



Utility Open House for Federal Customers: San Diego Gas & Electric

April 29, 2024 | 8:00 AM – 12:00 PM PDT

Webinar Logistics

- Call in for the best audio connection!
- Use of WebEx app is recommended (better than web version)
- Logistical issues: wbdg@nibs.org / bkitchens@nibs.org
- Send questions to all panelists in the Q&A window



Where is the Q&A window?

Click the ellipsis [...] next to the 'Chat' button in the lower right corner of the WebEx window.



This Training Offers IACET CEUs

How to obtain your CEUs:

1. Visit the Whole Building Design Guide (WBDG) at wbdg.org to log in or create an account
2. Enroll in the training
3. Attend the training in full
4. Return to your WBDG account's Enrolled courses
5. Select the training's "Proceed to Course" button
6. Complete an assessment
7. Submit a training evaluation
8. Download your certificate.

What's an IACET CEU?

An International Association for Continuing Education and Training (IACET) continuing education unit (CEU) is a unit of credit equal to 10 hours of participation in an accredited program designed for professionals with certificates or licenses to practice various professions.



Agenda

8:15 AM (PDT)	Welcome and Opening Remarks
8:35 AM	Federal Energy Goals and FEMP Programs
9:20 AM	SDG&E Utility Energy Service Contract (UESC) Program
9:40 AM	NAVFAC SW Contracting for UESC Projects
9:55 AM	Utilizing the GSA Areawide Contract
10:10 AM	Break
10:30 AM	SD Energylink – Energy Efficiency Incentives and Energy Audit Program
10:45 AM	SDG&E Emergency Load Reduction Program
11:00 AM	SDG&E Power Your Drive Program for Fleets
11:20 AM	Electrification – Planning the Future of the Grid
11:40 AM	Final Q&A, Resources, Next Steps
12:00–12:45 PM	Tour SDG&E Wildfire & Climate Resilience Center



FEMP Welcome

Mary Sotos

Director, Federal Energy Management Program

Federal Goals Lead to Electrification



Energy Act of 2020

- Use performance contracting to address at least 50% of cost-effective ECMs identified in facility audits (w/in 2 years)



Executive Order 14057

- Net zero federal operations by 2050
- 100% net zero buildings, zero-emission fleets, 100% carbon pollution-free electricity by 2030



Federal Building Performance Standard

- Support achievement of net-zero emissions for federal building portfolio
- Zero scope 1 emissions from on-site fossil fuel use in 30% of federal buildings by 2030

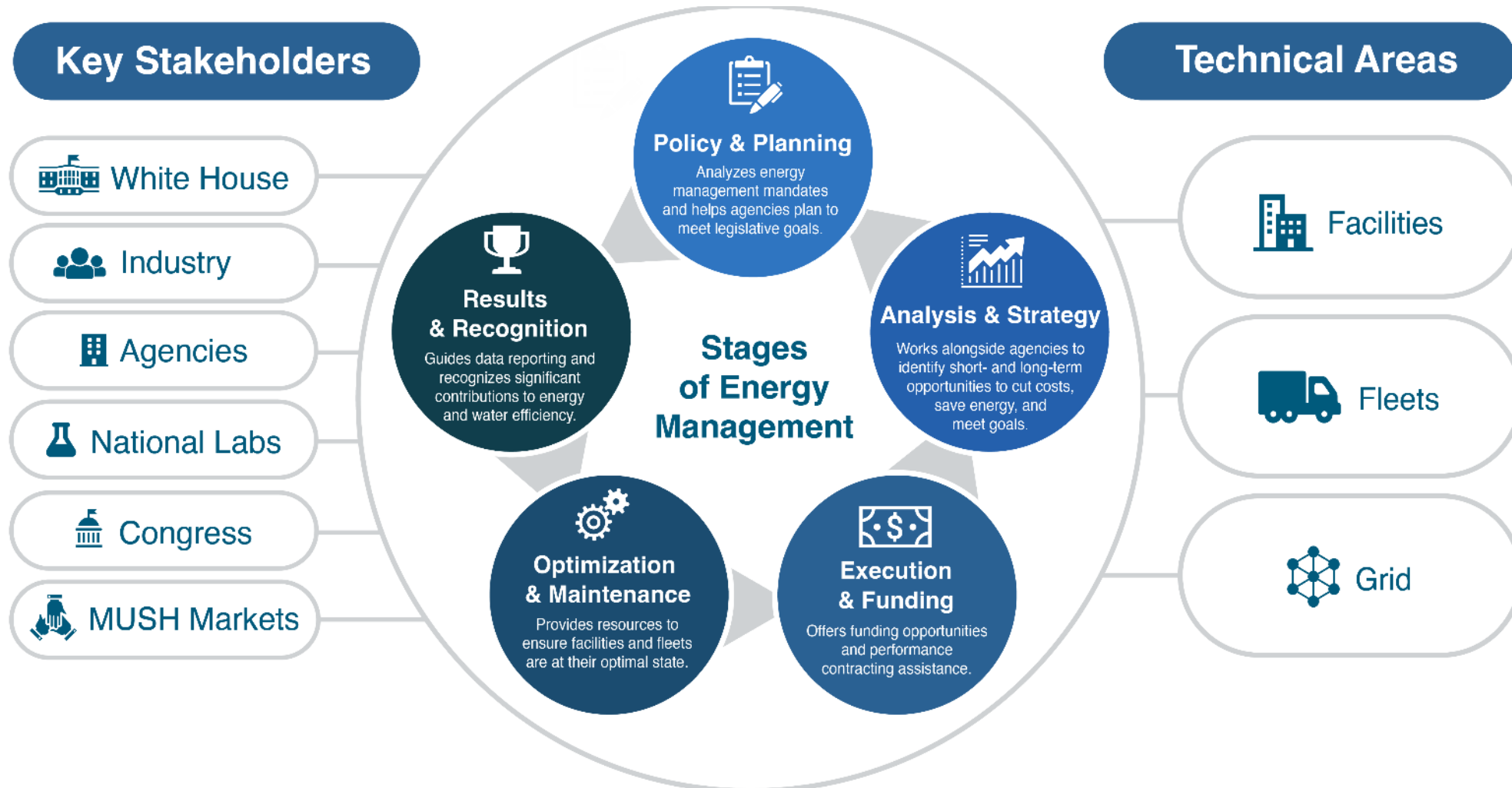


Climate Smart Building Initiative

- Establish emissions reduction targets delivered through performance contracting
- Increase on-site clean electricity generation

FEMP Empowers Federal Agencies to Lead By Example

FEMP works with **key stakeholders** to support **all stages of energy management** in federal agencies' **critical areas**



FEMP Support Moves Agencies Forward

Access off-the-shelf resources and request specialized support.



[Request Technical Assistance](#)

FEMP's technical experts learn about your needs and provide customized support.



[Access Tools](#)

Available tools help collect data, assess resilience, identify opportunities for carbon pollution-free electricity, and much more.



[Join a Community](#)

Communities are available for federal employees & industry stakeholders to share lessons learned and drive decision-making.



[Apply for Funding & Access Support](#)

\$250M in AFECT funding is available as well as performance contracting support.



[Get Recognition](#)

















Nominate individuals, projects, and sites for a variety of available federal recognition programs.



[Take Training](#)

On-site, in-person, and on-demand FEMP-delivered training supports an informed, capable workforce.

FEMP Tools & Support

-  [Smart Facility Accelerator](#)
-  [FEDS Spotlight](#)
-  [REopt](#)
-  [ESPC](#)
-  [Technical Resilience Navigator](#)
-  [Federal Utility Partnership Working Group](#)
-  [Re-tuning Trainings](#)
-  [EVI Locate](#)
-  [UESC](#)
-  [CDF Calculator](#)
-  [Treasure Hunts](#)
-  [Interagency Task Force](#)
-  [Federal Energy & Water Management Awards](#)
-  [Energy Exchange](#)
-  [AFECT Funding](#)
-  [Electricity Procurement Analysis](#)
and much, much more...

FEMP's Goal for Today: Agencies Take Action!

Request a consultation with FEMP or your utility to:

- *Discuss your site's energy goals, challenges, and priorities*
- *Identify program offerings that align with your needs*
- *Sign up for incentives*
- *Connect with subject matter experts to learn more about any of the topics discussed today*

Consultation Request Form

Fill out this [*linked form*](#) or scan the QR code below.

FEMP will connect you with the appropriate party for follow-up, which may include FEMP technical experts, utility POCs, and/or the relevant Utility Lead Agency.





Welcome Remarks

Dana Golan, Vice President – Customer Services

Grid-Interactive Efficient Buildings (GEB)

Legislative Drivers

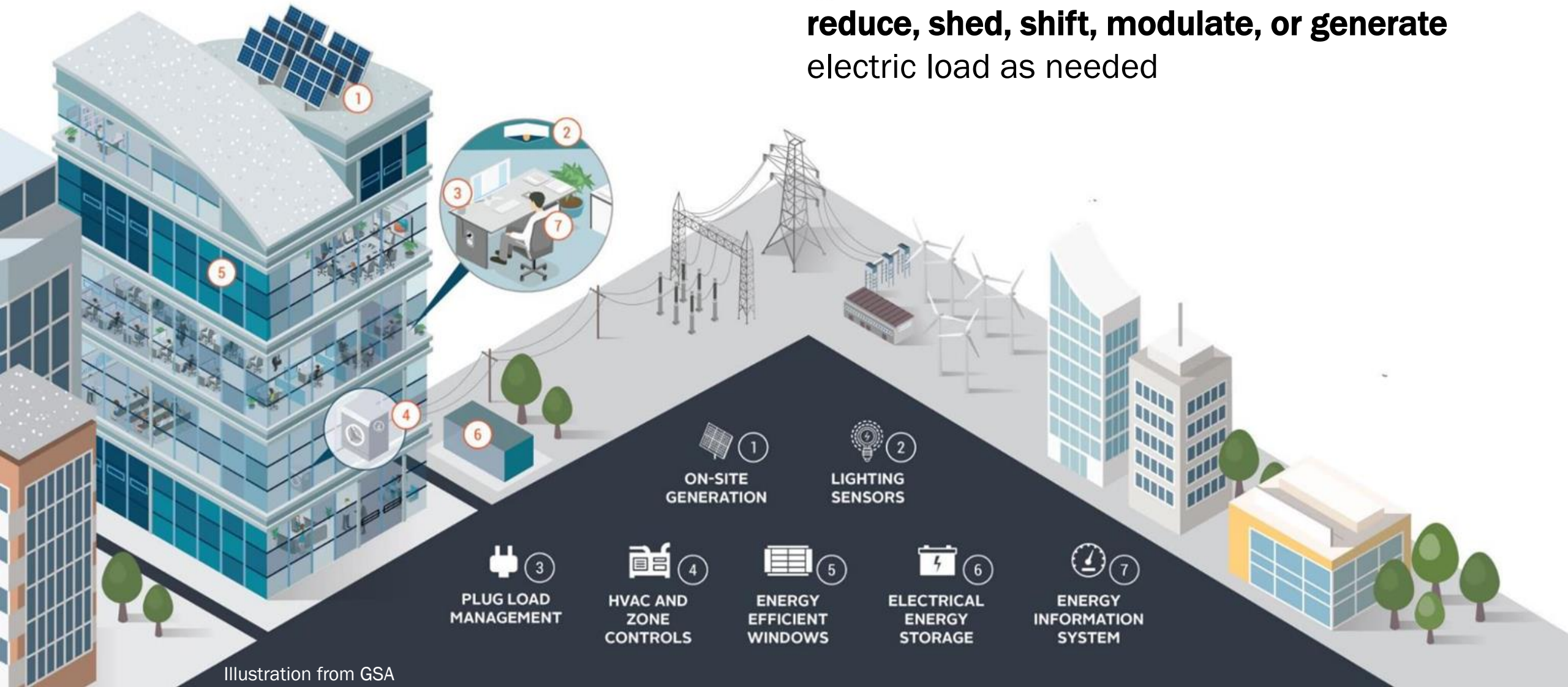
- **Energy Independence and Security Act (EISA) of 2007**
 - Numerous mentions (114 to be exact!) of “smart” (e.g., smart grid technologies, smart consumer devices and appliances, smart services and practices)
- **Energy Act of 2020, Smart Building Acceleration**
 - Requires the Secretary of Energy, as a part of the Better Building Challenge, to develop smart building accelerators to demonstrate innovative policies and approaches to accelerate the transition to smart buildings.
 - Establishes an R&D program focused on building-to-grid integration.
- **E.O. 14057, Catalyzing America’s Clean Energy Industries and Jobs through Federal Sustainability**
 - Guidance for both existing facilities (energy efficiency and deep energy retrofits) and new construction and modernization to implement GEB



What are GEBs?

GEBs incorporate energy efficiency, renewables, energy storage, and load flexibility

GEBs employ these capabilities to flexibly **reduce, shed, shift, modulate, or generate** electric load as needed



FEMP GEB Program Support

- FEMP's GEB program is available to provide technical assistance and guidance around implementing GEB strategies
 - Technology Insights
 - Financing Guidance
 - Utility Rate and Incentive Considerations
 - Case Studies



[GSA Oklahoma City Federal Building Case Study](#)

- Highlights a robust GEB project carried out via an utility energy service contract (UESC)
- FEMP's GEB team is available to develop additional cases studies. **Let us help you tell your story!**



Demand Response and Time Variable Pricing (DR/TVP)

What is Demand Response?

Demand response is a short-term, voluntary decrease in electrical consumption by end-use customers to stabilize the grid, triggered by:

- compromised grid reliability,
- high wholesale market prices, or
- supply/demand imbalance



Image Source: DOE (www.energy.gov/oe/demand-response)



DR/TVP Programs Benefits

Participating in DR/TVP programs can help agencies meet federal goals by:

- Lowering the price of energy consumed
- Enabling greater use of on-site storage and generation
- Reducing carbon emissions during periods of peak demand
- Contributing to federal resilience and grid stability through reduced peak energy consumption



Authorizing Law

Both informal (tariff-based) and formal DR Programs are authorized

- 10 USC 2913/2919 (DoD) and 42 USC 8256 (all of Fed Gov)
 - “Agencies are authorized and encouraged to participate in programs to increase energy efficiency and for water conservation or the management of electricity demand conducted by gas, water, or electric utilities and generally available to customers of such utility”
 - “Each agency may accept financial incentives, goods, or services generally available from any such utility, to increase energy efficiency or to conserve water or manage electricity demand.”



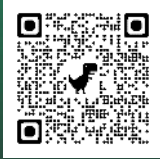
Resources and Support

- [FEMP's Demand Response and Time-Variable Pricing Website](#)
- [FEMP's Technical Assistance Portal](#)
- [Whole Building Design Guide Training on Demand Response and Time-Variable Pricing](#)



Demand Response and Time-Variable Pricing Programs

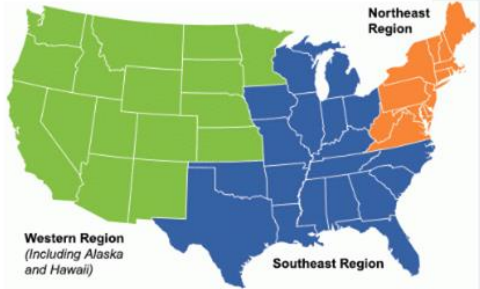
Federal Energy Management Program



Federal Energy Management Program » Demand Response and Time-Variable Pricing Programs

The Federal Energy Management Program developed profiles of demand response and time-variable pricing programs throughout the United States. These profiles are grouped regionally by state.

- Western States
- Northeastern States
- Southeastern and Midwestern States



Demand response (DR) is a short-term, voluntary decrease in electrical consumption by end-use customers that is generally triggered by compromised grid reliability or high wholesale market prices. In exchange for conducting (and sometimes just committing) to curtail their load, customers are remunerated.

<https://www.energy.gov/femp/demand-response-and-time-variable-pricing-programs>



Carbon Pollution-Free Electricity (CFE) Discussion

Executive Order 14057

Catalyzing Clean Energy Industries and Jobs through Federal Sustainability

(12/8/2021)



[Implementing Instructions for Federal Agencies](#)



100% carbon pollution-free electricity (CFE) by 2030, including 50 percent 24/7 CFE



A net-zero emissions building portfolio by 2045, including a 50% emissions reduction by 2032; and



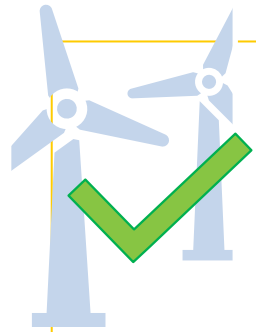
100% zero-emission vehicle (ZEV) acquisitions by 2035, including 100% zero-emission light-duty vehicle acquisitions by 2027



Net-zero emissions from overall federal operations by 2050



Evaluate options to determine what qualifies as CFE



CFE Technology
solar/wind/non carbon
emitting, etc.



Placed in service
10/1/2021 or newer



EACs delivered or
retired



Delivered to **CAISO**
balancing area



California Community Choice Aggregation (CCA)

CCA programs allow cities and counties to purchase and/or generate electricity for residential and non-residential customers in California.

- There are currently 25 operational CCA programs in California
- More than 200 towns, cities, and counties throughout the state have chosen to participate in CCA



https://cal-cca.org/wp-content/uploads/2024/04/CCAs-Contact-Info-and-Location_April-2024.pdf



CFE Resources on the FEMP Website


Carbon Pollution-Free Electricity Resources for Federal Agencies

Federal Energy Management Program

Federal Energy Management Program » Carbon Pollution-Free Electricity Resources for Federal Agencies

This page connects federal agencies to [Federal Energy Management Program \(FEMP\)](#) carbon pollution-free electricity (CFE) resources and provides information to increase federal agency understanding of on-site and off-site CFE options. Additionally, the steps outlined below represent a comprehensive approach to CFE planning and procurement.


Assess



Understand site utility markets and CFE usage

➔


Strategize



Identify feasible, impactful pathways to increase CFE

➔

Implement



Execute procurement strategies for CFE

Learn more: [CFE Resources for Federal Agencies](#)

Assess

Assess the options available to your site based on the utility regulatory environment in which it is located. Available options will differ depending upon the market structure.

- UNDERSTAND AGENCY ELECTRIC UTILITY REGULATORY ENVIRONMENT +
- IDENTIFY BALANCING AUTHORITIES +
- REVIEW AVAILABLE DATA RELATED TO IDENTIFIED ECMS FOR EFFICIENCY OPPORTUNITIES +
- CONSIDER FUTURE LOAD +

Strategize

Identify feasible, impactful pathways to increase CFE.

- UNDERSTAND POTENTIAL FOR ADDITIONAL ON-SITE CFE GENERATION CAPACITY +
- IDENTIFY CURRENT ELECTRICITY PROCUREMENT STRATEGY +
- UNDERSTAND OPTIONS FOR OFF-SITE CFE PROCUREMENT +

Implement

Implement energy efficiency measures, off-site CFE procurement, and on-site CFE generation and/or energy storage projects.

