

Exhibit to Agenda Item #10

Brief the Board on SMUD's Zero Carbon customer programs.

Board of Directors Meeting

Thursday, September 15, 2022, scheduled to begin at 5:30 p.m.

Virtual Meeting (online)

2030 Zero Carbon Plan

Customer Programs - Status Update

September 15, 2022

Powering forward.
Together.



Zero Carbon Customer Programs by Portfolio



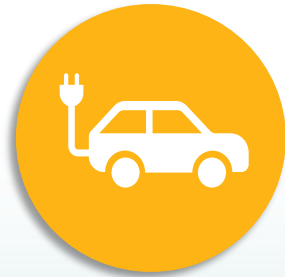
Building Electrification & Energy Efficiency

Encourages customers to decarbonize their homes and workplaces by converting from gas to efficient electric equipment and optimize and manage their electricity use



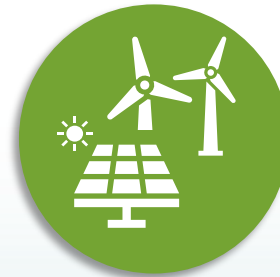
Load Flexibility & Battery Storage

Programs and options for customers to participate in building our Virtual Power Plant to help shift and manage loads during times when energy is needed or when excess energy is available



Transportation Electrification

Incentives, information, and special rates that help customers purchase and charge electric vehicles for homes and businesses



Green Pricing

Gives SMUD customers the ability to conveniently satisfy their desire to achieve and maintain a highly renewable or zero carbon power supply



Building Electrification & Energy Efficiency

Powering forward.
Together.





How do I electrify my HVAC or Hot Water System?

Building Electrification & Energy Efficiency

Customer searches for available rebates and participating contractors

smud.org/rebates

smudcontractornetwork.org

Customer signs installation contract

Contractor completes installation & sends documentation to SMUD

Contractor reserves qualifying rebates

SMUD reviews/ approves project & pays rebate

Customer selects a participating contractor & requests cost estimate for HVAC or HW conversion

smudcontractornetwork.org

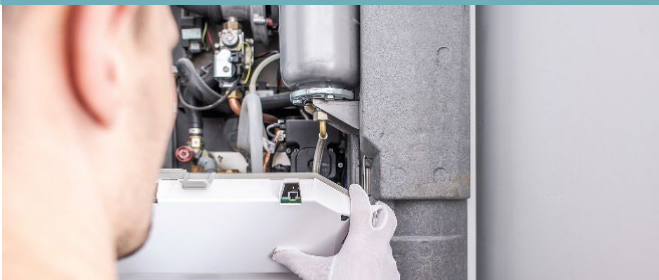
RESIDENTIAL



How do I decarbonize my home?

Building Electrification & Energy Efficiency Residential Programs

Advanced Home Solutions Contractor Network



- Seal and insulate
- Heat pump HVAC
- Heat pump water heaters
- Panel upgrade
- Circuit upgrade

Retailer Partnerships



- Washers & dryers
- Refrigerator & freezers
- Air cleaners
- Room air conditioners
- Advanced power strips
- Refrigerator recycling

Customer Rebates and Information



- Induction cooktops
- SMUD Energy Store
 - Smart thermostats
- Informational Programs
 - Home Electricity Reports

smud.org/rebates



How do I decarbonize my business?

Building Electrification & Energy Efficiency Commercial Programs

Self-Service Approach



smud.org/ees

- Express Energy Solutions

Turnkey Approach



smud.org/ces

- Complete Energy Solutions

Specialized Approach



smud.org/custom

- Advanced Commercial Solutions

Property Owners / Managers



smud.org/multifamily

- Multifamily retrofit

Builders / Developers



smud.org/ids
smud.org/smarthomes

- Commercial Integrated Design Solutions
- Residential Smart Homes



Key Metrics & Milestones

Building Electrification & Energy Efficiency

	2021 Final	2022 July Actual	2022 EOY Forecast	2022 Goal
Heat Pump HVAC Conversions	2,575	1,888	3,224	2,600
Heat Pump Water Heater Conversions	958	622	1,357	1,380
New Homes & Multifamily Units Constructed	578	713	1,200	1,300
Cumulative Carbon Reduction (metric tons)	53,421	59,950	74,026	71,106

Future Activities

Launch Home Electricity Reports

Expand SMUD Contractor Network to Commercial Installers

Integrate Community Impact Plan Offerings



Community Impact Initiatives

Building Electrification & Energy Efficiency

Future Activities and Program Expansions

Residential



- Neighborhood focus: providing bundle offerings to increased # of customers
- Multifamily: increased incentives for affordable housing property managers

Commercial



- Neighborhood approach for small/medium-sized businesses: providing energy bundles for Zero Carbon Plan programs



Transportation Electrification

Powering forward.
Together.





