BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues.

Rulemaking 13-11-005 (Filed November 14, 2013)

2023 ENERGY EFFICIENCY ANNUAL REPORT OF PACIFIC GAS AND ELECTRIC COMPANY (U 39 M)

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Dated: May 1, 2024

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Pacific Gas and Electric Company (PG&E) respectfully submits the attached 2023 Energy Efficiency Annual Report (2023 Report) in accordance with the August 8, 2007, Administrative Law Judge's Ruling Adopting Annual Reporting Requirements for Energy Efficiency and Addressing Related Reporting Issues (Ruling), in Rulemaking (R.) 06-04-010 and direction from the California Public Utilities Commission (Commission or CPUC) Energy Division. Ordering Paragraph (OP) 2 of the Ruling requires "each utility to file its annual report on May 1 of the year following the end of a given program year."

The 2023 Report is being filed and served to parties in R.13-11-005, which is the successor proceeding to R.09-11-014 and R.06-04-010. In compliance with the Decision Addressing Third Party Solicitation Process for Energy Efficiency Programs, Decision (D.) 18-01-004, OP 8, PG&E's 2023 Report includes information regarding where to locate PG&E's Third-Party Contract List for 2023. Additionally, the 2023 Report is further updated pursuant to requirements established in D.21-05-031.

The 2023 Report describes the programs that comprise the 2023 energy efficiency portfolio and summarizes PG&E's energy efficiency accomplishments for 2023. PG&E's 2023 Report and Excel workbook will be posted to the CPUC's California Efficiency Data and Reporting System (CEDARS) website: <u>https://cedars.sound-</u>

data.com/documents/standalone/list/.

Respectfully Submitted,

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ATTACHMENT



2023 Energy Efficiency Annual Report



May 1, 2024



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Executive Summary

Pacific Gas and Electric Company (PG&E) has worked for more than four decades to help customers reduce their energy use and carbon footprint. Today, PG&E's Energy Efficiency (EE) Programs serve customers across the residential, commercial, agricultural, industrial, and public sectors. In 2023, PG&E continued its role as a leader in EE, delivering a dynamic portfolio of programs structured to meet customers' evolving needs.

PG&E's Energy Efficiency priorities include:

- Supporting customers, California's climate goals, and the electric grid and gas system through a diverse portfolio across all customer sectors.
- Meeting customers where they are by personalizing customer journeys, enhancing digital strategies, and removing barriers to participation.
- Pursuing a multi-pronged approach to building decarbonization, including targeted electrification
 of existing and new buildings and equipment, as well as technical support and advocacy through
 codes and standards.
- Deploying technologies that are grid-responsive and demand flexible to support a coordinated energy supply load strategy.
- Contributing to cost-saving resiliency solutions for customers, such as partnering across microgrids, remote grids, and individual customers to provide permanent load reducing solutions.

In 2023, PG&E worked through programs and partnerships to drive energy savings, greenhouse gas (GHG) emissions reductions, and long-term total system benefit to the electric grid and gas system. PG&E works to support California's energy goals and serve the diverse needs of more than 16 million customers across a <u>70,000 square-mile service territory</u>¹. PG&E's Energy Efficiency Programs are designed to reach customers across all sectors using a variety of channels, from self-service software tools to PG&E's business customer account representatives. To increase our impact, we also partner with state and local governments, community partners, and trade professionals, and offer education and training to building and real estate professionals.

This report is being filed in compliance with California Public Utilities Commission (CPUC or Commission) guidance on Energy Efficiency Program reporting², which was expanded following approval of the Energy

¹ <u>https://www.pge.com/assets/pge/docs/account/service-requests/greenbook_manual.pdf, pg. iii</u>

² Pursuant to Attachment C of ALJ Ruling Adopting Annual Reporting Requirements for Energy Efficiency and Addressing Related Reporting Issues, dated August 8, 2007.



Efficiency Business Plans in Decision $\underline{D.18-05-041}^3$ and updated in $\underline{D.21-05-031}^4$ and $\underline{D.23-06-055}^5$. This report focuses on Program activities and accomplishments in the year 2023 and describes the full set of programs in PG&E's 2023 portfolio.

PG&E's 2023 milestones include:

- Provided education and training on electrification for industry professionals. Electrification topics comprised over 40% of our classes, webinars, and on-demand courses. Overall, we offered education and training to over 19,000 participants and delivered over 500 classes and webinars, while also offering over 250 on-demand classes.
- Expanded Home Energy Reports⁶ (HER) which currently serves about 3.1 million residential customers, to include a Peak Day Alert offering to about 500,000 customers. The alert virtually encourages customers to shift their load on peak days. In 2023, the HER program was awarded the PG&E Richard A. Clarke Environmental Leadership Award recognizing the energy savings for our customers, reduced energy footprint, and increased customer support. PG&E is a national utility leader in home energy reports and runs one of the largest programs in the nation.
- Launched Business Energy Reports to approximately 25,000 small and medium business customers to provide them weekly energy use data and tips to save energy.
- Enhanced our online guide⁷ to help residential customers find the best programs, resources, and energy products that suit their needs, like smart thermostats, EV chargers, and portable batteries. In 2023, the site saw over 687,000 unique visitors and over 3.2 million page views both more than doubling results from 2022.
- Offered no-interest energy efficiency financing⁸ through our <u>On-Bill Financing Program</u> that provides commercial customers and government agencies with loans for energy efficiency upgrades with no out-of-pocket costs and zero interest. The Program funded 369 loans worth a total of \$51 million in 2023, with most loans going to small and medium businesses, and public organizations.
- Launched Micro-Small Customer Equity Program mid-year, specifically focused on
 Disadvantaged Communities and hard-to-reach customers. By year end provided service to over

³ <u>https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M215/K706/215706139.PDF</u>

⁴ https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M385/K864/385864616.PDF

⁵ https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M512/K907/512907396.PDF

⁶ <u>https://www.pge.com/en_US/residential/save-energy-money/floating-pages/home-energy-reports/home-energy-reports.page?WT.mc_id=Vanity_homeenergyreports</u>

⁷ https://guide.pge.com/

⁸ <u>https://www.pge.com/en_US/small-medium-business/save-energy-and-money/energy-efficiency-financing.page</u>



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600 customers, with more than 300 opting to install energy savings measures totaling over \$25,000 in bill savings. This is the first fully equity focused program in the portfolio.

- Helped industrial customers reduce their energy usage through Strategic Energy Management (SEM) Programs. SEM retrocommissions and upgrades equipment, works with industrial facility employees to pursue energy savings, and provides planning resources for future energy needs. More than 70 customers participated in 2023 and are expected to save over 46.5 GWh and 2.7 million therms annually by implementing energy management practices at their facilities and changing the way operations teams think about energy use.
- Supported decarbonization through statewide all-electric new construction programs and codes and standards. Enrolled 75 high performance commercial all-electric new construction projects in the recently launched statewide incentive program. Continued to provide research data and advocacy for the advancement of state and national energy codes and standards savings customers 1,355 GWH and 23.9 million therms annually.
- Supported our local governments that are pursuing local GHG reduction and climate action goals by providing over 250 requested GHG inventories Climate Action Planning and benchmarking support. The programs supported over 40 communities adopting or advancing local energy ordinances and provided tools, training, and resources to building departments throughout the state to help communities comply with the building code and realize the energy and GHG emissions reductions potential it offers.
- PG&E made significant progress evolving its portfolio in 2023 to test new approaches to support building electrification and integrated load management strategies for customers. For example, PG&E launched RFPs to procure a Residential Electrification Equity Program, a Zonal Electrification Equity Program, and a Residential Whole-Home Load Management Program, for which we expect sign contracts for in 2024.
 - **The Residential Electrification Equity Program** focuses on serving hard-to-reach and underserved customers located in disadvantaged communities by addressing the up-front costs and potential energy bill increases associated with building electrification.
 - The Zonal Electrification Equity Program targets electrification efforts in the residential and commercial sectors on specific identified gas distribution and transmission system "zones" with the intent of decommissioning that section of the gas system or avoiding new future gas capacity projects.
 - The Residential Whole-Home Load Management Program will investigate the ability of various orchestration strategies within a comprehensive load management program consisting of energy efficiency measures, time-of-use rates, and other distributed energy resources to provide regular and consistent load reductions without sacrificing on key customer needs of health, safety, comfort, and productivity.



Planning For the Future

In 2021, the Commission issued D.21-05-031, which outlined an ambitious new future for EE in California, including total system benefit goals, portfolio segmentation, and a new portfolio planning cycle. PG&E began to plan for that future in 2021, including filing the 2022-2023 Biennial Budget Advice Letter that oriented PG&E toward the new EE paradigm. In February 2022, PG&E filed its 2024-2031 business plan application, with approval in June 2023 in D.23-06-055. PG&E filed it's 2024-2027 True-Up Budget Advice Letter in October 2023, which was approved in February 2024. PG&E will continue to deliver on its commitment to customers and support California's EE and climate goals through innovative program and pilot strategies and excellence in program administration.



Annual Report Data

D.21-09-037 established net energy savings and demand reduction goals for 2023 for investor-owned utility (IOU) territories, for both incentive and codes and standards programs. Codes and standards goals where later corrected in D.22-05-016 to properly account for interactive effects. Achievements discussed in this section comprise total impacts across both incentive and codes and standards programs combined. In 2023, PG&E's Energy Efficiency Programs helped California avoid the emission of over 8 million lifecycle metric tons of carbon dioxide. Customers saved approximately 1,715 GWh and 42.5 million therms of energy through incentive programs, codes and standards advocacy, on-bill financing, and data-driven interventions that help customers understand and manage their energy usage.

D.09-09-047 defined and D.12-11-015 clarified the 10 percent utility administrative cost cap, the 6 percent marketing cost cap, the 4 percent EM&V budget allocation⁹ and the 20 percent direct implementation nonincentive (DINI) target. Statewide ME&O is excluded from the marketing cap.¹⁰ PG&E reports its progress against these caps and targets in quarterly reports posted in the CPUC's California Energy Data and Reporting System (CEDARS)¹¹ along with PG&E's monthly expenditure and savings reports. As part of the statewide shift to portfolios that are primarily implemented by third-party vendors, D.18-05-041¹² directed IOUs to track the number and proportion of third parties that forego the option of using utility account representatives. IOUs must include this information in their annual reports. As of May 2023, no third-party vendor has foregone the use of PG&E account representatives.

PG&E has also included an additional section of this report to highlight the significant efforts made by PG&E as well as the Regional Energy Networks (RENs) and Community Choice Aggregators (CCAs) to prevent EE program duplication and optimize customer experience and ratepayer resources.

⁹ Affirmed in D.16-08-019, Conclusion of Law 67.

¹⁰ D.13-12-038, p. 82.

¹¹ See Cap and Target reports at <u>https://cedars.sound-data.com/documents/standalone/list/</u>.

¹² D. 18-05-041, Ordering Paragraph (OP) 17.



In 2023, PG&E administered a broad portfolio of EE programs that served an array of market sectors and customer types and supported energy efficiency across numerous technologies. IOUs used a variety of market intervention strategies from upstream rebates – targeted at manufacturers and distributors to buy-down the cost of the product for the end-use customer – to midstream and downstream incentives. These programs supported <u>PG&E's 2018-2025 Energy Efficiency Business Plan</u> goals to provide customers with a more integrated EE experience, access to information, and greater financing opportunities.

PG&E's service area is approximately 70,000 square miles in Northern and Central California, and the company serves approximately 16 million customers. Over 80 languages are spoken throughout PG&E's territory, covering rural to urban communities, with a diverse residential, commercial, agricultural, and industrial base. To meet customers' needs, PG&E offers programs that serve broad market segments and leverages local partnerships and third-party programs to serve targeted markets, harder-to-reach segments, and groups with specific needs.

PG&E's solicitations schedule, resources, and updates can be found on PG&E's website at https://www.pge.com/en_US/for-our-business-partners/energy-efficiency-solicitations/energy-efficiency-solicitations/energy-efficiency-solicitations.page.

This section describes PG&E's successful strategies and accomplishments for the following program sectors in 2023:

Statewide

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- Residential
- Commercial
- Public
- Industrial
- Agricultural
- Financing
- Codes, Standards, and New Construction
- Workforce Education and Training (WE&T).



Statewide Program Implementation

Starting in 2016, the Commission directed the California investor-owned utilities to begin transitioning California toward greater statewide program administration and third-party involvement in the proposal, design, implementation, and delivery of energy efficiency programs.¹³ IOUs are required to allocate at least 25 percent of their proposed Business Plan budgets to statewide programs¹⁴ and at least 60 percent to third-party programs by the end of 2022.¹⁵



The Commission established statewide programs and the associated lead IOU¹⁶ in 2018, as described in Table 1:

Program Category	Lead IOU
Plug Load and Appliance	SDG&E
HVAC (Upstream Residential, Upstream Commercial)	SDG&E
Codes & Standards (Building Codes Advocacy)	PG&E
Codes & Standards (National Advocacy)	PG&E
Codes & Standards (Appliance Standards)	PG&E
New Construction All-Electric (Residential)	PG&E
New Construction All-Electric (Non-Residential)	PG&E
New Construction Mixed Fuel (Non-Residential)	PG&E
Emerging Technologies (Gas)	SoCalGas
Emerging Technologies (Electric)	SCE
Institutional Partnerships (State of California, California Department of Corrections)	PG&E

Table 1: Lead Program Administrator for Statewide Programs by Area

¹³ D.16-08-019, Decision providing guidance for Initial Energy Efficiency Rolling Portfolio Business Plan Filings.

¹⁴ D.16-08-019, OP 6.

¹⁵ D.18-01-004, OP 1.

¹⁶ D.18-10-041, OP 26.



Program Category	Lead IOU
Workforce Education & Training (WE&T) (Career Connections)	PG&E
Institutional Partnerships (University of California, California State University), called "Higher Education"	SCE
Foodservice Point of Sale (POS)	SoCalGas
Midstream Commercial Water Heating	SoCalGas

Table 2: Lead Program Administrator for Statewide Downstream Pilot Programs

Program	Lead IOU
HVAC Quality Installation/Quality Maintenance (QI/QM)	SDG&E
Water/Wastewater Pumping Program	SCE
Workforce Education & Training (WE&T) (Career and Workforce Readiness)	PG&E

The Commission also outlined the roles and responsibilities for statewide program leads¹⁷, noting that they would each have sole responsibility for the following:

- Program vision development, design/delivery, and intervention strategies
- Procurement, contract administration, and co-funding management from partner program administrators
- Implementer oversight
- Implementer management, rewards, and any necessary corrective action
- Review of implementer performance and program performance on a quarterly basis
- Meeting savings goals and customer satisfaction levels
- Metrics development
- Reporting

The IOUs intended to outsource the proposal, design, implementation, and delivery of statewide programs to third parties as part of their third-party solicitations, associated with the implementation of 2018 – 2025 EE Business Plans. Therefore, the budgets for statewide programs will count towards both

¹⁷ D.18-05-041, p. 185-186, OP 18.



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the 25 percent statewide and 60 percent third-party outsourcing requirements. Statewide programs are designed and delivered by one or more statewide implementers, under contract to the Lead IOU.¹⁸

Program administrators collaborate to keep each other informed on statewide program progress, enabling coordination on program delivery and timely updates on statewide program budgets. Statewide coordination is intended to keep all program administrators informed of each individual IOU's required allocations toward statewide programs for use in portfolio planning, as well as regulatory budget filings. This statewide coordination aligns with Commission guidance, which confirms that "statewide activities are clearly in support of state policy and actively supervised by, and a priority for the Commission"¹⁹ and helps to avoid a conflict with the scope of a statewide program as described in D.18-05-041.²⁰ Additional compliance reporting on statewide program administration is detailed in Section 11 of this report.

Statewide Energy Efficiency Programs

Below, PG&E provides a status update on the PG&E-led statewide programs listed in Table 1.21 A summary narrative has been provided for PG&E-led statewide programs that have either already launched or have reached the stage of seeking Commission approval of contracts through the Advice Letter process, and credit for the proportional benefits from statewide programs through the CPUC's California Energy Data Reporting System (CEDARS). Please refer to the lead program administrators' respective 2023 Annual Reports for information on statewide programs. Descriptions of 21 PG&E-led statewide programs follow.

State Building Codes Advocacy Program: Title 24, Part 6 & Part 11 (PGE_SW_CSA_Bldg)

Statewide Program Lead: PG&E

Implementers: Energy Solutions, Frontier Energy, TRC, McHugh Energy

The Statewide Building Codes Advocacy Program supports the California Energy Commission's (CEC or Energy Commission) triennial update to the Energy Code (Title 24, Part 6) to include new EE regulations or to strengthen existing regulations for various technologies or measures. Advocacy activities include the development of Codes and Standards Enhancement (CASE) proposals, research to provide the data needed to advance EE regulations, and participation in public rulemaking processes. The Program also supports the Energy Commission in preparing recommendations to the Building Standards Commission to update the California Green Buildings Standards (Title 24, Part 11 or CALGreen). The voluntary energy

¹⁸ D.16-08-019, p. 109, OP 5.

¹⁹ D.18-05-041, p. 81.

²⁰ D.18-05-041, p, 173, COL 17 which states, "All PAs should have the ability to continue local pilot activities that would otherwise qualify for statewide administration but that are not yet ready for such statewide treatment, provided that such local pilots or programs do not compete with, or otherwise impede the progress or activities of, operational statewide programs."

²¹ Solicitations status is based on the Joint IOU Energy Efficiency Solicitation Schedule, available at https://www.caeecc.org/third-party-solicitation-process



measures in CALGreen provide foundational elements for local reach codes. Descriptions of energy code proposals, timeline, and other supporting documentation are available at <u>title24stakeholders.com</u>.

National Codes and Standards Advocacy Program (PGE_SW_CSA_Natl)

Statewide Program Lead: PG&E

National Codes & Standards: DOE, ASHRAE 90.1 and 189.1, IECC, ENERGY STAR Implementers: 2050 Partners, Energy Solutions, McHugh Energy

PG&E advocates for national building codes and appliance standards that support California by encouraging broader market adoption of transformative technologies and construction processes. Alignment between national and state codes also helps reduce barriers to compliance by harmonizing the requirements across state borders. Organizations that work across multiple states, including California, can establish business practices that would result in less customization for the California market. Advocacy during U.S. Department of Energy (DOE) proceedings supports large cost-effective savings in California through more stringent federal appliance standards. Participation in Environmental Protection Agency (EPA), Federal Trade Commission, ASHRAE, and IECC code and standard update proceedings in support of increasing requirements is important to minimize gaps, when regionally appropriate, between the California's EE regulations and the EE regulations that other states adopt.