- EXECUTE STRATEGIES TO INCREASE ON-SITE CFE GENERATION +
- EXECUTE STRATEGY TO INCREASE CFE FOR SITES IN VERTICALLY INTEGRATED MARKETS +
- EXECUTE STRATEGY TO INCREASE CFE FOR SITES IN RETAIL ELECTRIC CHOICE MARKETS +
- REPORT CFE USAGE +
- MEASURE PROGRESS +

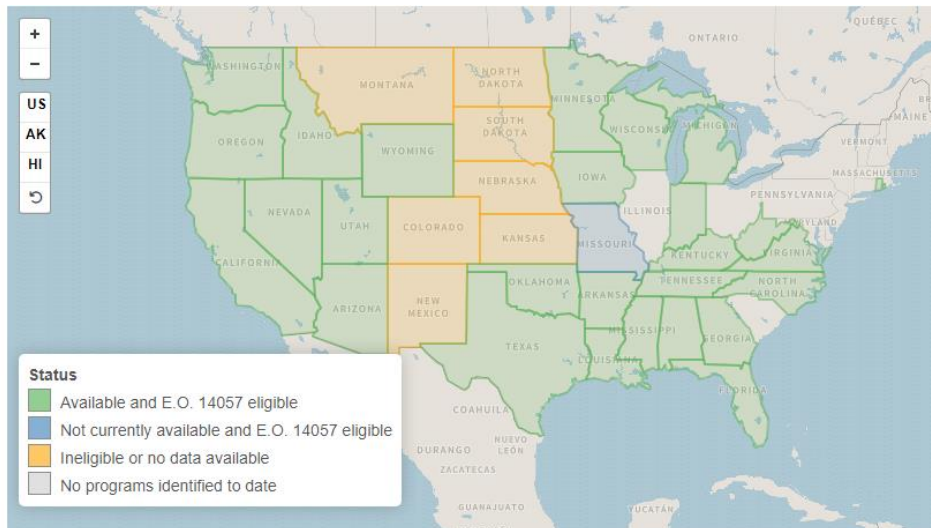


Tools for CFE Planning

Utility CFE Program Availability Map Tool

- Identify clean energy purchasing programs offered by vertically integrated utilities.
- Filter by state, program availability, E.O. 14057 eligibility, and existing areawide contract to identify programs of interest.

New programs/utility offerings added quarterly!



Balancing Authority Lookup Tool

- Identify a site's balancing authority by entering its ZIP code.

REopt (Renewable Energy Optimization Tool)

- Evaluate economic viability of on-site technologies at a given site.
- Perform single- or multi-site analysis.
- Set clean energy goals (i.e., can specify % of load to be met by on-site CFE).



Request Follow-Up to be the First to Know About New Options

- Currently, no qualifying CFE options for SDGE customers
- In the next section we will learn about community choice aggregators—but these offerings do not qualify as CFE at this time

Request Follow-Up!

Use this [linked form](#) or scan the QR code below and click the “Carbon Pollution-Free Energy and Clean Procurement” box



5. Please select the program areas that you are interested in learning more about:

Demand Response, Emergency Load Reduction, and Time-Variable Pricing Programs

Carbon Pollution-Free Energy and Clean Energy Procurement

EV Fleet and Electric Vehicle Supply Equipment (EVSE) Incentives and Rebates



Resilience

Ethan Epstein

Resilience Program Manager
DOE FEMP

What is Resilience?

The ability to anticipate, prepare for, and adapt to changing conditions and to withstand, respond to, and recover rapidly from disruptions.



RESOURCEFULNESS

Preparedness with optimized performance of energy and water systems and adequate planning, personnel training, and testing to manage through a disruption



REDUNDANCY

Availability of back-up resources and islandable onsite generation systems that enable continuity to critical loads during primary system disruptions



ROBUSTNESS

Ability to maintain critical operations during a disruptive event through building, infrastructure, and redundant system design, as well as system substitution capability



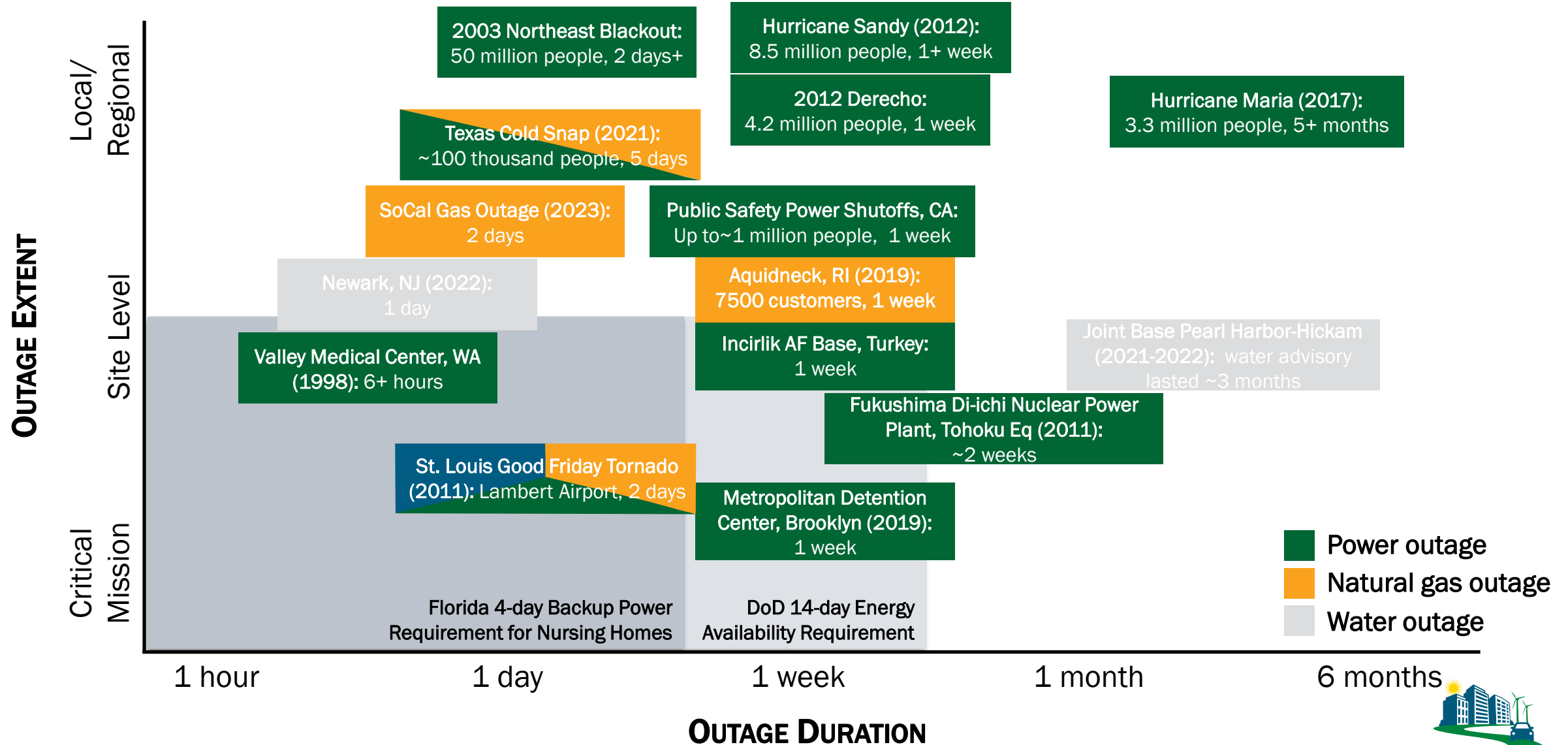
RECOVERY

Ability to return to normal operating conditions as quickly and efficiently as possible after a disruption

**ENERGY & WATER
RESILIENCE**



Energy and Water Resilience is Increasingly Important



High Impact Hazards Occurring More Frequently Over Time

- NOAA analysis of “billion-dollar disasters” demonstrates an increase in hazards that are likely to be impacted by climate change over time
- Increasing cost of natural hazards is likely a combination of increasing population and climate change effects

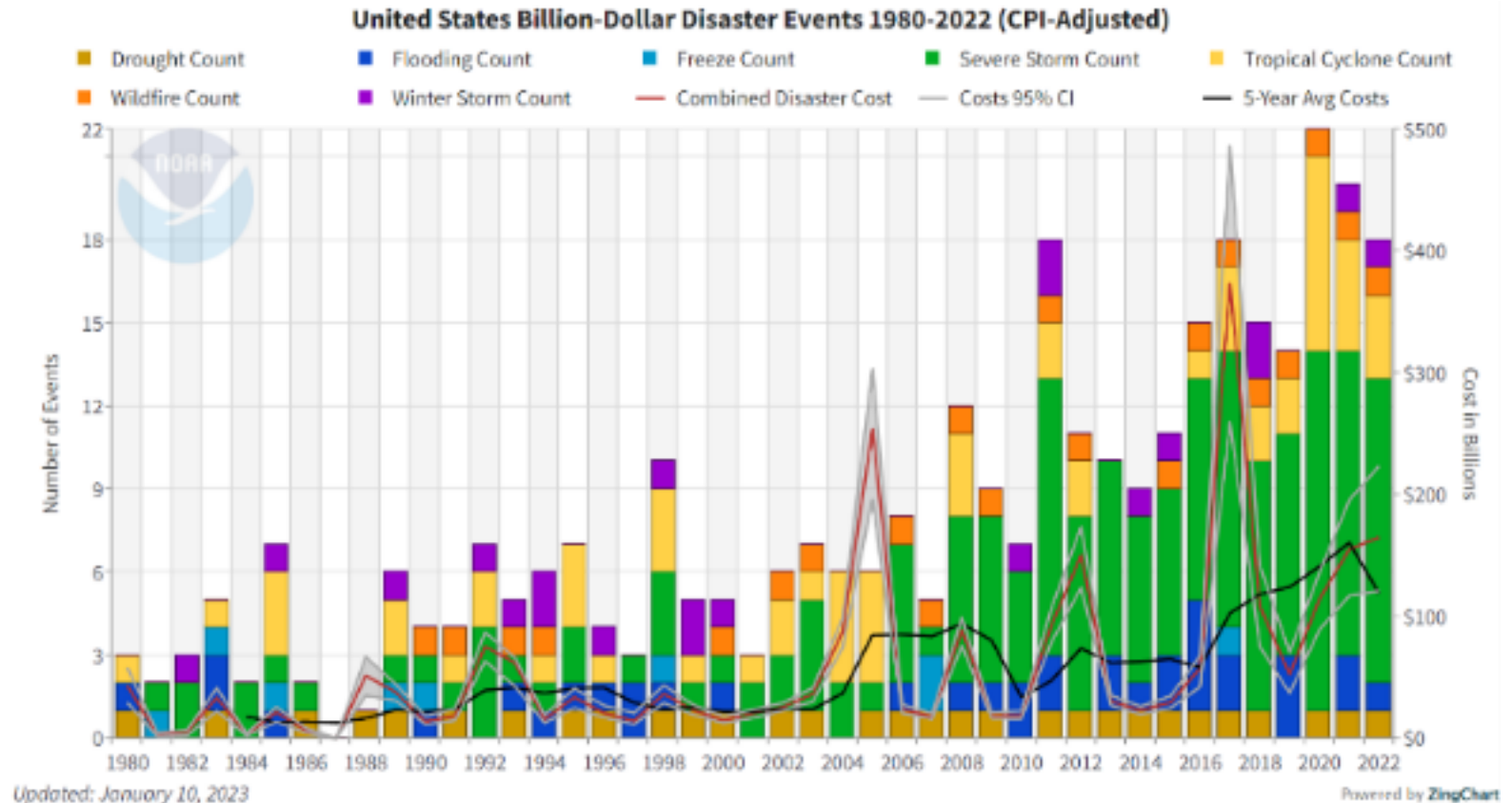


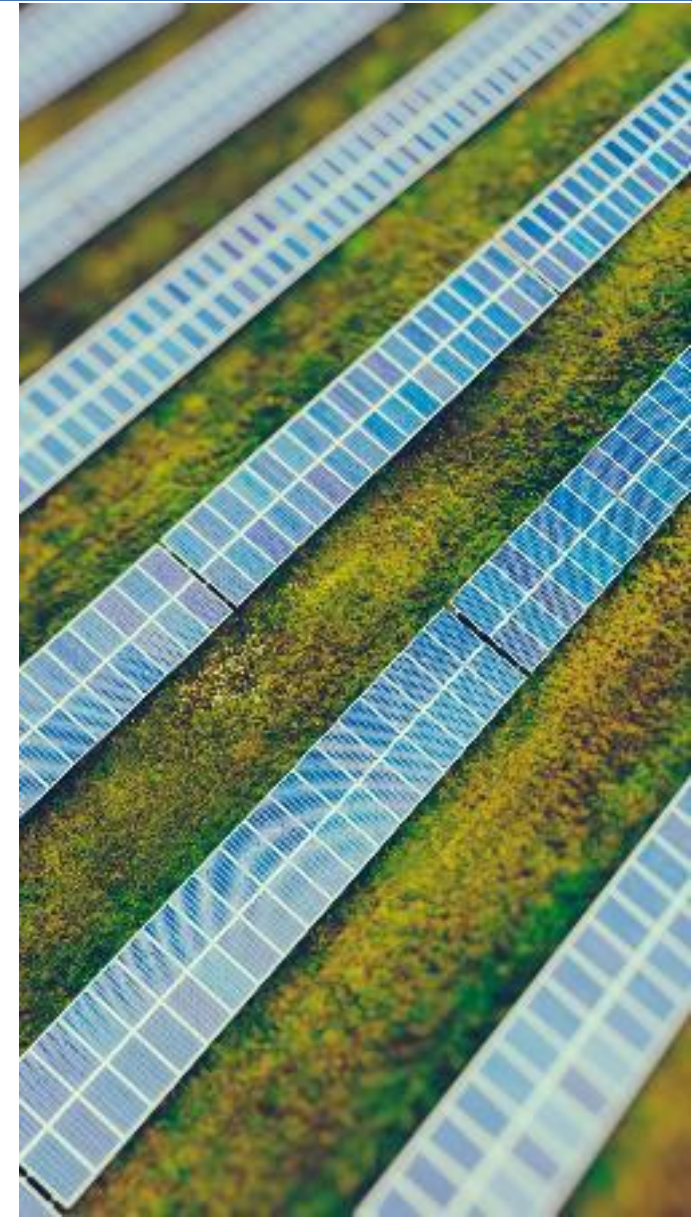
Figure Source: NOAA/NCEI, <https://www.climate.gov/news-features/blogs/2022-us-billion-dollar-weather-and-climate-disasters-historical-context>



Federal Utility Resilience Projects - Funding Approaches*

- Real property arrangements such as lease, easement or license for on-site generation/storage
- Utility Service Contracts (using GSA Areawide Contracts)
- Direct Funded Projects/Appropriations
- Utility Incentives
- Utility Resilience Tariffs
- Utility Energy Service Contracts (UESCs)

* *There are other options for achieving resilience goals, such as using [ESPCs](#), that will not be covered in this webinar.*



Utility Resilience Tariffs

- New offering from a limited number of utilities in vertically-integrated markets
- Generation/storage systems designed, built, paid for, owned and operated by the utility; operates during a grid outage
- Typically require state PUC approval
- Important considerations:
 - Resilience uptime guarantee
 - Cost
 - Contract length
 - Terms/conditions
 - REC ownership (if applicable)



Fleet and Electric Vehicle Supply Equipment (EVSE) Programs

Electric Vehicles as an Administration Priority

WH.GOV



Executive Order on Tackling the Climate Crisis at Home and Abroad

January 27, 2021

GSA, CEQ, and OMB in coordination with DOE, DOL, and DOC to develop a plan to convert Federal, state, local, and Tribal fleets to ZEVs



WH.GOV



Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability

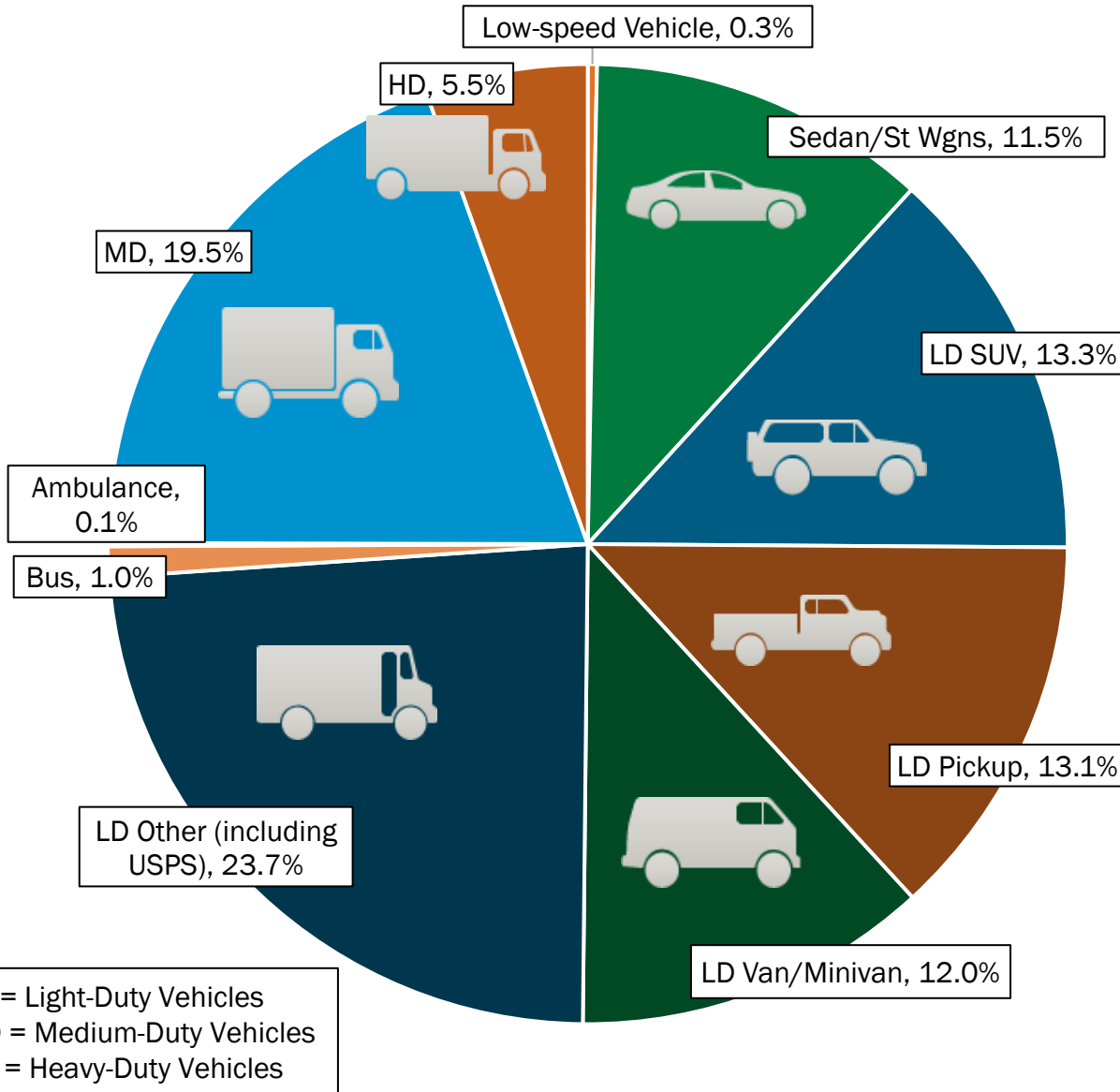
December 8, 2021

Transition to a zero-emission federal fleet

- Annual targets for ZEVs by agency
- 100% LD acquisitions by 2027
- 100% MD/HD acquisitions by 2035



Federal Fleet Electrification is Accelerating (FY23 FAST)

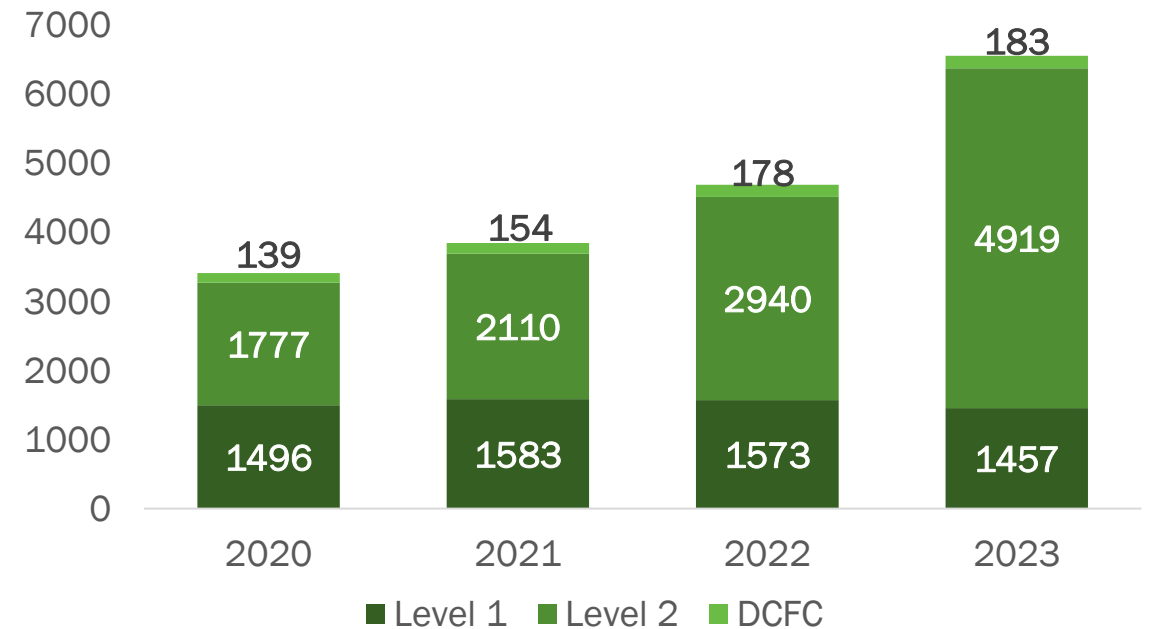


3.6k FY22 ZEV orders
(9% of Federal Fleet Purchases)

5.8k FY23 ZEV orders
(14% of Federal Fleet Purchases)

5.1k FY24 ZEV orders as of 2/29/24
(18% of Federal Fleet Purchases)

Source: GSA, Excludes USPS



ZEV Ready Framework

FEMP's recommended site-level fleet electrification planning process consists of 15 process steps organized into 3 phases.



