

# Exhibit to Agenda Item #1

Provide the Board an update and status of customer programs under the **2030 Zero Carbon Plan.**

Board Energy Resources & Customer Services Committee and Special SMUD  
Board of Directors Meeting

Wednesday, September 17, 2025, scheduled to begin at 6:00 p.m.

SMUD Headquarters Building, Auditorium

# 2030 Zero Carbon Plan

## Customer programs & initiatives

September 17, 2025

Powering forward.  
Together.

Board Energy Resources & Customer Services Committee and Special SMUD Board of Directors Meeting





# Zero Carbon Plan overview



## Repurpose natural gas generation

Replace 2 power plants with renewable and storage resources and retool remaining 3 to minimize emissions.



## Expand proven clean technology

Grow SMUD's renewable and battery storage by 3.5x. Support customer's resources via solar and battery storage.

Remaining 10%+



## Pilot & scale new technology and business models

Increase education and demand flexibility, spread adoption of customer-owned virtual power plants & invest in grid-scale technology.




## Pursue grants, partnerships and limit rate impacts




## Maximize community benefits

Stay affordable and reliable, improve air quality and overall community health while supporting under-resourced communities.

Goal:




CO<sub>2</sub>



Eliminate CO<sub>2</sub> from SMUD's power supply

100%



Zero carbon by 2030

Create thousands of new regional clean tech jobs

Up to 90% reduction

# Zero carbon customer program portfolios



## Building electrification & energy efficiency

Helping customers decarbonize their homes and workplaces by optimizing and managing their electricity use and converting from gas to efficient electric equipment.



## Transportation electrification

Information and resources to help customers shop for an EV and special rates and incentives to help customers charge EVs at homes and businesses.



## Distributed energy resources/load flexibility

Programs and options 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.



## Green pricing

Gives customers the ability to opt in and select a level of renewable and/or carbon-free electricity that meets individual or corporate objectives above and beyond our standard retail rates.

