Annual 2024 Portfolio Performance Report Review

August 5, 2025

# Overview

On August 5, 2025, representatives from the California Energy Efficiency Committee (CAEECC) Member organizations presented their 2024 Annual Portfolio Performance Report Review via Zoom. There were 112 attendees, including 22 representatives from 18 CAEECC Member organizations and 2 CAEECC Ex-Officio agencies as well as 90 Members of the Public *(See* [*Appendix A*](#_1ci93xb) *for a full list of meeting registrants)*

This meeting was facilitated by Katie Abrams (Abrams) of Birch Road Consulting and supported by Michelle Vigen Ralston (Ralston) and Suhaila Sikand (Sikand) of Common Spark Consulting, as well as Susan Rivo (Rivo) of Raab Associates. Portfolio Administrator (PA) presenters and Questions & Input support included:

[**CCR REN**](#_x8pud0qyh7nk)**:** Jordan Garbayo

[**NREN**](#_x8pud0qyh7nk)**:** Patricia Terry and Stephen Kullmann

[**SDREN**](#_x8pud0qyh7nk)**:** Sheena Tran and Aisha Cervantes-Cissna

[**3C-REN**](#_ozymyb6b9vsl)**:** Erica Helson, Nancy Barba, and Margaret Marchant

[**SCE**](#_respero9yn1g)**:** Ashley Hall, Justine Chao, Desiree Villalobos, and Christopher Malotte

[**SoCalGas**](#_y6murcgosc68)**:** Mori Farid, Roy Christian, Andres Danryd, and Darren Hanway

[**SDG&E**](#_isav72y0c4dv)**:** Kelvin Valenzuela

[**I-REN**](#_ym8igct6p05m)**:** Benjamin Druyon, Margaret Marchant and Jesse Farber-Eger

[**SoCalREN**](#_2kfa6i4z2b5i)**:** Lujuana Medina and Sulma Hernandez

[**PG&E**](#_85tsa278qiu5)**:** Lisa Hunter, Billy Roderick, Jake Richardson, and Angela McDonald

[**MCE**](#_hq8ffd5zhk5g)**:** Alice Havenar-Daughton, Qua Vallery, Jenn Green, and Alex Valenti

[**BayREN**](#_2qqc6z1v013x)**:** Jane Elias and Tim Olsen

Relevant materials—including the Agenda, the Slide Deck, PA Annual Reports, a link to CEDARS for additional data on energy savings, and the CAEECC Consensus EE Filing Process Proposal—are available at <https://www.caeecc.org/8-5-2025-pppr-mtg>.

Key themes from the Annual 2024 Portfolio Performance Report Review:

* All IOUs met their total system benefit (TSB) requirements and met or came close to cost effectiveness targets.
* The top five contributing programs to TSB per PA were all different.
* **Performance Metrics:** PAs are required to achieve TSB goals and non-RENs must also meet total resource cost (TRC) (cost-effectiveness) requirements. Portfolio programs tend to meet one more than the other, so a diversity of programs must be balanced to meet both metrics. Fuel substitution and gas-for-gas measures have an increasing impact on these metrics.
* **Diversity of Programs:** There is a diversity of programs among PAs, with a continued strong focus on commercial and residential programs. SEM and industrial programs drove energy savings, TRC, and TSB success. Normalized metered energy consumption (NMEC) is also showing up more significantly in portfolios.
* **Workforce:** Stakeholders seek more intention to make connections between workforce development programs and energy efficiency (EE) programs.
* **Market Challenges:** PAs are showing ongoing innovation to better serve hard to reach (HTR) customers. Issues are arising especially when asking for sensitive data. Changing measure packages (without sufficient notice) and challenges in NMEC modeling create project uncertainty or holdups. PAs realized a workforce transition is needed for a significant increase in heat pump (HP) installations. Lastly, program and implementer transitions take time and may be part of certain programs’ increased costs.
* **Affordability and Political Considerations:** While cost effectiveness is often the metric used to consider affordability, TSB also contributes to affordability but less transparently.

*This meeting summary is intended to capture the overarching discussion of ideas, thoughts, and concerns; it is a high-level summary and not a transcript.*

# Performance Overview

*Slides: 18 - 33*

Coby Rudolph and Gillian Weaver (CPUC Energy Division) presented an overview of the 2024 performance reviews, covering achievements compared to targets, cost effectiveness (CE), expenditures, and TSB achievement. Of note, all IOUs met their TSB targets, met or came close to cost effectiveness targets, and generally saw a significant growth in fuel substitution since 2023.

Energy Division shared a CEDARS table that shows spend by segment, as well as by PA. To view the data, follow the link below and select “2024”: <https://cedars.cpuc.ca.gov/claims/all-confirmed-dashboard/>

# Overview of New PAs

*Slides: 34 - 57*

As new PAs, CCR REN, NREN, and SDREN did not have 2024 programs to present at the Annual Portfolio Performance Report Review. Instead, they presented their respective service area, 2024 spend, and preview of portfolio activities.

*No questions or input was elevated for new PAs from CAEECC Members or the Public.*

# Central CA Performance Review

*Slides: 58 - 68*

3C-REN presented their 2024 Annual Portfolio Performance Report Review followed by Questions & Input from CAEECC Members and then by Members of the Public via Slido.

## Summary of Discussion on 3C-REN’s 2024 Annual Portfolio Performance Report Review

* 3C-REN is working to balance energy savings, project costs, and greenhouse gas (GHG) reductions for programs while prioritizing serving HTR customers.
* 3C-REN is facing challenges—including requiring contractors to forecast energy savings and a limited upfront incentive—within their commercial NMEC program to reach HTR commercial customers specifically. 3C-REN is guiding contractors to do more customer outreach, such as door to door, and supporting smaller local contractors to participate in the NMEC program.
* 3C-REN had more residential participants choosing electrification measure implementation than expected, which drove much of the TSB and electricity realization rates.
* 3C-REN is working to address the challenge of small contractors not being able to meet requirements to participate in their residential NMEC program, such as forecasting energy savings. However, the high kWh (97%), therm (81%), and TSB (92%) realization rates show that contractors currently participating in their programs are submitting energy estimates that very closely match measured energy performance.
* 3C-REN does not track if workforce training leads to installations directly and does not require workforce program participants to report on installations after a training. 3C-REN has addressed a previous gap in trained contractors for heat pump water heater (HPWH) installation through their training efforts.