Step 9 – Identify Utility Point of Contacts and Incentives

FEMP's EV Utility Finder (EV U-Finder)

Database that helps federal agencies connect to electric vehicle supply equipment (EVSE) utility partners and incentives available by ZIP Code

Enter ZIP Code to identify local utilities, electric vehicle support programs, and Clean Cities Coalitions.

72863

Powered by the U.S. Utility Rate Database (<https://openei.org/apps/USURDB/>)
Utility territories last updated February 2021.

See Introduction worksheet for notes on using EV U-Finder.

***Customer Types:**

G: Government or Public; C: Commercial; R: Residential

Identified active utilities in 72863

Utility	Utility Name	Utility Ownership	Known EVSE Funding Eligibility?*	Known Advisory Services Eligibility?*	Known Federal EVSE Incentives?	GS
1	Entergy Arkansas Inc	INVESTOR	GCR		Y	
2	Arkansas Valley Elec Coop Corp	COOPERATIVE				
3	Village of Brainard, Nebraska (Utility Company)	PUBLIC				

<https://www.energy.gov/femp/articles/ev-utility-finder-ev-u-finder>



Utility Energy Service Contracts (UESCs)

Jeff Gingrich

Project Manager, FEMP Utility Program
National Renewable Energy Lab

What are Utility Energy Service Contracts (UESCs)?

Performance contracts that allow agencies to do energy and water projects with little to no up-front costs and appropriations from Congress.

- Savings from reduced consumption and improved efficiency used to pay for a variety of measures
 - Infrastructure upgrades
 - Replacement of aging, inefficient equipment
 - Renewable energy systems
- Capital costs paid for through financing and available agency funds



Federal Drivers: EA 2020 and Energy Management Requirements

42 U.S.C. § 8253 Energy and Water Management Requirements

- Annual requirements for evaluation of 25% of covered facilities (EISA audits)
 - UESC Preliminary Assessment or Investment Grade Audit can fulfill audit requirement
- **EA 2020** - Requires installation of life-cycle cost (LCC) effective energy conservation measures within 2 years of audit
- **EA 2020** – Requires use of performance contracting to address at least 50% of LCC ECMs
 - Applies to measures identified in evaluations completed on or after **December 27, 2020**



FEMP Guidance

Performance Contracting Requirements Related to the Energy Act of 2020



How do UESCs work?



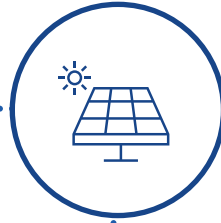
Select contractor

Competition limited to serving distribution utilities



Conduct assessments to evaluate energy/water savings opportunities

Contractor identifies cost effective energy conservation measures (ECMs)



Implement ECMs

Utility secures financing and installs measures



Make payments from cost savings

Contract term of up to 25-years to pay for ECMs



Implement Performance Assurance Plan to monitor and sustain savings

Via operations & maintenance / savings verification/other



Authorizing Law: UESC

Authorized and encouraged under the Energy Policy Act of 1992 (42 U.S.C. § 8256 and 10 U.S.C. § 2913 for DOD)

- Agencies are authorized to participate in utility incentive programs and accept any financial incentives, goods, or services generally available.
- Defined as a limited-source acquisition between a federal agency and serving utility for energy management services, including:
 - Energy efficiency improvements
 - Water efficiency improvements
 - Demand reduction services
 - Distributed energy

UESCs are Limited Source Acquisitions

Competition is limited to serving distribution utilities (electricity, natural gas, and water).



Key Advantages of UESCs

- **Intended to achieve savings or be budget neutral**
 - Paid for through energy/water savings and/or available agency funds
 - Utility is responsible for obtaining financing
- **Contract term up to 25 years**
- **Multiple sites/facilities within the utility's service territory may be included in a single task order**
- **Performance Assurance Plan and/or savings guarantee is required**
 - Utility can perform operations & maintenance, repair/replacement, measurement and verification
- **Contracts are firm-fixed-price**
- **Utility is single point of contact for entire project – evaluation, design, installation, post-installation services**



Energy Conservation Measures

Common Examples

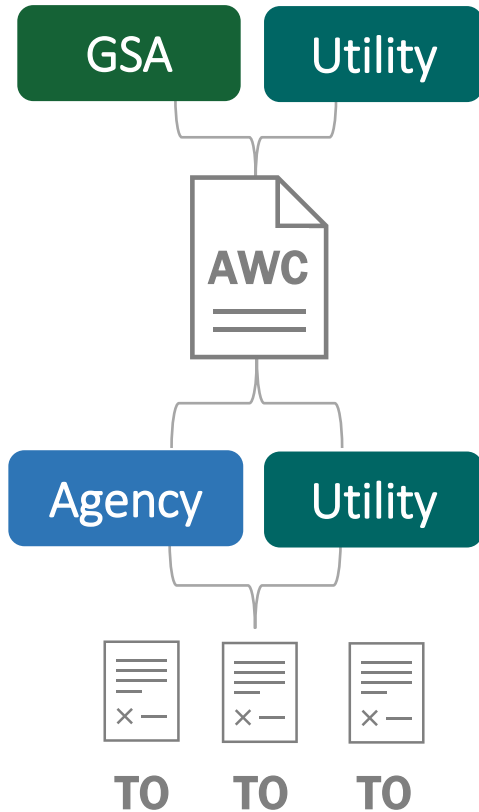
(not exhaustive)

- Boiler and chiller upgrades
- Energy management control systems
- Commissioning/Retro-commissioning
- Building envelope
- HVAC
- Chilled/hot water, steam distribution
- Lighting and lighting control improvements
- Electric motors/drives
- Refrigeration
- Renewable Power Generation Systems
- Electrical peak shaving/load shifting
- Rate adjustments
- Appliance/plug load reductions
- Energy consuming devices and support structures
- Water and wastewater

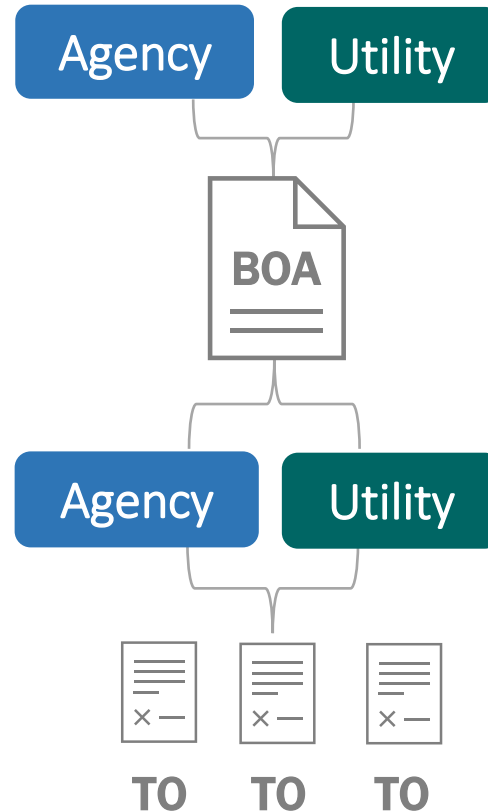


UESC Contracting Options

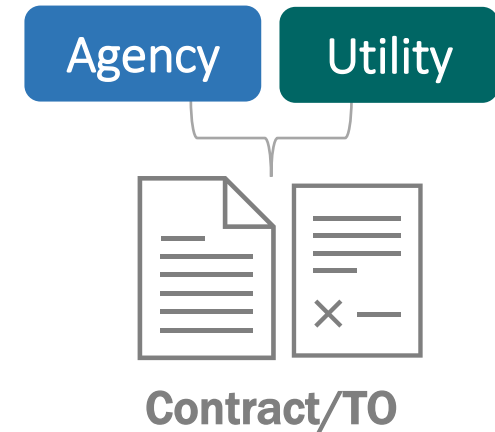
Areawide Contract (AWC)



Basic Ordering Agreement (BOA)



Separate Contract



Getting Started with a UESC

- **Set goals for your project.**
 - Energy/water efficiency, equipment replacement, decarbonization and electrification, resilience, etc.
- **Review facility/energy consumption data and identify known ECM opportunities.**
 - Leverage existing audits, multi-year site plans, and facility data
- **Identify eligible utility providers.**
 - Contact your serving utilities (electricity, natural gas, water) learn about program availability and experience
- **Evaluate funding options.**
 - Identify available appropriations, grants, and incentives that may help expand scope or shorten contract term
- **Contact FEMP for training and technical support.**



UESC Support and Resources

FEMP offers various types of support to set projects up for success:

- General consultations with [Federal Project Executives](#)
- [Project Facilitators \(PF\)](#) to act as advisors through the Preliminary Assessment
- [Project support](#) provide by technical and contracting SMEs through DOE National Labs
- [Training](#) on contracting and technical topics for agency teams
- [Online templates and other resources](#)
- [Peer-to-Peer working groups and seminars](#)



How much does FEMP support cost?

Nothing!

Most support can be provided at no cost*

[Visit the FEMP UESC website to learn more](#)





SDG&E'S FEDERAL TURNKEY



UTILITY MANAGED ENERGY PROJECTS

SDG&E'S FEDERAL TURNKEY

SDG&E's Federal Turnkey department consists of seasoned Project Managers, Project Coordinators and Support Staff. We assist our Federal customers in the development and implementation of Energy Conservation and Resiliency Projects at their facilities located within SDG&E's service territory.



SDG&E'S FEDERAL TURNKEY

SDG&E offers total Project Management and Financing as a customer service to our largest customer in the interest of energy conservation, resiliency, and electrification goals. Services include energy audit/survey(s), project development, procurement, financing, execution, and close-out for a total turnkey approach.

Assists SDG&E in meeting our CPUC energy efficiency and reliability goals.



SDG&E'S FEDERAL TURNKEY

Through the Utility Energy Service Contract (UESC), Federal Agencies can enter into contracts with their serving utility to implement Energy Conservation Projects

- **Energy Policy Act of 1992**
 - Authorizes and encourages Federal agencies to participate in utility programs ranging from rebates on equipment to delivering a complete turnkey project. (Source: FEMP)
- **Energy Independence and Security Act (EISA) of 2007**
 - Set energy conservation goals for Federal facilities – 30% from established baseline by 2015
- **Executive Order 14057**
 - Signed in December 2021, sets targets for federal agencies to achieve carbon-free electricity, zero-emission vehicles, net-zero buildings, and more by 2030-2050.



SDG&E'S FEDERAL TURNKEY

Executing energy projects for 30 years

Lighting

- LED
- Interior
- Exterior
- High Bays
- Streetlights

Mechanical

- Central Plant Upgrades
- Package Units
- Pumps
- DDC
- Retrocommissioning
- Transformer
- VFDs

Utility/Generation

- Photovoltaic
- Solar Thermal
- Battery Storage
- Fuel Cell
- Co-gen
- Microgrids



SDG&E'S FEDERAL TURNKEY

SDG&E-managed Projects

Turnkey energy-efficiency projects and services

- Project Development – Audits, engineering/design, and facility analysis.
- Performance Assurance available to ensure generating long-term energy savings
- Energy conservation and demand-side management measures may provide additional rate relief
- Operations & maintenance, training of personnel
- Full Facility Commissioning
- Infrastructure analysis, repair, installation, & maintenance
- Quality of Life Improvements increase productivity & morale



AVAILABLE FINANCING STREAMS

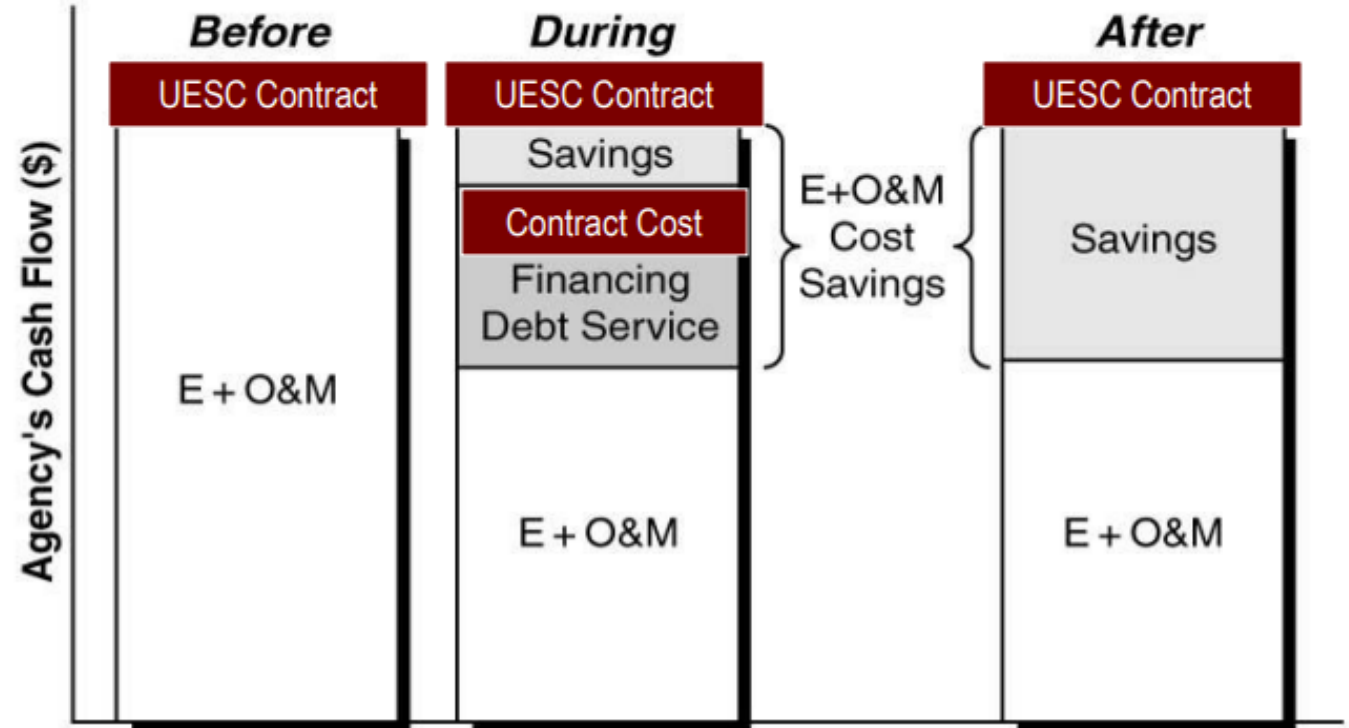
Flexible Financing Options

- Customer funded
- Third-party funding
- Program incentive and rebate processing
- Hybrids
 - Appropriations
 - Grants (ERCIP)
 - 3rd Party Lender

Maintain a Life Cycle Cost Effective Payback

- Financed projects are paid from savings -
- No increase in government spending occurs -

- ✓ Pay a lower utility bill
- ✓ Pay the contractor
- ✓ Avoid costs



VALUE PROPOSITION

Energy Savings offset life-cycle costs

- Any required Measurement & Verification can be included
- Performance Assurance ensures the project generates long-term energy savings

Maintenance Contracts are Optional

- Contract value is minimized by allowing the flexibility of using other vehicles for maintenance requirements, if desired

Partnership

- SDG&E's partnership with our customers allows a collaborative process to minimize project overheads and focus on project implementation. Our proposals are open book
- Quality of Life Improvements increase productivity & morale

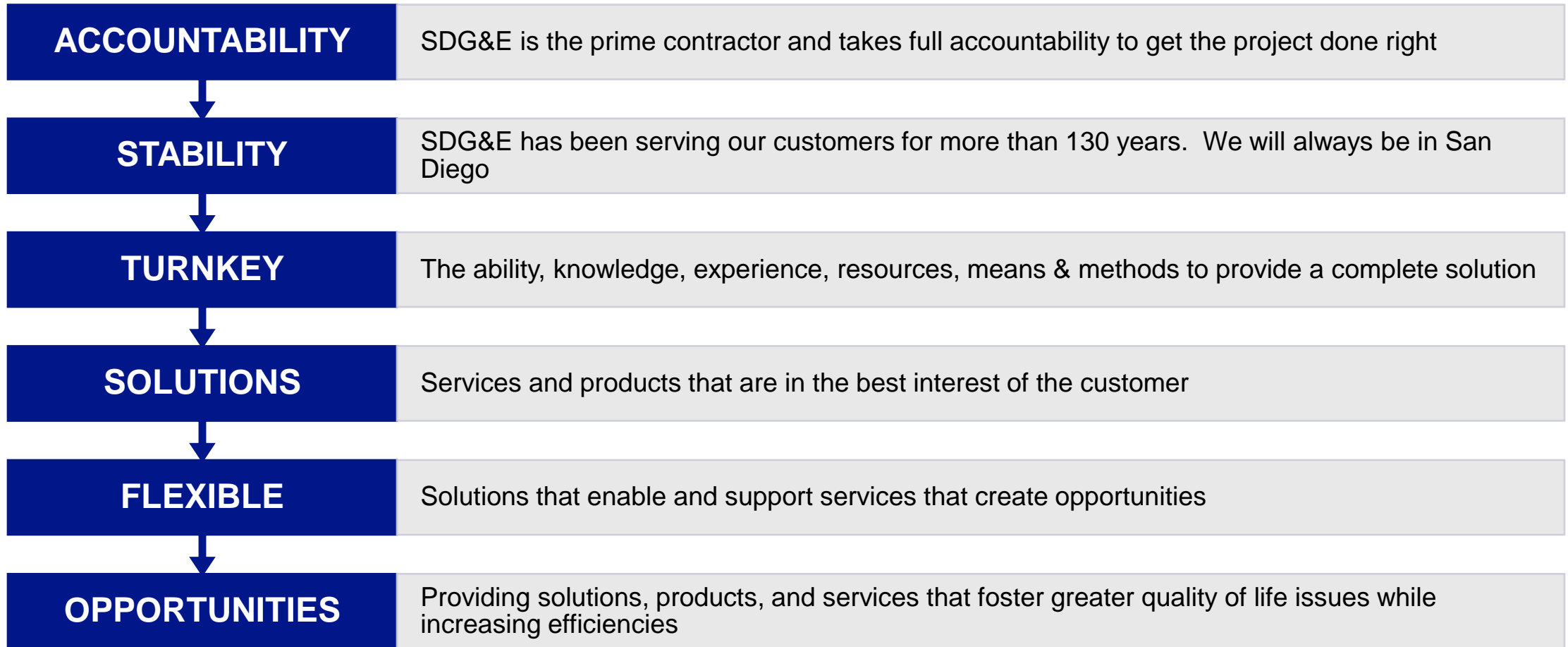


BEST VALUE

- **Design-Build Process**
 - SDG&E offers a Design-Build type of process, eliminating the need for multiple contractual actions on a single project
- **SDG&E handles all competitive requirements**
 - Assures that projects are competitive in nature, providing least cost and increased value
- **Open Book Accounting**
 - Customer is provided subcontractor bids
 - All SDG&E costs are made available