# Building electrification & energy efficiency



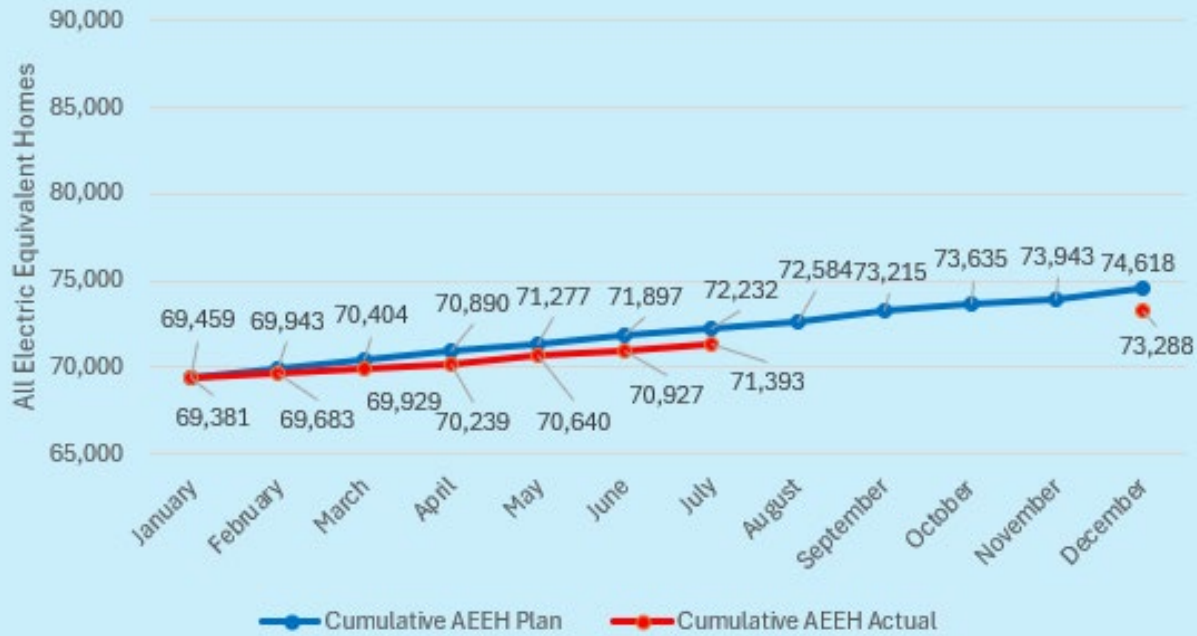
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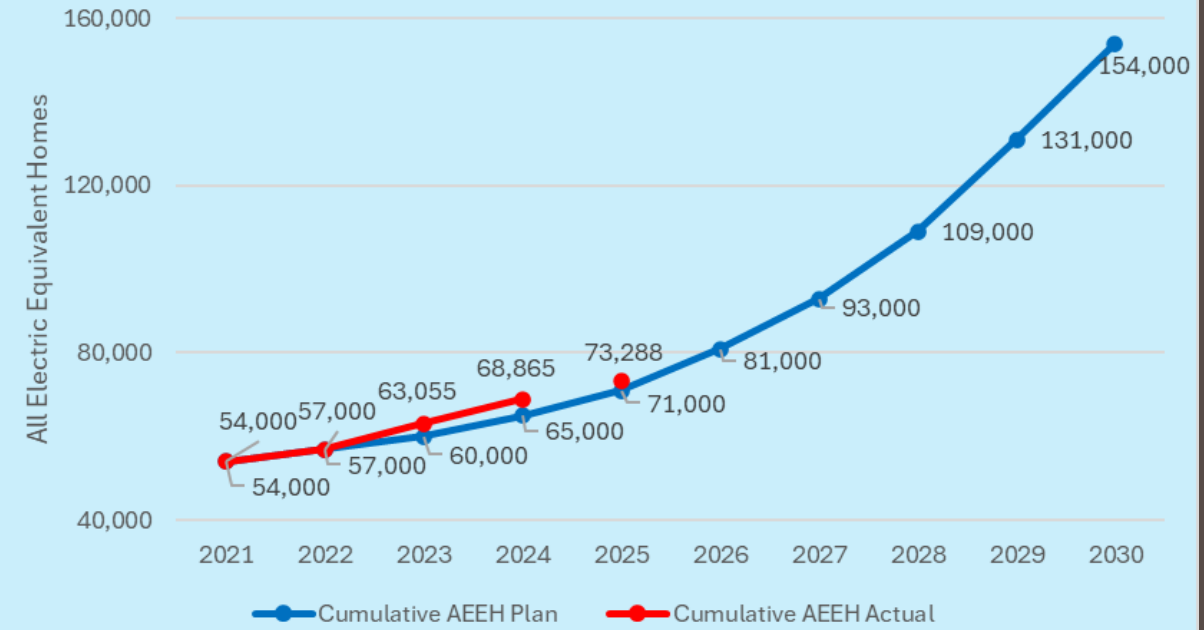
# Building electrification & energy efficiency

## Customer program portfolio status

### 2025 All Electric Equivalent Homes



### All Electric Equivalent Homes by 2030





# Building electrification and energy efficiency

## Key metrics & milestones

	2024 Final	2025 Goal	YTD (July)	2025 Forecast
Heat pump HVAC conversions	4,413	3,890	2,075	3,325
Heat pump water heater conversions	1,704	1,629	347	722
Induction cooktop conversions	345	375	215	380
Smart homes				
• Single-family homes	659	763	216	763
• Multifamily units	1,188	962	1,191	1,200
Multifamily units retrofitted	435	339	246	470
Income qualified home electrification retrofits	251	203	171	320
Commercial retrofit and new construction projects	316	292	244	402
All electric equivalent homes (cumulative)	68,865	74,618	71,103	73,165

### Program milestones:

- Advanced Homes: 20K heat pumps
- New SMUD Contractor Network & Grid Capacity evaluation platforms
- Significant year-over-year increases in commercial electrification projects
- Community Impact Plan success
- Headwinds from loss of external funding impacting achievement of incremental goals

### Looking ahead:

- Launch online residential electrification tool
- Explore options to address gap in loss of federal funding sources
- Evolve new construction programs with new T24-25 Code





# Building electrification and energy efficiency Highlights



Integrated Design Solutions: Aggie Square - Life-Long Learning & Life Sciences Towers