*Questions, Responses, and Input are available in* [*Appendix B: 3C-REN Q&A and Input*](#_85j6eu1kxb0l)

# Southern CA Performance Review

*Slides: 69 - 124*

SCE, SoCalGas, SDGE, I-REN, and SoCalREN presented their respective 2024 Annual Portfolio Performance Report Review. Each presentation was followed by Questions & Input from CAEECC Members and then by Members of the Public via Slido. The session concluded with a Regional Q&A, providing attendees the opportunity to direct questions to any specific PA in the region or present high-level themes for multiple PAs to address.

## Summary of Discussion on SCE’s 2024 Annual Portfolio Performance Report Review

* SCE summarized two program closures in 2024 due to cost effectiveness thresholds and external factors that were difficult to overcome.
* SCE noted there are multiple programs for non-equity residential customers, noting that the single family (SF) and multifamily (MF) programs have a high participation rate and may provide excess delivery in 2025.

*Questions, Responses, and Input are available in* [*Appendix B: SCE Q&A and Input*](#_i0lr3f7oy2ks)

## Summary of Discussion on SoCalGas’ 2024 Annual Portfolio Performance Report Review

* SoCalGas highlighted their top performing programs for TSB (Midstream Commercial Water Heating, Residential Core, and Small Business) and top Expenditures (Residential Core, Agricultural, and Midstream Commercial Water Heating).
* SoCalGas distributed 66,062 Energy Efficiency kits to residential customers and received a total of 73 returns.

*Questions, Responses, and Input are available in* [*Appendix B: SoCalGas Q&A and Input*](#_867actin3o4b)

## Summary of Discussion on SDG&E’s 2024 Annual Portfolio Performance Report Review

* SDG&E clarified that some reporting tables in their presentation had differences from the reporting tables in CEDARS due to the limitations in CEDARS to reclassify legacy programs. The reporting in CEDARS is accurate.

*Questions, Responses, and Input are available in* [*Appendix B: SDG&E Q&A and Input*](#_qxfkwndpr4tt)

## Summary of Discussion on I-REN’s 2024 Annual Portfolio Performance Report Review

* I-REN does see a direct link between their workforce partners and EE offerings. They shared various ways workforce partners support EE offerings.
* I-REN clarified that they are currently on a 6 year portfolio and soon will sync up to the 4 year portfolios with the rest of the PAs in 2028. They clarified that I-REN's original savings forecast from its 2021 Business Plan was developed prior to having implementers on board and that this forecast was updated for the [2023 True-up Advice Letter](https://iren.gov/DocumentCenter/View/319/I-REN-True-Up-Advice-Letter-2024-2027) using the implementer’s forecasting approach.

*Questions, Responses, and Input are available in* [*Appendix B: I-REN Q&A and Input*](#_8cotogy9fdgj)

## Summary of Discussion on SoCalREN’s 2024 Annual Portfolio Performance Report Review

* SoCalREN clarified that their programs didn’t close, but that they are not seeking to do a Codes and Standards (C&S) program because it would be redundant to SCE’s program.
* SoCalREN residential TSB decreased between 2023-2024 because the Avoided Cost Calculator (ACC) and TSB favors gas to gas over electrification. However, with recent ACC updates, in 2025, they forecast TSB to double.
* SoCalREN’s public sector solicitation will be available in Q3.

*Questions, Responses, and Input are available in* [*Appendix B: SoCalREN Q&A and Input*](#_vot27cvirfez)

## Southern CA Regional Q&A

* I-REN engages with SCE for Workforce, Education, and Training (WE&T) and C&S programs to coordinate a cross collaboration. Currently they are focusing on rolling out third party programs, but will make a note of the training timing and WE&T program timing. SoCalREN does support small medium business enterprises (SMBE) to become program contractors through a training program but has not launched this connection yet for the Energy Savings Assistance (ESA) Program.

*Questions, Responses, and Input are available in* [*Appendix B: Southern CA Regional Q&A and Input*](#_yxaz49v1nco4)

# Northern CA Performance Review

*Slides: 125 - 159*

PG&E, MCE, and BayREN presented their respective 2024 Annual Portfolio Performance Report Review. Each presentation was followed by Questions & Input from CAEECC Members and then by Members of the Public via Slido. The session concluded with a Regional Q&A, providing attendees the opportunity to direct questions to any specific PA in the region or present high-level themes for multiple PAs to address.

## Summary of Discussion on PG&E’s 2024 Annual Portfolio Performance Report Review

* PG&E had one large Strategic Energy Management (SEM) project in 2024 and is not expecting large ones for 2025.
* PG&E provided details on the building envelope TSB measures for agriculture ([see data table](#961pvfcbhxnm)).
* A core objective of the upcoming Statewide heating, ventilation, and air conditioning (HVAC) program is to drive adoption of all-electric HVAC solutions with installers as a critical unlock for broader market adoption, which may help raise awareness among customers who lean on their installers for appliance recommendations.

*Questions, Responses, and Input are available in* [*Appendix B: PG&E Q&A and Input*](#_o6xhcoqalnm9)

## Summary of Discussion on MCE’s 2024 Annual Portfolio Performance Report Review

* MCE has a small number of agricultural customers (many are categorized as commercial instead), causing year to year fluctuations.
* MCE’s Market Access Program is mostly paid-for-performance but also includes fixed costs (like implementer ramp up and down among other factors).
* MCE has 3 Flex Market programs. MCE faced challenges in the Flex Market programs around implementer engagement, recruitment, and retention.

