

Energy Savings Programs for PG&E Health Care Customers

June 8, 2023



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Welcome

T Abraham

Regional Vice President

Hospital Council – Northern & Central California



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Online Questions: At any time, submit your questions in the Q/A box at the bottom of your screen and press enter. We will take questions at the end of the presentation.

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Dan Sperber
Senior Program Manager
Resource Innovations

Dan Sperber serves as Senior Program Manager of Resource Innovation's Healthcare Energy Fitness Initiative (HEFI) team and has managed the program design, launch, and delivery since 2018. He has delivered customer-friendly energy efficiency programs that have completed more than 100 health care projects.

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Sean Eyler
Program Lead
Resource Innovations

Sean Eyler serves as Program Lead for the Healthcare Energy Fitness Initiative (HEFI) and leads outreach, project coordination, partner network management, and customer relationship management efforts. He brings extensive project management experience and a deep commitment to sustainability.

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**Healthcare Energy
Fitness Initiative (HEFI)**

*Hospital Council's Energy Savings Programs
for PG&E Health Care Customers*

June 8, 2023



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Agenda



1 Introductions



4 Next Steps to Save



2 Program Overview







5 Questions & Discussion



3 Eligibility

Our HEFI Program Team

PG&E Program Administrator	Resource Innovations Program Implementer	HEFI Partner Network Our Expert Subcontractors
<ul style="list-style-type: none"> • Administer Portfolio of EE Programs • Rate payer funded under auspices of CPUC • Solicit & hire healthcare Program Implementer • Support Implementer's program delivery • Approve all projects & incentive payments 	<ul style="list-style-type: none"> • Hired by PG&E to deliver program • Marketing & Outreach • Project Development • Engineering & Quality Control • Incentive Processing • Project Coordination • Partner Network Coordination • PG&E Account Rep Coordination 	<ul style="list-style-type: none"> • Project Development • <i>Optional</i> Turnkey Solutions • <i>Optional</i> Financing Solutions • <i>Optional</i> HCAI Support <div style="display: flex; flex-direction: column; align-items: center;">     <div data-bbox="1224 1726 1386 1789" style="border: 1px solid black; padding: 5px; text-align: center;"> Additional Specialists </div> </div>

Tailored Solutions to Hurdle YOUR Unique Barriers

What challenges are you facing?

- ✓ Energy rate & cost increases
- ✓ Mission critical operations
- ✓ Aging systems & equipment
- ✓ Hot/cold calls & comfort
- ✓ Resiliency & carbon reduction
- ✓ Workforce & staffing turnover
- ✓ HCAI compliance
- ✓ Balancing competing priorities
- ✓ Limited budgets & funding options
- ✓ Large campuses & multi-site portfolios
- ✓ Complex & sensitive facilities/systems
- ✓ Finding energy saving opportunities
- ✓ In-house time and resources for EE
- ✓ Approval & stakeholder complexity

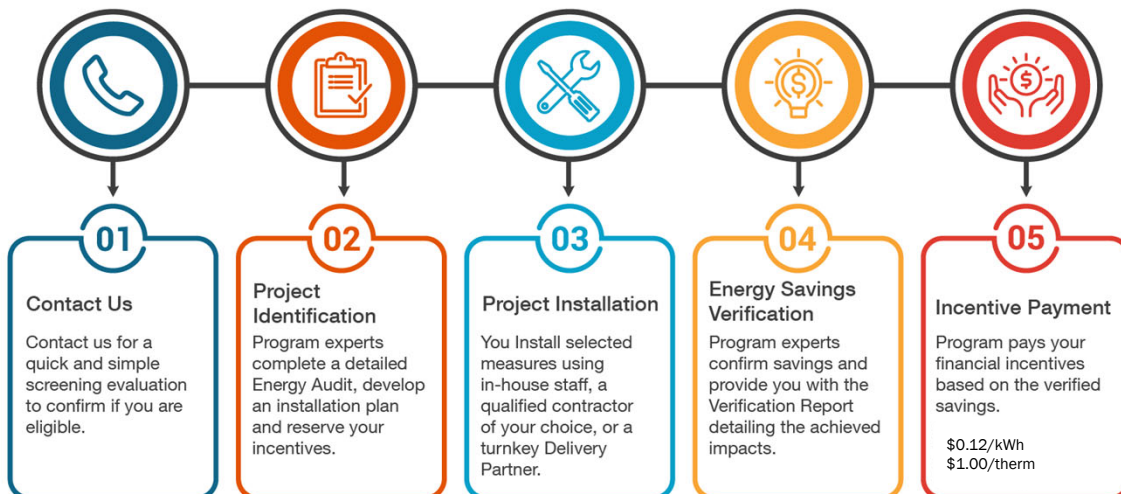


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How it Works



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Program Benefits & Flexible Solutions

- **Energy cost savings** and **GHG reductions**
- **No-Cost technical assistance:** energy audit, savings analysis, reporting, M&V
- **Financial incentives:** \$0.12/kWh + \$1/therm saved to reduce installation costs
- **Non-Energy Benefits:** health, safety, comfort, productivity, maintenance, etc.