THE RIGHT CHOICE





FEMP SDG&E

29 April 2024

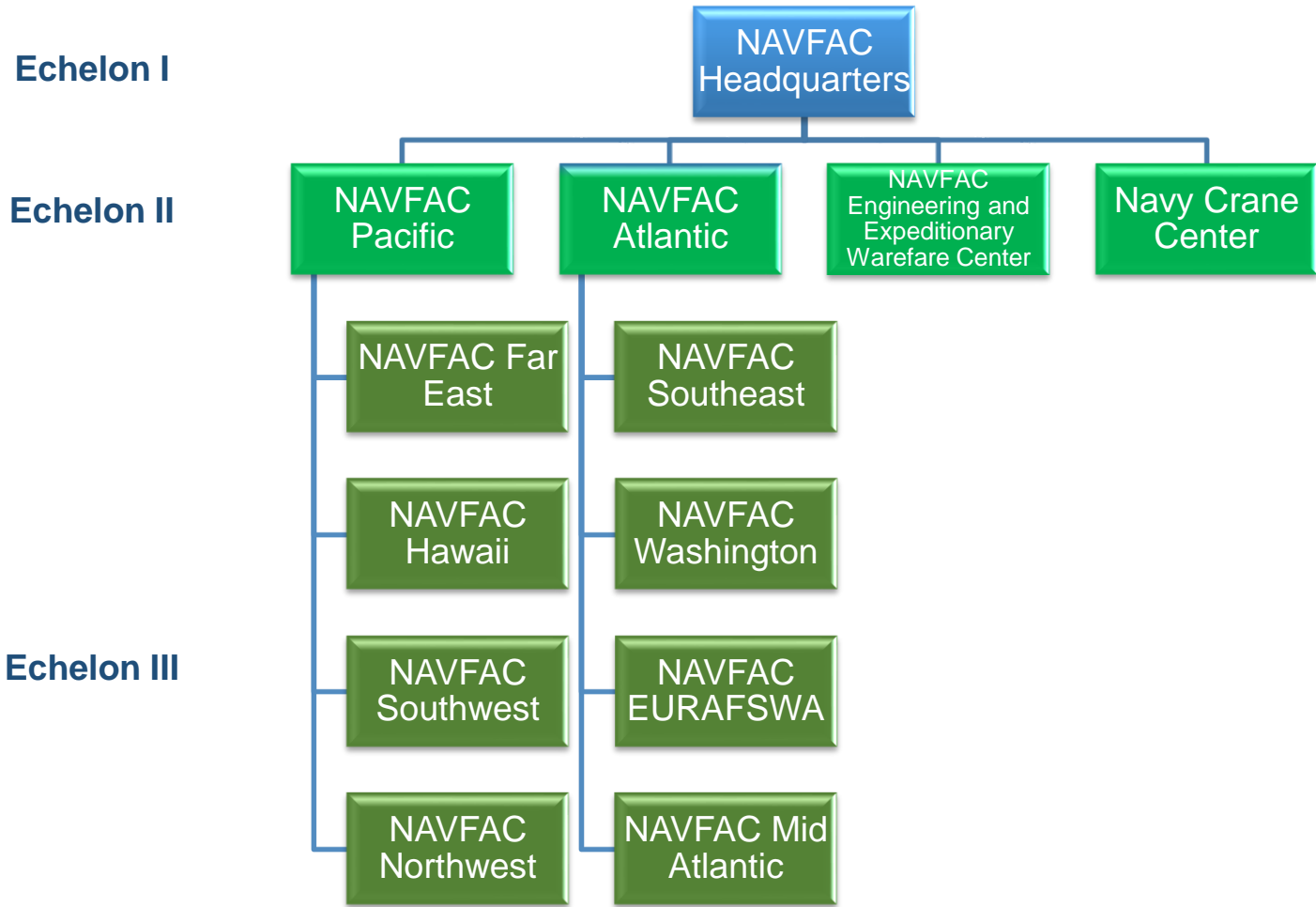
***Presenter: Nguyen Truong,
Supervisor for NAVFAC Southwest PW
CORE, Utilities and Energy Management
(UEM) Contracting***

Agenda



- ***Navy and NAVFAC Southwest Overview***
- ***Utility and Energy Management Contracting Portfolio***
- ***Acquisition Strategy***
- ***Recent Projects with SDG&E***

NAVFAC Org Chart



Navy's Chief Sustainability Officer (CSO)



- **CSO Serial One – Infrastructure**
- **CSO Serial Two - Water**
- **CSO Serial Three - Nature-Based Resilience**
- **CSO Serial Four - Sustainable Acquisition and Procurement**
- **CSO Serial Five - Shore Energy**
 - *Maximize third-party financing and Energy Resilience and Conservation Investment Program (ERCIP) Funds.*

<https://www.secnav.navy.mil/Climate/Pages/Resources.aspx>

Installation Overview



- **Utilities (PW6)**

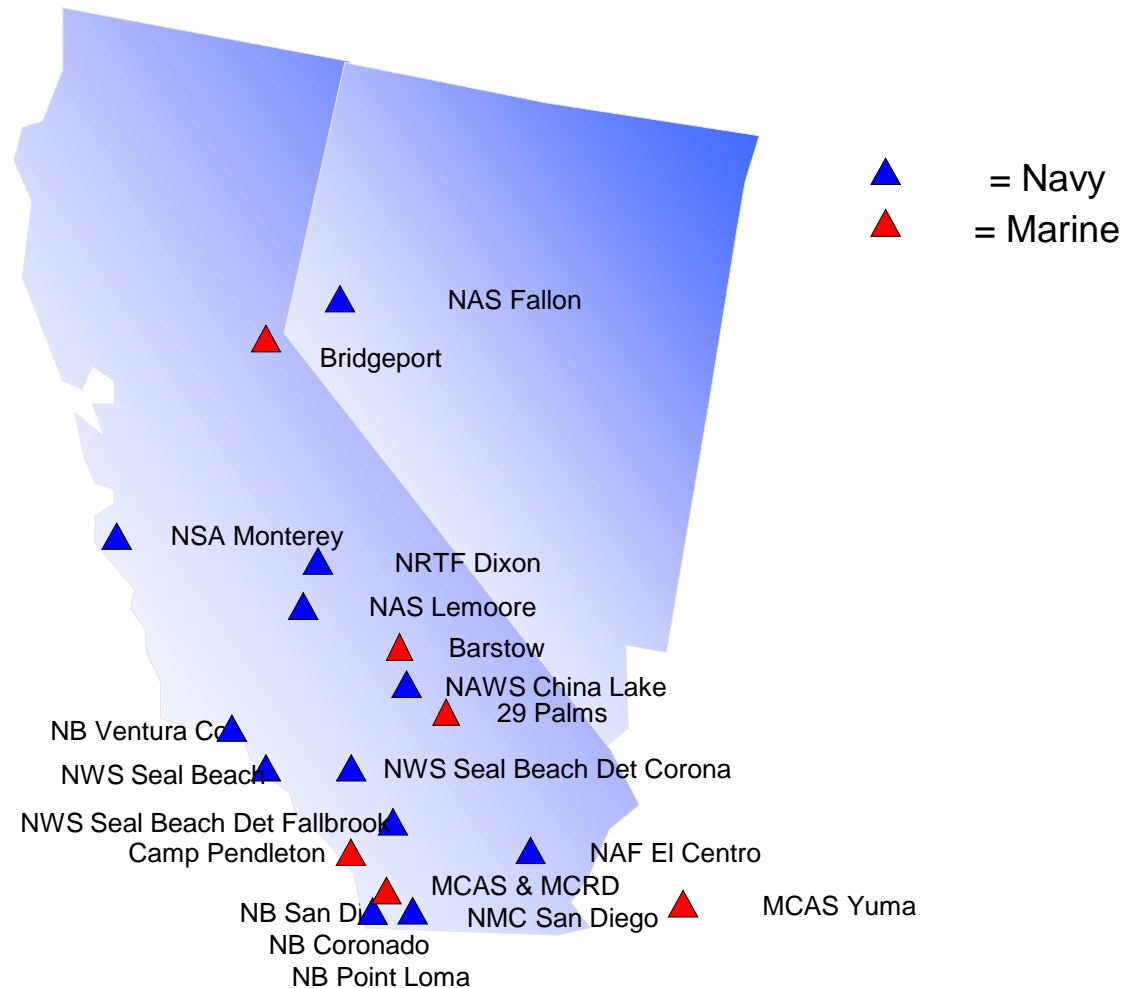
- Acquisition of Utilities Service Contracts, Interagency Agreement, or other type of arrangement; and
- Engineering and Planning Studies, Design, Project Review, Sustainment, Modernization, Resilience.

- **Energy (PW8)**

- Utility Energy Savings Contracts (UESC);
 - BOAs
- Administer PPAs

- **Miscellaneous**

- REM Services, PV Maintenance, IT buys, etc.



UESC Acquisition Strategy



- **FAR 16.703 - Basic Order Agreements (BOA)**
 - NOT A CONTRACT.
 - *Establishes the terms and conditions for future contracts (task orders).*
- **Justification and Approval (J&A) required for each task order.**
- **Mixture of funds; O&M, ERCIP, AFFECT Grant, and/or third-party finance.**
- **Key Terms and Conditions:**
 - Incentives for all UESC projects
 - Additional warranty labor or O&M services.
 - FAR 52.244-5, “Competition in Contracting”
 - Utility Companies allowed to hire Energy Service Companies (ESCO)
 - Certified Cost and Data
 - Buy American Act and Trade Agreement Acts Compliance

NAVFAC Southwest BOAs



- ***Four \$100M BOAs with 5-year duration.***
 - SDG&E
 - SoCalGas
 - PG&E
 - Southwest Gas (*In the works*)
- ***First right for refusal within franchise area.***
- ***Previous BOAs were \$30M NTE amount.***
- ***Larger UESC Projects due to ERCIP funds and Policies.***
- ***Long-term relationship with our Utility Partners.***

Recent SDG&E UESC Projects



UESC Projects	Award Value	Annual Savings Energy	Annual Savings Water	Energy Saving (MBtu)	Water Savings (kGal)
Camp Pendleton 23	\$ 27,140,239	\$ 1,360,566	\$ 190,932	35,127	56,322
Camp Pendleton 19.1	\$ 12,945,336	\$ 1,202,228	\$ -	45,896	0
Miramar	\$ 16,971,924	\$ 611,469	\$ 2,441	15,788	720
Total	\$ 57,057,499	\$ 3,174,263	\$ 193,373	96,811	57,042

- **NB San Diego, NB Point Loma, and NB Coronado.**

- **Miramar UESC**

- LED and HID retrofit for buildings and street lights, heat pumps, pool filtration pumps, efficient cooling tower, boilers, and air-cooled chillers.

- **Camp Pendleton 19.1**

- Install Advanced Metering Infrastructure (AMI) and Supervisory Control and Data Acquisition (SCADA), LED and HID retrofit, replace Direct Digital Control equipment and replace boilers.

- **Camp Pendleton 23**

- Support Authorization to Operation and install for facility related control systems, AMI, SCADA, DDC.
 - Replace boilers and hot water storage tanks, and optimize heat pumps.
 - Cybersecurity and Risk Management Framework.

Summary



- ***NAVFAC Southwest***
- ***Navy's CSO memos***
- ***UEM Contracting Portfolio***
- ***Acquisition Strategy***
- ***Projects with SDG&E***

CONTACT INFO

nguyen.h.truong.civ@us.navy.mil

(619) 705-4873



Leveraging GSA Areawide Contracts (AWCs)

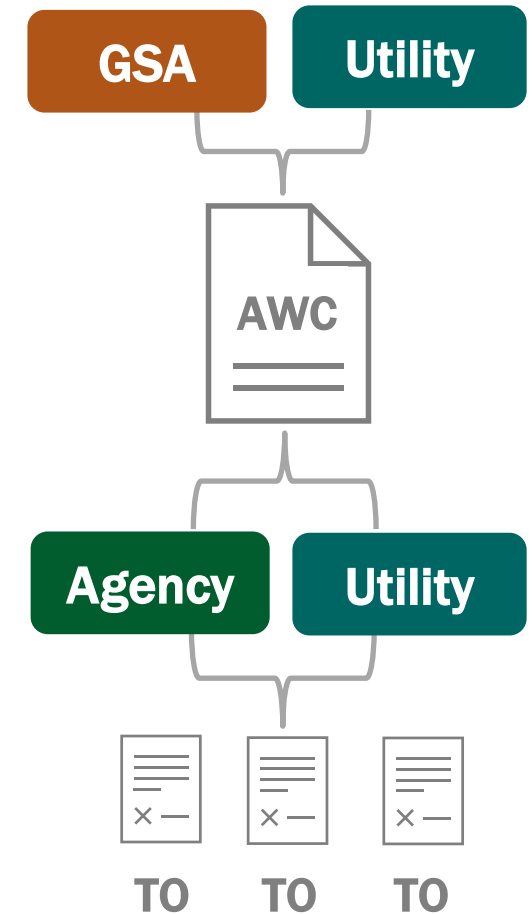
Ebony Atkinson

Chief, Public Utility Branch | Senior Contracting Officer
GSA

Areawide Contracts (AWCs) for Utility Services

GSA negotiates Areawide contracts (AWCs) with public utilities on behalf of the Federal Government to streamline procurement of utility services.

- GSA has Statutory Authority under 40 U.S.C 501
 - DOD and DOE have permanent delegations
 - Veterans Affairs has authority for interconnection charges
- Contract Term - 10 years (25 years for UESCs)
- FAR Part 41 requires agency use available AWC unless head of contracting authority (HCA) determines otherwise
- AWC bilaterally signed by GSA and utility
- Exhibits for services signed by agency and utility
- Delegation required when there is no AWC



AWC Exhibits/Authorizations

Authorization for Electric Service

Nature of Service

- Connect
- Change
- DSM Work
- Line Extension, Alteration, Relocation or Reinforcement
- Special Facilities

Examples: EV Infrastructure, Advanced Meters

Authorization for Natural Gas Service

Nature of Service

- Connect
- Change
- Continue service
- Line Extension, Alteration, Relocation or Reinforcement
- Transportation
- Billing & Ancillary Services

Example: Installation of gas line

Authorization for Energy Management Services

Nature of Service

- Preliminary Energy Audit
- Investment Grade Audit
- Engineering & Design Study
- Energy Conservation Project Installation
- Demand Side Management Project

Examples: Lighting and Chiller Retrofits, Recommissioning, HVAC

Authorization for Provisions of Services Under (insert appropriate Regulatory Authority)

Nature of Service

- _____ Interconnection of the Ordering Agency's renewable energy project

Examples: Interconnection of PV System



Authorizations for Electric or Natural Gas Service

Used to obtain utility service and implement infrastructure projects that don't typically result in savings.

Authorization for Electric Service

Nature of Service

- Connect
- Change
- DSM Work
- Line Extension, Alteration, Relocation or Reinforcement
- Special Facilities*

Authorization for Natural Gas Service

Nature of Service

- Connect
- Change
- Continue service
- Line Extension, Alteration, Relocation or Reinforcement
- Transportation
- Billing & Ancillary Services

* *Special Facilities includes a variety of measures not otherwise listed in the Exhibit*



Authorization for Electric Service: Project Examples

- EV Infrastructure
- Advanced Meters
- Solar Arrays
- Conversion of overhead lines to underground
- Utilities hardening
- Emergency & back-up generation
- Customer-owned substation and distribution system upgrades
- Distribution system mapping
- Osmose pole inspections/replacements
- Emergency restoration/repairs
- Redundant/alternate feeder
- Infrared scan
- Line extensions
- Lightning protection



Using the EMSA for UESCs

The Authorization for Energy Management Services (EMSA) is used to award UESCs under an AWC.

- **UESC services include:**
 - Project development - preliminary assessment, investment grade audit
 - Task order award - engineering and design, ECM installation
- **How does it work?**
 - Agency and utility agree upon the scope, deliverables, and cost for the service
 - Agency completes EMSA form and attaches task order
 - Agency sends EMSA and customer agreement form to Utility for signature



EMSA Example

EXHIBIT "B"

AUTHORIZATION FOR ENERGY MANAGEMENT SERVICES

CONTRACT NO. **47PA0420D0006**

Ordering Agency: _____

Address: _____

Pursuant to Contract No. 47PA0420D0006 between the Contractor and the United States Government and subject to all the provisions thereof, service to the United States Government under such contract shall be rendered and subject to all the provisions thereof. This Authorization for Energy Management Services (EMS) including any attachments listed below and any FAR provisions checked below and incorporated herein by reference, shall together with the referenced Areawide Contract form one single integrated agreement.

PREMISES TO BE SERVED: _____

SERVICE ADDRESS: _____

- NATURE OF SERVICE:
- | | |
|---|---|
| <input type="checkbox"/> Energy Audit, | <input type="checkbox"/> Comprehensive Energy Audit |
| <input type="checkbox"/> EMS Engineering and Design, | <input type="checkbox"/> EMS Installation |
| <input type="checkbox"/> Demand Side Management (DSM) Project, | <input type="checkbox"/> Standby Generation |
| <input type="checkbox"/> Demand Response/Load Control Participation | <input type="checkbox"/> Other (See Remarks Below) |
| <input type="checkbox"/> ECP Feasibility Study | |
| <input type="checkbox"/> ECP Engineering & Design Study | |
| <input type="checkbox"/> Energy Conservation Project (ECP) | |



Leveraging the AWC

Steps for using AWCs for obtaining utility services:

- Obtain copy of AWC
 - AWC List: [Download Contracts/ Modifications | GSA](#)
- Complete applicable authorization form for utility services
 - Ensure applicable clauses are incorporated
- Complete necessary standard forms (SF) and customer agreement
 - Include applicable rate schedule and tariff options
- Send Authorization and customer agreement form to Utility for signature/Agency should fully execute documentation

KEY REQUIREMENT

- Send signed forms to GSA for archiving
- FAR 41 requirement and important part of the process
- Copies of all agreements should be sent to GSA (energy@gsa.gov)



Know a Utility who wants to establish an AWC?

Utilities should start by contacting GSA (energy@gsa.gov) to start the conversation.