*Questions, Responses, and Input are available in* [*Appendix B: MCE Q&A and Input*](#_oi7lh3jtjay)

## Summary of Discussion on BayREN’s 2024 Annual Portfolio Performance Report Review

* BayREN highlighted their resource acquisition (RA) program (BayREN Business) and how challenging it is to reach the TRC threshold given the sole focus on working with small HTR businesses.
* BayREN’s Climate Careers program (Green House Calls) employs youth from the communities they serve and while there is overlap, there is no ESA duplication.
* Currently, BayREN is not concerned with the continuity of the Home Energy Score tool, however, have been discussing a plan B with DOE contacts should the tool be disrupted.
* BayREN’s multifamily program didn’t experience delays, but comprehensive retrofits with incentive stacking takes time so some projects ran into 2025. BayREN is working with the implementer to be more proactive with property owners to have the results within the same calendar year.

*Questions, Responses, and Input are available in* [*Appendix B: BayREN Q&A and Input*](#_9pqovk4hvw3g)

## Northern CA Regional Q&A

*There were no regional questions posed. Questions to the respective PA are included in their Q&A and Input sections.*

# General Q&A

During discussion, statewide or general questions were elevated and are summarized below:

* The new rulemaking proceeding ([R.25-04-010](https://apps.cpuc.ca.gov/apex/f?p=401:56::::RP,57,RIR:P5_PROCEEDING_SELECT:R2504010)) [Scoping Ruling Memo](https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M574/K336/574336024.PDF) outlines CE tests as an issue area the proceeding may explore. Furthermore, Energy Division wants to study interventions, capital projects, fuel substitution, and decarbonization opportunities and their impacts on affordability.
* First year savings goals (which were replaced with TSB) don’t fully capture customer bill impacts.
* Water heater measures in SCE’s programs were mostly served through the Comprehensive Commercial Program. Information on water heater measures in the Statewide Midstream Program was not provided.
* RENs outlined language observations and translation needs observed in their portfolio.

*Questions, Responses, and Input are available in* [*Appendix B: General Q&A and Input*](#_n32yai1uwcos)

# Key Themes

*Slides: 162 - 166*

Ralston facilitated a discussion on key themes, first presenting a summary of what the Facilitation Team heard:

* **Performance Metrics:** PAs are required to achieve TSB goals and non-RENs must also meet TRC (cost-effectiveness) requirements. Portfolio programs tend to meet one more than the other, so a diversity of programs must be balanced to meet both metrics. Fuel substitution and gas-for-gas measures have an increasing impact on these metrics.
	+ TRC requirements were difficult to meet in 2023 due to use of the vintage ACC. 2024 TRCs are faring better with the updated ACC values.
	+ Equity and Market Support Indicators, along with the Common Metrics, will be shared in future rounds and help describe how those programs are doing.
* **Diversity of Programs:** There is a diversity of programs among PAs, with a continued strong focus on commercial and residential programs. SEM and industrial programs drove energy savings, TRC, and TSB success. NMEC is also showing up more significantly in portfolios.
* **Workforce:** Stakeholders seek more intention to make connections between workforce development programs and EE programs.
* **Market Challenges:** PAs are showing ongoing innovation to better serve HTR customers. Issues are arising especially when asking for sensitive data. Changing measure packages (without sufficient notice) and challenges in NMEC modeling create project uncertainty or holdups. PAs realized a workforce transition is needed for a significant increase in heat pump (HP) installations. Lastly, program and implementer transitions take time and may be part of certain programs’ increased costs.
* **Affordability and Political Considerations:** While cost effectiveness is often the metric used to consider affordability, TSB also contributes to affordability but less transparently.

Ralston then invited CAEECC Members to discuss additions, modifications, or highlights from the presentations. A summary of the discussion is below:

* Members discussed the benefits of doing PPRR presentations including transparent reporting, lessons learned, and best practice sharing highlights. One Member noted that each PA’s top five measures were all different, thus showcasing the value of PPRRs generally. A Member hoped that future PPRRs would be more timely to their respective reporting deadlines.
* Members clarified the difference between fuel substitution (transitioning from a regulated fuel to another regulated fuel) and fuel switching (transitioning from non-regulated fuel to a regulated fuel). Members noted that fuel switching (especially an opportunity in rural areas) is an issue because there is no policy to support it. This issue may be covered in the new rulemaking ([R.25-04-010](https://apps.cpuc.ca.gov/apex/f?p=401:56::::RP,57,RIR:P5_PROCEEDING_SELECT:R2504010)).
* Members discussed the CEDARS improvements and how they showcase EE benefits through TSB data.
* A Member asked about the throughline of PA program development and the ESJ Action Plan, which the Facilitation Team noted could be part of the equity topics to be discussed at the next Full CAEECC Quarterly Meeting.

Ralston launched a poll, “what topic, challenge, or question raised today should CAEECC consider to explore or address?”. Ralston instructed that CAEECC could later vote on what issues CAEECC may want to further discuss.

* Cost Effectiveness tests, ratios, and measure influence
* Affordability and bill impacts
* Fuel switching and fuel substitution impacts
* NMEC program challenges and measure success
* Streamlining EE measure packages

*Poll responses are available in* [*Appendix B: Key Themes*](#_1iufhqlqld71).

# Wrap Up

*Slides: 167 - 169*

Abrams adjourned the meeting with reminders to PA presenters about the summary and an invitation to the Q3 Full Quarterly CAEECC Meeting #47 on August 13, 2025.