State Appliance Standards Advocacy Program (PGE_SW_CSA_Appl)

Statewide Program Lead: PG&E

Implementers: 2050 Partners, Energy Solutions

The Statewide Appliance Standards Advocacy (ASA) Program targets improvements to Title 20 by the California Energy Commission. Advocacy activities include developing Title 20 code enhancement proposals and participating in the California Energy Commission public rulemaking process. Additionally, the Program monitors state and federal legislation and intervenes, as appropriate.

California Energy-Smart Homes All-Electric Residential Program (PGE_SW_NC_Res_electric)

Statewide Program Lead: PG&E

Implementer: TRC

The California Energy-Smart Homes All-Electric Residential Program (CESH-AE) supports a high-level approach to achieving California's advanced energy efficiency policy goals through 2025 by engaging with builders and developers to recruit projects and influence them to build all-electric. The Program is available to customers in the PG&E, SCE, and SDG&E territories. The all-electric Program offering serves five residential sub-sectors: single-family and duplexes, multi-family low-rise (three or fewer stories), manufactured housing, accessory dwelling units (ADU) and addition/alteration (A&A, additions greater than 700 square feet). The Program influences the decision and eases the transition to adopt all-electric



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new construction practices by educating potential participants and stakeholders on the features of allelectric homes, enrolling projects, emphasizing the installation of advanced EE measures, and facilitating future opportunities through non-incentivized, prerequisite measures that position homes to install highimpact demand response technologies more easily in the future.

California Energy Design Assistance All-Electric (CEDAE) Program (PGE_SW_NC_NonRes_Com_electric)

Statewide Program Lead: PG&E Implementer: Willdan Energy Solutions

The CEDAE Program serves commercial, public, high-rise multi-family residential, industrial, and agricultural new construction sectors, and major alterations in facilities across the PG&E, SCE, and SDG&E territories. This Program contributes to the IOUs' efforts to achieve their share of California's ambitious EE, greenhouse gas emission reduction, and Zero Net Energy (ZNE) goals by offering EE options tailored to each building during the design and construction process. CEDAE also offers technical assistance early in the process, when it has the greatest influence on design and operation, driving energy savings beyond code and gathering data to further advance future codes. The CEDAE Program both directly supports projects and influences the non-residential new construction market to achieve deeper energy savings and decarbonize through key activities such as outreach and education, energy modeling, verification, and data tracking to inform future codes and standards.

California Energy Design Assistance Mixed Fuel (CEDAM) Program (PGE_SW_NC_NonRes_Com_mixed)

Statewide Program Lead: PG&E Implementer: Willdan Energy Solutions

The CEDAM Program serves commercial, public, high-rise multi-family, industrial, agricultural, new construction sectors, and major alterations in facilities across the PG&E, SCE, SoCalGas, and SDG&E territories. CEDAM contributes to the IOUs' efforts to achieve their share of California's ambitious EE, greenhouse gas emission reduction, and ZNE goals by offering technical assistance early in the process, when it has the greatest influence on design and operation, driving energy savings beyond code and gathering data to further advance future codes. The CEDAM Program will both directly support projects and influence the non-residential new construction market to achieve deeper energy savings and decarbonization through outreach and education, energy modeling, verification, and data tracking to inform future codes and standards.

State of California Energy Strategy and Support Program (PGE_SW_IP_Gov)

Statewide Program Lead: PG&E Implementer: Alternative Energy Systems Consulting, Inc (AESC)



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The State of California Energy Strategy and Support Program (SOC ESS) opened to customers in September 2021. SOC ESS helps California State Agencies (excluding higher education, which will be served by a Statewide program led by SCE) reach their greenhouse gas (GHG) emission reductions goals while reducing energy use through EE and Integrated Demand-side Management (IDSM) project planning, technical support, and financial assistance. The Program builds on the State's successful existing approaches while adding new channels to address key barriers California state agencies. SOC ESS is designed to overcome structural and operational barriers related to staffing and capacity, capital and financing, and safety to support successful realization of energy savings in state buildings.

The Program offers two pathways with varying levels of support. Pathway 1 provides agencies that are committed to a minimum level of energy savings and program engagement with high-touch, customized, and strategic portfolio-wide and engineering support plus staff augmentation. Pathway 2 provides support on individual projects as identified and pursued. Additionally, the Program continues to provide all agencies with the services they relied on through the prior statewide partnership programs, including financial, policy, technical, project, and program application support.

Career Connections: Energy is Everything (PGE_SW_WET_CC)

Statewide Program Lead: PG&E Implementer: The Energy Coalition (TEC)

The Statewide Career Connections third-party "Energy is Everything" (EisE) Program helps to build the next generation of energy workers. EisE provides Kindergarten through 12th grade students the knowledge, skills, and abilities they need for college and career opportunities in the energy industry and motivates students to adopt pro-environmental behaviors. EisE incorporates career concepts for all learners, since early exposure to career options increases the chances of students pursuing and securing high-demand energy and STEM careers. Education providers targeted will primarily focus on those classified as "disadvantaged".

Career and Workforce Readiness: Energize Careers (PGE_SW_WET_Work)

Statewide Program Lead: PG&E

Implementer: Strategic Energy Innovations (SEI)

Energize Careers aims to create a diverse and representative energy workforce through the economic empowerment of people who experience personal or systemic barriers to employment. Energize Careers assists program participants in accessing technical training and living wage energy career opportunities. Energize Careers provides holistic services to support disadvantaged workers through technical training and job placement, as well as wrap-around service support. Energize Careers collaborates with pre-apprenticeship programs, apprenticeship programs, community-based training organizations, and community colleges to provide technical energy job training to disadvantaged workers. Energize Careers also collaborates with wrap-around service providers and industry partners to provide people with



services and support to access career pathways into jobs where they can leverage their energy efficiency knowledge and skills.



Residential Sector

PG&E's vision for the residential sector is to help customers reduce energy use in their homes, reduce energy demand on the grid, build resiliency, and advance building decarbonization in California, through a variety of programs that break down the barriers to adoption.

PG&E's residential programs offer an array of services and tools that guide customers to their energyand money-saving goals, while meeting portfolio targets.

In 2023, programs engaged customers and other market actors through the following channels:

- Behavioral and home energy management tips, tools, and initiatives
- Education and tools to help customers make informed decisions on energy efficient products and appliances and how to leverage them to save energy
- Improvements to the built environment, such as home upgrades, heating, ventilation, air conditioning (HVAC), water heating, and new construction

Key Initiatives and Notable Changes in 2023

Continuous Energy Feedback Program: Behavior Based Program Enhancements

The Continuous Energy Feedback Program (CEFP) includes several elements that make up the Energy Efficiency Behavior Platform of programs. The foundational element is the PG&E Home Energy Report (HER), which reached an additional 150,000 customers in 2023, bringing the new total population to 3,160,000 million customers.

Building on momentum in 2022, PG&E introduced four new important elements to CEFP to further help our customers save energy and portfolio value:

- 1. **Time-of-Use HER:** an enhanced experience sent to customers twice a year to help them prepare for the upcoming Summer and Winter seasons.
- 2. Electric Vehicle HER: this report highlights for customers their energy use towards EV charging by leveraging new disaggregation insights and incorporates additional insights and tips related to electric vehicle ownership.
- Peak Day Alerts: a digital communications and behavior science program that encourages select HER customers to reduce energy consumption on days when demand for electricity is forecast to be greater than supply.

Business Energy Report (BER) Program: for select small and medium business customers with the goal of providing actionable insights about their energy use and motivate them to lower their electricity



and/or gas usage. The PG&E 2024-2027 True-Up Advice Letter²² has identified Program ID PGE_Com_007 that will be effective 2024 and beyond.

Energy Action Guide (EAG) Enhancements

PG&E added many enhancements to Energy Action Guide to make searching for energy solutions even easier for customers. During 2023, the site had over 687,000 unique visitors who were able to benefit from the additional features that provided even more customized information about products and resources specific to the customers' needs and interests. One of the notable updates included a GoGreen financing estimator to help customers estimate GoGreen financing payments based on the upgrades selected.

Residential Meter-Based Offerings

PG&E continued its residential Normalized Metered Energy Consumption (NMEC) Programs, the residential Pay for Performance (P4P) Programs. The P4P Programs employ metered energy consumption data to help customers targeting energy savings and drive grid benefits. These Programs aim to achieve PG&E's goals of establishing savings persistence and on-going relationships between PG&E, the third-party program implementers, and our customers. PG&E had two active P4P Program in 2023: Comfortable Home Rebates and HomeIntel. HomeIntel was able to increase its customer reach to over 8,000 customers in 2023, more than doubling the Program's total customer enrollment from the previous year.

Looking Ahead

PG&E is excited for the planned launch of two new equity segment electrification pilot programs by the end of 2024. These new pilots are expected to produce significant learnings about how to successfully electrify homes and businesses, especially for customers in disadvantaged communities, while producing insights about how such efforts can be scaled more broadly. These pilots intend to integrate important elements for scalability such as leveraging of other funding sources and endeavoring to reduce overall building energy use.

In addition, PG&E is currently soliciting two additional market support segment programs that are expected to launch in 2025. One of these is a pilot program focused on energy orchestration that is intended to effectively integrate EE, other distributed energy resources, and time-of-use rates to help customers more effectively manage their electric load in a dynamic fashion. The other program will provide market support to residential customers interested in building electrification, as well as to contractors who can provide electrification-related services.

²² PG&E 2024-2027 True-Up Advice Letter 4814-G/7047-E



As outlined in PG&E's Portfolio Plan for 2024-2027, PG&E will continue to look for opportunities to expand integrated demand-side management (IDSM) and electrification support for its residential customers.

Residential Programs

Residential Pay for Performance (P4P) Program

Implementers: Home Energy Analytics and Franklin Energy

The Pay for Performance (P4P) model enables measurement of energy savings at the meter and aims to achieve persistent savings through an ongoing relationship between customers and their contractors.

HomeIntel, offered by Home Energy Analytics (PGE_Res_001b): In-depth analysis of a home's energy use, customized recommendations, and energy coaches to help reduce energy usage. Includes monthly energy efficiency progress report.

Comfortable Home Rebates, offered by Franklin Energy (PGE_Res_001a): Whole-home, deep retrofit Program. The Program uses building science principles and is primarily focused on building enclosure and Heating and Cooling (HVAC). 2023 was Comfortable Home Rebates' second and final year of customer participation; the Program continued to track and claim savings through the end of 2023, its final contract year.

Home Energy Checkup (PGE_Res_002a)

Implementer: Oracle

The Home Energy Checkup (HEC) Program is a self-guided online assessment that helps customers understand where they use energy in their homes. It also provides energy-saving tips and suggestions based on the customer's specific responses and generates a simple checklist plan. The plan is saved on the customer's *PG&E My Account* website to track progress as items are completed in 2023, approximately 258,000 customers completed a Home Energy Checkup (HEC).



Residential Third-Party Programs

PG&E's Residential Third-Party Programs²³ are an integral component of its overall residential sector strategy to help provide many customers with energy-efficient solutions and services.

Continuous Energy Feedback Program (PGE_Res_002d)

Implementer: Oracle

The Continuous Energy Feedback Program (CEFP) uses multiple behavior-based energy efficiency strategies to support our Residential and SMB customers in understanding and empowering them to manage and lower their household/business energy consumption. This program uses information and customer engagement strategies to prompt non-rebated behavior change that can be measured using randomized controlled trials to validate savings and demonstrate attribution. As a result of their changed behaviors, customers can manage their energy use and energy behaviors, make more efficient purchasing decisions, and take energy related actions to lower their energy use.

The CEFP includes the following program elements and offerings:

Home Energy Reports (~3,160,000 customers, sent 12 times per year via a hard copy and email). HERs gives customers actionable insights about their energy use to motivate them to lower their electricity and/or gas usage. This Program increased by 260,000 customers in 2023.

Solar Home Energy Reports (~425,000 customers, sent 12 times per year). Solar HERs serve customers with installed solar and aims to motivate them to reduce their energy use and form energy-saving habits. This program grew by ~75,000 customers in 2023.

Summer Video Home Energy Reports (~750,000 customers, sent yearly). This new HER experience reaches customers through video emails. Customized summer video HERs include normative comparisons, personalized energy insights, summer specific tips, and a call to action through the Home Energy Checkup (HEC).

Bill Forecast Alerts (~1,500,000 customers, sent upon reaching Alert thresholds). These alerts, primarily sent through email, but available through text messages and phone calls, notify customers of upcoming potential high bills and give them the opportunity to take action to save energy and money. Alerts are sent based on set bill thresholds, forecasted usage, and projected costs.

Time-of-Use (TOU) Rate Coach (~363,000 customers, sent weekly). These emails deliver insights to TOU rate customers to educate them about their peak energy usage and encourage them to shift their use to off-peak hours to help reduce their peak spending and lower their monthly energy bills. PG&E added new disaggregation insights into the report and expanded this program to an additional 210,000 customers in 2023.

²³These programs were launched following the Commission-approved solicitations process and meet the third-party program definition as described in Decision 18-01-004.



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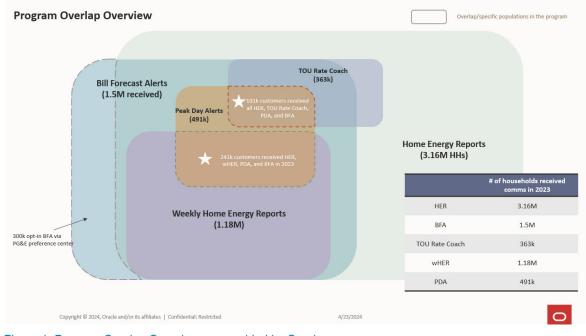
Weekly Home Energy Reports (~1,180,000 customers, sent weekly). These emails deliver personalized information to customers about their energy use, including a neighbor comparison, energy history information, tips, and marketing modules. Weekly HERs give customers actionable insights about their energy use and aim to motivate them to lower their electricity and/or gas usage. This Program added 880,000 customers in 2023.

NEW Electric Vehicle HER (~43,000 customers sent monthly). This report highlights customers' EV charging energy use by leveraging new disaggregation insights while incorporating electric vehicle ownership tips.

NEW Time-of-Use HER (~883,000 customers, sent semi-annually). An additional communication experience sent to customers to help them prepare for the upcoming summer and winter seasons.

NEW Peak Day Alerts (~491,000 customers, sent only on days when demand for electricity is forecast to be greater than supply). During these events a digital communications and behavior science system encourages select HER customers to reduce their energy consumption. Four events were called in 2023.

NEW Business Energy Reports BERs (~25,000 customers, sent weekly). This pilot kicked off in Sept 2023 for three segments (AG, Food Service and Retail). These emails deliver personalized energy use information to business customers, including a self-comparison, energy history information, tips, and marketing modules. The goals of the BERs are to give customers actionable insights about their energy use and motivate them to lower their electricity and/or gas usage.



Program Overview

Figure 1. Program Overlap Overview, as provided by Oracle

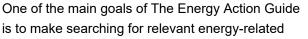
PG&E Marketplace Refresh – Energy Action Guide (PGE_Res_002e)

Implementers: ZappyRide and Bellawatt

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PG&E's online Energy Action Guide tool is a solution that guides PG&E customers with relevant, timely, and contextual personalization to help them make the best energy related decision—all while supporting PG&E's carbon reduction strategies. The tool raises awareness of, and increases engagement with, energy management technology (EMT), provides incentive information for adopting EMTs, educates residential and small-medium business (SMB) customers about EMT programs, including income qualified customer programs.







information, products or PG&E resources, as simple and straight-forward as possible. A new Go Green Financing Calculator ²⁴ estimating tool was added where a customer can enter simple information to get a sense of what financed monthly payments might look like, see Figure 2Figure 2 A product comparison tool was also added to create a familiar online shopping experience when a customer is looking for an energy efficient or electrification product. In addition, a customized message was added to direct customers with helping make decisions when searching for products. Not only do these features simplify the customer's experience, they also lead the customer to relevant, actionable next steps. Energy Action Guide empowers customers to take control of their energy consumption, reduce costs, and enhance resiliency. During 2023, the Energy Action Guide attracted over 687,000 visitors, resulting in over 3.1 million page views and over 5.5 million customer interactions with the website, a significant increase from 2022.

Multi-Family Energy Savings Program (MESP, PGE_Res_003)

Implementer: TRC

The Multi-Family Energy Savings Program (MESP) aimed to provide property owners EE upgrade services for multi-family buildings of five units or greater throughout PG&E's service territory. The program provided end-to-end program implementation services, including marketing, outreach, engineering, operations, customer service, data management, and reporting. MESP was tailored to serve multi-family customers, inclusive of smaller properties and underserved regions that would most benefit from property upgrades. The Program aimed to create new EE opportunities by targeting underserved

²⁴ Go Green Home Energy Financing – PG&E Energy Action Guide: <u>Shop only the top electric water</u> <u>heaters - PG&E Energy Action Guide (pge.com)</u>



property stakeholders, while providing scalability to achieve deeper retrofit opportunities with larger and more modern properties.

Due to the lack of projects and therefore kW and kWh savings over 2021 and 2022, PG&E requested and gained approval from the CPUC in May 2023 to close the program early. PG&E managed a smooth ramp down for customers and the vendor.²⁵ Multifamily customers are being directed to the PG&E Multifamily Single Point of Contact website (https://pgemultifamily.com), which is a service that helps customers find multi-family program offerings. Some programs that are available to multi-family customers include the Energy Savings Assistance Northern Multifamily Whole Building Program, as well as the California Energy-Smart Homes Program.

WatterSaver Program

Implementer: Association for Energy Affordability (AEA)

Participants who enroll in WatterSaver can optimize their energy use and save money by connecting their water heaters, via internet or cellular data, to the program. WatterSaver helps participants save by automatically taking advantage of lower electricity rates, heating water at less expensive off-peak times of the day. Participants also receive a \$50 gift card for enrolling plus an additional \$5 gift card for each month of active participation. Enrolled customers increase electric grid reliability and support increased renewable energy generation like solar and wind power by shifting energy use to off-peak times.

In 2023, the program focus was on collaboration with different heat pump water heater (HPWH) manufacturers. Though the communication and control technology is still in development for most HPWH manufacturers, cutting-edge technology was tested and employed by WatterSaver. For example, WatterSaver was the first program in the country to successfully deliver a remote advanced load up command using a third-party universal control module (UCM). This is significant because all HPWH manufacturers will likely rely on this communication standard as they develop their communication and control functionalities. This program's work is pushing the existing limits of how heat pump water heaters can be controlled and how their load should be shifted. About 200 customers were enrolled in WatterSaver by the end of 2023, over 20 kW reduced during peak, and over 55 kWh shifted outside of peak period.