How do I electrify my personal vehicle?

Transportation Electrification

RESIDENTIAL

Searches for EV info

smud.org/driveelectric

1

Test drives an EV

Ride & Drive Events

3

Researches which EV and home charger is most appropriate

PlugStar Online Tools

SMUD EV Support Program
support@pluginamerica.org

2

Visits a dealership

Dealer Engagement

4

Makes EV purchase

CA Clean Fuel
Reward Program

5

Purchases and installs a home charger

SMUD Energy Store

SMUD Charge@Home Incentives

Sacramento Clean Cars for All Partnerships

6

Wants to save money when charging at home

EV Rate Credit
(Time-of-Day)

7

Enrolls in Managed Charging pilot

smud.org/driveelectric

8



How do I electrify my company fleet?

Transportation Electrification

COMMERCIAL

Reviews EV Fleet options

smud.org/driveelectricbusiness

Talk to Commercial EV Staff

1

Develops plan for fleet electrification

Commercial EV Program

SMUD eFuel AdvisorSM

2

Develops plan & install chargers

Commercial EV Program

SMUD eFuel SolutionsSM

3

Makes EV purchases

Commercial EV Program

4

Examines ways to reduce demand charge burden

Commercial EV Pilot Rate

5



Residential and Commercial Programs

Transportation Electrification

Residential (smud.org/DriveElectric)



- Drive Electric Program
 - Individual EV Support
 - Ride & Drive Events
 - Dealer Engagement
 - PlugStar Online Tools
- SMUD Charge@Home Program
- Residential EV Rate Credit
- Sacramento Clean Cars for All Partnership
- Community Partnerships
- EV Managed Charging Pilot

Commercial (smud.org/DriveElectricBusiness)



- Commercial EV Program
 - Light, Medium, and Heavy-Duty vehicle incentives
 - Level 1, 2 and fast charger incentives
- SMUD eFuelSM
 - Advisor
 - Solutions
- Commercial EV Pilot Rate
- CALeVIP Partnership



Key Metrics & Milestones

Transportation Electrification

	2021 Final	2022 July Actual	2022 EOY Forecast	2022 Goal
Residential EV Chargers	N/A	486	833	800
Commercial EV Chargers	266	129	320	300
Cumulative Residential EV Rate Participants	12,176	15,156	16,500	16,376
# of Light Duty EV's in Service Territory	23,421	24,816	27,385	25,879

Future Activities

SMUD Contractor Network to install
SMUD Charge@Home projects launching October 2022

Expanded e-mobility incentives and EV home charger
installations for EAPR and income qualified customers

Add additional electric vehicle manufacturers to
Managed Charging pilot

SMUD eFuel SolutionsSM program offering launch by
year end

In depth consultation services helping customers right
size home EV charging solutions

Investigating Universal Charging



Load Flexibility & Battery Storage

Powering forward.
Together.





How can I help build my “Virtual Power Plant”?

Load Flexibility & Battery Storage

RESIDENTIAL

Online search
for qualifying
smart thermostats

1

Enrolls smart
thermostat
in My Energy
Optimizer Partner

3

Receives
notifications
around Peak
Event Days

5

Receives
\$25 participation
rebate at the end
of season or
Critical Peak
Pricing bill
savings

7

Purchases
smart thermostat

SMUD Energy Store

2

Receives \$50
enrollment rebate
and Critical Peak
Pricing information

4

Home preconditioned
during Peak Event
Days

6



How can I help my community build a virtual power plant?