# **Appendix A: Attendees**

| **Organization** | **Name** |
| --- | --- |
| **CAEECC Members**  |  |
| 3C-REN | Erica Helson |
| BayREN | Jane Elias |
| CCR REN | Jordan Garbayo |
| Frontier Energy | Nancy Barba |
| I-REN | Benjamin Druyon |
| LGSEC | Amaury Berteaud |
| MCE | Alice Havenar-Daughton |
|  PG&E | Lisa Hunter |
|  NREN | Stephen Kullmann |
|  SBUA | Ted Howard |
|  SCE | Jessica Lau |
|  SDREN | Sheena Tran |
|  SDG&E | Stacie Risley |
|  SF Department of the Environment | Lowell Chu |
|  SJVCEO | Courtney Blore |
| SoCalGas | Roy Christian |
| SoCalREN  | Lujuana Medina |
| The Energy Coalition | Laurel Rothschild |
| **Ex-Officio**  |  |
| CPUC Energy Division | Ely Jacobsohn |
| CPUC Energy Division | Pam Rittelmeyer |
| CPUC Energy Division | Coby Rudolph |
| California Energy Commission | Owen Howlett |
| **Other Interested Stakeholders** |
| California Farm Bureau  | Karen Norene Mills |
| CalMTA | Stacey Hobart |
| CalMTA | Smita Gupta |
| Cascade Energy | Emily Lange |
| Cascade Energy | Sam Skidmore |
| CCR REN | Leah Armstrong |
| Center for Accessible Technology | Kate Woodford |
| ClimaBridge | Melanie Colburn |
| CPUC | Ali Choukeir |
| CPUC | Hope Christman |
| CPUC | Peng Gong |
| CPUC | Will Graswich |
| CPUC | Patrick Huber |
| CPUC | Kapil Kulkarni |
| CPUC | Jessie Levine |
| CPUC | Ilona Mantachian |
| CPUC | Savannah McLaughlin |
| CPUC | Emily Pelstring |
| CPUC | Amy Reardon |
| CPUC | George Tagnipes |
| CPUC | Gillian Weaver |
| CPUC | Ana Zapata |
| Don Arambula Consulting | Don Arambula |
| DNV | Nick Brod |
| Ecology Action | Lore James |
| Ecology Action | Michelle Morales |
| Frontier Energy | Aaron Jones |
| Frontier Energy | Jesse Farber-Eger |
| Frontier Energy | Margaret Marchant |
| Grounded Research | Jenn Mitchell-Jackson |
| Guidehouse | Yamini Arab  |
| Guidehouse | Ryan Tanner |
| Lincus | Patrick Ngo |
| MCE | Jenn Green |
| MCE | Alex Valenti |
| MCE | Qua Vallery |
| MW Consulting | Mark Wallenrod |
| Opinion Dynamics | Jeana Swedenburg |
| Oracle | Serj Berelson |
| Peninsula Clean Energy | Matthew Rutherford  |
| PG&E | Claire Braico |
| PG&E | Josaphine Buennagel |
| PG&E | Michael Burger |
| PG&E | Sebastien Csapo |
| PG&E | Angela McDonald |
| PG&E | Samantha McNabola |
| PG&E | Alero Moju |
| PG&E | Roopa Reddy |
| PG&E | Jake Richardson |
| PG&E | Ginella Rivkin |
| PG&E | Billy Roderick |
| PG&E | Lindsey Tillisch |
| Quantum Energy Analytics | Rachel Harcharik |
| Recurve | Carmen Best |
| Resource Innovations | Vivek Joshi |
| San Jose State University | Farzan Kazemifar |
| SCE | Justine Chao |
| SCE | Gary Golden |
| SCE | Arturo Gonzalez |
| SCE | Ashley Hall |
| SCE | Chris Malotte |
| SCE | John McCarson |
| SCE | Mara Portlock |
| SCE | Larry Tabizon |
| SCE | Desiree Villalobos  |
| SD REN | Aisha Cissna |
| SD REN | Alyson Scurlock |
| SD REN | Marissa Van Sant |
| SD REN | Amy Whitehouse |
| SDGE | Vanessa Garcia |
| SDGE | Melissa Jones |
| SDGE | Kelvin Valenzuela |
| SDGE | John Zwick |
| SoCalGas | Gary Arcega |
| SoCalGas | Anders Danryd |
| SoCalGas | Mori Farid |
| SoCalREN | Audrey Bragg |
| SoCalREN | Tory Coffin |
| SoCalREN | Fernanda Craig |
| SoCalREN | Sulma Hernandez |
| SoCalREN | Shelley Osborn |
| The Clean Energy Alliance | Kaitlin McGee |
| The Energy Coalition | Natalie Espinoza |
| The Energy Coalition | Tim Olsen |
| The Energy Coalition | Rachel Pennington |
| The Utility Reform Network | Ruthie Lazenby |
| Tierra Resource Consultants | Julie Gidley |
| Tierra Resource Consultants | Graham Yotsuya |
| TRC Companies | David Paton |
| US Credit Union | Jose Orozco Pelico |
| **Facilitators** |  |
| Birch Road Consulting | Katie Abrams |
| Common Spark Consulting | Michelle Vigen Ralston |
| Common Spark Consulting | Suhaila Sikand |
| Raab Associates | Susan Rivo |

#

# **Appendix B**

## Energy Division Performance Overview Presentation

* **Stacie Risley (SDG&E)**: Is there a breakdown of segment spend across the state without regard for PA status?
	+ **Energy Division Response:** See this table in CEDARs (and make sure 2024 is selected). This shows spend by segment, as well as by PA. <https://cedars.cpuc.ca.gov/claims/all-confirmed-dashboard/>