Though managed by PG&E's EE residential team, WatterSaver is funded separately from other EE programs, through funding authorized under Assembly Bill 2868 of 2016, which was adopted to accelerate the deployment of connected distributed energy storage systems in California.

²⁵ PG&E Advice #4754-G.6943-E filed 5/15/23.



Commercial Sector

PG&E's commercial EE programs offer non-residential customers a suite of approaches, products, and services to help overcome the market barriers to optimizing energy management. These programs offer comprehensive energy management solutions, which may include EE, as well as IDSM, through strategic energy planning support, technical support services such as facility audits and calculation or design assistance, and financial support through rebates, incentives, and financing.

In 2023, PG&E's commercial EE programs continued to ramp down the proportion of rebate and incentive funds in favor of meter-based programs and in-house and publicly available financing options. On Bill Financing (OBF) offers to help customers address the cost barriers which drive project decisions. For more details on PG&E's OBF program, see the <u>Financing Programs</u> chapter of this report.

Key Initiatives

PG&E focused on strategies in 2023 that will position its programs to achieve PG&E's vision for the commercial sector: putting commercial buildings on a path to Zero Net Energy (ZNE) by 2030 for all new construction buildings and for half of existing buildings.

Key initiatives to achieve these goals included:

- Reducing program dependence on incentives and rebates by increasing focus on financing offerings
- Continuing to evolve programs to pursue deeper savings: promoting more comprehensive and controls-based project strategies, encouraging conservation at times when it will yield greater grid benefits, increasingly emphasizing behavioral and operational interventions
- Building longer-term EE relationships between customers and project developers, resulting in a deeper understanding of a customer's EE goals and challenges
- Increasing funding for commercial programs provided smaller commercial customers with
 opportunities to reduce electric usage at their business. For the smallest of customers, an equity
 program was launched which provides customer education, direct install upgrades, and
 equipment retrofits with the goal of reducing customer bills.

Looking Ahead

As discussed in PG&E's 2024-2027 Business Plan²⁶, one of the key strategies to achieve commercial sector goals is to expand Strategic Energy Management (SEM) Programs beyond the industrial sector. SEM is a holistic, long-term, whole facility approach that uses advanced implementation, measurement

²⁶ PG&E Energy Efficiency 2024-2027 Portfolio Plan, Exhibit 2, Chapter 4, pg.4-41.



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and verification services and tools to determine energy savings from all program activities at the facility including capital projects, maintenance and operation improvements, as well as retrocommissioning. Participants receive coaching to develop their own energy management practices that will persist beyond their engagement with the program. As authorized in D.23-02-002²⁷, PG&E is currently underway on the solicitation for a commercial SEM program. The commercial expansion of SEM will adhere to the same design guidelines as its industrial counterparts and combine long term energy efficiency savings, operational changes, and IDSM opportunities. We expect the Commercial SEM program to launch in Q1 of 2025.

Commercial Programs

Commercial Calculated Incentives Program (PGE21011)

The Commercial Calculated Incentives Program provides financial incentives for non-residential customers to install new equipment or systems which meet or exceed applicable code and/or industry standards in existing buildings when projects don't have a good fit with a third-party program. The program includes both custom incentives and retrocommissioning (RCx) offerings. RCx represents an important element of PG&E's EE toolkit by reducing energy usage and optimizing the efficiency of mechanical equipment, lighting, and control systems to current standards in existing facilities. PG&E offers financial and technical assistance for customers to undertake RCx projects and implement measures that improve facility operations. This is a legacy program implemented by PG&E, and it will be ramping down throughout 2024 to accommodate the third-party program described below. Projects still in the Commercial Calculated program pipeline are expected to be completed by the end of 2024.

Commercial Deemed Incentives Program (PGE21012)

The Commercial Deemed Incentives (Deemed) Program offers a limited number of prescriptive rebates directly to customers, vendors, or distributors for the installation or sale of energy-efficient equipment. These measures reach across technology segments including HVAC, refrigeration, and water heating, where there is not an overlap with statewide programs. While reduced, the prescriptive rebate approach continues to fill gaps in other programs and remains an attractive option for smaller projects.

Commercial Energy Advisor Program (PGE21014)

The Commercial Energy Advisor Program provides customer education and encourages participation in EE, DR, self-generation programs and promotes awareness of GHG and water conservation activities. The program provides energy savings opportunities and continuous improvement over time by supporting online self-service tools, such as Business Energy Checkup28. Through Business Energy Checkup,

²⁷ D.23-02-002, OP 14

²⁸ Business Energy Checkup is located within the pge.com/myaccount website for customers to perform a Facility Audit, read about recommendations on energy use, and explore rate options.



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customers receive rate analysis, check their bills, and receive tips and tricks for saving energy. Aligning integrated improvement opportunities with customers' needs, the Energy Advisor Program also increases program participation and adoption rates by helping customers to better understand EE benefits.

Savings by Design (PGE211025)

Savings by Design (SBD) encourages energy-efficient building design and construction practices and promotes the efficient use of energy by offering up-front design assistance, supported by financial incentives. SBD uses the applicable California Building Energy Efficiency Standards (Title 24, Part 6) as reference baselines, and when appropriate, uses other industry standards to determine reference baselines for comparisons. PG&E's SBD Program stopped accepting new applications in 2019 and is continuing to complete projects that were already in the pipeline. Legacy projects are expected to be completed by Q2 of 2024 and the Program will officially close with the completion of those projects.

Commercial Third-Party Programs

Commercial third-party programs²⁹ offer a turnkey approach that continues to deliver savings, serve customer needs, and remains innovative by adapting to changing market needs. In 2023, third-party programs focused on supporting customers through audits, project design and development, installation planning, coordination with installing contractors, and incentive and financing assistance. This comprehensive approach mirrors the nature of projects in 2023 and beyond, which look at entire buildings or systems rather than a single component. Each of the third-party programs described below focuses on the opportunity to build on previous customer upgrade efforts, obtaining momentum from savings realized at the meter. On-bill and third-party financing also play a larger role in customer choice to move EE planning to actual projects.

CoolSave Grocery Comprehensive Retrofit & Commissioning (PGE_Com_001)

Implementer: kW Engineering

CoolSave Grocery Comprehensive Retrofit & Commissioning (GCx) targets the energy intensive supermarket sector. The Program optimizes scheduling and controls of commercial refrigeration and HVAC controls, lighting, cooking, and packaging, with a mix of low- or no-cost RCx recommendations and capital investment equipment projects. This is a meter-based and pay-for-performance program which uses the NMEC approach to calculate savings.

²⁹ These programs were launched following the Commission-approved solicitations process and meet the third-party program definition as described in D.18-01-004.



Smart Labs (PGE_Com_002)

Implementer: kW Engineering

The SmartLabs Program specializes in laboratory ventilation system optimization. It offers lab owners expert technical assessments and the development of a performance management plan, including extensive hazard reports which establishes the foundation for adjustments to ventilation, fume hoods, and controls, as well as performance-based incentives to drive product completion. This is a meter-based and pay-for-performance program which uses the NMEC approach to calculate savings.

NetOne (PGE_Com_003)

Implementer: Ecology Action

The NetOne Commercial Efficiency Program is a downstream program that provides energy efficiency services, technical services, and incentive processing. Primarily serving the commercial real estate and retail markets, NetOne provides a suite of incentives to commercial customers to install refrigeration, HVAC, lighting, and meter-based energy savings using the Deemed, Custom, and NMEC platforms. The broad offering also puts NetOne in the position of accepting project types and sizes from a wide variety of market segments.

Advanced Energy Program for High Tech & Biotech (PGE_Com_004)

Implementer: Resource Innovations

The Advanced Energy Program is a customer-centric demand side management (DSM) program offering tailored solutions for high-tech and biotech (HTBT) customers.

The Program focuses on identifying and implementing energy efficiency opportunities in the unique HTBT sector, with facility types ranging from multi-site campus retrofits to laboratory, clean room, and data center upgrades. Additionally, the Program offers extensive guidance on control upgrades, and retro-commissioning (RCx) to optimize existing equipment, scheduling, and control sequences while shifting demand away from local and system peak periods.

The Advanced Energy Program targets medium to large high-tech and bio-tech facilities but is available to smaller customers in the sector as well. Typical projects have ranged from 10,000 sq. ft of small offices to millions of sq. ft across high-tech and bio-tech campus facilities. Annual electric consumption from customer projects has ranged from several hundred thousand kWh to tens of millions of kWh. The program has typically been a building controls-centric program with HVAC systems as its primary technology focus. This program has primarily leveraged the customized incentive process but provides support for Deemed and NMEC projects, as well as assistance with PG&E's On-Bill Financing on an asneeded basis with customers.

Healthcare Energy Fitness Initiative (PGE_Com_005)

Implementer: Resource Innovations

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The Healthcare Energy Fitness Initiative (HEFI) is a customer-centric demand side management (DSM) program that offers tailored solutions for PG&E's healthcare customers including public or private inpatient (hospital), outpatient (clinics), and residential living facilities. HEFI focuses on the highest potential end uses in the healthcare segment, including HVAC retrofits, controls, and optimization – including central heating, cooling, and steam plants; lighting fixtures and advanced lighting controls; process and equipment loads, refrigeration, and plug loads.

The Healthcare Energy Fitness Initiative Program targets medical facilities primarily for medium and large customers but is available to smaller customers in the sector as well. Typical projects have ranged from small medical office building spaces with lighting upgrades to multi-year central plant replacement efforts. This is a building controls-centric program with HVAC systems as its primary technology focus. This program has primarily leveraged the customized incentive process but provides support for Deemed and NMEC projects, as well as assistance with PG&E's On-Bill Financing on an as-needed basis with customers.

Summer Load Reduction Program - MAP 2.0 (PGE_Com_006)

Implementer: To Be Determined

The Summer Load Reduction Program has the primary objective to reduce peak kW demand utilizing a meter-based approach with a strategic mix of measures and targeted load shapes to maximize TSB delivery. The goal will be to provide a customer and aggregator friendly platform for customers of all sizes to leverage a full range of customer enabling behavioral and retrofit strategies to shift and reduce load. Inclusion of On-Bill and alternative financing will expand not only project scope but also the customer pool to capture stranded savings. This program is scheduled to launch in Q3 of 2024.

Simplified Savings Micro-Small Business Program (PGE_Com_SmallBiz)

Implementer: Resource Innovations

The Simplified Savings Program is PG&E's first equity segment³⁰ program, and will provide meaningful marketing, outreach, and education, as well as direct install services, financing, and incentives for a traditionally underserved segment. Simplified Savings will focus on customers with a demand of less than 50kW and located within a CalEnviroscreen Disadvantaged Community (DAC³¹). Hard to Reach (HTR) customers who meet the demand requirements but are not located within a DAC community may also qualify for the program. Bill reduction and customer engagement are the primary measures of success of

³⁰ This follows the equity segment definition as outlined in D.21-05-031, p. 14.

³¹ CalEnviroScreen Disadvantaged Communities: <u>https://oehha.ca.gov/calenviroscreen</u>, as listed on CPUC website: <u>https://www.cpuc.ca.gov/industries-and-topics/electrical-</u> energy/infrastructure/disadvantaged-communities



this equity program. Simplified Savings intends to engage 7,500 micro- and small business customers over its current three-year term.



Public Sector

Public sector programs support both local governments and public institutions in meeting their EE goals. PG&E in 2023 administered eight Local Government Partnerships (LGPs), the statewide State of California Energy Strategy and Support Program (SOC ESS), and four legacy institutional statewide partnership programs, which were ramped down and closed to new applications throughout 2022 in preparation for transition to new statewide programs run by other IOUs.

LGPs are generally focused on promoting EE within local government facilities and helping local governments implement California's EE objectives. These programs are led by thirdparties, such as implementers, local governments, or entities that have relationships with local governments. The third-party implementers concentrate on resource acquisition activities that directly procure energy savings, mainly centered around public entities



Government and Community Partnerships 2020-2023

and small and medium business customers that are hard-to-reach and/or are in disadvantaged communities.

In 2023, PG&E administered eight LGP programs, serving 32 counties. The LGPs offer comprehensive solutions that reflect the communities' needs. PG&E's partnerships with local governments and their communities help to shape EE and sustainability at the local, regional, and statewide level by meeting the needs of local governments, as well as educational institutions like K-12 public schools. Each individual program is described in the LGP section below. Public institution programs include those focused on the government entities themselves, such as federal and local government buildings, and those focused on facilities such as water treatment plants, and public K-12 schools.

In addition, PG&E administered four legacy institutional statewide partnership programs with California Community Colleges, University of California/California State University (UC/CSU), the State of California, and the California Department of Corrections and Rehabilitation. PG&E is also the lead for the statewide State of California Energy Strategy and Support Program (SOC ESS).



Key Initiatives and Notable Changes in 2023

Local Government Partnerships Electrification Initiatives

In 2023, LGPs identified and enabled energy savings through leads to PG&E resource acquisition programs, including 175 heat pump water heaters (HPWHs) installed in partnership with the Government and K-12 schools (GK-12) program. In addition, the local government partners delivered an estimated 1,000 educational opportunities highlighting PG&E EE programs, including outreach at local events partnering with community-based organizations (CBOs), sponsoring building operator certification for facilities managers, and promoting the PG&E Induction Cooktop Loaner Program³². The local government partners supported their communities by authoring approximately 2,000 benchmarking reports and greenhouse gas reports. The local government partners served as trusted energy efficiency advisors in their communities, managing and/or consulting 200 public projects focused on Energy efficiency. Through all this work facilitated by LGPs in 2023, EE was implemented in local government facilities and local governments are supporting the implementation of California's EE objectives.

Looking Ahead

Local Government Partnership Contract Extension

In February 2023, PG&E filed Advice Letter 4713-G/6860-E and subsequently gained approval to extend seven of PG&E's eight Local Government Partnership contracts through December 31, 2025. The contract extensions granted additional budget, refreshed labor rates to present day, and updated the Key Performance Indicators (KPIs) used to measure program performance.

Preparing to Achieve Public Sector Business Plan Goals in 2024 and Beyond

PG&E's proposed 2024-2027 Business Plan includes sector-specific strategies that will enable PG&E to deliver on forecasted Business Plan goals in the coming years. Public sector goals include providing flexible offerings for customers to pursue EE opportunities and advancing clean energy objectives. PG&E's public sector objectives are to provide programs to subsectors of the public sector, increase the number of projects financed, and support energy resiliency. Strategies to achieve these objectives include leveraging statewide and local programs, aligning financing opportunities with customer needs, and promotion of clean energy solutions.

Institutional Partnership Programs

PG&E administered four institutional partnership programs in 2023, which served agencies of the State of California and state educational institutions. The objective of institutional partnership programs is to reduce energy usage through facility and equipment improvements and share best practices among state

³² PG&E Induction Cooktop Loaner Program: https://pge-induction.myturn.com/library/



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institutions. The California IOUs have moved toward statewide administration of institutional partnership programs, so 2023 was used to ramp down the programs and closeout any remaining projects.

Through institutional partnership programs, IOUs and partners encourage strategies that promote investment in EE through comprehensive resource support and internal capacity-building. Although these existing programs have made progress over the years, energy savings opportunities still exist within state government and higher educational facilities. For example, California's Executive Order B-18-12 required reductions in grid-based electricity purchases and aggressive Zero Net Energy (ZNE) goals in state buildings. PG&E's institutional partnership programs focused on achieving energy savings and supporting demand-side management (DSM) integration and coordination. The statewide institutional partnership programs will carry on the work of partnering with state agencies and educational institutions to reduce energy usage and support sustainability goals.

California Community Colleges (CCC, PGE2110011)

The California Community Colleges/Investor-Owned Utility Energy Efficiency Partnership (CCC Partnership) advocated, promoted, and supported EE in the California Community College system by leveraging resources from the community college districts, the Community College Chancellor's Office, the four California IOUs, and the State of California. The CCC/IOU Partnership provided extensive outreach and support services to the districts within the California Community College system in support of their efforts to identify, develop, and implement EE projects. The partnership pursued common goals of long-term energy use reduction, cost savings, and fostering a more sustainable future.

PG&E's CCC Partnership program closed to new applications in December 2022, the last of these projects closed out in 2023 and the program has officially closed. These customers are now served by a statewide third-party program that will include the California community colleges. This new statewide program is led by SCE and launched in December 2022.

University of California and California State Universities (UC/CSU, PGE2110012)

The UC/CSU/Utility Energy Efficiency Partnership is a statewide program that includes California's four IOUs, the University of California (UC), and the California State University (CSU). The Program generates energy savings through by identifying and implementing retrofit, commissioning, and new construction EE projects. The UC/CSU Partnership program closed to new applications in December 2022, but it is still open to closeout any remaining legacy projects through 2025. New projects are being developed by the Statewide Higher Education Efficiency Performance Program, launched in December 2022 with SCE. New construction opportunities previously supported by this partnership will be served by the statewide New Construction third-party programs. More details on these programs can be found in the <u>Codes</u>, <u>Standards and New Construction</u> chapter of this report.



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State of California Partnership (PGE2110013)

The State of California IOU Partnership is a statewide program designed to achieve long-term energy and peak demand savings and establish a permanent framework for sustainable, comprehensive energy management programs at state facilities served by California's IOUs. The IOUs worked collaboratively with the Department of General Services (DGS) and coordinated with the established pool of Energy Service Companies to support implementation of comprehensive facility EE projects. The IOUs also worked with individual state agencies on technology-specific projects. DGS leveraged the Department of Finance Energy \$mart program, along with the IOU OBF, incentives, and rebates, to provide financing for projects.

The State of California partnership program closed to new applications at the end of 2021, upon the launch of the statewide third-party program, Statewide State of California Energy Strategy and Support Program, led by PG&E and described below. Legacy applications remained in the previous partnership program to meet customer commitments and for continuity, and the program continued to complete projects already in the pipeline throughout 2023 with the intent to close the program by the end of 2024.

California Department of Corrections and Rehabilitation (PGE2110014)

The California Department of Corrections and Rehabilitation/IOU (CDCR/IOU) Partnership aimed to save energy and reduce peak demand in the near term and establish a permanent framework for comprehensive energy management programs at CDCR institutions served by California's four large IOUs. The partnership utilized the resources and expertise of CDCR and IOU staff and leveraged the existing contractual relationship between CDCR and Energy Service Companies to develop and implement energy projects in CDCR facilities.

The CDCR partnership program closed to new applications at the end of 2021, upon launch of the statewide third-party program, SOC ESS, led by PG&E and described below. Legacy applications remained in the previous partnership program to meet customer commitments and for continuity, and the program continued to complete projects already in the pipeline throughout 2022. The last of these projects closed out in 2023 and the program has officially closed.