Custom retrofit: Sac Food Bank



Multifamily retrofit: Powell's Landing



# Transportation electrification



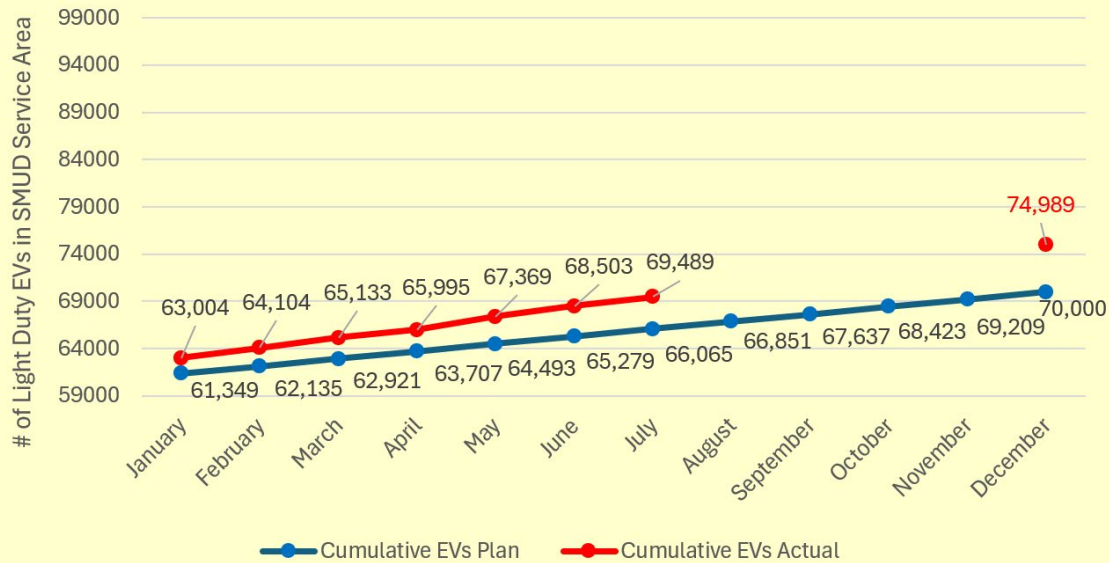
Incentives, information and special rates to help customers purchase and charge Electric Vehicles (EVs) for homes and businesses.



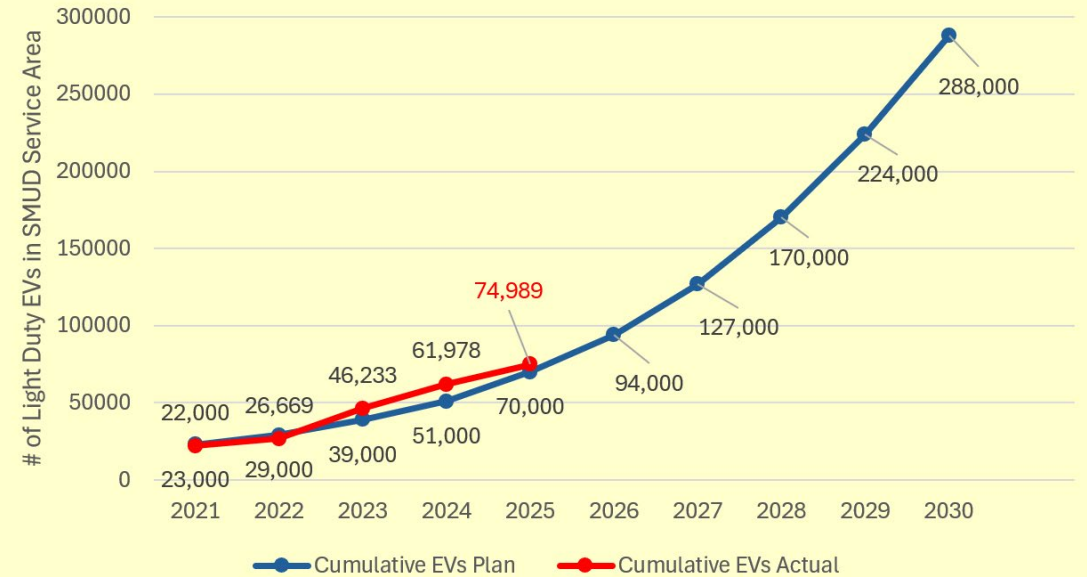
# Transportation electrification

## Customer program portfolio status

### 2025 Light Duty Electric Vehicles



### Light Duty Electric Vehicles by 2030





# Transportation electrification

## Key metrics & milestones

	2024 Final	2025 Goal	YTD (July)	2025 Forecast
Charge@Home <ul style="list-style-type: none"><li>Charger rebates/circuit installations</li><li>Income qualified installations (chargers/circuits)</li></ul>	4,098 520	2000 80	1,794 495	3,019 633
Commercial EV chargers <ul style="list-style-type: none"><li>Level 2 (L2) handles/smart outlets</li><li>Direct Current Fast Charger (DCFC)</li><li>Equity EV</li></ul>	611 67 97	500 35 --	263 25 69	650 52 97
Residential EV rate participants (cum.)	29,589	34,680	33,265	37,800
eFuel services program <ul style="list-style-type: none"><li>Advisor Reports (Biz EV tool)</li><li>Projects</li></ul>	44 0	30 10	7 0	10 6
Light-duty EVs in service territory (cum.)	61,978	70,000	69,489	74,989