## 3C-REN Q&A and *Input*

* **Coby Rudolph (CPUC)**: 3C-REN showed the TSB trajectory from 2023 to 2024 and the cost effectiveness numbers even though it’s not a compliance requirement for RENs. Where is the trajectory headed and what should we expect for 2025 numbers in those program costs compared to TSB achieved for the residential program?
	+ **3C-REN Response**: When looking at total cost compared to TSB, the biggest change will be TSB gains from the commercial sector. In 2024 there were program start-up costs, but no projects completed. In 2025, the incentive budget is already fully reserved, and projects are beginning to be installed. We expect to see a better balance between total program costs and TSB in 2025. In 2025, we are also seeing a drastic increase in HTR projects for single family homes. These projects are more expensive, but thanks to a large number of heat pump water heaters, TSB remains strong.
* The single- and multi-family programs are still relatively young, with both programs having their first full years of data in 2023. The trends we have seen are:
* Single-Family: TSB has grown each year: $319,165 (2023), $640,741 (2024) and $790,221.50 (2025, estimated). We saw a drastic increase in HTR projects in 2025 thanks to budget allocations. This resulted in a fewer number of projects than in 2024 since these projects are more expensive, but TSB did not suffer as 97% of 2025 projects are electrification, continuing the upward trend in the share of electrification projects from 2024.
* Multifamily: TSB grew from $267,958 in 2023 to $802,768 in 2024. For 2025, 3C-REN’s True-Up Advice Letter forecast for Multifamily TSB was $687,321. 3C-REN’s Q1 2025 Multifamily claims included $241,842 in TSB. The Multifamily program has a healthy pipeline for 2025 and is aiming to exceed the TUAL forecast; however, it’s important to keep in mind the long timeline for these projects which can span program years depending on a wide variety of factors affecting multifamily property owners. We’re also doing an extensive outreach campaign to drive participation in our most rural county (San Luis Obispo) and are seeing positive results in recent weeks to fill the pipeline with future projects.
* **Ted Howard (SBUA)**: What are your plans for reaching HTR commercial customers?
	+ **3C-REN Response:** 2024 was more of a ramp up period. One challenge is that it takes savvy contractors to participate in the NMEC program and even more savvy to serve HTR customers. There are some contractors that go door to door to expand reach, and these contractors are reaching the target audience in 2025. In addition, 3C-REN wants to support smaller local contractors to participate in NMEC programs.
* **Anonymous**: What barriers are preventing small contractors from participating in the residential NMEC, and what solutions are you considering?
	+ **3C-REN Response**: The barriers preventing small contractors from participating in the residential NMEC program are primarily due to the energy savings forecasting required to participate in the NMEC program, the administrative burden of paperwork, and the ability to float incentive costs until reimbursements occur. In our residential NMEC program, most contractors work with a partner like Sealed (who helps address these challenges), but some opt not to because they take a percentage of the incentive. We have yet to find a partner like this for the commercial sector.
* **Anonymous**: What approach allowed you to achieve relatively high realization rates for electricity, natural gas, and TSB? What caused the difference between realization rates for electricity vs gas?
	+ **3C-REN Response:** Working with contractors to ensure they were accurately forecasting energy savings. The difference between electric and gas realization rates is largely due to having greater than forecasted participants choosing to implement electrification measures. This fuel substitution and shift in measure mix can be seen through our top measure being HPWHs.
* **Anonymous**: Can you speak about the connection between the workforce trainings that you offer and the EE installations that your programs have provided? In other words, do you know if the trainings directly lead to installations?
	+ **3C-REN Response:** 3C-REN does not require training participants to report on installations after attending training. Installations are supported by training, especially for contractors who are enrolled in 3C-REN's incentive programs and who also attend WE&T training. For HVAC contractors, we know heat pumps are becoming the norm, so the intention of our training with an HVAC focus is to improve the quality of installations. For HPWH, this market is still largely driven by incentives. Just a few years ago there were residents in our region looking to install HPWHs, but no contractors with experience. 3C-REN has helped address this gap through both its incentive programs, as well as training efforts. One such initiative is a partnership with SunWork, a non-profit contractor. Local tri-county contractors attend a hands-on, in-person HPWH installation with SunWork at a real home, getting trained in the process of the live install.

## SCE Q&A and *Input*

* **Stacie Risley (SDG&E)**: Can you give more detail on the cause of the program closures?
	+ **SCE Response:** SCE and the implementer mutually agreed to close both the Comprehensive Industrial Program and the Comprehensive Multifamily Program) due to cost effectiveness and external factors such as EE markets, lingering effects of COVID-19, inflationary pressure, changes in measure eligibility, and incentive competition that was difficult to overcome.
* **Ely Jacobsohn (CPUC)**: What types of solutions is SCE offering to non-equity residential customers? What is the magnitude of the number of customers participating? To what extent are they achieving ratepayers meaningful savings on their utility bills?
	+ **SCE Response**: SCE has a number of solutions that support non-equity residential customers through the Multifamily residential and Single Family residential programs, which offer HVAC related measures including an opportunity to install HPWH; Home Energy Reports are also seeing positive results and will be replaced by the new third-party CHEERS program. SCE is seeing a high participation rate in the residential program offerings and likely looking at excess delivery for 2025, which could translate to a cost-effective TSB.

## SoCalGas Q&A and *Input*

* **Ely Jacobsohn (CPUC)**: I asked last year about what happens to the kits that are sent to residential customers and was informed that those that do not use (all of) the kits can return them to SCG. How many kits were returned to SCG in 2024?
	+ **SoCalGas Response**: In 2024, SoCalGas distributed 66,062 Energy Efficiency kits, and received a total of 73 returns.
* **Jesse Levine (CPUC)**: What program(s) are greatest contributing to TSB achievement? What program(s) have the greatest expenditures?
	+ **SoCalGas Response**:
		- Top performing Programs for TSB: Statewide Midstream Commercial Water Heating, Residential Energy Efficiency Program, Small and Medium Commercial EE Program (Equity)
		- Top programs by Expenditure: Residential Energy Efficiency Program, Agriculture Energy Efficiency Program, Statewide Midstream Commercial Water Heating

## SDG&E Q&A and *Input*

* **Laurel Rothschild (TEC)**: The spreadsheet in the annual report tables has the ratio for resource acquisition different from what is in the presentation (.98 vs 1.00)
	+ **SDG&E Response:** SDG&E noted that the annual report tables reflect on some of the limitations on CEDARS of what programs are in which segmentations. Because SDG&E has a lot of legacy programs, it’s difficult to reclassify these programs in CEDARS. The reporting in CEDARS is accurate.