Third-party Statewide Institutional Partnership Program

State of California Energy Strategy and Support Program (PGE_SW_IP_Gov)

Statewide Program Lead: PG&E

Implementer: AESC

The State of California Energy Strategy and Support (SOC ESS) Program helps California State Agencies (excluding higher education, which will be served by a statewide program led by SCE) reach their greenhouse gas (GHG) emission reductions goals while reducing energy use through EE and IDSM project planning, technical support, and financial assistance. The Program builds on the State's successful existing approaches while adding new channels to address key barriers California state



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agencies. SOC ESS is designed to overcome structural and operational barriers related to staffing and capacity, capital and financing, and safety to ensure successful realization of energy savings in state buildings.

The Program offers two pathways with varying levels of support. Pathway 1 provides agencies that are committed to a minimum level of energy savings and program engagement with high-touch, customized, and strategic portfolio-wide and engineering support plus staff augmentation. Pathway 2 provides support on individual projects as identified and pursued. Additionally, the Program continues to provide all agencies with the services they relied on through the prior statewide partnership programs, including financial, policy, technical, project, and program application support.

Third-party Local Government Partnership Programs (LGPs)³³

PG&E had eight Local Government Partnership Programs (LGPs that were active in 2023, serving approximately 32 counties. Through LGPs, PG&E and local and regional partners work together to develop and implement programs that serve the public sector and the broader community, including SMBs and non-profit customers. LGPs are the primary delivery channel supporting cities, counties, and other local agencies seeking energy savings and GHG emission reductions on a community scale. Promoting energy planning at a statewide and local level is a major market driver in increasing local government uptake of EE projects and extending the reach and effectiveness of PG&E's EE programs. Through LGPs, PG&E leverages the role of local governments to achieve deeper energy savings in both municipal facilities and the broader community as an integral part of other community climate action and sustainability programs.

PG&E LGPs are built around the communities they serve. While local governments represent most lead local partners, some LGPs are led by local economic development groups, associations of governments, joint power authorities, or regional non-profit organizations. These local organizations have missions aligned with supporting the economic, environmental, and societal health of their communities. Local partners are positioned to understand and identify customers who can benefit from EE programs within their communities and effectively partner with program implementers to overcome barriers to EE adoption.

Central California Energy Watch (CCEW, PGE_Pub_004)

Implementer: San Joaquin Valley Clean Energy Organization

The Central California Energy Watch (CCEW) is a non-resource program covering cities, counties, special districts, and K-12 school districts in the counties of Kings, Tulare, Stanislaus, San Joaquin, Merced, Fresno, Kern, Monterey, Madera, Santa Cruz and San Benito. The CCEW is designed to identify energy savings opportunities in public sector infrastructure, develop and deliver project leads to one of

³³ These programs were launched following the Commission-approved solicitations process and meet the third-party program definition as described in D.18-01-004.



PG&E's third-party direct installers, and develop short, mid-term and long-term energy efficiency project pipelines. The CCEW focuses on helping hard-to-reach (HTR) and Disadvantaged Communities (DAC) access, understand, and participate in EE through IOU-administered third-party programs.

Central Coast Leaders in Energy Action Program (CC-LEAP, PGE_Pub_001)

Implementer: The Energy Coalition

The Central Coast Leaders in Energy Action Program (CC-LEAP) offers energy efficiency project delivery services within the County of San Luis Obispo, County of San Benito and portions of the County of Santa Barbara served by PG&E. CC-LEAP is a resource hub that helps public agencies to complete energy upgrades expeditiously and cost-effectively. CC-LEAP not only provides connections and resources, but also directly supports energy projects with project management, engineering, and financing support services. CC-LEAP is driven by three objectives: to expand the implementation of cost-effective energy efficiency projects, make energy efficiency expertise accessible and available, and integrate energy efficiency as a standard business practice for public agencies.

EnergyAccess SF (PGE_Pub_006)

Implementer: City and County of San Francisco

EnergyAccess SF is a partnership between PG&E and the City and County of San Francisco, Department of the Environment (SFE). EnergyAccess SF supports energy saving opportunities for HTR and DAC customers and seeks to build capacity to help save energy community-wide. The partnership's goals are to increase EE participation in residential and HTR small and medium businesses (SMBs); influence customers to take energy efficiency actions; drive well-qualified leads to third-party PG&E programs, reduce customer acquisition costs, and achieve deeper energy savings for PG&E programs.

Due to the increased availability of EE programs outside of PG&E within this region, supporting residential and HTR small and medium businesses (SMBs), the EnergyAccess SF partnership closed in June 2023, at the end of the Program's original contract term. Customers in San Francisco's territory continue to have access to PG&E EE programs upon contract completion.

Marin Energy Watch Partnership (PGE_Pub_002)

Implementer: County of Marin - Community Development Agency

The Marin Energy Watch Partnership's (MEWP) key objectives are to support public agencies to understand energy use and achieve energy savings, and to connect local HTR communities to available energy efficiency programs. MEWP offers three overarching programs: Public Agency Climate Action Plans, Public Agency Energy Efficiency Support, and Empowering HTR Communities. MEWP's programs support PG&E by acting as a proven trusted advisor to Marin's public sector and HTR customers. MEWP focuses on building trust and relationships with public sector staff to assist them in identifying



opportunities and navigating EE programs and financing opportunities, using existing networks and established relationships in the community.

Redwood Coast Energy Watch (PGE_Pub_003)

Implementer: Redwood Coast Energy Authority

Redwood Coast Energy Watch (RCEW) serves the Humboldt County region. RCEW is intended to overcome the geographic barriers that affect the customers of the region and to lead customers to more comprehensive energy actions. The primary objective is to support cost-effective resource acquisition program services for public and commercial HTR customers while growing local EE capacity. RCEW serves public agencies, non-residential HTR customers, and residential HTR customers. The Program applies innovative approaches to enroll customers and build trusting relationships, with an end goal of motivating participants to continue pursuing deeper retrofits in the future. RCEW drives comprehensive public agency energy projects, increase cost-effectiveness for resource acquisition programs, increase opportunities for HTR customers to save energy, integrate deep-reaching energy projects with demand side management, and build local capacity for EE through education.

San Mateo County Energy Watch Program (PGE_Pub_005)

Implementer: City/County Association of Governments of San Mateo County (C/CAG), administered by the County of San Mateo Office of Sustainability

The San Mateo County Energy Watch Program (SMCEW) serves the public and commercial market sectors across San Mateo County. SMCEW assists municipalities, special districts, public agencies, K-12 public schools, and small, HTR businesses in accessing EE programs, trade professional networks, and financing opportunities. SMCEW provides coordination, outreach, referrals, and educational resources to help community members pursue EE projects. SMCEW runs a public facility quarterly working group to help facility staff increase their understanding of energy efficiency and energy management. Through San Mateo County's Regionally Integrated Climate Action Planning Suite initiative, SMCEW assists cities in reducing energy use and achieving GHG reduction goals. SMCEW hosts a monthly climate action working group for sustainability staff; develops annual community GHG inventories; and supports staff in developing, implementing, and tracking climate action plans.

Sierra Nevada Energy Watch (SNEW, PGE_Pub_007)

Implementer: Sierra Business Council

The Sierra Business Council's Sierra Nevada Energy Watch (SNEW) Program furthers PG&E and CPUC EE goals through EE project development activities, planning and policy work, and outreach/education efforts. These program activities motivate public sector leaders and SMBs to increase their capacity for EE action, especially in the rural Sierra Nevada counties and their HTR communities and DACs.



Sonoma Public Energy (PGE_Pub_008)

Implementer: County of Sonoma

The Energy and Sustainability Division of Sonoma County developed "Sonoma Public Energy", a suite of comprehensive services aimed primarily at the reduction of energy use, reduction of energy cost, and assistance with access to existing and future resources and services. These services are focused on facilitating upgrades to public facilities, K-12 Schools, special districts, and HTR and DAC customers located within Sonoma County.

Third-party Public Sector Programs³⁴

These public sector programs target publicly funded entities that receive revenue from state and local governments or are local governments themselves.

Government and K-12 (GK-12) Comprehensive Program (PGE_Pub_009)

Implementer: Willdan Energy

The Government and K-12 (GK-12) Comprehensive Program includes a broad offering of EE measures to diverse markets of local governments and K-12 public and charter schools. GK-12 has a strong focus on electrification, which aligns with substantial interest in the government and K-12 sectors. Utilizing the meter-based savings platforms, the Program offers HVAC and Lighting equipment and control system upgrades, retrocommissioning recommendations, and behavioral strategies to optimize system efficiencies. The Program is



designed to cost-effectively complete all sizes and scopes of projects and has a goal of engaging nearly half of its customers from the HTR and DAC sectors.

RAPIDS Wastewater Treatment Optimization Program (PGE_Pub_010)

Implementer: Alternative Energy Systems Consulting, Inc. (AESC)

The RAPIDS Program targets the wastewater treatment and collection system market, offering technical analysis, design assistance, project development support, incentives, and financing. While the Program does offer capital project solutions, it also focuses on the cascading effects of operational measures on downstream energy, process loads, and operational efficiency. Development of an action plan, including an ongoing system monitoring strategy, can contribute to energy savings persistence for customers. The

³⁴ These programs were launched following the Commission-approved solicitations process and meet the third-party program definition as described in Decision 18-01-004.



Program considers the operation of clarifiers, blowers, pumps, filters, and dewatering processes to optimize the complex interaction between systems and flow volumes.

When applicable and to help customers with cost, the RAPIDS program can leverage DOE Industrial Assessment Centers (IAC) Implementation Grant Program. to implement recommendations made in IAC and Combined Heat and Power Technical Assistance Partnership assessments.

Late in 2022, this Program ceased soliciting new projects with the launch of a Statewide wastewater program. The RAPIDS Program will continue working to obtain commitments for projects already proposed and to complete committed projects through 2024-2025.



Industrial Sector

California's industrial sector is extremely diverse, and, in most cases, industrial customers tend to be heavy energy users. In 2023, PG&E supported customers in oil production, printing plants, plastic injection molding, component fabrication, lumber and paper mills, cement and quarries, metals processing, petroleum refineries, chemical industries, assembly plants, and water and wastewater treatment plants. PG&E's programs focused on EE solutions for its industrial sector to help reduce energy consumption and GHG emissions while increasing customers' profitability by lowering energy costs.



PG&E's industrial EE programs also partnered with industry stakeholders to promote a comprehensive list of energy management solutions to end-use customers. This suite of program services not only overcomes the traditional market barriers to EE, but also uses efficiency to advance IDSM opportunities such as Demand Response (DR) and Distributed Generation (DG). Key offerings included rebates and incentives for efficient equipment and systems, technical support such as facility audits and energy savings analysis, zero-interest project financing, and strategic energy planning.

PG&E marketed and delivered these offerings through several channels, including direct communication with facility personnel, presence at industry events, support for education and research activities, and close partnerships with engineering and installation firms. PG&E's portfolio of offerings also includes specialized third-party programs focused on specific technologies, segments, or approaches with specialized requirements.

Key Initiatives

While industrial customers understand and appreciate EE, decisions to upgrade to energy-efficient equipment must be balanced with minimizing operational and production risks. PG&E works closely with customers to understand their business needs so that programs are thoughtfully designed, and offerings align with customers' requirements.

PG&E depends on a team of EE experts including account representatives, project engineers, contractors, and third-party implementers with deep technical knowledge and understanding of industrial processes to offer industrial customers the right EE solution at the right time—from EE audits and scoping EE projects via the Energy Advisor Program, to financial offerings to install EE projects through the calculated, deemed, or financing programs.



Looking Ahead

In 2024, PG&E's goal for industrial programs is to work towards high industrial customer satisfaction for program participants. Strategic Energy Management (SEM) programs yield high energy savings and customer satisfaction; PG&E will be working to increase participation in the two existing industrial SEM programs, and will look to expand beyond the industrial sector, as outlined in PG&E's 2024-2027 Business Plan. PG&E's industrial SEM programs are described in more detail, below.

Industrial Programs

Industrial Calculated Incentives Program (PGE21021)

The Industrial Calculated Incentives program provides custom incentives for non-residential EE retrofit and new construction projects involving the installation of high-efficiency equipment or systems. This is a legacy program implemented by PG&E, and it will be ramping down throughout 2024 to accommodate the third-party programs described below. Projects still in the Industrial Calculated program pipeline are expected to be completed by the end of 2025.

Industrial Deemed Incentives Program (PGE21022)

The Industrial Deemed Incentives Program provides rebates for the installation of new EE equipment and measures. Deemed retrofit measures have fixed incentive amounts per unit/ measure and are intended for projects that have well-defined energy and demand savings. PG&E is not generating new measures for our core deemed programs due to new Third-Party Programs. Customers can log onto PGE.com to apply for 18 rebate options being offered.



Industrial Energy Advisor Program (PGE21024)

The Industrial Energy Advisor Program provides energy savings opportunities and continuous improvement over time by supporting online self-service tools, such as Business Energy Checkup³⁵, for industrial customers. Through Business Energy Checkup, customers receive rate analysis, check their bills, and receive tips and tricks for saving energy. Aligning integrated improvement opportunities with

³⁵ https://www.pge.com/en_US/small-medium-business/save-energy-and-money/energy-savings-tools-and-tips/business-energy-savings-tool.page



customers' needs, the Energy Advisor Program also increases program participation and adoption rates by helping customers to better understand EE benefits.

Industrial Third-party Programs

Industrial third-party programs³⁶ offer a thoughtful, niche approach that continues to deliver savings, serve customer needs, and stay innovative by adapting to changing markets.

Industrial Strategic Energy Management (SEM)

SEM is a holistic, long-term, whole facility approach that uses advanced implementation, measurement, and verification services and tools to determine energy savings from all program activities at the facility, including capital projects, maintenance, and operation improvements, and retrocommissioning. Participants receive coaching to develop their own energy management practices that will persist beyond their engagement with the program. The methodology and program requirements were defined through a collaborative effort between the IOUs, CPUC, and external subject matter experts (D.23-02-002³⁷).

SEM is well-received by participants and enjoyed both high retention rates and successful recruitment in 2023; resulting in 70 participants by the end of the year, compared to 65 in 2022.

SEM Food Processing (PGE_Ind_001a)

Implementer: CLEAResult

The SEM Food Processing Program serves food processors and producers and takes a whole-facility approach that uses NMEC and dynamic baseline modeling to determine energy savings from all program activity at the facility, including capital projects, custom and deemed calculated retrofits, maintenance and operation, and retrocommissioning projects. The Program requires a multi-year customer commitment to participation in multiple cohort training workshops, individual or cohort energy analysis, and measurement and verification (M&V) activities based on information and characteristics of the facility's specific processes.

SEM Manufacturing (PGE_Ind_001b)

Implementer: Leidos, Inc.

³⁶ These programs were launched following the Commission-approved solicitations process and meet the third-party program definition as described in Decision 18-01-004.

³⁷ https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M501/K931/501931085.PDF



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The SEM Manufacturing Program combines cohort participation, individual site visits, and web-based activities to deliver program services to participating industrial manufacturing customers. Customers receive frequent communications identifying major opportunities for implementation, and the Program rigorously tracks energy usage before and after energy efficiency actions are performed to determine effectiveness and persistence.

Industrial Compressed Air System Efficiency Program (ICASE, PGE210212)

Implementer: ALDI

The ICASE Program was selected as an innovative program for the IDEEA 365 solicitation process. The Program serves industrial customers with large (greater than 100 horsepower) compressed air and vacuum systems and promotes and installs a state-of-the art control and data monitoring system called iZ. Compressed air and vacuum systems are dynamic systems that are constantly changing and deteriorate quickly when not closely monitored. iZ automation system delivers support and assists customers with maintaining efficiencies that have been initially gained by implementing an EE project. This is a legacy Program, and it will be ramping down throughout 2023 to accommodate the third-party programs described below. Projects still in the ICASE program pipeline are expected to be completed by the end of 2024.

Business Energy Performance (BEP) Program (PGE_Ind_002)

Implementer: CLEAResult

The Business Energy Performance (BEP) Program provides energy efficiency services, technical assistance, and incentives to the industrial sector within PG&E's service territory. BEP targets the Petroleum, Chemical, and Minerals subsegments using a downstream market approach and by leveraging the deemed and custom savings platforms to deliver cost-effective energy savings. BEP also promotes and leverages OBF as a tool to off-set the barrier of capital to fund projects. More information on OBF can be found in the Financing Programs chapter of this report.

Industrial Systems Optimization Program (ISOP, PGE_Ind_003)

Implementer: Cascade

The Industrial Systems Optimization Program (ISOP) serves the industrial manufacturing and food processing market segments throughout PG&E's territory, focusing on training, retrocommissioning, and capital projects with systems-level optimization. ISOP offers technical support to identify and implement projects, energy management coaching, energy management and collaboration software, and ongoing energy coach support to drive projects. The Program uses the deemed, custom, and meter-based platforms (where applicable) to achieve savings, and supports all relevant measure types, with a focus on complex mechanical systems such as refrigeration, compressed air, pumping, fans, blowers, boiler and steam systems, and the industrial processes they serve.



Agricultural Sector

In 2023, PG&E's agricultural programs provided a portfolio of offerings to support an industry impacted by fluctuating availability of surface water and increasing oversight on ground water pumping. The EE agricultural programs, coupled with Demand Response (DR) and Distributed Generation (DG) Programs, helped agricultural producers and processors manage energy costs and make informed investments in new equipment. PG&E offered a full suite of tools to position California agricultural



customers to eliminate unnecessary energy use, including rebates and incentives for efficient equipment and systems, technical support such as facility audits and energy savings analysis, zero interest project financing, and pump efficiency education.

PG&E marketed and delivered these offerings through a variety of channels, including direct communication with customers, advertising in industry publications, presence at industry events, support for education and research activities, and close partnerships with engineering and installation firms. PG&E complements its statewide EE offerings with concierge EE solutions through its third-party programs focused on specific technologies, segments, or approaches with specialized requirements. In 2023, PG&E programs served the agricultural growers (field crops, fruits and nut trees, vegetables, and vineyards), post-harvest processors, dairies, irrigation districts/agencies, fruit and vegetable processors (canners, dryers and freezers), agricultural service providers, wineries, and other beverage manufacturers.

Key Initiatives

In 2023, PG&E continued to focus on building trust with agricultural customers in their own communities by providing information about efficient irrigation equipment and operations via trusted trade professionals, scheduling workshops with partners such as local farm bureaus and the League of Food Processors and collaborating with agricultural universities such as California State University, Fresno and California Polytechnic State University, San Luis Obispo (Cal Poly).