Optional services include:

- Portfolio-level strategic energy planning
- Financing solutions (including off-balance sheet options)
- Turnkey project implementation (installation and/or construction management)
- HCAI support



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Qualifying Customer Segments

Segment	Example Customers
Hospitals	<ul style="list-style-type: none"> • General • Surgical • Psychiatric • Substance Abuse • Specialty
Outpatient	<ul style="list-style-type: none"> • Medical Office Buildings (MOBs) • Clinics • Urgent Care • Mental Health & Addiction • Medical & Diagnostic Labs • Surgical Centers • Birth Centers • Blood Banks • Dialysis & Diabetes Education • Imaging and Radiology • Telehealth • Orthopedic Rehabilitation

Segment	Example Customers
Residential Care	<ul style="list-style-type: none"> • Nursing Homes • Hospice • Assisted Living
Social Assistance	<ul style="list-style-type: none"> • Family Services • Community Food & Housing • Vocational Rehabilitation • Emergency Relief

Offering **flexibility and comprehensiveness**, while focusing on the **largest opportunities**.

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Comprehensive Solution for Healthcare Portfolios

Private & Public Customers

Owned or leased facilities

Large healthcare systems, campuses, standalone facilities

All Facility Types & Space Uses: from patient rooms and labs to offices and parking garages, data centers, and all others

All Types Of Projects & Measures: retrofits, capital projects, controls, RCx

All Electric & Gas End-uses: HVAC, lighting, DHW, data center, etc.

All Systems & Equipment: central heating/cooling/steam plants, chillers, boilers, AHUs, RTUs, pumps, fans, VSDs, refrigeration, compressed air, etc.

Offering flexibility and comprehensiveness, while focusing on the largest opportunities.

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Savings Opportunities for Healthcare Facilities

HVAC Retrofit

Central Plant

- Controls Optimization
- Chiller & Boiler Upgrades
- Reconfigurations & Re-piping

Standalone Equipment

- Boilers, Chillers, Packaged Units
- Add Small Dedicated Units

Variable Speed Drives (VSD)

- Pumps, fans, motors

Controls Optimization & Retro-commissioning

General HVAC

- HVAC schedules (AHU/Fan/Pump/VAV/FPB)
- Space Temperature Setbacks & Optimal Start/Stop
- Simultaneous Heating & Cooling

Air Distribution

- Duct Static Pressure Reset
- Supply Air Temperature Reset
- Economizer & Outside Air Optimization
- Fan & VSD Optimization

Chilled Water System

- Chilled Water Temperature Reset
- Condenser Water Temperature Reset
- Sequencing, Controls, & Pump Optimization

Hot Water / Steam System

- Hot Water Temperature Reset
- Sequencing, Controls, & Pump Optimization

Lighting

Interior Lighting (LEDs)

Exterior Lighting (LEDs)

Advanced Lighting Controls

Other Solutions

Controls/BMS Upgrade

Data Center Optimization

Laboratory Optimization

Compressed Air Optimization

Kitchen Equipment

Piping Insulation

Domestic Hot Water

Water Efficiency

Electrification

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HEFI Project Snapshots

Specialty Hospital HVAC Central Plant Optimization & RCx

Key Details:

- **Installation cost:** \$1,640,000
- **Installed by:** turnkey HEFI partner
- **Funding:** PG&E's 0% on-bill financing (OBF)
- **Financial Incentive:** \$140,000
- **Simple Payback:** 4 years

Annual Savings:

- **\$375,000 Energy Cost**
- 1,000,000 kWh
- 200 kW
- 110,000 therms

Measures:

- Chiller plant optimization
- Chilled water supply temperature reset
- Condenser water supply temperature reset
- Chilled water differential pressure reset
- Air balancing & supply air static pressure optimization
- Replace CHW Coils (4 AHUs)
- Supply air temperature (SAT) reset
- Optimize space temperature setpoints & deadband
- Retrofit kitchen demand control ventilation

Specialty Hospital LED lighting upgrade

Key Details:

- **Installation cost:** \$620,000
- **Installed by:** turnkey HEFI partner
- **Funding:** PG&E's 0% on-bill financing (OBF)
- **Simple Payback:** 4 years

Annual Savings:

- **\$145,000 Energy Cost**
- 900,000 kWh
- 100 kW

Measures:

- New LED Lamps and fixtures
- Interior and exterior lighting
- DLC and/or Energy Star listed
- Lighting controls
- Replacing T5, T8, CFL, incandescent, and other older lighting technologies

Small Hospital & Medical Office Controls Optimization (RCx)

Key Details:

- **Installation cost:** \$36,000
- **Installed by:** customer's controls contractor
- **Funding:** operational budget
- **Financial Incentive:** \$12,000
- **Simple Payback:** 0.5 years

Annual Savings:

- **\$50,000 Energy Cost**
- 240,000 kWh
- 30,000 therms

Measures:

- Supply air temperature (SAT) reset
- Heating hot water reset
- Economizer optimization

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PG&E's On Bill Financing (optional)

- **How it works**
 - 0% interest financing via your PG&E bill
 - Bill neutral (simple payback = term of loan)
 - Up to \$4M per site premise (\$5k minimum)
 - No early repayment penalty
- **Why it's helpful**
 - If no capital available
 - Deploy your limited capital on other priorities
 - Fund projects between budget cycles
 - Especially helpful for lighting projects
- **Used frequently by PG&E's healthcare customers**



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Project Facilitation

- Concierge-level service
- Relationship builders
- Market Partner liaisons
- Strong communicators
- Project facilitators
- Primary point of contact



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Flexible Toolkit



Portfolio-Level Strategic Energy Planning Services	Technical Services to Identify Measures	Financial & Approval Support Service to Gain Commitment	Implementation Support to Install Measures
<ul style="list-style-type: none"> ▪ Benchmarking ▪ Screening & scoping ▪ Planning & goal setting ▪ Site Prioritization ▪ Integration with sustainability plans ▪ DR/DER integration ▪ Resiliency consulting ▪ Carbon Reduction studies ▪ Coordination with other PG&E programs 	<ul style="list-style-type: none"> ▪ Interval data analytics ▪ Feasibility Studies ▪ ASHRAE Audits: Level 1/2/3 ▪ RCx, MBCx & FDD ▪ Functional testing ▪ M&V & Remote trending ▪ OSHPD Compliance 	<ul style="list-style-type: none"> ▪ Budgetary, Financial, & Non-Energy Benefit Analysis ▪ Carbon, & Sustainability Analysis ▪ Financial Incentives ▪ Speed-based Bonuses ▪ Non-Monetary Incentive ▪ Financing Options 	<ul style="list-style-type: none"> ▪ Turnkey Services ▪ Design engineering ▪ Disruption avoidance planning/support ▪ Scope of Work refinement ▪ Market Partner referrals ▪ Market Partner coordination

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Customer Eligibility

Healthcare customers with:

1. Active PG&E meter (electric and/or natural gas)
2. Paying the Public Goods Charge or Public Purpose Programs (PPP) surcharge for the meter targeted for savings

Eligible customers evaluated on case-by-case basis for acceptance into HEFI.



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Ideal Project Characteristics

High Energy Savings Potential

- High total energy usage & EUI
- Large facility size (sq ft)
- Comprehensive project scope
- Large HVAC systems or central plants (AHUs, chillers, boilers)
- Centralized controls (BMS/BAS), ideally with DDC, not pneumatics
- Not brand-new construction or recent comprehensive EE
- Lighting not yet upgraded to LED

Motivated & Supportive Customers

- Project champion
- Supportive facility/site staff
- Supportive C-suite/leadership
- Clear EE project approval criteria, processes, and signers
- Access to financial resources or willingness to utilize financing
- Focused on completing projects to realize energy & cost savings

Energy Savings: Long-Term, Claimable, Verified

- Measures will stay installed for the full measure life
- No major planned post-project retrofits or facility changes
- No planned facility sale or lease termination
- Install after PG&E pre-approval
- Program influenced outcomes (avoid free ridership)

Our screening process will help confirm if customers and projects are a good fit for the Program. Projects will be evaluated on case-by-case basis based on multiple criteria.

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Next Steps

1. Contact us to schedule an intro & screening call
2. Sign your HEFI Application
3. Start identifying savings opportunities

Program funding is **first-committed, first served**
Program services offered through at least 2024

Contact us to get started!

The screenshot shows a form titled "Advanced Energy Program Participation Agreement and Application". It is divided into several sections: "APPLICATION", "CUSTOMER INFORMATION", "OPTIONAL CUSTOMER'S PROJECT REPRESENTATIVE(S)", and "PROJECT INFORMATION". Each section contains various input fields for names, addresses, phone numbers, and project details. There are also checkboxes for "HEFI Service Agreement" and "PG&E Service Agreement". At the bottom, there is a section for "HEFI PROGRAM PARTICIPATION AGREEMENT AND APPLICATION" with a small logo.

The slide features a background image of two construction workers in hard hats. Overlaid on this is a large blue circle containing the text "THANK YOU!" and "Q & A". In the top right corner, there is a smaller orange circle with the Resource Innovations logo. At the bottom, there are two columns of contact information for Dan Sperber and Sean Eyler.

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Thank You



Thank you for participating in today's webinar.

For education questions, contact:

education@calhospital.org