## I-REN Q&A and *Input*

* **Pamela Rittlemeyer (CPUC)**: For I-REN, are you seeing a direct link between the 100+ workforce partners and EE offerings?
	+ **I-REN Response:** Yes. Here are the ways that workforce partners support EE offerings:
* Co-hosting events for job seekers and sharing information about I-REN fellowship opportunities, helping grow the pool of interested fellows and host cities
* The fellows then have a direct link to I-REN's equity EE programs for the public sector- helping jurisdictions enroll in the programs so they can benefit from technical assistance and rebates.
* WE&T collaboration: Energy fellows are supporting Public Sector projects at 35 facilities by increasing staff capacity at local government agencies resulting in over $4.1M in lifetime savings to agencies within our region.
* Contributions to I-REN's workforce assessment which informs I-REN's development of additional workforce activities
* Sharing information about I-REN's other EE offerings, for example, C&S trainings for contractors, the importance of EE and high-road green energy jobs in general, and the availability of other EE programs also offered in the region.
* **Emily Lange, Cascade Energy:** What drove the higher forecast in the advice letter filing that needed to be adjusted after the programs began?
	+ **I-REN Response**: Unlike the other PAs who have 4-year portfolio periods that begin in 2024, I-REN has a 6-year portfolio period from 2022 through 2027. I-REN submitted its original business[[1]](#footnote-0) plan a few months prior to Decision [(D.) 21-05-031](https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M385/K864/385864616.PDF), which instituted the 4- and 8-year application periods, portfolio segmentation, biannual true-up and mid-cycle filings, and various other changes. I-REN's original savings forecast from its 2021 Business Plan was developed prior to having implementers on board. That forecast was then updated for the 2023 True-up Advice Letter using the implementer’s forecasting approach. ([*I-REN 2024-2027 Energy Efficiency Portfolio True-Up Advice Letter AL# 3-E/3-G 10/16/23*](https://iren.gov/DocumentCenter/View/319/I-REN-True-Up-Advice-Letter-2024-2027))

## SoCalREN Q&A and *Input*

* **Anonymous:** Any update for when the 2026-2029 SoCalREN public sector program solicitation will be released?
	+ **SoCalREN Response:** SoCalREN’s public sector solicitation will be out in Q3 as the prior one has expired.
* **Stacie Risley (SDGE):** One thing I noticed about the SoCalREN portfolio is the number of programs. Did you experience any unexpected program closures in 2024?
	+ **SoCalREN Response:** SoCalREN is not seeking to do the codes and standards programs moving forward because it would be redundant to SCE’s program.
* **Ely Jacobsohn (CPUC):** Can you elaborate on why residential TSB went down from 2023 to 2024?
	+ **SoCalREN Response:** SoCalREN’s TSB for residential decreased between 2023 and 2024 because of the forecasted goals of more electrification measures and how the ACC and TSB gas to gas is favored over electrification. We forecast that in 2025, the TSB will likely double.

## Southern CA Regional Q&A and *Input*

* **Coby Rudolph (CPUC)**: How do your workforce training programs engage with the IOU ESA programs and ESA contractors to provide an employment pipeline? ESA contractors are saying that logistics and operations around engagement with WE&T programs across the state is hard to line up with the timing of training. We want to make the link as smooth as possible.
	+ **I-REN Response:** I-REN does engage with SCE on WE&T and C&S to collaborate on how to cross collaborate promotion of various programs. We are focusing on rolling out third party programs to member agencies in 2025. I-REN will make a note of this issue to ESA and WE&T leads.
	+ **SoCalREN Response**: Our E-Contractor Academy does support SMBE's to become participating contractors into SoCalREN, SCE and SoCalGas programs by providing training workshops. It does not currently support ESAP but it will once the CEC EBD programs are launched - the SoCalREN E-Contractor academy has a decarbonization pathway which will support both market rate and Low-income qualified programs to provide direct training and an opportunity pipeline (connection to projects).

## PG&E Q&A and *Input*

* **Ely Jacobsbohn (CPUC):** Can PGE describe why the building envelope is such a high TSB measure for agriculture?
	+ **PG&E Response:**

| **Building Envelope Measure** | **Sum of Total System Benefit** |
| --- | --- |
| Heat curtain installed in single layer polycarbonate greenhouse | 13,477,205.30 |
| R film installed on double layer polyethylene greenhouse | 1,759,046.55 |
| Heat curtain installed in double layer polyethylene with IR greenhouse | 1,360,562.15 |
| *Total* | **16,596,813.99** |

* **Coby Rudolph (CPUC):** Wondering about SEM achievements and curious looking ahead for 2025, what do you expect and how much of this will be large projects?
	+ **PG&E Response:** PG&E occasionally gets large projects and is not expecting large ones for 2025. There was one in 2024 that contributed 7M to TSB.
* **Ted Howard (SBUA):** The non-residential HVAC statewide program RFP notes a significant barrier to HP adoption due to a shortage of contractors promoting and integrating HP into business models. How do you plan to stimulate and encourage this?
	+ **PG&E Response:** A core objective of the upcoming statewide HVAC is to drive adoption of all-electric HVAC solutions with installers as a critical unlock for broader market adoption. Installer demand directly influences distributor and retailer stocking decisions, and so engaging this segment is critical to driving supply chain alignment and ensuring availability of all-electric heat pump products across the market. At the same time, end use customers often look to their installers as the trusted advisor on recommendations for appliance upgrades and expect that greater installer adoption will drive greater awareness, understanding and adoption with customers as well.