Looking Ahead

PG&E continues to support a geographically widespread and diverse market with opportunities that support customer and grid resiliency. With customer interest in decreasing demand and electrifying equipment in mind, PG&E plans to educate and support customers with innovative EE and IDSM opportunities, as part of the larger effort to make the grid safer and more reliable.



Agricultural Programs

Agricultural Calculated Incentives Program (PGE21031)

The Agricultural Calculated Incentives Program is a site-specific program providing financial incentives for agricultural customers to install new equipment or systems that exceed applicable code and/or industry standards in buildings and sites which do not qualify for a current third-party implemented program. This is a legacy Program implemented by PG&E, and it will be ramping down throughout 2024 to accommodate the third-party program described below. Projects still in the Agricultural Calculated Program pipeline are expected to be completed by the end of 2024.



Agricultural Deemed Incentives Program (PGE21032)

The Agricultural Deemed Incentives Program provides fixed rebates for high volume measures such as variable frequency drives (VFDs) for irrigation pumps or process fans. Deemed retrofit measures have fixed incentive amounts per unit/measure and are intended for projects that have well-defined energy and demand savings. This is a legacy Program implemented by PG&E, and it will be ramping down throughout 2024 to accommodate the third-party program described below. PG&E is not generating new measures for our core deemed programs due to new Third-Party Programs. Customers can log onto the PG&E website³⁸ to apply for 18 rebate options being offered.

Agricultural Energy Advisor Program (PGE21034)

The Agricultural Energy Advisor Program provides customer education and encourages participation in EE, DR, self-generation programs and promotes awareness of GHG and water conservation activities. The Program provides energy savings opportunities and continuous improvement over time by supporting online self-service tools, such as Business Energy Checkup³⁹, for agricultural customers. Through Business Energy Checkup, customers receive rate analysis, check their bills, and receive tips and tricks for saving energy. Aligning integrated improvement opportunities with customers' needs, the Energy Advisor Program also increases program participation and adoption rates by helping customers to better understand EE benefits.

³⁸ www.pge.com/rebates

³⁹ https://www.pge.com/en_US/small-medium-business/save-energy-and-money/energy-savings-tools-and-tips/business-energy-savings-tool.page



Agricultural Third-party Programs

Third-party agricultural programs⁴⁰ offer a tailored solution to the specific needs of PG&E's agricultural customers. Through customized solutions and thoughtful program delivery, PG&E's third-party implementers serve the unique energy needs of the diverse agricultural sector.

Agricultural Energy Savings Action Plan (AESAP) Program (PGE_Ag_001)

Implementer: TRC

The Agricultural Energy Savings Action Plan (AESAP) Program supports PG&E's vision for the agricultural sector to maximize yield while reducing energy consumption. AESAP uses data, technical assistance, analytics, energy efficiency measures and marketing to reduce demand, increase operational efficiency, and broaden customer participation while leveraging the custom, deemed, and meter-based savings platforms. AESAP also promotes and leverages OBF and other private financing options as a tool to off-set the barrier of lack of capital to fund projects. Please see the Financing Programs chapter of this report to learn more about OBF. AESAP was selected as one of the first Program to extend with Total System Benefit (TSB) contract payment terms set in place, paving a new road for programs and implementers within our portfolio.

⁴⁰ These programs were launched following the Commission-approved solicitations process and meet the third-party program definition as described in D.18-01-004.



Financing Sector

PG&E's EE financing programs are designed to help customers finance the up-front cost of EE projects. Financing programs facilitate portfolio energy savings by enabling customers to pursue large, comprehensive efficiency retrofit projects that might not have been financially feasible otherwise.

Financing is offered in conjunction with other PG&E EE programs or on its own to stimulate and enable higher levels of customer participation.



Key Initiatives and Notable Changes in 2023

On-Bill Financing Program

In 2023, PG&E issued 369 loans for a total value of \$51 million. OBF loans are primarily issued directly to the customer through industry trade professionals, though many PG&E-contracted programs also incorporate OBF into their program offerings.

Streamlined Financing Solutions

In 2023, OBF issued 49 loans for projects using the Tier 1A pathway which was launched in 2021. This pathway offers a streamlined review process for measures with predictable savings methodologies and simplified inputs, removing barriers to participation for smaller projects by allowing for expedited project review. For these select measures, the energy savings estimates were confirmed through a workbook template, eliminating detailed and unnecessary engineering steps.

Looking Ahead

PG&E is working to incrementally expand its current OBF program measure eligibility to include clean energy technologies alongside energy efficiency projects. In 2023, PG&E gained approval to provide financing for energy storage measures41, and plans to seek regulatory approval for additional clean energy measures in the future. These technologies will be available as part of the program following the establishment of new program rules and documents.

⁴¹ Advice Letter 7075E



Financing Programs

On-Bill Financing (PGE_210911)

OBF is a key enabler of energy savings across customer classes, providing zero-percent financing for qualifying EE retrofits, with loan payments appearing as fixed monthly charges on the customer's PG&E bill. OBF helps customers, who would otherwise have difficulty qualifying for commercial credit, get over the first-cost hurdle to EE investment, unlocking broader and deeper cost savings while supporting PG&E's energy savings targets.

Following the approval of PG&E's request to expand the OBF offering, the Commission required PG&E to provide additional reporting on the OBF program as part of the Energy Efficiency Annual Reports.⁴² PG&E is required to report on "default rates, energy savings, status of efforts to replace incentives with loans, and the degree of free ridership, if any, associated with energy efficiency projects financed through the OBF program."⁴³ In 2023, the OBF Program recorded five loan defaults, bringing the total number of loan defaults since program launch to 50 (a 0.84% default rate, based on 5,926 loans issued since program launch).⁴⁴

In April 2023, Opinion Dynamics completed an impact evaluation of the OBF program years 2018-2019, assigning an overall net-to-gross ratio of 0.69 for OBF Alternative Pathway.⁴⁵ Additionally, in December 2023, the Population-Based NMEC Impact Evaluation completed by DNV assigned the OBF Alternative Pathway a net-to-gross ratio of 0.56 for program years 2020 and 2021.⁴⁶

43 Ibid.

⁴² D.19-03-001, OP 4.

⁴⁴ Loans that defaulted in 2023 were issued between 2018 and 2023. Therefore, loan default rates are calculated for the length of the OBF program's operation. These loan defaults are also separate from the loan deferral process as detailed in PG&E Advice Letter 4397-G/6110-E.

⁴⁵ Report Template v2017.0521 (energydataweb.com)

⁴⁶ Final Population-Based NMEC Program Impact Evaluation Report - Program Years 2019 to 2021_PDA.pdf (energydataweb.com)



Codes, Standards, and New Construction

PG&E's Codes, Standards and Cross-cutting (CS&C) Programs collaborate with regulatory bodies—such as the CEC and the U.S. Department of Energy (DOE)—to strengthen or develop new EE and GHG emissions-reducing regulations. CS&C Programs undertake efforts to increase compliance with regulations so that the State realizes the savings from updated codes and standards. The Programs also support local governments that include adopting local energy ordinances as a climate strategy. Additionally, PG&E leads three statewide new construction programs, across the residential and non-residential sectors, supporting California's ambitious new construction goals. Planning and coordination, across a broad range of internal and related external activities, are conducted to optimize programs and to capture organizational efficiencies.

Advocacy and compliance improvement activities extend to newly constructed or renovated buildings and appliances sold in California. In so doing, CS&C efforts not only support California's ambitious climate and energy goals but also extend the successes of voluntary EE programs to all customers and resolve market barriers such as split incentives.

	Gross Savings			Net S	tandard	Savings	Net Program Savings			
	GWh	MW	MMTherm	GWh	MW	MMTherm	GWh	MW	MMTherm	
Statewide	13,348	2,235	96.0	5,632	1,235	69.2	3,828	734	50.2	
All IOUs	10,620.83	1,780.16	95.95	4,487	984	68.3	3,049	585	49.6	
PG&E	4,715.60	790.40	46.00	1,992	437	32.7	1,354	260	23.7	
SCE	4,259.00	713.80	-	1,799	394	-	1,223	235	-	
SoCalGas	-	-	42.80	-	-	30.5	-	-	22.1	
SDG&E	1,646.20	275.90	7.14	695	152	5.1	473	91	3.7	

Table 3: California 2023 C&S Savings

Key Initiatives and Notable Changes in 2023

PG&E's key initiatives for 2023 included:

 Continuing statewide administration of building energy codes and appliance standards advocacy programs and new construction programs



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- Developing new Construction program processes to collect data for high performance measures that align with the long-term tactical plan and will support future codes and standards cycles.
- Advocacy for measures to update California's 2025 Energy Code and CALGreen
- Advocacy for energy efficiency and GHG reducing measures as part of updates to relevant American Society of Heating Refrigeration and Air-Conditioning Engineers (ASHRAE) standards and the triennial update to the International Energy Conservation Code (IECC)
- Advocacy for energy efficiency and DR-capable equipment through California's Title 20 Appliance Efficiency Regulations (Title 20) and SB-49 rulemakings, DOE appliance standards, and related ENERGY STAR[®] activities
- Primary data collection to support DOE and CEC rulemakings, and to inform California Building Energy Code Compliance (CBECC)-Res and CBECC-Com (CEC code compliance software)
- Delivering training, tools, and resources to support compliance with California's existing EE regulations
- Development of cost-effectiveness studies and other resources to support over 50 local government reach codes
- Code readiness activities aimed at specific industries and technologies for future code cycles;
- Continue to evolve the statewide residential and nonresidential new construction (all-electric and mixed fuel) programs to better serve customers
- Planning and coordination activities to guide implementation and optimize work across teams within PG&E and with other California utilities.

Looking Ahead

Emerging issues of focus in the C&S and new construction sectors include demand management; integration of EE with EV charging infrastructure, renewables, and energy storage; and affordable, all-electric multi-family buildings that also provide appropriate indoor air quality and well-managed water use features. PG&E's C&S and new construction programs will continue to advocate for more efficient building codes and appliance standards; collect primary data to inform code and standard development; develop tools to support code compliance; support local governments that pursue reach codes; and support efficient, all-electric and electric-ready new construction projects that can serve as a model for the architecture, engineering design, and builder communities. In 2024, the CS&C Program will launch a new subprogram, Decarbonization Support. This new Program intends to provide technical support through data collection to inform state and national advocacy for appliances and buildings, and compliance with the resulting regulations aimed at decarbonizing the built environment.



Codes and Standards Programs

State Building Codes Advocacy: Title 24, Part 6 & Part 11 (PGE_SW_CSA_Bldg)

Statewide Program Lead: PG&E

The Statewide Building Codes Advocacy Program supports the CEC's triennial update to the Energy Code (Title 24, Part 6) to include new EE regulations or to strengthen existing regulations for various technologies or measures. Advocacy activities include the development of Codes and Standards Enhancement (CASE) proposals, research to provide the data needed to advance EE regulations, and participation in the public rulemaking processes. In 2023, a portfolio of approximately 60 measures were supported to prepare for the 2025 Energy Code rulemaking. To engage public participation, the process of developing code proposals, the CASE Team hosted 17 utility-sponsored meetings over 10 weeks; over 2,600 stakeholders registered to attend. The Team added a focus on Energy Equity and Environmental Justice in 2023 and engaged three new Community Based Organizations. The Program also supports the Energy Commission in preparing recommendations to the Building Standards Commission to update the California Green Buildings Standards (Title 24, Part 11 or CALGreen). The voluntary energy measures in CALGreen provide foundational elements for local reach codes. Descriptions of the 2025 Energy Code proposals, timeline, and other supporting documentation is available at <u>title24stakeholders.com</u>.

National Codes & Standards: DOE, ASHRAE 90.1 and 189.1, IECC, ENERGY STAR[®] (PGE_SW_CSA_Natl)

Statewide Program Lead: PG&E

PG&E advocates for national building codes and appliance standards that support California by encouraging broader market adoption of transformative technologies and construction processes. Alignment between national and state codes also helps reduce barriers to compliance by harmonizing the requirements across state borders. Organizations that work across multiple states, including California, can establish business practices that would result in less customization for the California market. Advocacy during DOE proceedings supports large cost-effective savings in California through more stringent federal appliance standards, including 16 final rules⁴⁷ in 2023. Participation in Environmental Protection Agency (EPA), Federal Trade Commission, ASHRAE, and IECC code and standard update proceedings in support of increasing requirements is important to minimize gaps, when regionally appropriate, between the California's EE regulations and the EE regulations that other states adopt. In 2023, the program supported nine measures in the ASHRAE / ANSI / IES 90.1 maintenance process, and over 20 measures in the IECC 2024 update proceedings.

⁴⁷ DOE finalized rules for commercial fans and blowers, residential refrigerators and freezers standard, air cleaners standard, motors standard, furnace standards, residential water heater standards, commercial package boiler standard, commercial water heater standard, window air conditioner standard, dedicated pool pump motor standard, room air conditioner test procedure, consumer pool heater standard, room air conditioner standard, electric motor test procedure, definition general service lighting

State Appliance Standards Advocacy Program (PGE_SW_CSA_Appl)

Statewide Program Lead: PG&E

Pacific Gas and

Electric Company[®]

The Statewide Appliance Standards Advocacy (ASA) Program targets improvements to Title 20 by the California Energy Commission. Advocacy activities include developing Title 20 code enhancement proposals and participating in the California Energy Commission public rulemaking process. Additionally, the Program monitors state and federal legislation and intervenes, as appropriate. In 2023, the CEC adopted new flexible demand pool regulations with support from IOUs.

Compliance Improvement Program (PGE21053)

The Compliance Improvement (CI) Subprogram strives to maximize compliance with the Energy Code (Title 24, Part 6) and Title 20 in order to meet CA's energy efficiency and carbon reduction goals. Under the Energy Code Ace brand, CI drives higher compliance rates by enacting behavior change throughout the building and appliance efficiency supply chains. Training develops knowledge and skills, Tools and Resources empower desired action, and Outreach increases awareness and motivation. 2023 accomplishments in each category include:

- Delivering 203 training sessions to more than 5,800 students and realizing an average 25% knowledge swing and 97% satisfaction rate
- Launching new details resource, industry brochures, and energy code fact sheets gaining over 93,000 file views
- Delivering 145 promotional email campaigns with a 42% open rate; participated in 55 events drawing in more than 7,000 people; and earned more than 300,000 total social media post impressions.

Reach Codes Program (PGE21054)

In addition to state and national building codes advocacy, the C&S Reach Codes Program provides support to local governments that wish to adopt local energy ordinances ("reach codes") that exceed statewide Title 24 minimum requirements for new and existing buildings, additions, or alterations. The primary objective of the program is to facilitate the adoption process by filling resource or expertise gaps at the jurisdiction through:

- Conducting research and analyses to establish performance levels and cost effectiveness relative to fundamental Title 24, Part 6 (Energy) and Part 11 (CALGreen) requirements by climate zone
- Drafting model ordinance language to encourage consistency
- Assistance completing and expediting the application process required for approval by City Councils, the California Energy Commission, or California Building Standards Commission



- Providing customized implementation support to improve compliance with the requirements once effective
- Providing a robust policy analysis tool to assist jurisdictions in developing geographically specific cost-effective energy ordinances.

Adoption momentum remained strong early in 2023 with six jurisdictions adopting a reach code in the first quarter. Following an unfavorable court ruling⁴⁸ which created uncertainties, most jurisdictions elected to pause reach codes activities. Momentum began building again toward year-end, with four additional jurisdictions adopting reach codes, and many others re-starting the adoption process. Nearly all the ordinances target new construction although more jurisdictions are beginning to consider regulations targeting existing buildings. In addition, many jurisdictions are broadening the scope of reach codes options available to include other energy-and emissions reductions strategies such as reducing embodied carbon and water conservation. More information and a list of adopted ordinances is available at https://localenergycodes.com/.

Planning and Coordination Program (PGE21055)

The planning element of this Program includes long-term planning and scenario analyses, modeling of impacts from potential C&S Program activities relative to California policy goals and voluntary programs, development of business and implementation plans, updating the incremental measure costs for C&S measures, and maintenance of a C&S savings database consistent with evaluation protocols. The coordination element includes internal and external harmonization with other groups, including voluntary and workforce education and training EE programs; other PG&E program areas; and grid management.

Since codes and standards impact the entire state and almost all building types, occupancy categories, and related technologies, external harmonization activities encompass: 1) CPUC, Energy Commission, and California Air Resources Board (CARB), 2) other IOUs, municipal utilities, and utilities in other states, 3) national advocates such as the Appliance Standards Awareness Project, Natural Resources Defense Council, Northwest Energy Efficiency Alliance, Sierra Club, American Council for an Energy-Efficient Economy, National Consumer Law Center, Consumer Federation of America, 4) representatives of various manufacturing companies and industry groups such as the Association of Home Appliance Manufacturers, Consumer Technology Association, NEMA, Air-Conditioning, Heating and Refrigeration Institute, American Gas Association, and 5) water utilities and local governments, and 6) other parts of the compliance improvement supply chain: building inspectors, Title 24 consultants, Contractor State Licensing Board, and others.

^{48 21-16278.}pdf (uscourts.gov)



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Code Readiness Program (PGE21056)

The primary purpose of the Code Readiness program is to accelerate achievement of state policy goals related to building and appliance energy efficiency, decarbonization, and grid harmonization through data acquisition and industry outreach. Technologies and market-disruptive systems that are expected to be installed in residential non-residential buildings are tested and demonstrated with the aim of collecting high-quality information and data needed to support improvements to state and federal C&S building codes and appliance standards proposals; specifically, test procedure representativeness, as well as measure cost-effectiveness, feasibility, and compliance efficacy. Data from the program directly supported multiple Codes and Standards Enhancement Reports (CASE) for the 2025 Energy Code update cycle including measures to advance residential indoor air quality, controlled environment horticulture lighting, and multi-family domestic hot water systems.

New Construction Programs

PG&E led three statewide new construction programs in 2023, including all-electric and mixed fuel projects in the nonresidential subsectors and all-electric projects in the residential subsector. The goal of these new construction programs is to influence the new construction market to achieve deeper energy savings and to decarbonize and electrify new buildings through key activities such as customer incentives, outreach and education, real-time energy modeling, verification, and data tracking to inform future codes and standards.

California Energy-Smart Homes All Electric Residential Program (PGE_SW_NC_Res_electric)

Statewide Program Lead: PG&E

Implementer: TRC

The California Energy-Smart Homes All-Electric Residential Program (CESH-AE) supports a high-level approach to achieving California's advanced EE policy goals through 2025 by engaging with builders and developers to recruit potential projects and convince them to build all-electric. The Program is available to customers in the PG&E, SCE, and SDG&E territories. The all-electric program offering serves four residential sub-sectors: Single-family and duplexes, multi-family low-rise (three or fewer stories), accessory dwelling units, and addition/alteration (additions greater than 700 square feet). The Program influences the decision and eases the transition to adopt all-electric new construction practices by educating potential participants and stakeholders on the features of all-electric homes, enrolling projects, emphasizing and incentivizing the installation of advanced energy efficiency measures, and facilitating future opportunities through non-incentivized, prerequisite measures that position homes to install high-impact demand response technologies more easily in the future.