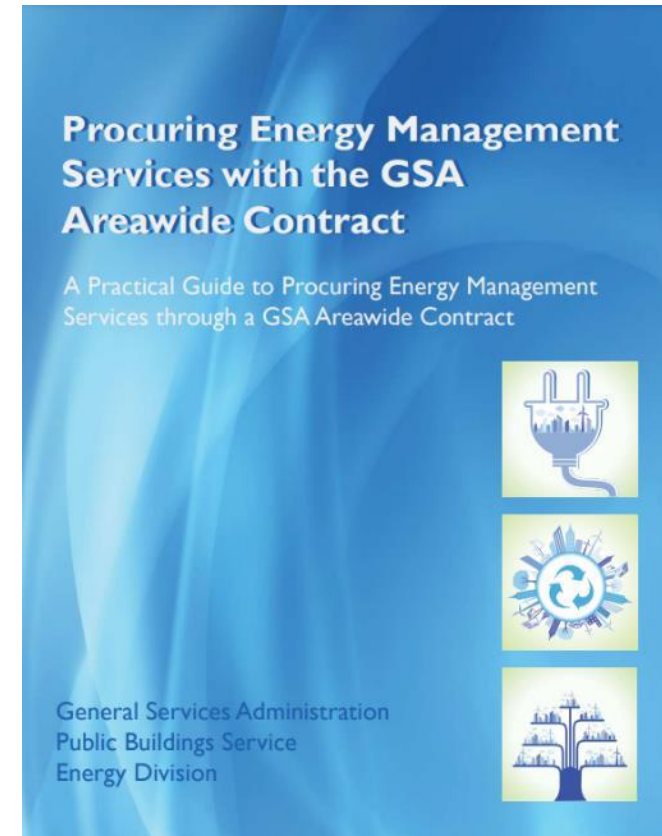
- **GSA works with Utility to decide whether an AWC is appropriate to pursue**
 - Considerations include objectives, number of federal customers, and total federal load
- **Review basic requirements and obligations under an AWC**
 - Including terms and conditions, key articles and contract clauses, and annual subcontracting reporting
- **Access templates for starting the AWC process**
 - Areawide Agreement, Small business subcontracting plan



GSA AWC Resources

GSA Energy Library - Utility Areawide Contracts

- Utility AWC Listing
- Procurement Guide for Public Utility Services
- Utility Areawide Guide
- Procuring Energy Management Services with the GSA AWC
- Sample EV Charging Infrastructure Exhibits (coming soon)



20-Minute Break



SD EnergyLink

Cash Incentives for Energy-Efficiency Projects

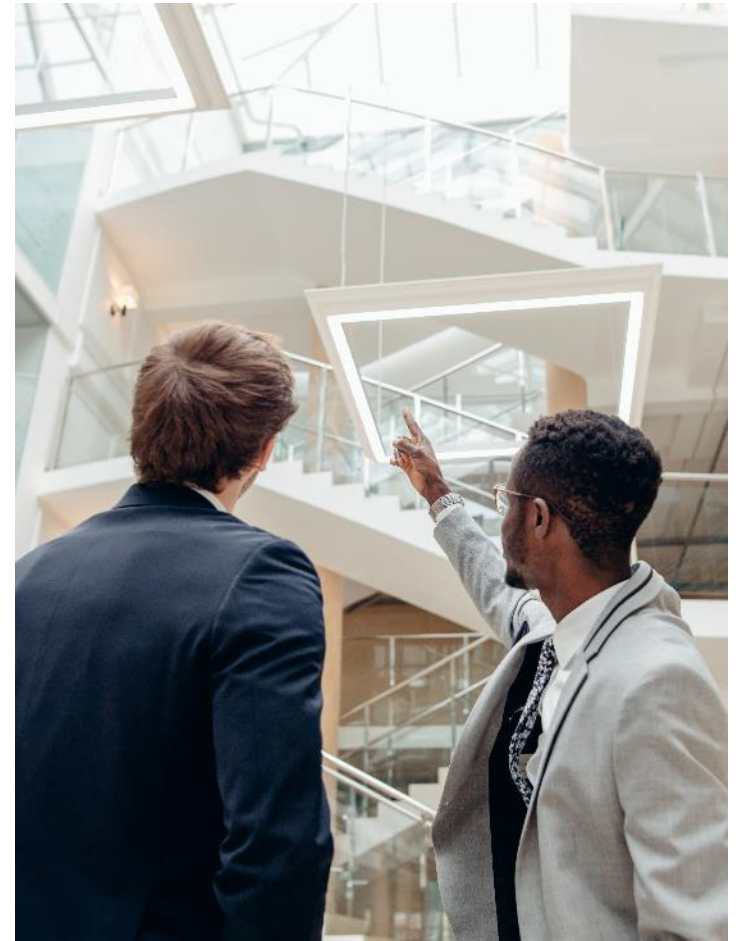
April 2024



Who is SD EnergyLink?

The SD EnergyLink program offers incentives and rebates for energy-saving projects involving the retrofit or installation of energy consuming equipment.

- **Part of SDG&E's energy efficiency portfolio**
 - For federal customers and customers on tribal lands
- **Implemented by TRC Companies**
 - Sole third-party implementer for this sector
- **Services are at no-cost to the customer**



Common Business Types



**DOD/Military
Facilities**



**Federal
Government**



Tribal Nations

- **DoD / Military Facilities**

- San Diego county has the largest concentration of military installations in the United States

- **Federal Government**

- GSA
- Law Enforcement
- Postal Service

- **Tribal Nations**

- 18 recognized tribes in SDG&E service territory – largest in nation

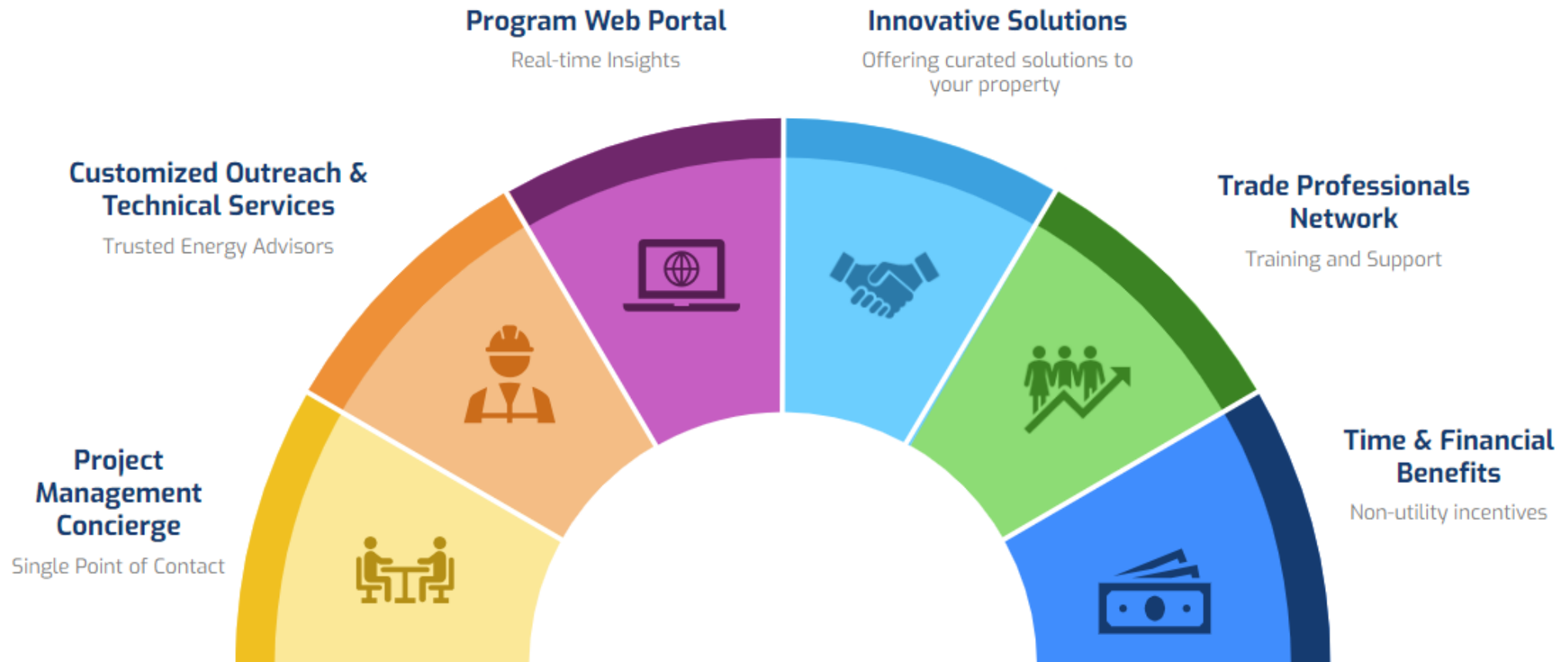
Program Service Territory

SD EnergyLink Coverage Area

- Must be an existing SDG&E® customer on federal property or Native American lands
- Billing must be based on a qualifying rate schedules AL-TOU, AL-TOU2 and/or schedule GN-3
- If you are an existing SDG&E customer but do not meet the above criteria, contact SDG&E's energy service center at 1-800-644-6133



Additional Program Benefits



Fast-track Incentives

Deemed

- Predetermined fixed incentives for qualified equipment
- Does not require any measurement or verification, can be applied retroactively
- Simple plug and play process



Custom Incentives

- Pre-approval required
- Measures that do not align with Deemed offering
- Focused on customers with unique needs



Direct Install

- Low- to no-cost energy-saving products
- Low- to no-cost energy assessments
- Energy-saving equipment is installed at low- to no-cost



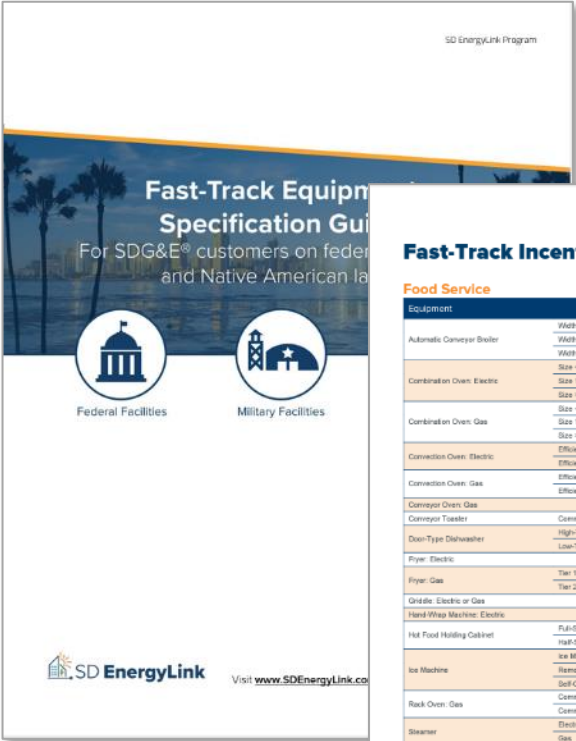
Normalized Metered Energy Consumption (NMEC)

- Multiple Energy Efficiency measures resulting in over 10% energy reduction
- NMEC projects typically yield higher savings
- One year pre- and post- M&V required



Fast-Track (Deemed) Incentives

- Efficient measures paid at a fixed dollar amount per-unit
- No pre-approval required (qualified equipment can be installed before submitting an incentive application to TRC).
- Applications must be submitted to the SD EnergyLink program within 90 days of the project's installation date or before December 8 of current program year, whichever is sooner, to qualify for current year rates.
- Applications submitted after December 8 are subject to change based on next year rates
- **See full list of incentives**



SD EnergyLink Program

Fast-Track Equipment Specification Guide
For SDG&E® customers on federal and Native American lands

Federal Facilities Military Facilities

SD EnergyLink Visit www.SDEnergyLink.com



SD EnergyLink Program

Fast-Track Incentives List

Food Service

Equipment	Incentive
Automatic Conveyor Broiler	Watt <20 inches \$2,500 per unit Watt 20 - 25 inches \$3,125 per unit Watt >25 inches \$3,650 per unit
Combination Oven: Electric	Size <15 Pan Model \$1,975 per unit Size 15 - 26 Pan Model \$2,275 per unit Size >26 Pan Model \$2,775 per unit
Combination Oven: Gas	Size <15 Pan Model \$1,500 per unit Size 15 - 26 Pan Model \$2,000 per unit Size >26 Pan Model \$3,000 per unit
Convection Oven: Electric	Efficient, Half-Size \$350 per unit Efficient, Full-Size \$288 per unit
Convection Oven: Gas	Efficient, Half-Size \$180 per unit Efficient, Full-Size \$275 per unit
Conveyor Oven: Gas	\$750 per unit
Conveyor Toaster	\$650 per unit
Door-Type Dishwasher	High-Temperature \$650 per unit Low-Temperature \$450 per unit
Fryer: Electric	\$176 per unit
Fryer: Gas	Tier 1 \$672 per unit Tier 2 \$1,000 per unit
Griddle: Electric or Gas	\$225 per installed linear foot
Hand-Wrap Machine: Electric	\$288 per unit
Hot Food Holding Cabinet	Full-Size \$163 per unit Half-Size \$85 per unit
Ice Machine	Ice Maker Head (IMH) \$75 - \$300 per unit Remote Condensing Unit (RCU) \$225 - \$375 per unit Self-Contained Unit (SCU) \$60 - \$125 per unit
Rack Oven: Gas	Commercial, Single-Rack \$645 per unit Commercial, Double-Rack \$1,170 per unit
Steamer	Electric \$1,000 per unit Gas \$1,800 per unit
Underfoot Brazer	\$400 per installed linear foot
Undercounter Dishwasher: High-Temperature	Gal/Rack <0.86, Site Energy Rate <0.50 kWh \$250 per unit Gal/Rack <0.73, Site Energy Rate <0.43 kWh \$264 per unit
Undercounter Dishwasher: Low-Temperature	Gal/Rack <1.19, Site Energy Rate <0.50 kWh \$162 per unit Gal/Rack <1.01, Site Energy Rate <0.43 kWh \$250 per unit

Table of Contents

Fast-Track Equipment Specification Guide 2022v1 | 1

Fast-Track Rebate Process



1. Equipment Purchase

You purchase the equipment, making sure it complies with all requirements (we can help). Then install.



2. Submit Application

You submit the Online Application (OLA) with the required Documentation



3. Application Review

Program team reviews and completes the paperwork



4. Signature Stage

Paperwork will be sent to you for final signature



5. Rebate Issuing

Rebate check will be issued and sent to you

● - - - **Customer defined**
Must be within 90 days of install

● ————— **1-2 months**
upon application submission

Electrification Measures

- Building Electrification is replacing fossil fuel powered appliances with electrically-powered equivalents, **also known as fuel substitution**
- **Can help fulfill DOD and DOE electrification mandates**
- Benefits of electrification:
 - Improved indoor air quality
 - More energy-efficient appliances
 - Reduces greenhouse gas emissions
- Popular Measures
 - **Heat Pump Water Heaters**
 - **Convection Ovens**
 - **Combination Ovens**
 - **HVAC Heat Pumps**



- **Gas saving measures are inexpensive, easy-to-install, and lower utility bills**
- **Popular Measures**
 - **Hot Water Tank and Pipe Insulation**
 - Reduce heat loss from water systems
 - **Hot Water Loop Temperature Controllers**
 - Assesses when hot water is needed and regulates equipment operation to better match demand
 - Most suitable for anything with more than 50 rooms



Software-Controlled Switch Reluctance Motor

- **40% of energy** used in commercial buildings **is from HVAC equipment**
- **Switch reluctance motors, powered by Turntide, run optimal sequences to ensure minimal energy use**
 - Reduce HVAC energy use by an average of 64%
- Benefits to switch reluctance motors
 - Good ROI energy project with low cost and good savings
 - Lowers environmental impact
 - Can help accelerate corporate ESG goals
- Suitable for any building with packaged roof top units (RTUs)



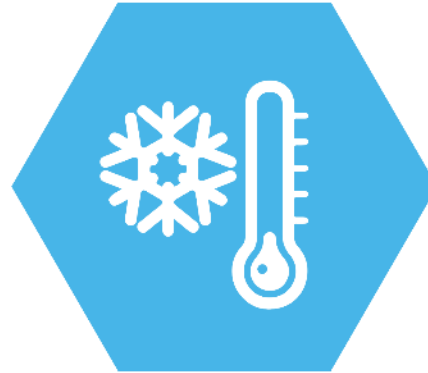
- No current deemed rebates for interior lighting
- Rebate now available for exterior lighting
- **UL Type B LED Mogul Base Lamp HID Retrofits for Outdoor**
 - Can reduce energy consumption while using existing fixtures and maintain aesthetics
- Most suitable for parking lots and exterior walkways



Custom (Pre-Approval) Incentives

If your project is not on the Fast-Track list, you can apply for a custom incentive!

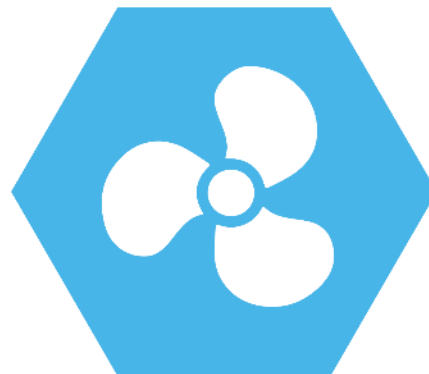
Cooling



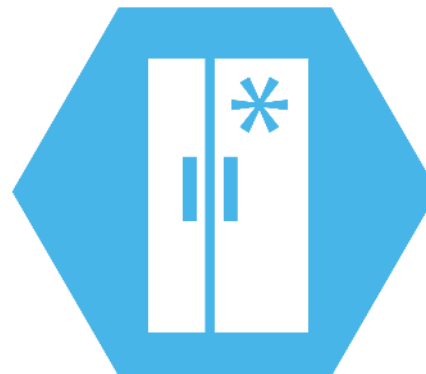
Building Shell



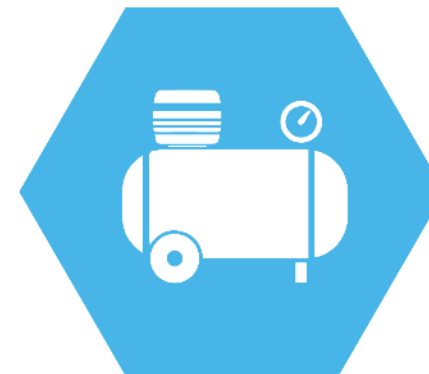
Ventilation



Refrigeration

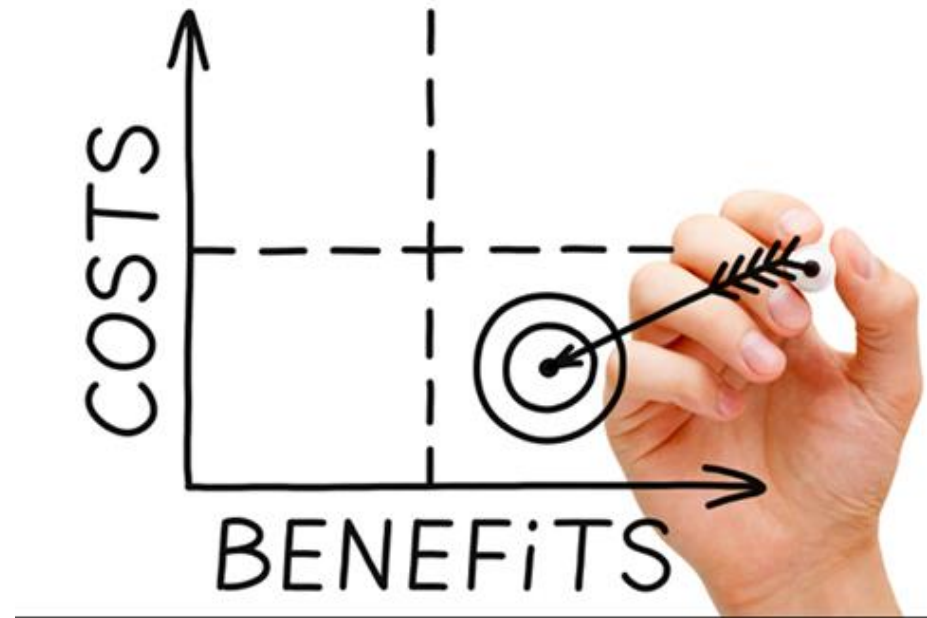


Air Compression



Custom (Pre-Approval) Incentives

- Project measures must demonstrate reliable and cost-effective energy-savings potential in the proposed use and site
- Equipment may not be purchased or installed before the customer signs and returns the Pre-Approval Incentive offer form and SDG&E issues Notice to Proceed (NTP).
- Custom incentive rates vary based on the total system benefit (TSB) of the project and are paid on a \$/TSB basis.