## MCE Q&A and *Input*

* **Stacie Risley (SDG&E):** What occurred in the Agricultural sector where there was a presence in 2023 but not 2024?
	+ **MCE Response:** MCE doesn’t have a standalone agricultural program and has very few customers categorized as agricultural in the service area. For example, in Napa, a lot of agriculture is classified as commercial. Overall, there's significant participation fluctuation year to year.
* **Coby Rudolph (CPUC):** Since market access programs are mostly pay-for-performance, where is the higher expenditures proportional to TSB coming from?
	+ **MCE Response:** MCE’s Market Access Program is mostly paid for performance but also includes fixed costs. Some of these fixed costs include a transition with an implementer between program launch and program closeout, which impacted the portfolio. In addition, some programs from prior years didn’t meet the same extent of forecasted savings. All other factors are just the lack of volume in projects.
* **Anonymous:** What obstacles did the previous Flex Market Program face, and how do you think they were addressed with the implementer refresh?
	+ **MCE Response:** MCE faced challenges around implementer engagement, recruitment, and retention. Another challenge this last year was measure cost, which is an external factor.
* **Ted Howard (SBUA):** What strategies does MCE have for the transition from early adopters to general for the Peak Flex Market and MCE Sync programs.
	+ **MCE Response:** MCE has 3 Flex Market programs (2 fall within EE portfolio and one outside). In past years MCE Sync was in the demand response program and currently is funding out of MCE’s operational funds. Due to the scope of this meeting, this question will be followed up offline.

## BayREN Q&A and *Input*

* **Coby Rudolph (CPUC):** For the resource acquisition (RA) program, because there’s no TRC requirement for the segment, how do you think about CE (TSB, expenditures vs TSB, etc) and how do you hope these improve in future budget cycles?
	+ **BayREN Response**: BayREN Business is the only Resource Acquisition program in BayREN’s portfolio. Although we are not held to achieving TRC, we strive to make the numbers, while also recognizing these projects require more incentives for the improvements given our focus of solely working with small HTR businesses.
		- BayREN Business sets its base incentives at a 3:4 ratio to the Total System Benefit (TSB) generated by each completed project. In other words, the standard incentive rate is $0.75 for every $1.00 of TSB. However, contractors are generally less motivated to pursue projects at small HTR businesses, as they typically generate lower energy savings that don’t justify the higher customer acquisition costs. Additionally, many HTR businesses are cash-constrained and unable to afford any out-of-pocket expenses for energy upgrades.
		- To overcome the financial barrier for the businesses and make this sector more attractive to contractors, BayREN Business applies an incentive multiplier to the base incentive rate specifically for HTR businesses. As a result, the incentive amounts are often high enough to cover most or all of the cost of the projects, making the upgrades little to no cost for the customers. In 2024, BayREN Business incentives made up approximately 66% of the program budget.
		- To improve cost-effectiveness, we are actively evaluating the following strategies: reducing the incentive multiplier without chilling the market; recruiting aggregators to expand the range of measures offered to include more high-TSB measures; and using new technologies to streamline processes to reduce implementation costs.
* **Pamela Rittlemeyer (CPUC)**: Can you provide any details on the Climate Careers program and any overlap with PG&E ESA program?
	+ **BayREN Response:** The Green House Calls provide an introductory EE touchpoint for many customers. The youth employed work on building trust in the communities they serve. In relation to ESA, there is overlap, but not duplication. Youth are trained to identify measure installation criteria and they won’t install items that don’t meet that criteria or if the measures are already in place. The ESA program can work with the low income customers we serve to provide even more improvements and benefits to that customer. We see an opportunity to better coordinate with ESA and provide them with a warm lead. The concern we have is getting reassurance from ESA that they have a contractor in that community and are ready to go. We don’t want the customer placed on a waitlist that could potentially be years out. We hope to formalize a way in which our programs can coordinate directly in the next JCM cycle. That may involve needing to request scheduling details from ESA.
* **Ely Jacobsohn (CPUC)**: How will DOE's current approach to reducing energy efficiency and renewable resources for communities and labs impact BayREN's implementation of Home Energy Score? Do you have any concerns about continuity?
	+ **BayREN Response:** BayREN doesn’t have concerns about continuity or implementing the DOE’s Home Energy Score tool currently. We have direct contacts at the DOE with people that work on this tool, and we have formal quarterly check-in meetings as well. We have discussed potential “plan B” options, should there be a disruption to the tool and maintaining continuity.
* **Anonymous**: Can you provide details as to why the MF experienced delays? Do you expect such delays to continue, and, if so, what steps are you taking to address these project delays?
	+ **BayREN Response**: The 2024 MF program had a strong pipeline and some projects experienced delays or took longer to complete based on various factors (bullets below). The unspent incentive funds in 2024 were carried over into 2025 and BayREN anticipates no issues spending down these funds in 2025. BayREN encourages our project managers to be efficient with their timelines, but not currently explicitly pushing them to complete within a year. We are considering implementing required timelines for different stages of a project - e.g. 6 mo. deadlines from rebate reservation to install and rebate payment.
		- Electrification projects generally take longer to complete, often over a year from scope development through install
		- Projects often co-leverage multiple programs, requiring significantly more time to coordinate
		- Needed electrical infrastructure upgrades (common area and/or in unit) and related PG&E permitting can significantly delay projects
		- Heat pump equipment procurement timelines can very widely