Statewide Program Lead: PG&E Implementer: Willdan Energy Solutions

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The CEDAE Program serves commercial, public, high-rise multi-family residential, industrial, and agricultural new construction sectors, and major alterations facilities across the PG&E, SCE, and SDG&E territories. This Program contributes to the IOUs' efforts to achieve their share of California's ambitious energy efficiency (EE), greenhouse gas reductions, and meet electrification goals by offering EE options tailored to each building during the design and construction process. CEDAE also offers technical assistance early in the process when it has the greatest influence on design and operation, driving energy savings beyond code and gathering data to further advance future codes. The CEDAE Program enrolls and influences the non-residential new construction market to achieve deeper energy savings and decarbonization goals through key activities such as customer incentives, outreach and education, real-time energy modeling, verification, Integrated Demand Side Management (IDSM) support and data tracking to inform future codes and standards.

California Energy Design Assistance Mixed Fuel (CEDAM) Program (PGE_SW_NC_NonRes_Com_mixed)

Statewide Program Lead: PG&E

Implementer: Willdan Energy Solutions

The CEDAM Program serves commercial, public, high-rise multi-family, industrial, and agricultural new construction sectors, and major alterations facilities across the PG&E, SCE, SoCalGas, and SDG&E territories. CEDAM contributes to the IOUs' efforts to achieve their share of California's ambitious energy efficiency (EE), greenhouse gas reduction, and electrification goals by offering technical assistance early in the process when it has the greatest influence on design and operation, driving energy savings beyond code and gathers data to further advance future codes. The CEDAM Program will enroll and influence the non-residential new construction market to achieve deeper energy savings and decarbonize through key activities such as customer incentives, outreach and education, real-time energy modeling, verification, IDSM support and data tracking to inform future codes and standards.

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Workforce Education and Training (WE&T)

PG&E's Workforce Education and Training (WE&T) Program's target audience includes the current and future energy workforce that designs, builds, operates, and maintains buildings and building systems. Through hundreds of classes offered annually and in support of PG&E's and California's energy efficiency and carbon-reduction goals, WE&T provides essential information and skills to eliminate unnecessary energy use and to electrify and decarbonize homes and nonresidential buildings.



PG&E continued to demonstrate leadership in the local, state, and national EE workforce arenas in 2023. While implementing the WE&T program (Integrated Energy Education & Training or IEET) locally and administering the Statewide WE&T programs (Career & Workforce Readiness and Career Connections), PG&E also collaborated with and provided technical advice to educational institutions, professional organizations, and building trades training programs.

Metric/Deliverable	Quantity			
Formal Collaborations with other organizations*	13			
Total Class Attendance*	19,349			
Class participants as a percent of eligible target population*	3.3%			
Percent of participants meeting the definition of Disadvantaged Worker* $^{\!$	47.8%			
Number of Classes	790			
Tool Lending Library (TLL) Transactions	343			
Tool Lending Library Tools Loaned	4,110			
Tool Lending Library Projects Supported	320			
*Formal WF&T Rusiness Plan Metric				

Table 4: 2023 WE&T Accomplishments

*Formal WE&T Business Plan Metric

⁴⁹ D.18-10-008 defines a disadvantaged worker as "an individual that meets at least one of the following criteria: lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more



Key Initiatives and Notable Changes in 2023

Supporting Electrification Readiness

As California and PG&E move forward with electrification goals and as our target audience has been requesting additional information about how to electrify and decarbonize buildings, classes focused on electrification and decarbonization became increasingly important and relevant to the WE&T audience. In 2023, approximately 40% percent of PG&E's training focused on electrification topics including heat pump water heaters, induction cooking, heat pump space conditioning, battery storage, and grid integration. In 2024, WE&T will continue to offer such classes and develop new ones to address the rapidly changing landscape and customers' need for information on how to electrify and decarbonize buildings. A catalog of current electrification classes is available on the PG&E electrification class catalog⁵⁰.

PG&E provided 16 induction cooking demonstrations across our territory to chefs, restaurant owners, designers, commercial foodservice establishments, and residential customers. These demos allowed customers to try a residential or full-size commercial induction stove and to learn about the benefits of induction cooking and kitchen decarbonization. WE&T supported the PG&E Santa Nella Utility Conversion project by presenting and providing a hands-on demo in English and Spanish to PG&E customers on the benefits of induction cooking.

Furthermore, PG&E operated a no-cost Induction Cooktop Loaner Program (ICLP), which gives residential customers, commercial food service customers, and other customers the opportunity to try an induction cooktop at their homes and businesses. Through the ICLP, customers have two weeks to try a countertop induction cooktop and provide PG&E their impressions of induction cooking before and after the loan period. In 2023, 481 PG&E customers borrowed an induction cooktop.

Supporting the Energy Savings Assistance (ESA) Program

PG&E's WE&T programs continued to support PG&E's Energy Savings Assistance (ESA) Program by offering a blended learning experience comprised of on-demand, webinar, and in-person training for the Energy Specialist, Weatherization Specialist, and Natural Gas Appliance Testing Technician roles. PG&E continued to deliver training safely through the Train-the-Trainer model, thus reducing and optimizing the time and travel costs associated with ESA contractor training. In 2023, PG&E completed the transition to a new Train-the-Trainer model with the ESA Program training team. The drivers for this new model include increasing flexibility of training schedules for contractors, streamlining training processes, expanding webinar to on-demand and blended training delivery, and reducing training cost to benefit rate

following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; or lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool."

⁵⁰ <u>www.pge.com/electrificationclasses</u> (note: this link will redirect user to the PG&E Workforce Education & Training catalog website)



payers. PG&E conducted outreach to all ESA implementers and/or contractors at all IOUs to increase awareness of CWR and WE&T training.

Expanding Program Reach through Collaborations

PG&E collaborated with professional, trade, and workforce development organizations that share common workforce goals, including safety, energy efficiency, electrification, and a highly skilled energy workforce. In 2023, PG&E collaborated with various organizations to reach additional and new members of the energy workforce.

The 13 collaborations included:

- 1. Providing instruction and energy efficiency training modules for San Francisco's Stationary Engineers Local 39 to incorporate into their training program.
- 2. Supporting faculty and staff at six higher educational institutions with curriculum and training resources for energy efficiency training and energy projects support through Energize Colleges.
- 3. Supporting students at seven higher educational institutions with energy efficiency and soft skills training, internships, and sustainability outreach campaigns through Energize Colleges.
- 4. Partnering with California's other IOUs to support the 2022-2023 and 2023-2024 co-funded Architecture at Zero design competitions, which promoted decarbonization, equity and resilience awareness and provide an educational opportunity for students and professionals.
- 5. Expanding curriculum and introducing energy efficiency content into the Center for Employment Training's training programs.
- 6. Providing training resources for the U.S. Army's Construction Engineering Research Laboratory (CERL) Academy and for PG&E's Existing Buildings Commissioning (EBCx) Workshop series.
- Leveraging PG&E's specialized training facilities to deliver training for weatherization contractors California Department of Community Services & Development (CSD) and its implementer Richard Heath & Associates (RHA). In 2023, this collaboration resulted in approximately 108 training sessions including 12 five-day Combustion Appliance Safety and 12 four-day Duct and Shell trainings reaching approximately 288 participants.
- Delivering electrification-related training in partnership with Revalue.io to support the TECH Quick Start Grant project that targeted local minority owned contractors and laborers. This training was delivered at Cypress Mandela in Oakland, CA and pre-apprenticeship students also attended the training.



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 - Educating and informing UC Davis students, faculty, and facilities staff about energy efficiency, auditing and zero net energy buildings through on-campus projects that allowed participants to integrate energy efficiency, auditing and decarbonization into campus buildings.
 - 10. Participating in an Amazon Web Services Internet Infrastructure Workshop to provide technical training of how renewable and sustainable energy sources can be utilized to power data centers and increase familiarity with the use of tools and equipment to conduct energy audits. Introduced students to a range of energy efficiency career opportunities within the internet infrastructure workforce.
 - 11. Teaching and demonstrating Oakland residents, business owners, and chefs the benefits of induction cooking, in collaboration with the City of Oakland.
 - 12. Teaching a group of Bay Area high school students enrolled in the Conservation Society of California summer STEAM (science, technology, engineering, the arts, and mathematics) program about climate change, electrification, and induction cooking; informing them about careers in the energy and energy efficiency sector; and supplementing their curriculum with curated WE&T on-demand content.
 - 13. Working with Emerald Cities Collaborative to enhance their training program to educate and inform women, minority, and disadvantaged business enterprise (WMDBE) contractors about building electrification technologies, the benefits of electrification, and the importance of offering electrification services to clients.

Expanding Program Reach through Targeted Marketing

PG&E's WE&T Programs continued to refine and enhance marketing efforts with an increased emphasis on multiple marketing channels including email promotions, quarterly newsletters, partner organizations, and social media advertising. In 2023, PG&E also focused on marketing for disadvantaged workers and initiated targeted marketing efforts to reach these students. Examples of these initiatives included paid social media advertising, and Google ads targeting high unemployment ZIP codes that are in the top 25 percent of the CalEnviroScreen Tool⁵¹ unemployment indicator. Each month, Welcome emails were sent to familiarize new users with available resources provided by WE&T. In addition, WE&T marketed training and other resources to all ESA training participants via email campaigns and newsletters.

Supporting the Energy Efficiency Portfolio

PG&E's WE&T training incorporated PG&E energy efficiency program information and resources that would benefit the attendees. Some key examples include the Generator and Battery Rebate Program, Backup Power Transfer Meter Program, WatterSaver, Energy Savings Assistance Program, Solar Calculator, EV Savings Calculator, Agricultural Energy Savings Action Plan (AESAP), and Statewide

⁵¹ https://oehha.ca.gov/calenviroscreen



Rebate Program - Water Heater, Smart Thermostat, Room A/C, among other resources, programs, rebates, and incentives.

WE&T resources also supported training development and delivery (Training-as-a-Service) in select projects benefiting the PG&E's EE program workforce, contractors, implementers, and customers.

Looking Ahead

PG&E's WE&T Programs support PG&E's goal to help customers reduce energy use, which will help PG&E optimize delivery of TSB and reduce GHG emissions to support carbon neutrality by 2045. PG&E plans to continue its WE&T work in 2024-2027 with three goals and strategies outlined in the PG&E Energy Efficiency 2024-2027 Portfolio Plan. The three goals for 2024-2027 include: continuing to provide energy efficiency, electrification, and decarbonization training that contributes to developing a highly skilled energy workforce; enabling PG&E and California to achieve their energy efficiency savings and decarbonization goals; and being a valued partner that is integrated into PG&E's Communities and energy workforce professions. To accomplish these goals, PG&E intends to use three strategies: aligning with the WE&T audience, training for the future, and building and maintaining collaborative relationships that prioritize and support Disadvantaged Workers. To successfully implement these strategies, PG&E will work closely with stakeholders to regularly update programs and strategies to address changing needs and emerging trends impacting California's energy workforce.

WE&T Programs

Integrated Energy Education & Training (IEET, PGE21071)

The Integrated Energy Education & Training (IEET) Program serves the incumbent energy efficiency workforce—people who design, build, maintain, or operate buildings and building systems—across several market segments, including agriculture, foodservice, commercial, industrial, and residential. IEET typically provides in-person and web-based education and training programs, outreach events, and energy measurement tool loans.

Statewide WE&T Programs

PG&E leads two statewide Third-Party WE&T Programs—Career Connections (CC) and Career & Workforce Readiness (CWR)—both of which launched in June 2021.

Career Connections: Energy is Everything (PGE_SW_WET_CC)

Implementer: The Energy Coalition (TEC)

The statewide Career Connections third-party "Energy is Everything" (EisE) Program helps to build the next generation of energy workers. EisE provides Kindergarten through Twelfth grade students the



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knowledge, skills, and abilities they need for college and career opportunities in the energy industry and motivates students to adopt pro-environmental behaviors. EisE incorporates career concepts for all learners, since early exposure to career options increases the chances of students pursuing and securing high-demand energy and STEM careers. Education providers targeted will primarily focus on those classified as "disadvantaged".

In 2023, 36,807 students were enrolled in the EisE Program and completed 172,582 hours of instruction and training. Twenty partnerships were established and supported outreach to participants, including 341 educators, across 341 California K-12 schools and, Out-of-School Time and after school programs.

Career and Workforce Readiness: Energize Careers (PGE_SW_WET_Work)

Implementer: Strategic Energy Innovations (SEI)

Energize Careers aims to create a diverse and representational energy workforce through the economic empowerment of people who experience personal or systemic barriers to entering and remaining in the energy workforce. Energize Careers assists program participants in accessing technical training and energy career opportunities. Energize Careers provides holistic services to support disadvantaged workers through technical training, job placement, and wrap-around service support. Energize Careers collaborates with pre-apprenticeship programs, apprenticeship programs, community-based training organizations, and community colleges to provide technical energy job training to disadvantaged workers. Energize Careers also collaborates with wrap-around service providers and industry partners to provide people with services and support to enter career pathways where they can leverage their energy efficiency knowledge and skills.

Through 2023, Energize Careers has established 15 collaborations with training partners and wraparound service providers, enrolled 843 participants in technical training programs, and placed 548 program participants in jobs. Additionally, 140 program participants reached their final program milestone of remaining employed for 12 months in jobs where they are using the knowledge and skills they acquired.



REN and CCA Coordination

In 2023, PG&E continued coordination efforts with the Regional Energy Networks (RENs) and Community Choice Aggregators (CCAs) to prevent EE program duplication and optimize the customer experience and ratepayer resources.

CCAs: MCE, Ava Community Energy, CleanPowerSF, Sonoma Clean Power, Peninsula Clean Energy, San Jose Clean Energy

RENs: BayREN, 3C-REN, and Rural REN (R-REN)⁵²

2023 Program coordination activities among PG&E, the RENs, and the CCAs (i.e., Joint PAs) included the following:

- Program coordination calls and other communications: The purpose of these calls and other communications was to ensure that Joint PA EE programs are complementary and nonduplicative, to provide updates on marketing and outreach activities, to identify opportunities for collaboration, and to provide updates on new programs and program changes.
- Joint Cooperation Memos (JCMs): In compliance with CPUC Decisions 18-05-041 and 21-05-031, Joint PAs with overlapping service areas are required to submit JCMs to coordinate EE program activities. PG&E submitted 2023 JCMs with BayREN, 3C-REN, MCE, and Ava Community Energy. These JCMs documented areas of potential EE program overlap by sector, with details about collaboration methods used to mitigate customer confusion, streamline customer handoffs, and avoid duplication.
- Data sharing and double dipping⁵³ prevention: PG&E has data governance and protection obligations for sharing customer data. When requested, PG&E will share data for double-dip check purposes and for supporting REN and CCA programs. Strict data security and privacy protocols must be completed by the party seeking data before PG&E will share any customer data.
- **Customer referrals**: Through PG&E program resources (like guide.pge.com) and other Joint PA resources, the Joint PAs derive additional value by providing information and referrals to programs across all program implementers, including those outside each other's implementation

⁵² D. 23-06-055 states R-REN should submit three separate JCMs, as follows: A JCM between PG&E and R-REN (North Coast). A JCM between PG&E, 3C-REN, and R-REN (Central Coast); and a JCM between PG&E, SCE, SoCalGas, SoCalREN, and R-REN (San Joaquin Valley and High Sierra).

⁵³ Double dipping is when customers obtain incentives for the same energy efficiency program measure or projects from more than one organization.



focus. The Joint PAs have agreed-upon referral protocols to make hand-offs seamless and to minimize loss of participant engagement.



Tables and Appendices

Section 1 Savings & Goals

Table 1

T-1 2023 Net First Year Savings, Goal Attainment and Fuel Sub Load Reduction Adjustments

	GWh	MW	MMTherms	GWh	MW	MMTherms
	I	Portfolio - Non-	C&S	Codes & Standards		
2023 Total Installed Portfolio Savings	376.1	68.3	19.1	1,353.9	259.8	23.7
Adopted Goals (D.21-09- 037/D.22-05-016)	597.0	81.0	14.0	1,016.0	212.0	20.0
Percentage of goal attainment	63%	84%	149%	133%	123%	119%
Fuel Substitution Goal Reduction see Tab 2, Table 2B	0.0		1.2			
Goals less FS Goal Reduction (7-9 not reflected in CEDARS unless requested)	597.0	81.0	12.8			

[1] All energy savings numbers are net with 5% market spillover.

Energy savings are based on the actual accomplishments recorded in 2023.

[2] Installed savings for PG&E includes Bay Area Regional Energy Network (BayREN), Marin Clean Energy (MCE), Tri-County Regional Energy Network (3C-REN)

Redwood Coast Energy Authority (RCEA), San Jose Clean Energy (SJCE), Peninsula Clean Energy (PCE), Sonoma Clean Power (SCP), and Ava Community Energy (formerly East Bay Community Energy or EBCE) as reported in their 2023 Annual Claims filed in CEDARS.

[3] CPUC Adopted Goals and installed savings excludes Energy Savings Assistance (ESA) Program.

[4] Percentage of goal attainment is calculated using adjusted goals for fuel substitution.

[5] Energy Savings may not exactly match with the results in CEDARS due to rounding.

Section 2 Fuel Substitution Savings

Table 2

All fuel substitution savings data can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-2 Fuel Sub". The spreadsheet can be accessed on the CPUC's California Energy Data and Reporting System (CEDARS) website at: <u>https://cedars.sound-data.com/documents/standalone/list/</u>.



Section 3 Environmental Impacts

Table 3

All environmental impacts data, listed by measure use category, can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-3 EnvImpacts". The spreadsheet can be accessed on the CPUC's CEDARS website at: <u>https://cedars.sound-data.com/documents/standalone/list/</u>.

> Section 4 Programs & Expenditures

Table 4

All EE programs and associated budget, expenditures, cost-effectiveness, and savings data can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-4 Program Data". The spreadsheet can be accessed on the CPUC's CEDARS website at: <u>https://cedars.sound-</u> <u>data.com/documents/standalone/list/</u>.

> Section 5 Segment Summary

Table 5

All EE programs, organized by segment (Resource Acquisition, Market Support, and Equity), and associated budget, expenditures, cost-effectiveness, and savings data can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-5 Segment Summary". The spreadsheet can be accessed on the CPUC's CEDARS website at: <u>https://cedars.sound-data.com/documents/standalone/list/</u>.

