggists' Sundries Wholesalers, Pharmacies and Drug Stores
- New Car Dealers
- Gasoline Stations with Convenience Stores, Convenience Stores
- Warehouse Clubs and Superstores
- Home Centers

- LED Lighting
- HVAC
- Refrigeration measures
- Retrocommissioning

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Indoor Horticulture

- LED Lighting
- HVAC

Residential

- Single Family Home
- Mobile Homes (manufactured housing)

- LED Lighting • Whole House Fans • VSD Pool Pumps
- Evaporative Cooler (offset) • Condenser ECM Fan Motor

High Level M&V Plan

M&V Consideration	Planned Approach
Settlement (Comparison) Group Definition (Population)	All projects completed by an implementation contractor within a four-month period. The three periods are defined as: • February through May • June through September • October through January
Analytical Method	Individual premise regression with synthetic control profiles as an independent variable. The model used is a seasonal Time of Week Temperature (TOWT) model that includes 168 hour-of-week dummy variables, a temperature spline, and one or more granular profiles which act as a synthetic control. The profiles will be based on a segmentation scheme that is still being finalized.
Contractor	SCE retained a third-party evaluator to develop and implement the M&V plan and build out the settlement platform
Data Collection Strategies (requirements, similar to site level NMEC)	Upfront capture of typical efficiency attributes: • Project location (contract number) • Project start and completion date • Equipment type, quantity, capacity, and specifications • Project cost • Upfront incentives Back-end consolidation of participant meter data, performance estimates, and incentive payments
Performance Metrics	• Aggregate peak kW savings • Annual kWh savings • Weighted Average EUL • Total System Benefits 51
Weather normalization	Settlement and reporting will be based on actual ex-post measurement of savings during the 2022-2023 observation period without weather normalization. Regression models developed using data from the baseline period will be used to predict population loads during the performance period.
Total System Benefits Calculation	2021 ACC values by climate zone averaged by (1) climate zone (2) year (3) month (4) business/non-business day.

Next Steps

- Program page is available at [SCE.com/SRP](https://sce.com/SRP)
- If you are not currently registered in SCE's Trade Ally Community (TAC), you may go to:
 - <https://sce-trade-ally-community.force.com/tradeally/s/trade-professional-overview>
- Program materials (Program Manual, Application, etc.) are posted on TAC.
 - <https://sce-trade-ally-community.force.com/tradeally/s/trade-professional-resources>
 - It is the Trade Professionals responsibility to ensure they are using the most up to date documentation as posted on TAC prior to developing a project and submitting an application to ensure the project is in compliance with the most recent program requirements.
- If you are already registered in the TAC and have not reviewed and agreed to the most recent Terms and Conditions, you will have to do so prior to application submission.
- Prior to submitting an SRP application, TradePros should ensure the customer's project is eligible for enrollment. **TradePros must also notify the Trade Ally Community team via TradeAllyConnect@sce.com when they are ready to submit their first project so SCE can walk them through the entire submission process.**

Frequently Asked Questions

What is the incentive amount that Trade Pros will receive for the program?

Trade Pro's are provided compensation that's 65% of the total TSB. That compensation is estimated at the application stage and the actual amount will vary based on actual project performance.

Are public buildings such as city/county owned eligible?

Only the listed buildings are currently pre-approved. However, other sites may be approved on a project-by-project basis. Please confirm with SCE before applying via email at SummerReliabilityProgram@sce.com

What is the expected project approval after application submittal?

Projects will be reviewed on a case-by-case basis. This is a new program, and we don't have exact timelines finalized but we anticipate the process to take 30-45 days to go through review and approval processes.

Will SCE ensure that the control group does not perform any EE projects during the program period?

SCE does not have any way of ensuring that the control group does not pursue EE opportunities. We expect sites within the control group to likely install code/ISP measures as a normal means of operating, but they will be a very small percentage and not likely to significantly impact the group.

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Question: What can the "Custom" approach be utilized for?

The Custom approach can be used for any solution where the applicant feels that they have developed a sound engineering calculation that provides more accuracy than the deemed offering. The custom calculations must be provided for review with the application.

Frequently Asked Questions

If project overperforms, does the Trade Pro gain additional compensation?

The program manual states that we can pay up to 110%, however we will review projects on a case-by-case basis to allow for additional compensation.

What LED “lighting” technology is required?

LED lighting fixtures are required to be DLC listed. Energy savings will be compared against the existing baseline. Please note that the program requires that all project measures meet code requirements.

Can customers utilize On-Bill Financing with a qualifying SRP project?

SCE's On-Bill Financing is not available for SRP.

What is the Trade Pro payment schedule?

SCE will compensate TradePros submitting projects using a whole building measure based on the Trade Pro's SRP project portfolio performance for each 4-month period (after installation approval), for the 12-month measurement period for active projects in a TradePro's portfolio(s). In other words, TradePros will receive up to three (3) payments per year for each project.

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How does an underperforming project impact other projects in a portfolio?

Trade Pro's are compensated based on their portfolio in each trimester, not individual projects.

Frequently Asked Questions

How many projects does a Trade Pro need in their portfolio to ensure savings show up as expected?

There is no set minimum project recommendation. It's the Trade Pro's responsibility to ensure accuracy in their submissions.

What happens if a customer needs more than 30 days to complete retrofit?

The project is still eligible. Ideally though, projects should have quick turnarounds with this program.

Based on the Terms and Conditions [now revised] will SCE require Trade Pro to payback if business goes out of business within next 5 years?

That section of the Terms and Conditions was revised, see updated version.

What variables should Trade Pro gather from customer for input into application?

Trade Pro's should fill in all the inputs specified in the application. Custom approaches will require additional information for review purposes. Reach out to SCE at SummerReliabilityProgram@sce.com for custom specific inquiries.

Contact Information and Questions

Contact

- SummerReliabilityProgram@sce.com
- 800-736-4777



CONTACT US



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INSTITUTE

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