Load Flexibility & Battery Storage

Rate Arbitrage



- My Energy Optimizer Starter
 - Battery Storage

smud.org/storageres

Residential Summer Peak Days



- My Energy Optimizer Partner
 - Thermostat
 - Battery Storage

myenergyoptimizer.org

Residential Year Round



- My Energy Optimizer Partner+
 - Battery Storage

smud.org/storageres

Summer Emergency Events



- Peak Corps (Air Conditioner Load Management)

smud.org/peakcorps

Commercial Summer Peak Days



- PowerDirect

smud.org/powerdirect

Research Pilots



- EV Managed Charging
- PowerMinder Water Heaters



Key Metrics & Milestones

Load Flexibility & Battery Storage

	2021 Final	2022 July Actual	2022 EOY Forecast	2022 Goal
My Energy Optimizer Smart Thermostats	NA	4529	6500	5600
My Energy Optimizer Battery Customers	NA	33	100	368
PowerDirect (MW)	15.6	17.9	18.0	17.7
Load Flexibility Portfolio (Total MW)	74	113	182	206

Future Activities

Increase PowerDirect® Small-Medium Business Participation

Grow My Energy Optimizer Partner Thermostat Participation

Implement My Energy Optimizer Partner Battery and Partner+ Events

Launch Next Gen Air Conditioning Load Management Offering



Green Pricing



How do I participate in Residential Greenergy™?

Green Pricing

RESIDENTIAL

Becomes aware of Greenergy

Start Electrical Service

Social Media Campaign

Media Advertising

1

2

Moves into home, finds Greenergy option via the start service interaction

smud.org/move

3

Selects Greenergy participation level

smud.org/move

smud.org/going-green

Receives 1st year thank you letter and information on upgrading to Greenergy Neighbor or Climate Advocate

Annual Power Content Label & Letter

4

Receives welcome letter with information about choice and impact

5



Residential and Commercial Programs

Green Pricing

Residential Greenenergy



smud.org/greenenergy

Updated - January 2022

- Standard
- California Renewable
- Local Renewable

New options - June 2022

- Neighbor
- Climate Advocate

Commercial Greenenergy



smud.org/greenenergy

- Partner Plus
 - 100% California-based carbon free generation
- Custom Blend
 - Tailored based on customer needs

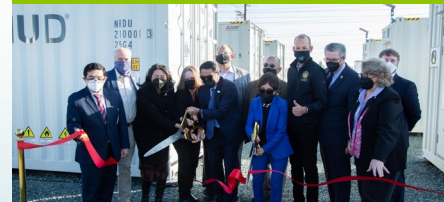
Sacramento Shade



smud.org/shadetrees

- Partnership between SMUD and Sacramento Tree Foundation
- Up to 10 free trees for residential customers

Community Solar/Storage



smud.org/going-green/neighborhood-solarshares

- Neighborhood SolarShares
- Commercial StorageShares



Metrics & Milestones

Green Pricing

	2021 Final	2022 July Actual	2022 EOY Forecast	2022 Plan
Residential Greenergy customers	68,000	66,000	67,000	71,000
Commercial Greenergy customers	2,128	1,215	1,700	1,700
# of trees distributed	11,628	6,047	12,250	12,250
# of Neighborhood SolarShares homes enrolled	16	1809	2100	2500

Future Activities

2023 - Planning and development of Commercial Greenergy California Renewable Offering

2024 - Planning and development of Commercial Renewable Shares Offering

2023 – Update Sacramento Shade Contract

Zero Carbon Program Resources



Program	Email address	Phone	Web Site
Advanced Home Solutions	AdvancedHomeSolutions@smud.org	916-732-5732	smud.org/rebates
Express Energy Solutions	Express.EnergySolutions@smud.org	916-732-5095	smud.org/ees
Complete Energy Solutions	CES@trccompanies.com	844-529-4084	smud.org/ces
Advanced Commercial Solutions	CustomRetrofit@smud.org	916-732-5095	smud.org/custom
Integrated Design Solutions	IntegratedDesign@smud.org	916-732-5095	smud.org/ids
Multifamily Go Electric	multifamily@smud.org	916-732-6359	smud.org/multifamily
All Electric Smart Homes	rnc@trccompanies.com	916-732-5300	smud.org/smarthomes
My Energy Optimizer	MyEnergyOptimizer@smud.org	916-732-7400	myenergyoptimizer.org
PowerDirect® ADR	powerdirect@smud.org	916-732-6950	smud.org/powerdirect
Drive Electric	Support@PlugInAmerica.org	877-EV-HELP-1	pluginamerica.org/sacramento-ev-support-program
Charge@Home	evincentives@smud.org	916-732-4800	smud.org/driveelectric
Commercial Electric Vehicles	commercialev@smud.org	916-732-5095	smud.org/driveelectricbusiness
Greenenergy	greenenergy@smud.org	888-742-7683	smud.org/greenenergy
Shade Trees	shadetrees@sactree.com	916-924-8733	smud.org/shadetrees



Thank You