## General Q&A and Input

* **Ted Howard (SBUA)**: What are the updates on the alternatives to TRC (i.e. Program Administrator Cost (PAC), societal cost test, etc) given the challenges in meeting a 1.0 TRC, concerns with affordability, and the results of the CPUC Auditor’s report?
	+ **Coby Rudolph (CPUC)**: The new rulemaking proceeding ([R2504010](https://apps.cpuc.ca.gov/apex/f?p=401:56::::RP,57,RIR:P5_PROCEEDING_SELECT:R2504010)) [Scoping Ruling Memo](https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M574/K336/574336024.PDF) does mention CE tests, the state audit, and the executive order. In 2024, the claims from evaluated program data segment wide, IOUs are generally exceeding the 1.0 TRC threshold. Energy Division wants to study the kinds of interventions, capital projects, fuel substitution, and decarbonization opportunities as well as their impacts on affordability. More analysis and future discussion is needed.
* **Anonymous**: How do the IOU PAs reconcile TSB being exceeded with significant budget underspend and missed energy savings goals? If energy savings goals are the primary driver of programs to help customers save money, does this imply most of the TSB of the portfolio accrue to the PA, not their customers?
	+ **Coby Rudolph (CPUC)**: The energy savings goals (which no longer exist) were first-year savings goals, not lifecycle savings goals. First-year savings goals don't fully capture customer bill impacts. Instead, we now use the TSB goal and a cost-effectiveness requirement. The following are included in TSB that aren’t fully represented in first year savings: Estimated useful life, fuel substitution, and peak savings.
* **Anonymous**: Is the water heater measure being served by multiple programs downstream and the statewide midstream program?
	+ **SCE Response**: We will let the lead IOU PA share developments and offerings on the Statewide Midstream program. However, with respect to SCE’s programs, in 2024, this measure was offered predominantly to commercial customers through our Comprehensive Commercial Program.
	+ **Lead IOU Response**: *No response provided.*
* **Anonymous**: Has there been any other language [translation] needs seen in either customer or contractor segments across the REN's besides Spanish. If so, is this being addressed, or targeted for in future efforts?
	+ **3C-REN Response**: 3C-REN's website is offered in Spanish as well as English and to-date, 97% of the non-English projects that have come through 3C-REN's residential single-family program are from Spanish-speaking customers. We have seen a small number of projects with customers who speak other languages such as Tagalog, Mandarin, and Farsi. 3C-REN is responsive to enrolled contractors if they have support needs related to serving customers in different languages.
	+ **BayREN Response**: BayREN’s website is available in English, Spanish, Simplified Chinese, Traditional Chinese, Vietnamese, Arabic, Tagalog, and Farsi. These languages were selected based on their prevalence in the Bay Area. For other materials, such as handouts, BayREN’s translation needs are often identified in collaboration with County partners. We commonly translate content into Spanish, Chinese, and Vietnamese. BayREN remains responsive to additional translation needs, including live translation services, and can utilize in-house support to ensure customers receive the information they require.
	+ **CCR REN Response**: CCR REN’s website and hotline will be available to customers in Spanish. We are exploring other languages that could be implemented as well. CCR REN’s Commercial, Residential, and WE&T programs all offer services and printed materials in Spanish. Intake forms include “other languages spoken” selection to ensure the customer is receiving the level of service needed to participate in programs. Additionally, program providers and partner agencies strive to hire bilingual staff to support program implementation.
	+ **I-REN Response**: I-REN recognizes the opportunity to bridge translation gaps when delivering building codes resources, primarily for Spanish-speaking building professionals. According to the University of California, Riverside, 51% of the Inland Empire’s population is comprised by Latinos— an estimated 2.37 million people. Few local or statewide providers for multilingual codes or technical trainings currently exist, but are important to supporting codes enforcement and realized energy efficiency. I-REN is working on offering program collateral in Spanish. We recently launched live and on-demand options for Spanish speakers for every training held, and are working with Energy Code Ace to develop an English-to-Spanish technical energy term translation dictionary. As Energy Code Ace coordinates more broadly with the investor-owned utilities, I-REN aims to help develop a resource where professionals and translators can begin streamlining how terms are conveyed.
	+ **NREN Response**: Currently, NREN’s website is equipped with a google translate plug-in to be able to convert the website into a much larger choice of languages. We have only recently launched so we have not seen any customer or contractor inquiries come in languages other than Spanish. We are aware that our communities would certainly benefit from translation of our program documents into additional languages but currently don’t have the resources to achieve that at this time. We plan to explore it after more of our programs launch.
	+ **SDREN Response**: SDREN has not launched programs yet and has not received inquiries from customers or contractors regarding translations. However, SDREN will prioritize offering in-language materials and will identify specific languages needed to reach our target audiences as we develop the outreach plans for each of our programs in Q4 2025 - Q1 2026.
	+ **SoCalREN Response**: *No response provided.*

## Key Themes

***Poll Question & Responses*** *(verbatim)****:*** What topic, challenge, or question raised today should CAEECC consider to explore or address?

* Anonymous: Fuel substitution electrification measures and deep dive into TSB, TRC and PAC versus Gas to gas measures
* Anonymous: bring back CalTF / continue tracking their recommendations for streamlining EE measure packages/custom/reporting etc.
* Anonymous: Utility bill impacts following fuel substitution
* Anonymous: Deeper dive into which measures and program types are contributing the most to the overall portfolio. How they impact TRC and TSB.
* Anonymous: challenges related to methodologies for NEBs. measure package developments and impacts to portfolios/programs
* Anonymous: Recognition of RENs' successes serving the equity segment, especially residential/small commercial, and residential electrification; the RENs seemed to have better CET ratios (even though not required for them) and ratios of equity TSB outcomes to equity spending.
* Anonymous: What are the lessons learned that PAs can share with each other?
* Anonymous: What are some of the successes and failures in the Market Access Programs. I'd love to take a deep dive into POP NMEC. What measures are successful, building types, climate zones, customer types etc... We are so ready for a deep dive on this. thanks!
* Ely Jacobsohn: Fuel Switching - whether & how to implement and measure costs & benefits
1. Download [Decision approving I-REN’s 2021 Business Plan](https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M425/K515/425515912.docx) as a word doc [↑](#footnote-ref-0)