Custom Incentive Process



1. Assessment

SD EnergyLink meets with you for a no-cost energy audit or to identify opportunities. SD EnergyLink will review the preliminary analysis with you prepare necessary reports



2. Application

You sign the program participation agreement and SD EnergyLink submits required paperwork to SDG&E for review and approval



3. Installation

You install project based on approved parameters



4. Verification

SD EnergyLink verifies project completion and submits final report



5. Incentive Issuing

Final paperwork is processed, and incentive is delivered



3+
months



Customer
defined



2+
months

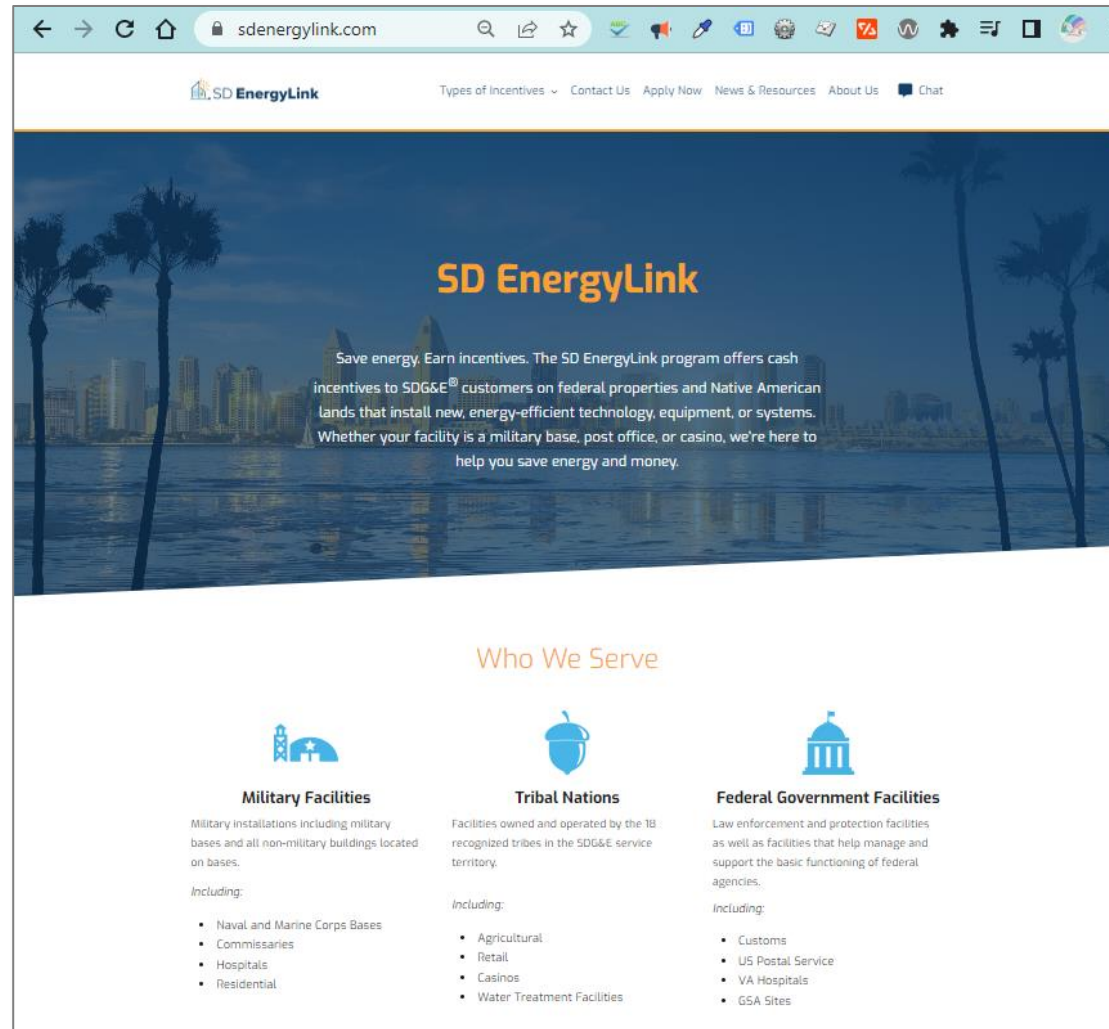


Timeline varies based on several factors, including scope of project, project complexity or installation timeline. CPUC selected projects will require additional review time

SD EnergyLink Website

Program Site

- Online Application Portal - OLA
- Fast-Track (Deemed) Catalog with estimated rebate amounts
- Related News & Resources



<https://www.sdenergylink.com>



How to apply

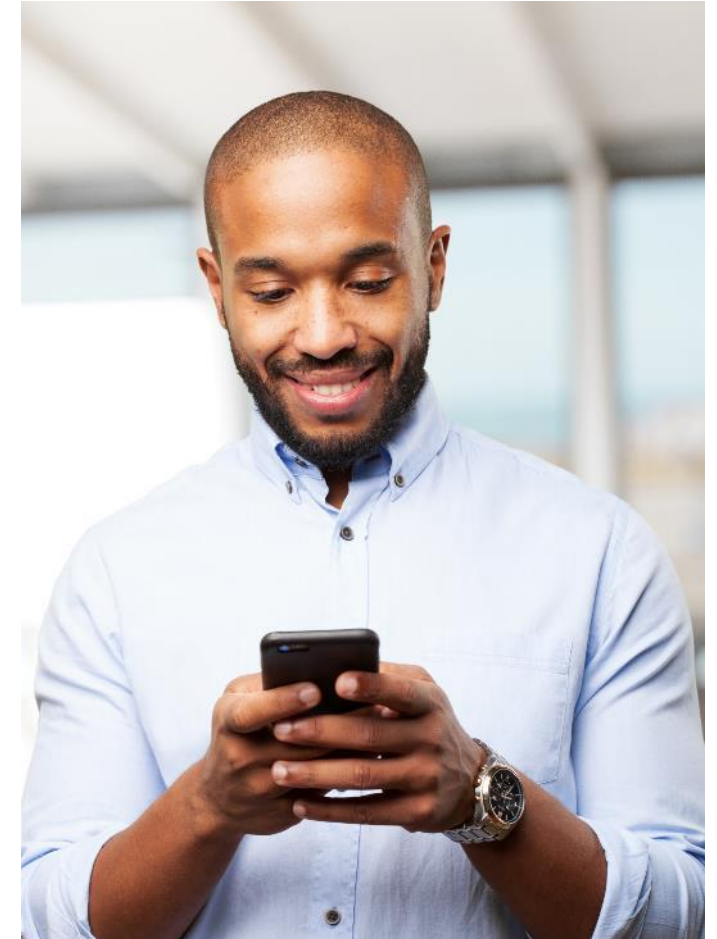
Scan the QR code for more detailed information on the SD EnergyLink application process.



Get in Touch

SD EnergyLink offers **no cost** energy assessments, contact us to learn more:

sdenergylink.com/contact-us



Outreach team available to support



Shawnda Garnett

SGarnett@trccompanies.com



Russell Stevens

RStevens@trccompanies.com



Howard Tapper

HTapper@trccompanies.com

Thank you!



Get in touch

1-844-600-2367

connect@sdenergylink.com



Emergency Load Reduction Program (ELRP) Summer 2024

Brad Mantz

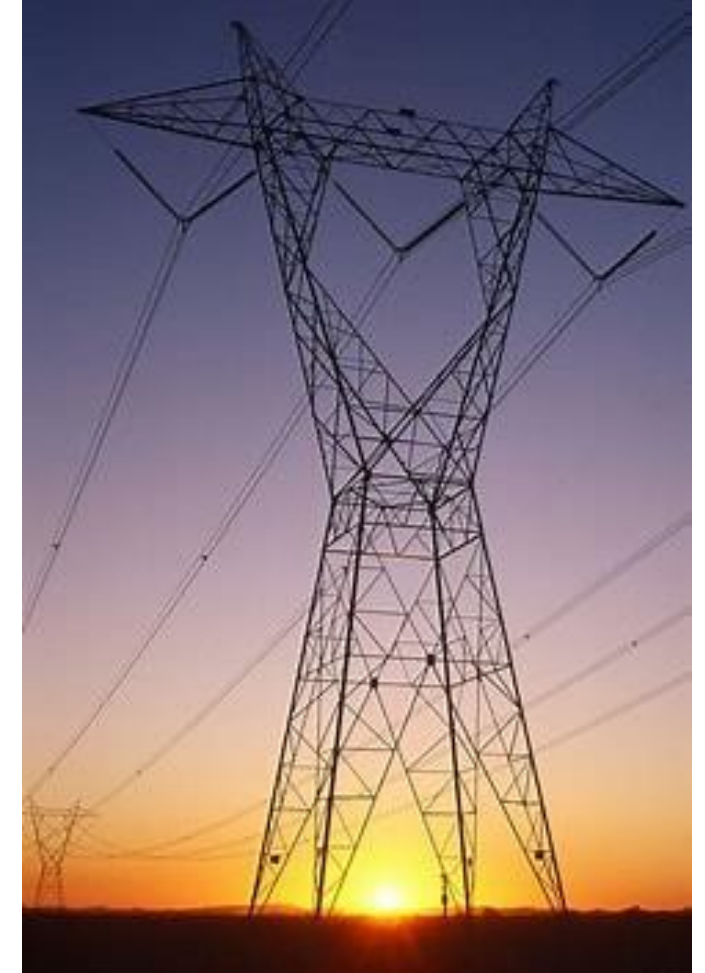
ELRP Overview 2024

- The ELRP was launched summer 2021 per CPUC decision.
- The goal of the ELRP is to support the grid during times of high grid need and emergencies.
- The ELRP is currently approved by the CPUC through the end of **2027**.
- **The ELRP is open to all residential or commercial customers in SDG&E's service area.**
- In 2022 the CAISO had 10 straight days of flex alerts and 9 ELRP A.1 (Non-Residential) events during 8/31- 9/9.
- In 2023 ELRP A.1 was activated 3 times for a total of 5 hours.



ELRP Subgroup A.1 Non-Residential Customer Program

- Incentivizes commercial and industrial customers to shed load when an ELRP event is called.
- Events are triggered by the CAISO when they issue an Energy Emergency Alert (EEA) Watch or Notice.
- **Events can be called:**
 - **May – October**
 - **4 pm. to 9 p.m.**
 - **Event duration is 1 to 5 hours**
 - **One event per day**
 - **Can be called either Day Ahead and Day Of**
- Eligible customers will be **paid \$2 kWh** for verified load shed per the CPUC approved Terms and Conditions.
- Participation is voluntary.



How to Sign up



Email Brad Mantz at BMantz@SDGE.com and we will help you get signed up.



Clean Transportation Programs



Chris Roberts
Sr. Customer Solutions Advisor



**IT'S EASY TO
LOVELECTRIC**

Power Your Drive *for Fleets*

Program Overview & Requirements

SDG&E helps install make-ready charging infrastructure for medium- and heavy-duty fleets

PROGRAM REQUIREMENTS



Demonstrate commitment to procure a minimum of 2 electric fleet vehicles



Demonstrate long-term electrification growth plan and schedule of load increase



Provide data related to charger usage for a minimum of **5 years**



Own or lease the property where chargers are installed, and **operate and maintain vehicles and chargers for minimum of 10 years**



PROGRAM OVERVIEW

\$107 million
budget over 5 years

3,000+ new EVs
on- and off-road Class 2-8

300+ customer sites
commercial and private fleets

LOVELECTRIC

Power Your Drive *for Fleets*

Eligible Vehicle Types



Program eligibility includes a diverse mix of on-road and off-road, medium- and heavy-duty vehicle types

MEDIUM DUTY



Delivery & shuttle (Class 2-6)
>6,000 LBs

HEAVY DUTY



Transit (Class 7-8)



School bus (Class 6-7)



Goods movement (Class 7-8)



Other (Class 7-8)

OFF-ROAD



Truck stop electrification



Transport refrigeration units



Yard trucks



Airport ground support equipment



Forklifts (Class 2 or higher)
>6,000 LBs



LOVELECTRIC

State and Local Government Requirements

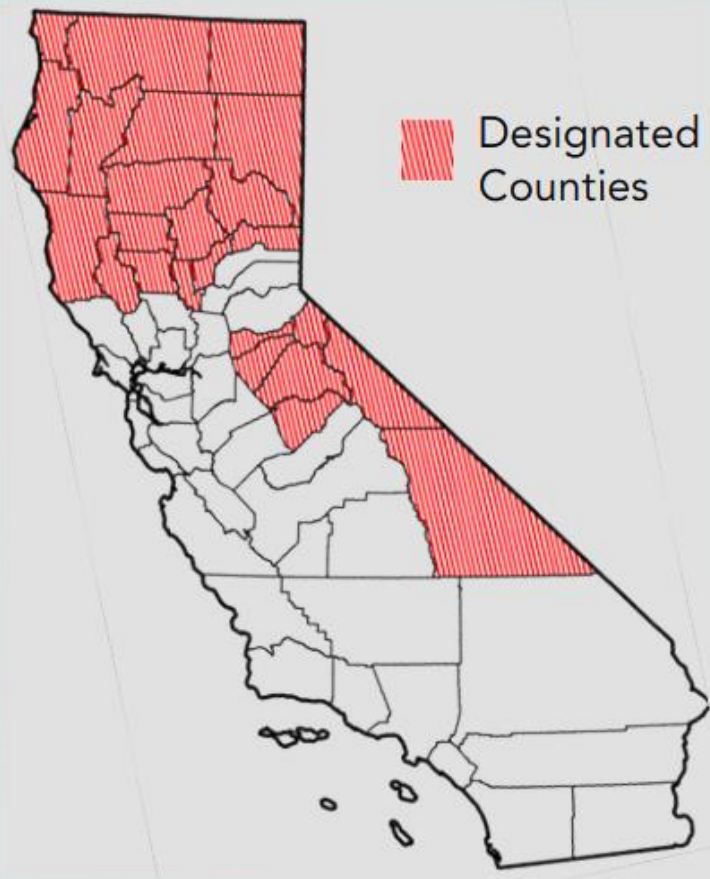
2024-2026

January 1, 2027

50 percent of purchases must be ZEV or NZEV

All purchases must be ZEV or NZEV

- Agencies in designated counties and divisions with 10 or fewer trucks exempt until 2027
- May use exemptions and extensions



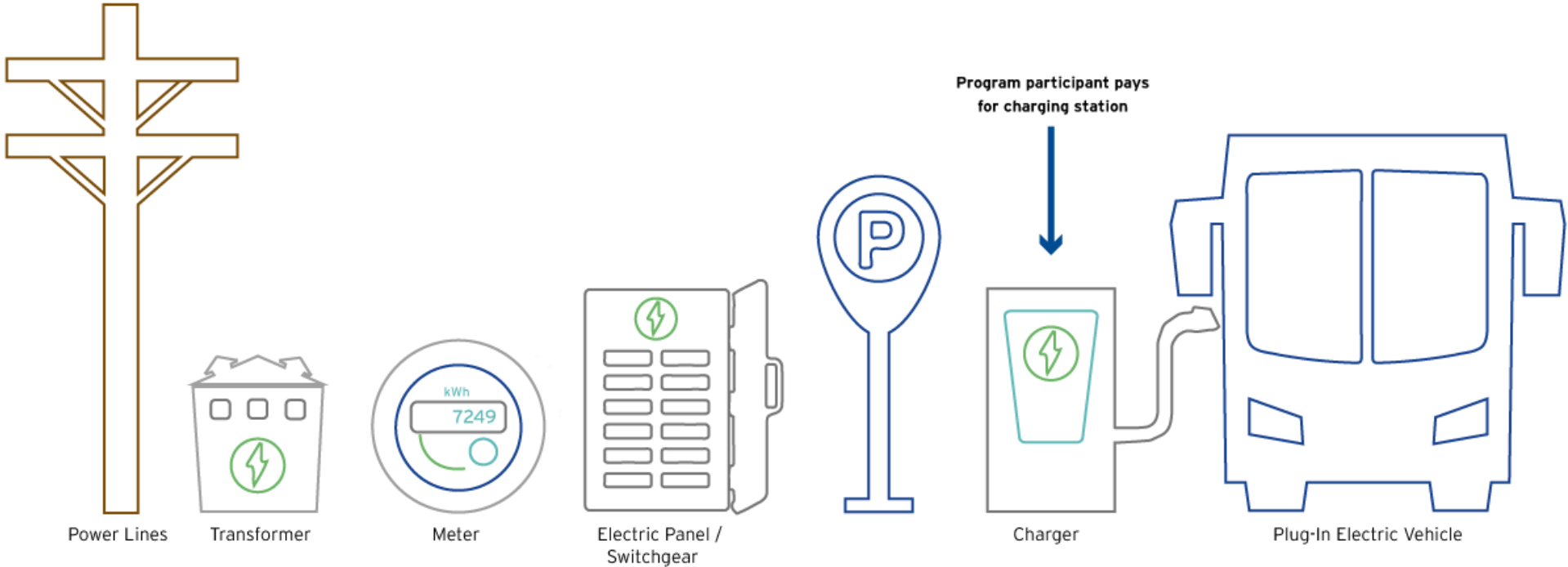
Optional ZEV Milestone Phase-in

- Open to High Priority and State and Local Government fleets
- Must meet ZEV milestones as a percent of total fleet
- Flexibility to add new or used ICE vehicles meeting cleanest engine requirements

Zero-Emission Fleet Percentage	10%	25%	50%	75%	100%
Group 1: Box trucks, vans, 2-axle buses, yard trucks, light-duty package delivery vehicles	2025	2028	2031	2033	2035
Group 2: Work trucks, day cab tractors, 3-axle buses	2027	2030	2033	2036	2039
Group 3: Sleeper cab tractors and specialty vehicles	2030	2033	2036	2039	2042

Power Your Drive for Fleets

Installation & Ownership Options



Option 1:

SDG&E-Owned Infrastructure



SDG&E pays for, constructs, owns and maintains all infrastructure up to the charging station

Customer owns & pays for charging stations; charger rebates may apply

Option 2:

Customer-Owned Infrastructure

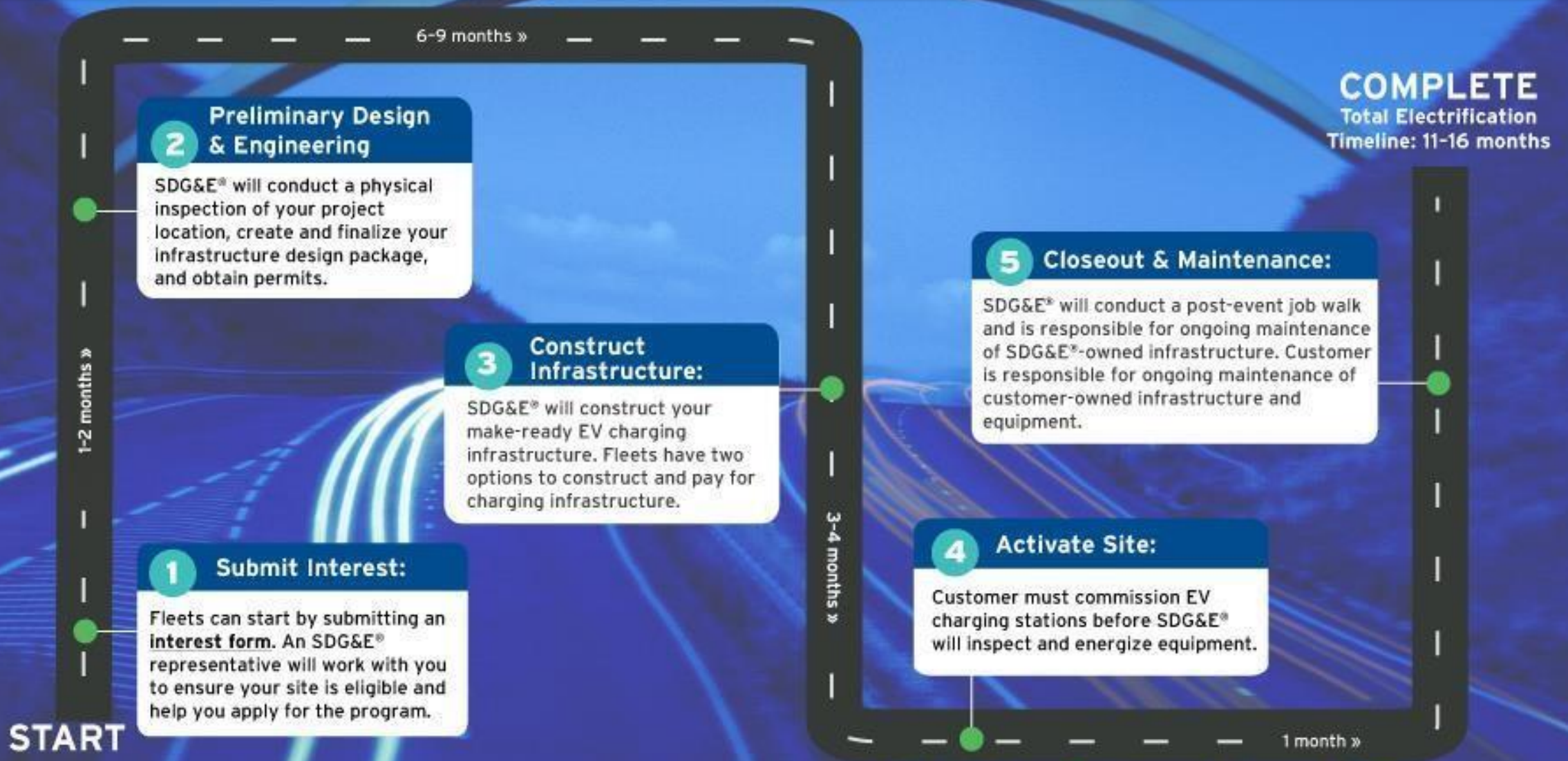


SDG&E pays for, constructs, owns and maintains infrastructure to the meter

Customer pays for, constructs, owns and maintains infrastructure behind the meter for a rebate of up to 80% of the costs; owns & pays for charging stations; charger rebates may apply

Power Your Drive *for Fleets*

Installation & Ownership Options



Power Your Drive *for Fleets*

Fleet-Friendly Pricing & Charger Rebates



Who is eligible for the charger rebate?