### Program milestones:

- Exceeding light duty EV goals, focus on commercial and public charging
- Significant growth in commercial charger installations & fleet electrification
- Launched online tool to help commercial customers electrify fleets
- Integrated Resource Distribution Planning (iDRP) underway

### Looking ahead:

- Launch customer EV App & public charging program
- Commercial EV fleet & workplace
- Evolution of Clean Fuel Rewards Program to Medium & Heavy Duty





# Transportation electrification

## Highlights



Commercial EV, Go Electric & Integrated Design Solutions at CORE Elk Grove



Ten L2 EV chargers at Sacramento Food Bank



Smart outlets at Bridgeway Towers:  
47 Level 1 (L1) "smart" chargers

# Distributed energy resources (DER)/load flexibility



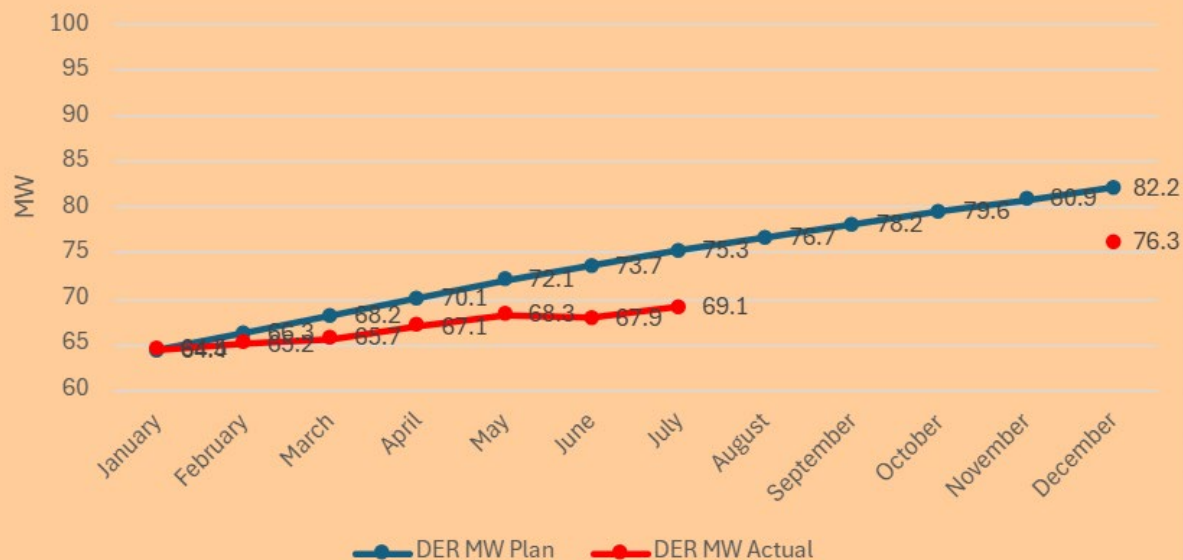
Programs and options to participate in building our Virtual Power Plant to help shift and manage loads during times when energy is needed or when excess energy is available.