Section 6 Bill Impacts

Table 6-1

All data for bill savings calculations can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-6 Bill Impacts". The spreadsheet can be accessed on the CPUC's California Energy Data and Reporting System (CEDARS) website at: <u>https://cedars.sound-data.com/documents/standalone/list/</u>.



Table 6-2

Estimated Bill Savings

	Electric Average Rate \$/kWh	Gas Average Rate \$/therm	Estimated First Year Bill Savings (\$)	Estimated Lifecycle Bill Savings (\$)
Estimated Rate Agriculture	\$0.3307	\$0.3609	\$1,181,162	\$9,289,464
Estimated Rate Commercial	\$0.3314	\$1.6098	\$17,664,361	\$214,408,758
Estimated Rate Industrial	\$0.2303	\$0.3609	\$12,805,793	\$64,574,911
Estimated Rate Public	\$0.3314	\$1.6098	\$4,583,578	\$40,108,702
Estimated Rate Residential	\$0.3215	\$2.2140	\$111,330,098	\$188,667,641
Estimated Cross-Cutting	\$0.3133	\$0.8167	\$443,751,246	\$5,835,697,601
Total			\$591,316,238	\$6,352,747,078

NOTE: The table above is only a portion of the full data set provided to highlight key information and ensure a readable format for in this report, the full data set can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-6 Bill Impacts". This spreadsheet can be accessed on the CPUC's California Energy Data and Reporting System (CEDARS) website at: <u>https://cedars.sound-data.com/documents/standalone/list/</u>

NOTE: (Consistent with SPM TRC/PAC/RIM tests, all savings used from actuals and forecasts in this table are net not gross)

(1) Estimated first year electric bill savings is calculated by multiplying an Estimated electric rate (as of 12/1/23) with first year net kWh energy savings.

Electric Commercial rate reflects the average rate in 2023 for bundled Small, Medium, and Large Commercial. (2) Estimated first year gas bill savings is calculated by multiplying an Estimated gas rate (annual average Non-CARE bundled for 2023) with first year net therm energy savings.

Gas rate reflects the annual estimated residential bundled rate for 2023.

Gas Commercial rate reflects the annual average rate in 2023 for bundled Small and Large Commercial and Core NGV.

Gas Industrial Rate reflects he weighted average rate for Industrial Distribution, Industrial Transmission and Industrial Backbone customers average annual rate in 2023.

All gas rates include the Greenhouse Gas (GHG) Costs. Residential average rates do not include the GHG climate credit.

(3) Total Estimated first year bill savings is the sum of Notes 1 and 2.

(4) Estimated lifecycle electric bill savings is calculated by multiplying an Estimated electric rate with lifecycle net kWh energy savings.

(5) Estimated lifecycle gas bill savings is calculated by multiplying an Estimated gas rate with lifecycle net therm energy savings.

(6) Total Estimated lifecycle bill savings is the sum of Notes 4 and 5.

(7) Total Estimated Bill Savings by Year and Lifecycle Bill Savings include C&S net savings and net lifecycle savings respectively;

and includes BayREN, MCE, 3C-REN, RCEA, SJCE, Ava (formerly EBCE), PCE, and SCP savings; excludes ESA Program.



Section 7 Savings by End Use

Table 7

T-7 Annual Savings by Use Category 2023

				Gross GWh G		Gross MW	Gross MMTherms		Net GWh		Net MW	Net MMTherms	
Measure End Use Category	TRC Ratio	PAC Ratio	TSB	First Year	Life Cycle	First Year	First Year	Life Cycle	First Year	Life Cycle	First Year	First Year	Life Cycle
Appliance or Plug Load	1.72	29.09	73,834,101.36	276.40	2,222.36	52.20	-0.42	33.73	103.76	744.77	19.39	-0.89	4.09
Building Envelope	1.81	16.91	202,905,121.57	106.14	1,888.06	37.01	9.88	163.37	64.41	1,131.75	23.97	6.26	102.80
Compressed Air	2.67	56.96	3,363,518.80	7.02	103.12	0.03	0.00	0.00	2.42	34.97	0.02	0.00	0.00
Commercial Refrigeration	4.78	18.89	82,514,373.66	306.19	2,379.67	46.97	0.20	0.55	103.95	874.47	15.03	0.15	0.50
Codes & Standards	5.13	228.02	172,360,845.98	662.34	11,051.91	109.20	0.52	7.90	113.50	1,772.68	14.67	0.40	6.02
Food Service	1.27	3.44	27,517,189.42	39.44	744.16	67.35	1.32	15.00	11.61	208.60	17.69	0.87	9.84
HVAC	3.11	15.41	286,115,919.09	410.33	6,447.78	162.35	10.78	163.15	159.94	2,384.31	55.15	4.93	70.86
Irrigation	0.22	0.29	315,963.46	1.42	9.85	0.71	0.00	0.00	0.50	3.45	0.25	0.00	0.00
Lighting	6.01	281.90	862,540,192.24	2,740.49	30,576.40	235.88	-2.85	-35.09	720.28	9,063.58	76.09	-1.26	-15.49
Non-Savings Measure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Process Distribution	0.69	0.82	840,712.44	1.29	14.74	0.05	0.00	0.00	0.84	9.58	0.03	0.00	0.00
Process Drying	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Process Heat	0.54	0.70	5,651,038.57	2.40	12.49	0.86	0.50	7.77	1.58	8.43	0.56	0.35	5.49
Process Refrigeration	0.71	0.96	20,095.55	0.14	0.33	0.01	0.00	0.00	0.09	0.22	0.01	0.00	0.00
Recreation	4.23	495.58	15,322,106.32	30.23	326.05	7.25	0.27	1.57	15.05	164.82	3.17	0.15	0.77
Service	0.41	0.59	1,128,859.38	3.95	11.84	0.51	0.18	0.53	2.61	7.82	0.33	0.12	0.37
Service and Domestic Hot Water	2.74	6.45	174,070,746.86	42.85	423.68	3.53	27.93	343.89	30.95	303.04	1.95	14.45	175.55
Whole Building	1.51	5.61	300,318,750.62	459.30	3,516.66	134.57	19.66	167.24	398.50	2,180.83	99.82	17.28	111.36
TOTAL	2.74	10.83	2,208,819,535.33	5,089.95	59,729.11	858.47	67.97	869.61	1,729.98	18,893.32	328.11	42.80	472.19

[1] All net energy savings numbers include 5% market spillover.

[2] Installed savings for PG&E includes Bay Area Regional Energy Network (BayREN), Marin Clean Energy (MCE), Tri-County Regional Energy Network (3C-REN) Redwood Coast Energy Authority (RCEA), San Jose Clean Energy (SJCE), Peninsula Clean Energy (PCE), Sonoma Clean Power (SCP), and Ava Community Energy (Ava) (formerly EBCE) as reported in their 2023 Annual Claims filed in CEDARS

[3] Cost effectiveness results: Excludes Energy Savings Assistance (ESA) Program, BayREN, MCE, 3C-REN, RCEA, SJCE, PCE, SCP, and Ava benefits and costs. Excludes Statewide Emerging Technologies Program costs per D.12-11-015 (p.52)

[4] Codes and Standards savings are assigned to a more specific use category where possible.

[5] ESA Program savings are excluded.

Section 8 Commitments

Table 8



Commitments Made in the Past Year with Expected Implementation after December 2023

	Com	mitted Funds	Ex	Expected Energy Savings					
2023		\$	GWh	MW	MMTherms				
Resource	\$	23,613,498.00	13.33	4.01	7.16				
Non-Resource		N/A	N/A	N/A	N/A				
Codes & Standards		N/A	N/A	N/A	N/A				
PG&E Total	\$	23,613,498.00	13.33	4.01	7.16				

NOTE: The table above is only a portion of the full data set to ensure a readable format for this report, the full table can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-8 Commitments". This spreadsheet can be accessed on the CPUC's California Energy Data and Reporting System (CEDARS) website at: https://cedars.sound-data.com/documents/standalone/list/

[1] All energy savings numbers are on a net basis.

[2] Committed Funds for 2023 include incentives related to PG&E EE projects committed in prior year(s) but not yet completed as of December 2023.

Section 9 Cap and Target Expenditures

Table 9

The 2022 Energy Efficiency Cap and Target Expenditure Report can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-9 Cap&Target". The spreadsheet can be accessed on the CPUC's CEDARS website at: <u>https://cedars.sound-data.com/documents/standalone/list/</u>

> Section 10 Metrics

Table 10

Due to non-standard formats, Program Administrators will use the same table they submitted for their 2022 report. This information can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-10 BP Metrics". The spreadsheet can be accessed on the CPUC's CEDARS website at: https://cedars.sound-data.com/documents/standalone/list/

> Section 11 Third-Party and Statewide Calculations

Table 11



Reporting on Local Program Third-Party Budgets, Statewide Programs Third-Party Budgets, Assembly Bill 841 Budget, Annual Budgets, Third-Party Outsourcing Compliance, and Statewide Budget Compliance can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-11 3P Calculation". The spreadsheet can be accessed on the CPUC's CEDARS website at: https://cedars.sound-data.com/documents/standalone/list/

Section 12 Third-Party Contract Info

Table 12

Reporting on PG&E third-party contract details can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-12 3P Contract Info". The spreadsheet can be accessed on the CPUC's CEDARS website at: <u>https://cedars.sound-data.com/documents/standalone/list/</u>

Section 13 PG&E's Marketplace Metrics

Table 13

On December 21, 2017, as directed in ordering paragraph (OP) 1c of Resolution E-4820, PG&E proposed to the Energy Division a format and schedule for reporting the targets for Energy Management Technology (EMT) related activities. PG&E proposed metrics for the Marketplace program that focus on the relevant sections of the platform for Assembly Bill 793 (AB 793) and EMTs. These are standard marketing industry accepted website metrics.

All Marketplace reporting data can be found in the "PGE.AnnualExcel.2023.1.xlsx" spreadsheet, under Tab "T-13 PG&E Marketplace Metrics". The spreadsheet can be accessed on the CPUC's CEDARS website at: https://cedars.sound-data.com/documents/standalone/list/

Appendix A PG&E Program ID Numbers

Program ID	Program Name
PGE21002	Residential Energy Efficiency



Pacific Gas and Electric Company[®]

Program ID	Program Name
PGE21005	Residential New Construction
PGE21007	California New Homes Multifamily
PGE21011	Commercial Calculated Incentives
PGE21012	Commercial Deemed Incentives
PGE21014	Commercial Energy Advisor
PGE210143	Hospitality Program
PGE21015	Commercial HVAC
PGE21021	Industrial Calculated Incentives
PGE210210	Industrial Recommissioning Program
PGE210212	Compressed Air and Vacuum Optimization Program
PGE21022	Industrial Deemed Incentives
PGE21024	Industrial Energy Advisor
PGE21027	Heavy Industry Energy Efficiency Program
PGE21031	Agricultural Calculated Incentives
PGE21032	Agricultural Deemed Incentives
PGE21034	Agricultural Energy Advisor
PGE21051	Building Codes Advocacy
PGE21053	Compliance Improvement
PGE21054	Reach Codes
PGE21055	Planning and Coordination
PGE21056	Code Readiness
PGE21061	Technology Development Support
PGE21062	Technology Assessments
PGE21063	Technology Introduction Support
PGE21071	WE&T Integrated Energy Education and Training
PGE21072	WE&T Connections
PGE21073	WE&T Strategic Planning



Program ID	Program Name	
PGE21091	On-Bill Financing (excludes Loan Pool)	
PGE210911	On-Bill Financing Alternative Pathway	
PGE21092	Third-Party Financing	
PGE21093	New Financing Offerings	
PGE2110011	California Community Colleges	
PGE2110012	University of California/California State University	
PGE2110013	State of California	
PGE2110014	Department of Corrections and Rehabilitation	
PGE2110051	Local Government Energy Action Resources (LGEAR)	
PGE211025	Savings by Design (SBD)	
PGE_Ag_001	Agricultural Efficiency Program	
PGE_CEC_SEES	SEESP Funds Transfer to CEC	
PGE_Com_001	Grocery Efficiency Program	
PGE_Com_002	Laboratory Performance Efficiency Program	
PGE_Com_003	Commercial Efficiency Program	
PGE_Com_004	High Tech and Bio Tech Efficiency Program	
PGE_Com_005	Healthcare Efficiency Program	
PGE_Com_SmallBiz	Micro and Small Business Program	
PGE_EMV	Evaluation Measurement and Verification	
PGE_ESA	Energy Savings Assistance	
PGE_Ind_001a	Industrial Strategic Energy Management - Food Processing	
PGE_Ind_001b	Industrial Strategic Energy Management - Manufacturing	
PGE_Ind_002	Petroleum and Chemical Efficiency Program	
PGE_Ind_003	Manufacturing and Food Processing Efficiency Program	
PGE_LoanPool	Financing Loan Pool Addition	
PGE_OtherPA_Admin	IOU REN/CCA Admin Costs	
PGE_Pub_001	Central Coast Local Government Partnership	



Program ID	Program Name	
PGE_Pub_002	Marin Local Government Partnership	
PGE_Pub_003	Redwood Local Government Partnership	
PGE_Pub_004	Central California Local Government Partnership	
PGE_Pub_005	San Mateo Local Government Partnership	
PGE_Pub_006	San Francisco Local Government Partnership	
PGE_Pub_007	Sierra Local Government Partnership	
PGE_Pub_008	Sonoma Local Government Partnership	
PGE_Pub_009	Government and K-12 Comprehensive Program	
PGE_Pub_010	Wastewater Process Efficiency Program	
PGE_Res_001a	Pay for Performance - Comfortable Home Rebates	
PGE_Res_001b	Virtual Energy Audit Program	
PGE_Res_001c	Pay for Performance - Home Energy Rewards	
PGE_Res_001d	Pay for Performance - Home Energy Optimization	
PGE_Res_002a	Universal Audit Tool Program	
PGE_Res_002b	Residential Energy Advisor - Marketplace	
PGE_Res_002c	Residential Energy Advisor - Home Energy Reports	
PGE_Res_002d	Residential Behavioral Program	
PGE_Res_002e	Online Marketplace Program	
PGE_Res_003	Multifamily Program	
PGE_Res_Equity	Residential Equity Placeholder	
PGE_SW_CSA_Appl	State Appliance Standards Advocacy	
PGE_SW_CSA_Appl_PA	State Appliance Standards Advocacy - PGE Costs	
PGE_SW_CSA_Bldg	State Building Codes Advocacy	
PGE_SW_CSA_Bldg_PA	State Building Codes Advocacy - PGE Costs	
PGE_SW_CSA_Natl	National Codes & Standards Advocacy	
PGE_SW_CSA_Natl_PA	National Codes & Standards Advocacy - PGE Costs	
PGE_SW_ETP_Elec	Emerging Technologies Program, Electric	



Program ID	Program Name	
PGE_SW_ETP_Elec_PA	Emerging Technologies Program, Electric - PGE Costs	
PGE_SW_ETP_Gas	Emerging Technologies Program, Gas	
PGE_SW_ETP_Gas_PA	Emerging Technologies Program, Gas - PGE Costs	
PGE_SW_FS	Food Service POS	
PGE_SW_FS_PA	Food Service POS - PGE Costs	
PGE_SW_HVAC_QIQM	Statewide Residential QI/QM	
PGE_SW_HVAC_QIQM_PA	Statewide Residential QI/QM - PGE Costs	
PGE_SW_HVAC_Up	Upstream HVAC (Comm and Res)	
PGE_SW_HVAC_Up_PA	Upstream HVAC (Comm and Res) - PGE Costs	
PGE_SW_IP_Colleges	Institutional Partnerships, UC/CSU/CCC	
PGE_SW_IP_Colleges_PA	Institutional Partnerships, UC/CSU/CCC - PGE Costs	
PGE_SW_IP_Gov	Institutional Partnerships: DGS and DoC	
PGE_SW_IP_Gov_PA	Institutional Partnerships: DGS and DoC - PGE Costs	
PGE_SW_MCWH	Midstream Comm Water Heating	
PGE_SW_MCWH_PA	Midstream Comm Water Heating - PGE Costs	
PGE_SWMEO	Statewide Marketing Education and Outreach	
PGE_SW_NC_NonRes_Ag_electric	SW New Construction NonRes Ag - All Electric	
PGE_SW_NC_NonRes_Ag_electric_ PA	SW New Construction NonRes Ag - All Electric - PGE Costs	
PGE_SW_NC_NonRes_Ag_mixed	SW New Construction NonRes Ag - Mixed Fuel	
PGE_SW_NC_NonRes_Ag_mixed_P A	SW New Construction NonRes Ag - Mixed Fuel - PGE Costs	
PGE_SW_NC_NonRes_Com_electri c	SW New Construction NonRes Com - All Electric	
PGE_SW_NC_NonRes_Com_electri c_PA	SW New Construction NonRes Com - All Electric - PGE Costs	
PGE_SW_NC_NonRes_Com_mixed	SW New Construction NonRes Com - Mixed Fuel	
PGE_SW_NC_NonRes_Com_mixed _PA	SW New Construction NonRes Com - Mixed Fuel - PGE Costs	
PGE_SW_NC_NonRes_Ind_electric	SW New Construction NonRes Ind - All Electric	



Program ID	Program Name	
PGE_SW_NC_NonRes_Ind_electric_ PA	SW New Construction NonRes Ind - All Electric - PGE Costs	
PGE_SW_NC_NonRes_Ind_mixed	SW New Construction NonRes Ind - Mixed Fuel	
PGE_SW_NC_NonRes_Ind_mixed_ PA	SW New Construction NonRes Ind - Mixed Fuel - PGE Costs	
PGE_SW_NC_NonRes_Pub_electric	SW New Construction NonRes Public - All Electric	
PGE_SW_NC_NonRes_Pub_electric _PA	SW New Construction NonRes Public - All Electric - PGE Costs	
PGE_SW_NC_NonRes_Pub_mixed	SW New Construction NonRes Public - Mixed Fuel	
PGE_SW_NC_NonRes_Pub_mixed_ PA	SW New Construction NonRes Public - Mixed Fuel - PGE Costs	
PGE_SW_NC_NonRes_Res_electric	SW New Construction NonRes Res - All Electric	
PGE_SW_NC_NonRes_Res_electric _PA	SW New Construction NonRes Res - All Electric - PGE Costs	
PGE_SW_NC_NonRes_Res_mixed	SW New Construction NonRes Res - Mixed Fuel	
PGE_SW_NC_NonRes_Res_mixed_ PA	SW New Construction NonRes Res - Mixed Fuel - PGE Costs	
PGE_SW_NC_Res_electric	SW New Construction Res - All Electric	
PGE_SW_NC_Res_electric_PA	SW New Construction Res - All Electric - PGE Costs	
PGE_SW_NC_Res_mixed	SW New Construction Res - Mixed Fuel	
PGE_SW_NC_Res_mixed_PA	SW New Construction Res - Mixed Fuel - PGE Costs	
PGE_SW_PLA	Plug Load and Appliance	
PGE_SW_PLA_PA	Plug Load and Appliance - PGE Costs	
PGE_SW_UL	Lighting (Upstream)	
PGE_SW_UL_PA	Lighting (Upstream) - PGE Costs	
PGE_SW_WET_CC	WET Career Connections	
PGE_SW_WET_CC_PA	WET Career Connections - PGE Costs	
PGE_SW_WET_Work	WET Career and Workforce Readiness	
PGE_SW_WET_Work_PA	WET Career and Workforce Readiness - PGE Costs	
PGE_SW_WP	Water/wastewater Pumping	



Program ID	Program Name	
PGE_SW_WP_PA	Water/wastewater Pumping - PGE Costs	
PGE_WATER	Water Energy Nexus	



Appendix B Regulatory Decisions, Rulings, and Advice Letters

EE Rulemaking Phase I

In 2014, the Commission completed Phase I of the Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation and Related Issues (R.1311005) that was issued on November 21, 2013. Phase I focused on approving EE funding and portfolios for 2015. PG&E filed its Energy Efficiency 2015 Funding Proposal on March 26, 2014. On October 24, 2014, the Commission issued D.14-10-046: Decision Establishing Energy Efficiency Savings Goals and Approving 2015 Energy Efficiency Programs and Budgets.