- School buses
- Transit buses
- Sites located in areas of opportunity

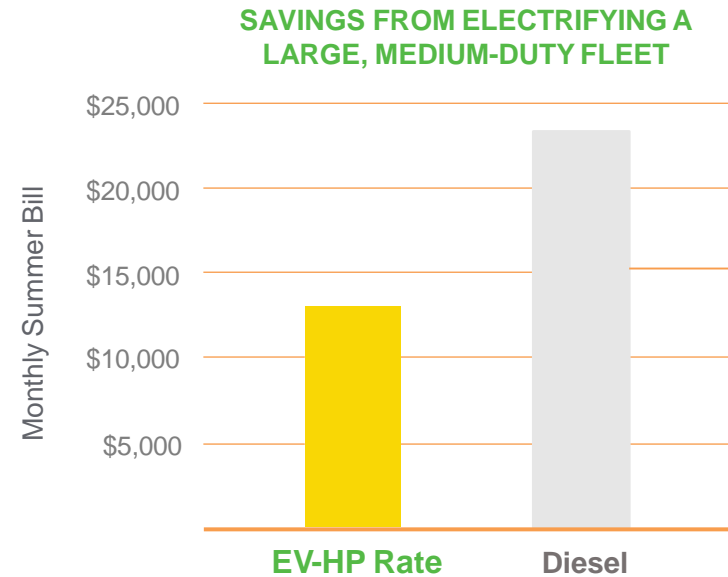
Maximum rebate amounts per charger power level

EVSE power	Max. rebate amount*
Up to 19.2kW	\$3,000 per charger
19.3kW up to 50kW	\$15,000 per charger
50.1kW up to 150kW	\$45,000 per charger
150.1kW and above	\$75,000 per charger

**Eligible sites will receive a rebate for each qualified charger for the lesser of 50% of the cost of the charger or the maximum amount based on power output as detailed above, not to exceed 50% of the cost of the charger.*

Benefits of the EV-HP Rate

- Eliminates Demand Charges
- Lower, Fixed Rates
- Simpler Billing Through a Monthly Subscription Plan



Eligible EV-HP customers have an opportunity to **save up to 50% on electricity costs** compared to the cost of fueling with diesel.



Available Rates for Medium & Large Commercial Customers (Effective 1/1/24)

Available Options ¹																							
Rate Type	EV-HP (SCHEDULE EV-HP)					EV-HP-CPP (SCHEDULE EV-HP-CPP)																	
Details																							
Eligibility	* This Schedule is optionally available to non-residential separately metered service to support charging of Electric Vehicles (EV), as defined in Special Condition 2, whose Monthly Maximum Demand equals, exceeds, or is expected to equal or exceed 20 kW. * Customers on this schedule whose Monthly Maximum Demand is less than 20 kW for three consecutive may optionally may choose Schedule EECC-TOU-A-P. In addition, customers may exercise the right to opt-out of the applicable dynamic rate (e.g., EECC-CPP-D or EECC-TOU-A-P) to EECC.					* EECC-CPP-D is the default commodity tariff for customers on EV-HP whose monthly maximum demand is not less than 20 kW for three consecutive months. * Critical Peak Pricing Default (CPP-D) is a commodity tariff that provides customers with an opportunity to manage their electric costs by either reducing load during high cost pricing periods or shifting load from high cost pricing periods to lower cost pricing periods. Except as set forth below, this Schedule is the default commodity rate for customers currently receiving bundled utility service on a commercial/industrial rate schedule for customers whose Maximum Monthly Demand is equal to or exceeds or is expected to equal or exceed 20 kW for twelve consecutive months.																	
Compare																							
Subscription Charge (\$/Month)		Less than or equal to 150 kW			Greater than 150 kW		Subscription Charge (\$/Month)		Less than or equal to 150 kW			Greater than 150 kW											
Secondary		\$30.68			\$76.71		Secondary		\$30.68			\$76.71											
Primary		\$30.52			\$76.31		Primary		\$30.52			\$76.31											
Basic Service Fee ² (\$/Month)		Less than or equal to 500 kW			Greater than 500 kW		Basic Service Fee ² (\$/Month)		Less than or equal to 500 kW			Greater than 500 kW											
Secondary		\$213.30			\$766.91		Secondary		\$213.30			\$766.91											
Primary		\$57.52			\$68.43		Primary		\$57.52			\$68.43											
Capacity Reservation Charge (CRC) (per kW)						Capacity Reservation Charge (CRC) (per kW)																	
Secondary						\$0.00						Secondary						\$1.73					
Primary						\$0.00						Primary						\$1.72					
Demand Charges (per kW)						Demand Charges (per kW)																	
Summer Maximum On Peak ^{3,5}						Summer Maximum On Peak ³						Summer Maximum On Peak ³											
Secondary						\$5.99						Secondary						\$0.00					
Primary						\$5.96						Primary						\$0.00					
SCHEDULE EV-HP Secondary Energy Charges																							
		UDC Total		WF-NBC + DWR-BC		EECC ⁶		Total Electric Rate		UDC Total		WF-NBC + DWR-BC		EECC-CPP-D ⁶		Non-Event Day Total Electric Rate		Critical Peak Pricing (CPP) Day Total Rate ⁴					
Summer (June 1 - October 31)																							
On-Peak		\$0.14244		\$0.00561		\$0.08642		\$0.23447		On-Peak		\$0.14244		\$0.00561		\$0.08642		\$0.23447		\$1.14714			
Off-Peak		\$0.05975		\$0.00561		\$0.05173		\$0.11709		Off-Peak		\$0.05975		\$0.00561		\$0.05173		\$0.11709		\$1.02976			
Super Off-Peak		\$0.05975		\$0.00561		\$0.04601		\$0.11137		Super Off-Peak		\$0.05975		\$0.00561		\$0.04601		\$0.11137		\$1.02404			
Winter (November 1 - May 31)																							
On-Peak		\$0.14244		\$0.00561		\$0.09658		\$0.24463		On-Peak		\$0.14244		\$0.00561		\$0.09658		\$0.24463		\$1.15730			
Off-Peak		\$0.05975		\$0.00561		\$0.05415		\$0.11951		Off-Peak		\$0.05975		\$0.00561		\$0.05415		\$0.11951		\$1.03218			
Super Off-Peak		\$0.05975		\$0.00561		\$0.04184		\$0.10720		Super Off-Peak		\$0.05975		\$0.00561		\$0.04184		\$0.10720		\$1.01987			
SCHEDULE EV-HP Primary Energy Charges																							
		UDC Total		WF-NBC + DWR-BC		EECC ⁶		Total Electric Rate		UDC Total		WF-NBC + DWR-BC		EECC-CPP-D ⁶		Non-Event Day Total Electric Rate		Critical Peak Pricing (CPP) Day Total Rate ⁴					
Summer (June 1 - October 31)																							
On-Peak		\$0.13620		\$0.00561		\$0.08600		\$0.22781		On-Peak		\$0.13620		\$0.00561		\$0.08600		\$0.22781		\$1.13979			
Off-Peak		\$0.05975		\$0.00561		\$0.05149		\$0.11685		Off-Peak		\$0.05975		\$0.00561		\$0.05149		\$0.11685		\$1.02883			
Super Off-Peak		\$0.05975		\$0.00561		\$0.04585		\$0.11121		Super Off-Peak		\$0.05975		\$0.00561		\$0.04585		\$0.11121		\$1.02319			
Winter (November 1 - May 31)																							
On-Peak		\$0.13620		\$0.00561		\$0.09614		\$0.23795		On-Peak		\$0.13620		\$0.00561		\$0.09614		\$0.23795		\$1.14993			
Off-Peak		\$0.05975		\$0.00561		\$0.05393		\$0.11929		Off-Peak		\$0.05975		\$0.00561		\$0.05393		\$0.11929		\$1.03127			
Super Off-Peak		\$0.05975		\$0.00561		\$0.04170		\$0.10706		Super Off-Peak		\$0.05975		\$0.00561		\$0.04170		\$0.10706		\$1.01904			

¹ Available Options pending eligibility & customer demand.

² Basic Service Fee will be determined each month based on the customer's maximum annual demand. If unavailable or less than 50% of 15-min. interval data is available, demand will be calculated by dividing total kWh by number of days in the billing period times 24 hours.

³ The On-Peak Period Demand Charges shall be applied to the highest demand recorded in the On-Peak periods during the bill cycle.

⁴ Critical Peak Pricing (CPP) Days apply from 4 PM to 9 PM when CPP events are called which can occur any day of the week year-round.

⁵ Summer Maximum On Peak Demand includes EECC demand charges, for detailed information refer to the tariffs at www.sdge.com/rates.

⁶ Unbundled customers are those who take generation from other providers, such as Direct Access (DA) or Community Choice Aggregation (CCA). Unbundled customers do not pay SDGE's commodity rates. The Total Energy Charge for an unbundled customer includes UDC, WF-NBC, DWR-BC, and Power Charge Indifference Adjustment (PCIA) rates. PCIA rates by vintage are included in the last page. Please see Schedules DA-CRS or CCA-CRS for more information regarding PCIA rates.



**Power Your Drive *for*
Workplaces,
Apartments and Condo**



**IT'S EASY TO
LOVELECTRIC**



Power Your Drive *for Apartments, Condos and Workplaces*

Program Targets



\$47.85 million
*in funding, including 10%
contingency for escalation*



200 Locations

*across San Diego,
serving 2,000 chargers*

Equity Target

*of 50% of sites located in
“Underserved Communities”*

\$18,000 per Port

average cost not-to-exceed

LOVELECTRIC

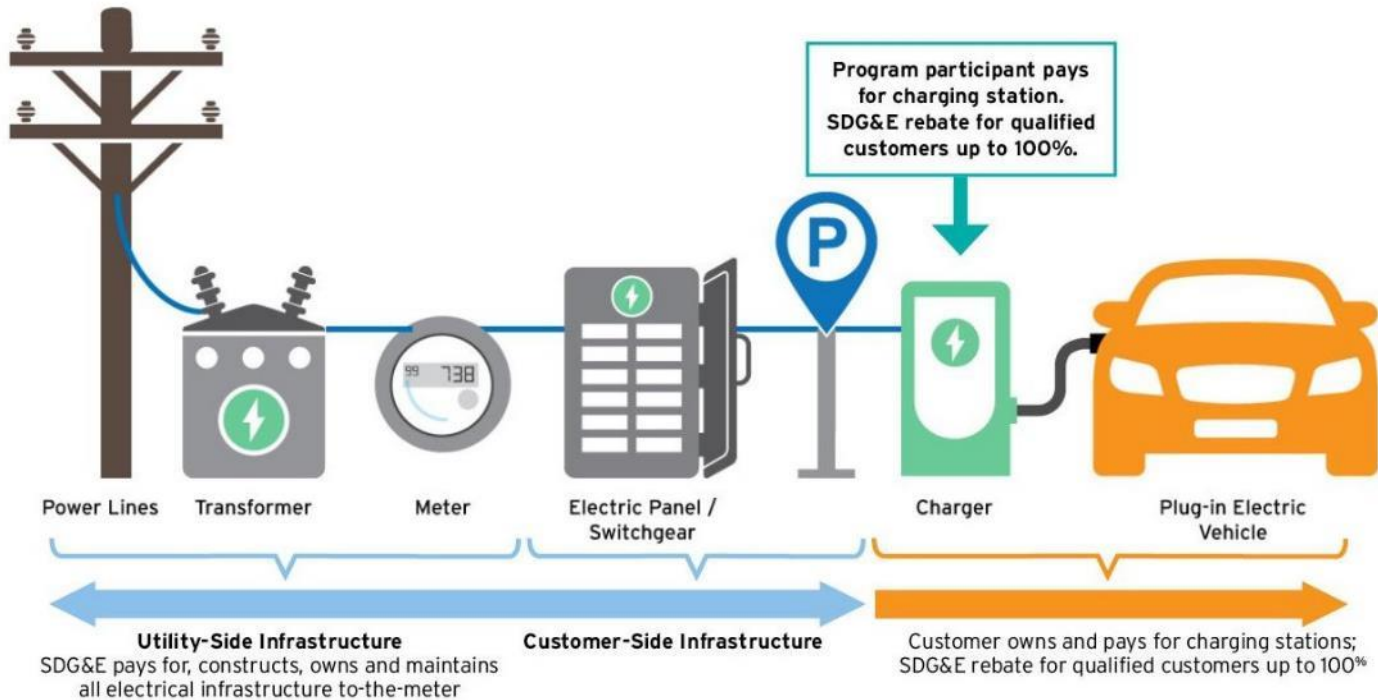
Power Your Drive for Workplaces

Infrastructure Installation Options



1) SDG&E-Owned Infrastructure, Customer-Owned Chargers

SDG&E pays for a significant portion of the costs



- ✓ SDG&E pays for, constructs, owns, and maintains all infrastructure up to the charging station
- ✓ Customer pays for, constructs, owns, and maintains charging station
- ✓ SDG&E provides a rebate for the cost of the charging station
- ✓ Easement required

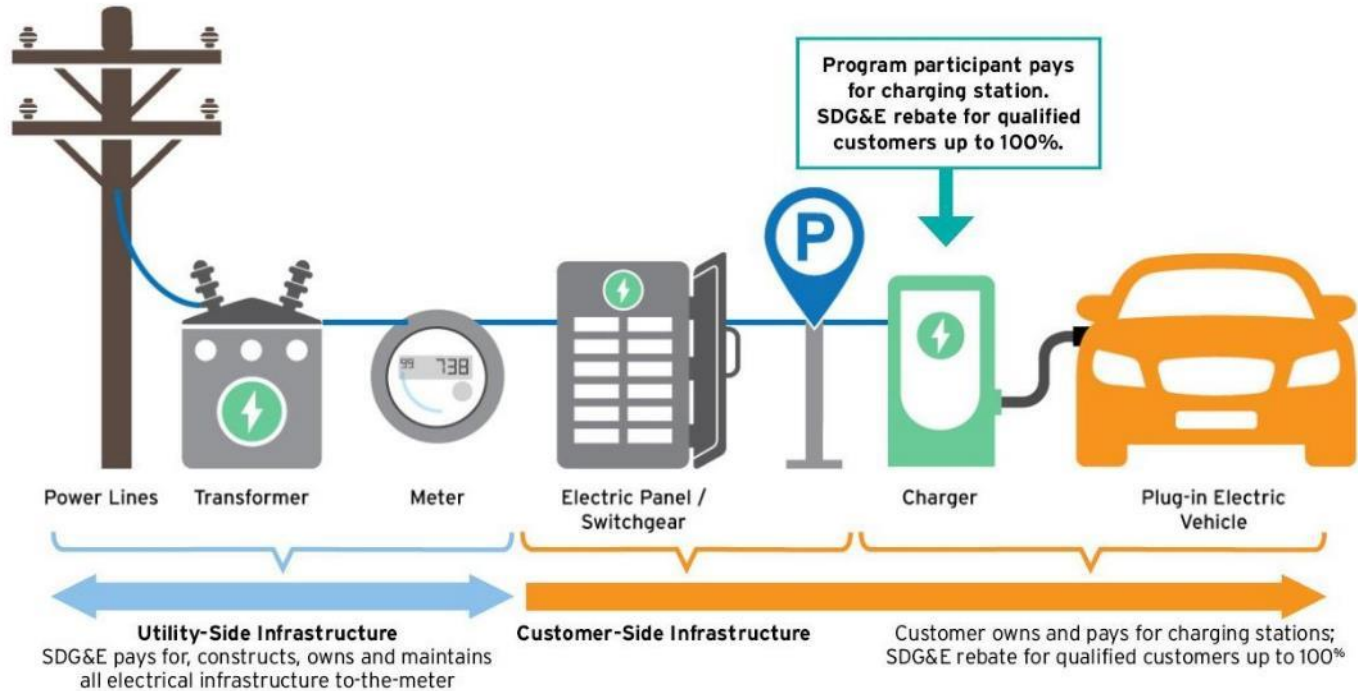
Power Your Drive for Workplaces

Infrastructure Installation Options



2) Customer-Owned Infrastructure, Customer-Owned Chargers

SDG&E pays for Infrastructure cost up to the customer meter



- ✓ SDG&E pays for, constructs, owns, and maintains all infrastructure up to the meter
- ✓ Customer pays for, constructs, owns, and maintains “customer-side infrastructure” and charging stations
- ✓ SDG&E provides a rebate of up to 100% of the cost of “customer-side infrastructure”
- ✓ SDG&E provides a rebate for the cost of the charging station

Power Your Drive *for* Workplaces

Charger Rebates



Lowering the Cost to Install Charging

This program offers a one-time rebate for both single and dual port chargers found on our approved vendor list

Equipment Type	Equipment Rebate
Level 2 Charger in an underserved community or small business	100% of charger cost <i>up to \$2,000</i>
Level 2 Charger not in an underserved community or a non-small business	50% of charger cost <i>up to \$2,000</i>