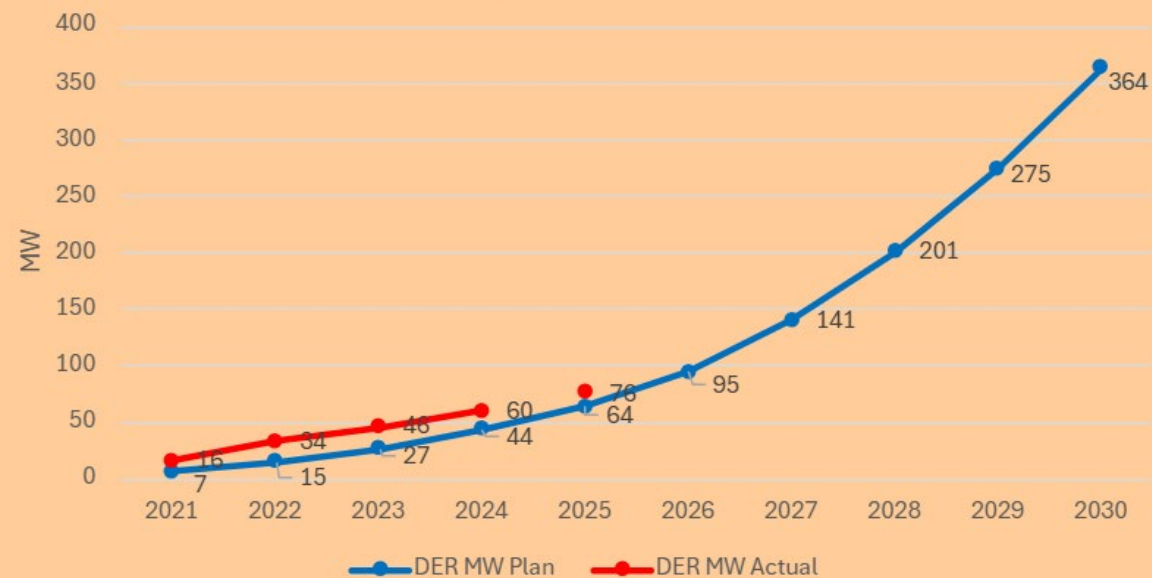
# Distributed energy resources (DER)/load flexibility

## Customer program portfolio status

2025 Distributed Energy Resources Cumulative MW



Distributed Energy Resources MW by 2030







# Distributed energy resources (DER)/load flexibility

## Key metrics & milestones

	2024 Final	2025 Goal	YTD (July)	2025 Forecast
My Energy Optimizer Partner <ul style="list-style-type: none"> <li>Smart thermostats enrolled</li> <li>MW enrolled</li> </ul>	30,427 23.73	39,000 30.4	35,066 27.35	39,000 30.4
My Energy Optimizer Batteries <ul style="list-style-type: none"> <li>Tesla batteries</li> <li>MW enrolled</li> <li>Non-Tesla batteries</li> <li>MW enrolled</li> </ul>	302 2 NA NA	1,391 7.51 209 .84	849 4.58 18 .04	1,041 5.64 52 .32
My Energy Optimizer Starter/Time of Day (TOD) Optimized <ul style="list-style-type: none"> <li>TOD-optimized batteries</li> <li>MW optimized</li> </ul>	602 3	3,124 7.8	1,285 6.43	2,000 7.5
Peak Conserve or NextGen Air Conditioning Load Management (ACLM) <ul style="list-style-type: none"> <li>Customer devices enrolled</li> <li>MW enrolled</li> </ul>	1,783 1.41	3,500 2.8	1,783 1.41	1,778 1.40
Commercial PowerDirect <ul style="list-style-type: none"> <li>Customers enrolled</li> <li>MW enrolled</li> </ul>	35 28	40 30.5	36 27	42 28.6
Residential Managed Charging <ul style="list-style-type: none"> <li>Customer enrolled</li> </ul>	1,396	3,500	0	350
Total MW of load flexible capacity*	60	82	69	76

### Program milestones:

- Nearly 5MW of capacity via My Energy Optimizer Partner+ program with Tesla
- Expanded battery storage incentives for five additional battery manufacturers
- Supply chain issues, economic conditions hampered stretch goals for battery adoption
- DER Market Harmonization definition launched

### Looking ahead:

- Multi-DER one vendor approach
- Transition Residential Managed Charging to full scale program (extended procurement process pushed later launch)
- Battery storage expansion to Commercial
- Continue scaling up key programs while adjusting considering value

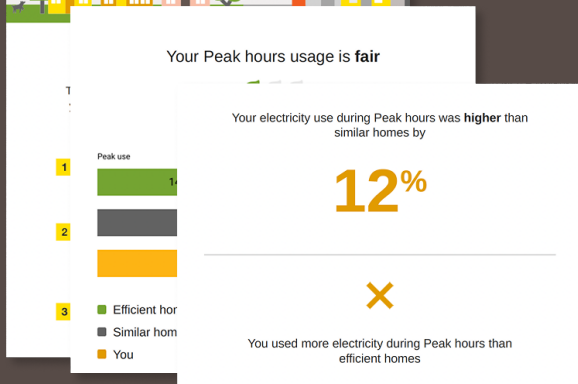
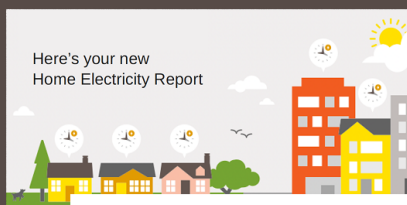


\*Total MW includes all Load Flexibility programs, including StorageShares.