The Phase I Decision, as corrected by D.15-01-002 and D.15-01-023, approved PG&E's total 2015 EE portfolio budget of \$430.1 million, including \$379.3 million for PG&E's program budget, \$16.8 million for EM&V, \$12.8 million for BayREN's EE programs, and \$1.2 million for MCE's EE programs. The Phase I Decision also approved PG&E's request for \$3.3 million for 2015 DR funding for IDSM.

The Phase I Decision (pp. 30-32) determined that 2015 is the third year of a 2013-2015 portfolio cycle, allowing the IOUs and RENs to use unspent 2013-2014 funds in 2015, to count savings from 2013-2014 towards 2015 goals and cost effectiveness, and to calculate regulatory caps and targets. The Commission directed Staff to undertake EM&V activities for 2013-2014 and 2015 combined.

The Phase I Decision (OP 21 and pp. 31-32) leaves the 2015 programs and funding in place until the earlier of when the Commission provides superseding direction, or 2025.

The Phase I Decision (OP 16) required the IOUs and MCE to file Tier 2 advice letters within 60 days to reflect the budget adjustments adopted in the decision, including recalculated TRC and PAC test results exceeding a 1.0 threshold for 2015. PG&E filed this advice letter on December 15, 2014, with superseding supplemental advice letters in 2015, as detailed below. The Phase I Decision also required several other advice letters to be filed in 2015.

EE Rulemaking Phase Ila

On February 24, 2015, the Commission issued the Scoping Memorandum for Phase II of this proceeding. Based on prehearing conference statements from the parties involved, the Commission identified three broad categories of items to address in Phase II: (1) developing "Rolling Portfolio" review processes; (2) providing guidance on changes for 2016 portfolios; and (3) updating various portfolio metrics (e.g., Database for Energy Efficiency Resources (DEER) values) to keep portfolios on course through 2016 and beyond.



On October 28, 2015, the Commission issued D.15-10-028: *Decision Re Energy Efficiency Goals for 2016 and Beyond and Energy Efficiency Rolling Portfolio Mechanics*. (Phase IIa Decision). In this decision, the Commission adopted energy savings goals for EE portfolios from 2016 to 2024; established a "Rolling Portfolio" process for reviewing and revising portfolios; and updated various EE program portfolio metrics, including Database of Energy Efficient Resources values.

EE Rulemaking Phase IIb

On August 25, 2016, the Commission issued D.16-08-019: *Decision Providing Guidance for Initial Energy Efficiency Rolling Portfolio Business Plan Filings*. (Phase IIb Decision). In this Decision, the Commission set forth policy guidance on several issues related to the filing of EE business plans, as previously contemplated in D.15-10-028. The Decision also addressed next steps for regional energy networks, the appropriate baselines to be used to measure energy savings for specific programs and measures, transition for statewide and third-party programs, and changes to the evaluation and shareholder incentive frameworks.

The Commission issued a Scoping Memo on April 14, 2017 to evaluate the reasonableness of the IOU, REN, and CCA proposals for EE business plans, filed in January 2017. The Scoping Memo identified the scope of issues to be evaluated in the proceeding and established the schedule for 2017 activities, which included requests for supplemental information, revised metrics, and comprehensive solicitation plans. The Commission issued the Proposed Decision Addressing Third-party Solicitation Process for Energy Efficiency on November 13, 2017. The Proposed Decision was subsequently finalized as D.18-01-004 in January 2018, and established solicitation oversight mechanisms, directed the IOUs to develop standard contract terms, and set the schedule for transitioning to the third-party model.

On October 2, 2017, the Commission issued D. 17-09-025: *Decision Adopting Energy Efficiency Goals for 2018-2030*. In this Decision, the Commission adopted energy savings goals for EE portfolios from 2018 to 2030.

EE Rulemaking Phase III

On November 2, 2016, the Commission issued the Scoping Memorandum for Phase III of this proceeding. The Commission acknowledged that this proceeding was already well underway when Senate Bill (SB) 350 (2015) and Assembly Bill (AB) 802 (2015) both became law, creating a significant impact on the Commission's oversight of EE programs and policy. The key provisions of SB 350 for EE to include a goal of doubling the amount of EE savings in California by 2030, with emphasis on market transformation and pay-for-performance approaches, among other things. AB 802's provisions primarily affect the way baselines are set for measuring energy savings towards goals. This broad set of topics were covered, to some degree, in D.16-08-019. However, two specific areas warrant additional policy development in Phase III: (1) market transformation, as discussed in SB 350 and (2) custom projects, particularly in the industrial sector, as discussed in D.16-08-019.



D. 19-08-009: *Decision Modifying the Energy Efficiency Three-prong Test Related to Fuel Substitution,* was issued on August 5, 2019, modified and clarified the formulation of the three-prong test. On August 23, 2019, the Commission issued D.19-08-034: *Decision Adopting Energy Efficiency Goals for 2020 – 2030*, adopted energy savings goals for ratepayer-funded energy efficiency program portfolios for 2020 to 2030. D. 19-12-021: *Decision Regarding Frameworks for Energy Efficiency Regional Energy Networks and Market Transformation*, issued on December 12, 2019 adopted frameworks for two areas of energy efficiency policy: regional energy networks (RENs) and market transformation initiatives (MTIs).

On March 20, 2019, under A. 08-07-021, the Commission issued D. 19-03-001: *Decision Granting Petition for Modification of Decision 09-09-047 Concerning On-bill Financing*, granted PG&E petition for modification and allowed PG&E to expand its on-bill financing program. On November 11, 2020, the Commission issued D. 20-11-013: *Decision Imposing Moratorium on Efficiency Savings and Performance Incentive Program*, which imposes a moratorium on award payments under the ESPI mechanism beginning with 2021 program year advice letter earnings claims to remain in effect pending subsequent Commission guidance.

This proceeding is still the ongoing venue for any policymaking related to EE. The ongoing policy issues identified including: updates to DEER and EE potential and goals; updates to the EE Strategic Plan; updates to the EM&V framework; the role of the California Technical Forum; updates to the ESPI mechanism; updates to the cost-effectiveness framework for EE, in coordination with the integrated distributed energy resource (IDER) rulemaking (R.14-10-003) and with the decarbonization rulemaking (R.19-11-011); coordination with statewide marketing, education, and outreach efforts; approach for evaluations using normalized metered energy consumption (NMEC) and/or dynamic baselines; and Industry Standard Practice determinations.

On November 16, 2020, D. 20-11-013 was issued, which imposed a moratorium on the efficiency savings and performance incentive (ESPI) program, deferring consideration of possible reforms until certain proposed changes to energy efficiency portfolio management and administration are disposed of.

On January 20, 2021, D.21-01-004 was issued providing directions to the large investor-owned utilities (IOU) for funding the School Energy Efficiency Stimulus Program, established by Assembly Bill 841 (Stats. 2020, Chap. 372) and under administration of the California Energy Commission (CEC).

On February 11, 2021, the Commission issued Resolution E-5115, addressing issues related to evidence requirements for the determination of energy consumption baselines for energy efficiency programs pursuant to D.16-08-019 and Resolution E-4818, with the proposed outcome of adopting minimum evidence *requirements* guidance to support custom projects accelerated replacement measure type. This Resolution did not increase costs beyond the energy efficiency budgets adopted in D.18-05-041.

On February 11, 2021, the Commission issued Resolution E-5108 (Rev 1) approving, with adjustments, Efficiency Savings and Performance Incentive awards for three major California IOUs for program years 2018 and 2019 and delayed the recovery of the incentives until 2022. This Resolution approved \$15,299,119 in incentives for PG&E.



Pacific Gas and Electric Company

D.21-01-004 provided directions to the large investor-owned utilities (IOU) for funding the School Energy Efficiency Stimulus Program, established by Assembly Bill 841 (Stats. 2020, Chap. 372) and under administration of the California Energy Commission (CEC).

D.21-05-031 adopted a new metric, total system benefit, for the identification of energy efficiency potential and setting goals; adopted a new approach to segmenting energy efficiency portfolios according to a program's primary purpose (resource acquisition, market support, or equity); and addressed changes to the rolling portfolio framework and regulatory processes proposed by stakeholders in the context of the California Energy Efficiency Coordinating Committee (CAEECC).

On June 24, 2021, Resolution E-5150: Adopted Updates to the Avoided Cost Calculator for Use in Demand-Side Distributed Energy Resource Cost-Effectiveness Analyses.

On August 5, 2021, Resolution E-5152: gave Approval of the Database for Energy-Efficiency Resources Updates for Program Year 2023 and Revised Version for Program Years 2022 and 2021.

D.21-09-037 adopted energy efficiency goals for 2022-2032.

D.21-12-011 authorized new programs to enhance Summer 2022 and 2023 electric reliability.

On December 23, 2021, the Assigned Commissioner and Administrative Law Judges issued an Amended Scoping Ruling, in which it outlined 2022 basic schedule for Energy Efficiency:

Topic/Event	Date
Resolution of OSC phases involving SoCalGas	$1^{st} \mbox{ and } 2^{nd} \mbox{ Quarters of } 2022$
Remaining lighting enforcement issues	Second Quarter of 2022
Issues associated with new portfolio applications	Second half of 2022
Rules associated with CCAs who elect to administer energy efficiency programs and RENs	Second half of 2022
Ongoing issues associated with implementation of market transformation policy, third-party solicitations, summer reliability programs, etc.	Throughout 2022 and 2023
Other issues	Ongoing/as needed

On July 15, 2022, ALJ Ruling issued seeking comments on third-party and other issues. The five topics: 1. Potential improvements to the third-party solicitation process; 2. Governance and reform of two of the Commission's energy efficiency database tools: a) the Cost Effectiveness Tool (CET); and b) the California Energy Data and Reporting System (CEDARS); 3. Strategic Energy Management (SEM) program issues; 4. The California Analysis Tool for Locational Energy Assessment (CATALENA) project; and 5. Data sharing for Commission-authorized energy efficiency programs.



On February 2, 2023, the Commission issued D.23-02-002: Decision Addressing Energy Efficiency Third-Party Processes and Other Issues, which addressed several topics important to the ongoing success of the Commission's EE portfolio, outlining improvements to the third-party solicitation process.

On March 3, 2023, the Commission issued D.23-04-009: Decision Granting SoCalREN's motion to authorize use of unspent Energy Efficiency funding for California Energy Efficiency Coordinating Committee Compensation Pilot.

On April 14, 2023, the Commission issued D.23-04-035: Addressing Codes and Standards Subprograms and Budgets and Staff Proposal on Reducing Ratepayer-Funded Incentives for Gas Energy Efficiency Measures.

On June 29, 2023, the Commission issued D.23-06-055 *Decision Authorizing Energy* Energy Efficiency portfolios for 2024-2027 and Business Plans for 2024-2031.

On August 10, 2023, the Commission issued D.23-08-005: *Decision Adopting Energy Efficiency Goals for 2024-2035,* which adopted total system benefit and energy savings goals for ratepayer-funded energy efficiency portfolios for 2024-2035.

2018-25 Business Plan Application

Application (A.)17-01-013, et.al, established the process for reviewing, submitting, approving, and implementing program administration business plans for the rolling portfolio years 2018-2025.

On January 11, 2018, the Commission issued D.18-01-004: *Decision Addressing Third-Party Solicitation Process for Energy Efficiency Programs*, which formalized the third-party solicitation process for EE programs. In this Decision, the Commission set timelines for the EE portfolio's transition to predominantly third-party program implementation, with December 31, 2018, marking the first milestone with a minimum of 25 percent third-party program administration. By the end of 2020, 40 percent of programs should be third-party administered, with the ultimate vision of reaching 60 percent third-party administration in the EE portfolio by the end of 2022. PG&E confirmed this percentage goal was reached in its portfolio at the end of 2022.

On May 31, 2018, the Commission issued D. 18-05-041: *Decision Addressing Energy Efficiency Business Plans.* In this Decision, the Commission approved the 2018-2015 Business Plans, formalized the statewide program governance structure, and established the annual Joint Cooperation Memo (JCM) filings between program administrators with overlapping territories.

On August 9, 2019, the Commission issued D.19-08-006: *Decision Adopting Standard Contract for Energy Efficiency Local Government Partnerships*, which adopted a standard contract for energy efficiency local government implementers, and associated implementation details.

On December 20, 2019, PG&E's 2020 Annual Budget Advice Letter was rejected via nonstandard disposition and PG&E was instructed to file a revised Business Plan Application by September 1, 2020.





Pacific Gas and Electric Company

On July 3, 2020, an *Amended Scoping Ruling Addressing the Impacts of COVID-19* was issued, postponing the deadline for PG&E's revised Business Plan Application to September 1, 2021. On December 21, 2020, PG&E's 2021 Annual Budget Advice Letter was rejected via nonstandard disposition. PG&E was required to hold a workshop to explain the portfolio's failure to meet cost-effectiveness requirements, how funding determinations were made for different programs, the methodology for establishing portfolio cost-effectiveness estimates, and why PG&E did not choose to provide additional funding to programs with high TRC. PG&E was also asked to provide updates on portfolio performance to date as impacted by COVID-19, and an update on the third-party solicitation process. The workshop was held on March 16, 2021. AL 4521-G-A/6385-E-Awas submitted on January 7, 2022, and was dispositioned on February 15, 2022.

2024-2031 Strategic Business Plan and 2024-2027 Portfolio Plan Application

On February 15, 2022, PG&E filed and served its 2024 Business-Portfolio Plan Application A.22-02-005. Its eight-year Business Plan covered the overall direction of Energy Efficiency work from 2024 through 2031, identifying major changes to strategies from prior strategic business plan strategies, plus the eight-year budget total. The four-year Portfolio Plan covered the specific programs, goals, portfolio- and sector-level performance metrics to be achieved, and budgets for Energy Efficiency from 2024 through 2027.

On June 29, 2023, the Commission issued D.23-06-055 *Decision Authorizing Energy* Energy Efficiency portfolios for 2024-2027 and Business Plans for 2024-2031.



Advice Letters

PG&E filed the following advice letters related to EE in 2023:

- 4. Ava Community Energy, Pacific Gas and Electric Company, and Bay Area Regional Energy Network Joint Cooperation Memorandum for Program Year 2024 Energy Efficiency programs, submitted December 15, 2023. https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC 7099-E.pdf
- PG&E's 2024-2027 True-Up Advice Letter in Compliance with Decision 21-05-031, Decision 23-06-055, and Decision 23-08-005, submitted October 16, 2023. https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS 4814-G.pdf
- Advice Letter Submittal of Pacific Gas and Electric Company's Third Party Solicitations resulting from its Statewide Codes and Standards Advocacy Request for Proposal - Federal Codes and Standards Advocacy Contract executed between 2050 Partners, Inc. and PG&E, submitted September 21, 2023. https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS 4801-G.pdf
- Advice Letter Submittal of Pacific Gas and Electric Company's Third Party Solicitations resulting from its Statewide Codes and Standards Advocacy Request for Proposal - Federal Codes and Standards Advocacy Contract, State Appliance Standards Advocacy Contract and Codes and Standards Advocacy Program Coordinator and Subprogram Coordinator for State Building Codes Advocacy Contract executed between Cohen Ventures LLC, dba. Energy Solutions and PG&E, submitted September 8, 2023.

https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS 4797-G.pdf

Supplemental: Pacific Gas and Electric's 2022 Unspent and Uncommitted Energy Efficiency Funds Applicable to AB 841 Schools Energy Efficiency Stimulus Program, submitted May 15, 2024.

https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS 4743-G-A.pdf

- PG&E Multifamily Energy Savings Program Closure Request, submitted May 15, 2023. https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS 4754-G.pdf
- 10. Joint Authorization Request to Recover Infrastructure and Operation Costs Pursuant to Decision 23-02-002, submitted May 4, 2023. https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS 4739-G.pdf
- 11. Pacific Gas and Electric's 2022 Unspent and Uncommitted Energy Efficiency Funds Applicable to AB 841 Schools Energy Efficiency Stimulus Program, submitted April 17, 2023. https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS 4743-G.pdf
- 12. PG&E's Final Annual Advanced Energy Rebuild Advice Letter in Compliance with Commission Disposition, submitted April 17, 2024. https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS 4744-G.pdf
- 13. Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Gas Company and Southern California Edison Company's Proposed Shared Funding of CATALENA Pursuant to Decision 23-02-002, submitted April 3, 2023. https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS 4734-G.pdf



- 14. Supplemental: California Energy Efficiency Coordinating Committee Meeting Work Plan and Budget for Program Year 2023, submitted March 9, 2023. https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS 4708-G-A.pdf
- 15. Advice Letter Submittal of Pacific Gas and Electric Company's Third-Party Local Government Partnerships Program contract amendments, executed between seven Local Government Partners and PG&E, submitted February 10, 2023. <u>https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS_4713-G.pdf</u>
- California Energy Efficiency Coordinating Committee Meeting Work Plan and Budget for Program Year 2023, submitted January 25, 2023. <u>https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS_4708-G.pdf</u>