Power Your Drive *for* Workplaces

Program Requirements



Own or lease the property



Attest to using the site for 5 years



Own and maintain EV chargers



Easement may be required



Load Management Plan is required

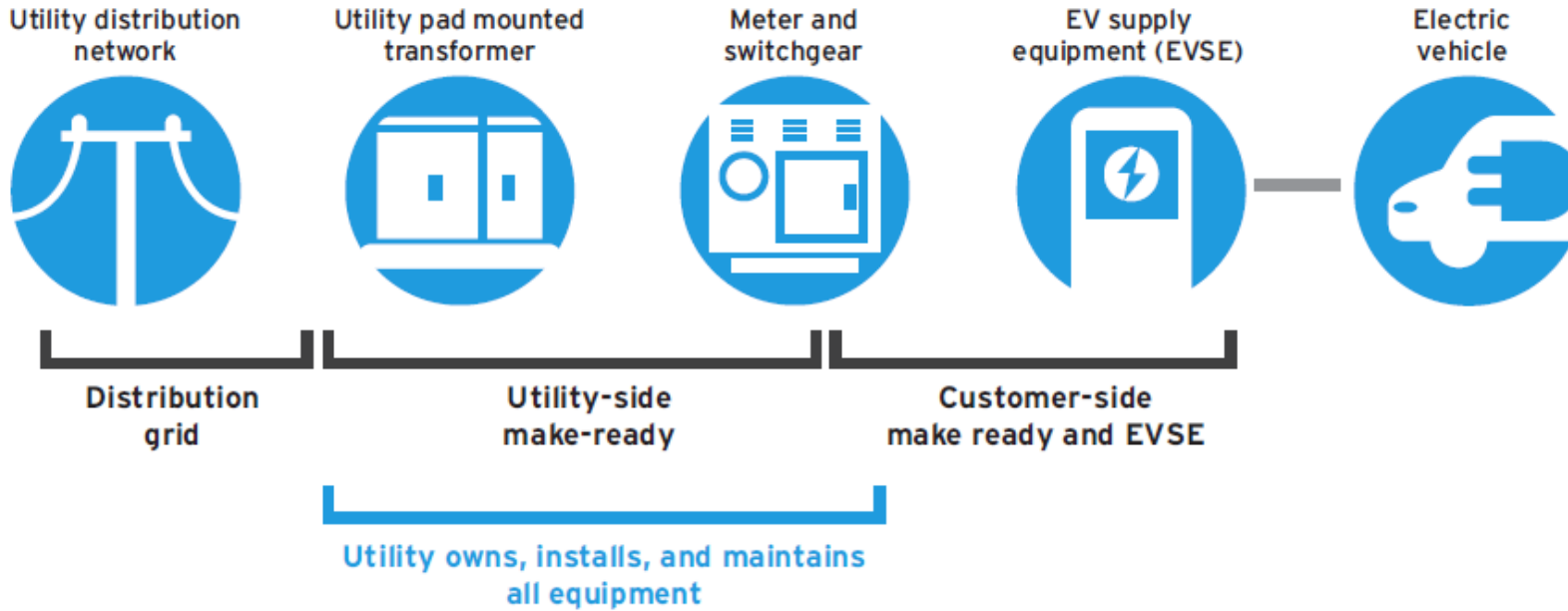


SDG&E's EV Rule to Reduce Costs

Optional Pathway for Separately-Metered EV Charging



EV Infrastructure Rule



SDG&E's Rule 45 allows installing, owning, and maintaining the "make-ready" equipment upstream of the customer meter:

- ✓ Transformer and electrical conductor
- ✓ Construction work like trenching and repaving a parking lot
- ✓ Service-related ducts and structures

Charging Infrastructure Programs

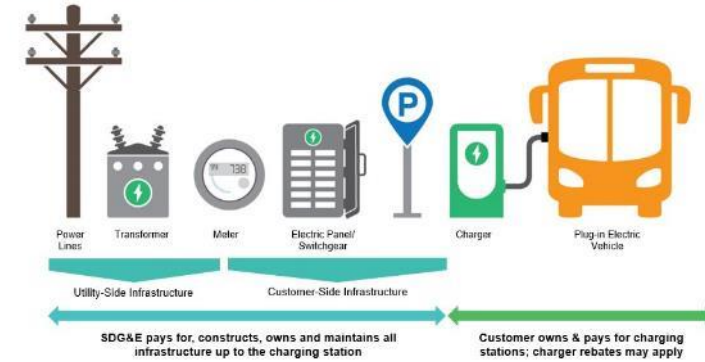
Overview



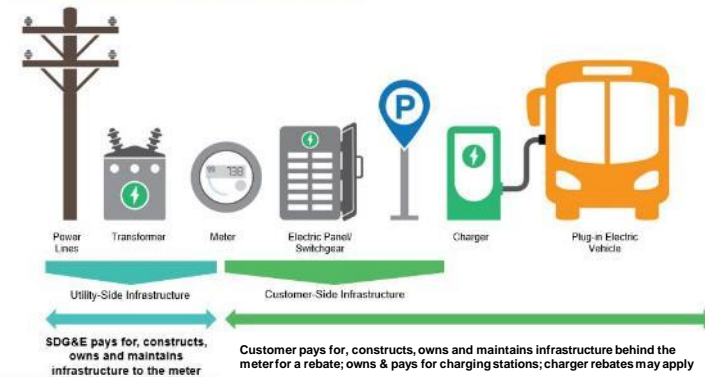
Program	Targeted Sector	Ownership Options	Charger Rebate Eligibility	Terms of Agreement
Power Your Drive for Fleets	Medium and Heavy-duty (MDHD) vehicles greater than 6000lbs gross vehicle weight and off-road equipment	<p>Option 1 – Utility-owned infrastructure</p> <p>Option 2 – Customer-owned infrastructure behind the meter with rebate up to 80% of customer-owned infrastructure</p>	Up to 50% rebate for Transit, School Buses, charging sites located in Statewide-defined Disadvantaged Community (DAC). Expansion to include SDG&E DAC filed with CPUC on Sept 30, 2022 – pending approval.	<p>Level 2 or DC Fast Charging</p> <p>10-year contract</p> <p>5-year data acquisition</p> <p>Minimum two electric MDHD vehicles with plans for future EV transition</p>
Power Your Drive for Workplace Waiting List	Employee, light-duty fleet with public charging availability	<p>Option 1 – Utility-owned infrastructure</p> <p>Option 2 – Customer-owned infrastructure behind the meter with rebate up to 100% of customer-owned infrastructure</p> <p>Project cost cap of \$18K per charging port, costs in excess of cost cap are paid by customer</p>	<p>Chargers located in Underserved Communities and/or small business - 100% of charger cost up to \$2,000</p> <p>Chargers not located in Underserved Communities or non-small business - 50% of charger cost up to \$2,000</p>	<p>Level 2 charging only</p> <p>5-year contract</p> <p>5-year data acquisition</p>
Power Your Drive for Apartments and Condos Waiting List	<p>Public charging located at multi-unit dwellings</p> <p>Public charging located within ½ mile of multi-unit dwellings</p>	<p>Option 1 – Utility-owned infrastructure</p> <p>Option 2 – Customer-owned infrastructure behind the meter with rebate up to 100% of customer-owned infrastructure</p> <p>Option 3 – Utility-owned infrastructure (Option 1) including the chargers – only applicable to chargers located in Underserved Communities</p> <p>Project cost cap of \$18K per charging port, costs in excess of cost cap are paid by customer</p>	<p>100% of charger cost up to \$5,000 for single-port chargers with \$3,000 for Network Service and \$5,000 for Maintenance</p> <p>100% of charger cost up to \$7,000 for dual-port chargers with \$5,000 for Network Service and \$5,000 for Maintenance</p> <p>For Option 3, Utility-owned chargers installed, therefore not applicable for charger rebate</p>	<p>Level 2 charging only</p> <p>5-year contract</p> <p>5-year data acquisition</p>

Installation & Ownership Options

Option 1: SDG&E-owned infrastructure



Option 2: Customer-owned Infrastructure



Rule 45 - EV Infrastructure

Overview



	Applicability	Equipment Installed	Requirements	Terms
EV Infrastructure	Optional service pathway for non-single residence customers with separately metered EV charging equipment and associated devices like card readers and immediate lighting	SDG&E's Rule 45 allows installing, owning, and maintaining all the utility side equipment upstream of the customer meter Includes transformer and electrical conductor, trenching and repaving, service-related ducts and structures	Installation will not begin until Applicant has provided proof of commitment – purchase order or receipt Cannot participate in other approved Clean Transportation programs	Maintain EV charging equipment for minimum of 5 years

Want to learn more about the program?

sdge.com/fleets

Ready to talk to a customer solutions specialist?

ctprograms@sdge.com

Thank you for your time today.



Electrification Overview

Katie Scanlan, Strategic Planning & Policy Manager

Climate Policy Momentum

Electrification + Decarbonization has gained significant momentum – resulting in aggressive policy goals and mandates at the local, state, and national level

2030

- **SB 32** | 40% reduction in emissions from 1990
- **SB 100** | 60% of electricity from renewables
- **CARB SIP** | **Zero emission standard** for heat pump water heaters and space heaters

2035

- **E.O. N-79-20 + ACC II + CARB Scoping Plan** | 100% of light-duty/MDHD sales are ZEV
- **SB 1020 + 100** | 90% renewable + zero-carbon electricity

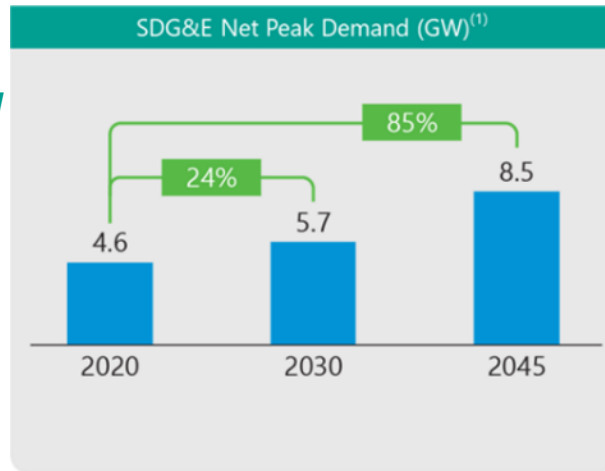
2045

- **AB 1279** | **Net zero** emissions + 85% reduction relative to 1990
- **SB 100 + SB 1020** | 100% renewable + zero-carbon electricity
- **CARB ACF** | 100% **ZEV** fleet required

Electrification is transforming our business

Forecasted load growth

Electric net peak demand is expected to grow 85% from 2020 to 2045¹, driven by EV adoption and building electrification.



Evolving for the future



Legislation accelerating timelines

- *New* - SB 410 | enable faster timelines interconnection + energization (timelines pending)
- *New* - AB 50 | determines criteria for timely service for electric customers (timelines pending)
- Rule 45 | reduces EV infrastructure barriers (125 days)

All-electric development is expected to increase due to recent loss of gas subsidies + electric subsidies for mixed fuel projects

Ongoing key considerations



Supply chain + equipment strategy



Volume + customer timelines



Regulation

Final Q&A, Resources, and Next Steps

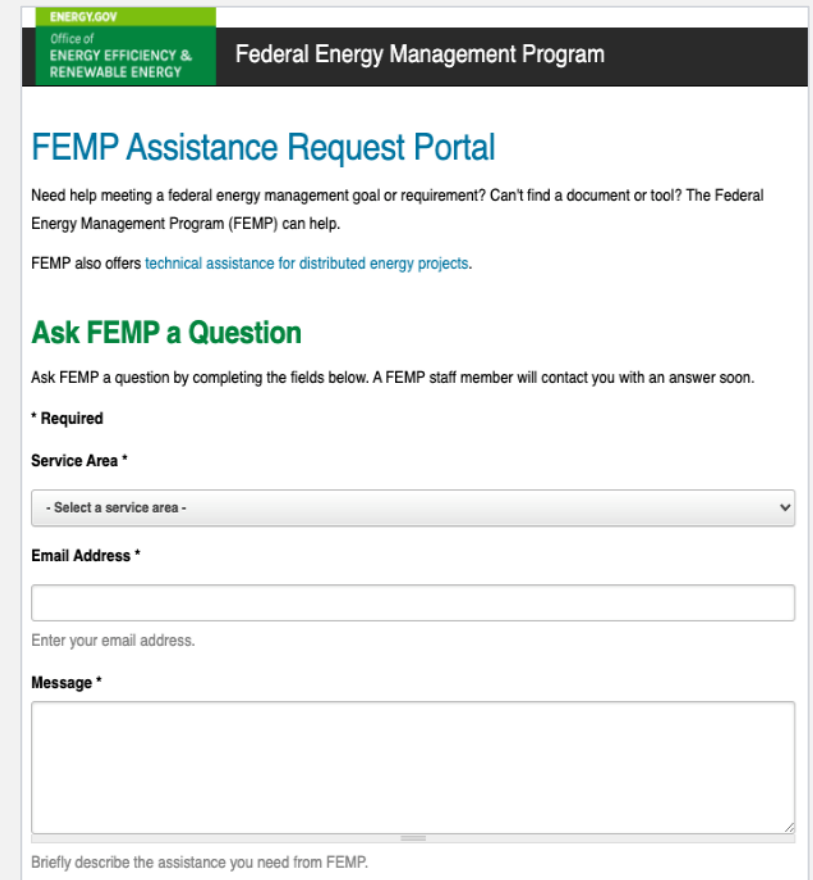
FEMP Technical Assistance

FEMP offers free support to federal agencies via the Assistance Request Portal:

- Staff training
- Project assistance
- Analysis* (utility rates, renewable energy optimization, resilience, etc.)
- Resources (guides, templates, etc.)

* Subject to available funding and scope of request

FEMP Assistance Request Portal



The screenshot shows the FEMP Assistance Request Portal interface. At the top, there is a header with the ENERGY.GOV logo and the text "Office of ENERGY EFFICIENCY & RENEWABLE ENERGY" and "Federal Energy Management Program". Below the header, the title "FEMP Assistance Request Portal" is displayed. A paragraph explains that FEMP can help with federal energy management goals and requirements. Another paragraph mentions technical assistance for distributed energy projects. A section titled "Ask FEMP a Question" includes a note that a staff member will contact the user. The form contains several required fields: "Service Area" (a dropdown menu with the option "- Select a service area -"), "Email Address" (a text input field with the prompt "Enter your email address."), and "Message" (a large text area with the prompt "Briefly describe the assistance you need from FEMP.>").

AFFECT BIL FAC: \$250 Million to Advance Net-Zero Facilities



Assisting Federal Facilities with Energy Conservation Technologies (AFFECT)
Bipartisan Infrastructure Law (BIL) Federal Agency Call (FAC)
Advancing Net-Zero Federal Facilities (DE-FOA-0003026)

Topic Areas (updated March 22, 2024)

Topic Area 1A	Assistance with Net-Zero Buildings Project Development
Topic Area 1B	Assistance with Net-Zero Buildings Program and/or Procedures Development
Topic Area 2	Modify Existing Projects for Net-Zero Buildings
Topic Area 3	New and/or In Development Net-Zero Buildings Projects

Resources

- [FAC and Application Forms](#)
- [FAC Informational Webinar Recording and Slides](#)
- [Slides Summarizing Recent FAC Modifications](#)
- [Applicant Questions and Answers](#)
- [Upcoming Training and Guidance Information](#)

Only Federal Agencies May Apply for AFFECT

Application Submission Deadlines

Phase 1	May 31, 2023 (closed)
Phase 2	June 27, 2024 (now open)
Phase 3	April 18, 2025 (forthcoming)

Selected projects announced approximately 6 months following the submission deadline.

Questions? Email AFFECTBIL@hq.doe.gov.



FEMP Webinars and On-Demand Training

Live and on-demand webinars can be accessed through the FEMP Training Catalog

- Continuing Education Units available
- Curriculums include:
 - [UESC and Performance Contracts](#)
 - [Distributed Energy Procurement](#)
 - [Resilience Planning and Integration](#)
 - [Facility and Fleet Optimized Design](#)
 - [Legislative and Mandate Guidance](#)
 - [Energy and Cyber Security Integration](#)

ESPC, UESC, and Appropriations Project Development

This curriculum offers courses related to financing the implementation of energy and water efficiency projects. These courses help to pair available specific project situations in an effort to prevent stalled, unfunded projects.

Energy and Water Efficiency Project Financing			
Title	Level	Length	CEUs
Energy Savings Performance Contracts (ESPC) Comprehensive Training: Phase 1 and 2	Introductory	3 hours	0.4
Energy Savings Performance Contracts (ESPC) Comprehensive Training: Phase 3	Introductory	3 hours	0.4
Energy Savings Performance Contracts (ESPC) Comprehensive Training: Phases 4 and 5	Introductory	3 hours	0.4
Energy Savings Performance Contracts (ESPC): Five Phases to Success	Introductory	3.5 hours	0.4
Project Facilitator Fundamentals	Introductory	4 hours	0.4
Using Task Order (TO) Schedules in eProject Builder (ePB)	Introductory	1 hour	0.2
Advanced Measurement and Verification for ESPC	Intermediate	2.5 hours	0.30
Decarbonization Considerations: Performance Contracting	Intermediate	1.5 hours	0.2
Federal On-Site Carbon Pollution-Free Electricity (CFE) Purchase Contracts	Intermediate	1 hour	0.2
Financing and Financial Proposal Review for Performance Contracting	Intermediate	1.5 hours	0.2

[Click here to view all courses!](#)



Next Steps: Schedule a Follow-Up Call

Request a consultation with FEMP or your utility to:

- *Discuss your site's energy goals, challenges, and priorities*
- *Identify program offerings that align with your needs*
- *Sign up for incentives*
- *Connect with subject matter experts to learn more about any of the topics discussed today*

Consultation Request Form

Fill out this [*linked form*](#) or scan the QR code below.

FEMP will connect you with the appropriate party for follow-up, which may include FEMP technical experts, utility POCS, and/or the relevant Utility Lead Agency.



Contact Information

FEMP / DOE

Name	Program
Tracy Niro	UESC & CFE
Ethan Epstein	Resilience
Jason Koman	GEB and Fleet/EVSE
Billie Holecek (LBL)	Demand Response and TVP
Jeff Gingrich (NREL)	UESC
Ebony Atkinson (GSA) energy@gsa.gov	Areawide Contracts

Contact FEMP SMEs via the
[FEMP Assistance Request Portal](#)

SDGE

Name	Program
Joe Pierzina JPierzina@sdge.com	UESC
Russell Stevens https://sdenergylink.com/contact-us/	SD Energylink
Brad Mantz BMantz@sdge.com	Emergency Load Reduction
Chris Roberts CRobert1@sdge.com	Fleets, EV/EVSE
Katelin Scanlan KScanlan@sdge.com	Grid Electrification



This Training Offers IACET CEUs

How to obtain your CEUs:

1. Visit the Whole Building Design Guide (WBDG) at wbdg.org to log in or create an account
2. Enroll in the training
3. Attend the training in full
4. Return to your WBDG account's Enrolled courses
5. Select the training's "Proceed to Course" button
6. Complete an assessment
7. Submit a training evaluation
8. Download your certificate.

What's an IACET CEU?

An International Association for Continuing Education and Training (IACET) continuing education unit (CEU) is a unit of credit equal to 10 hours of participation in an accredited program designed for professionals with certificates or licenses to practice various professions.



Stay in Touch

Ask Questions

Visit FEMP's [Technical Assistance Portal](#) to ask questions ranging from general to project-specific.

Find More Trainings

Search the [FEMP Training Catalog](#) to find upcoming live trainings, events, and on-demand courses.

Sign Up for FEMP Updates

Receive periodic emails to [stay informed](#) of FEMP news, trainings, tools, resources, and more.

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[Follow FEMP on LinkedIn](#) for event announcements, examples of agency success, and of-the-moment news.



Thank You!



Tracy Niro

FEMP Utility Program Manager

Joe Pierzina

Federal Account Manager

JPierzina@sdge.com