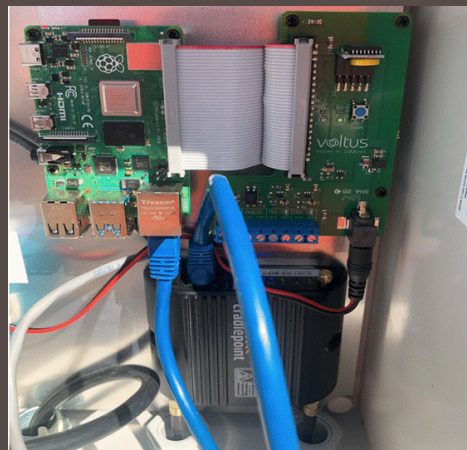


# Distributed energy resources/load flexibility

## Highlights



Peak focused Home Electricity Reports (HERs)



PowerDirect



My Energy Optimizer Partner + Program & Campaign

# Green pricing programs



Gives customers the ability to opt in and select a level of renewable and/or carbon-free electricity that meets individual or corporate objectives above and beyond our standard retail rates.





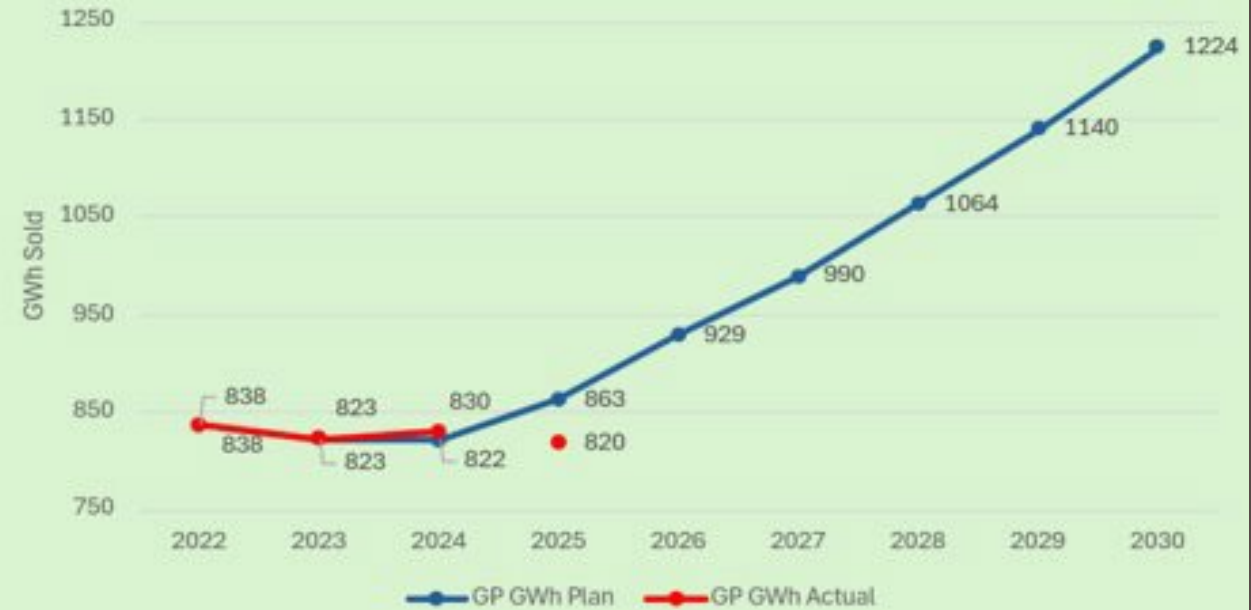
# Green pricing programs

## Key metrics & milestones

2025 Green Pricing GWh



2025 Green Pricing GWh





# Green pricing programs

## Key metrics & milestones

	2024 Final	2025 Goal	YTD (July)	2025 Forecast
Residential Greenergy accounts	61,520	63,988	62,384	62,849
Commercial Greenergy accounts	1,573	1,661	1,576	1,585
Residential SolarShares accounts	391	1,500	723	>1,600
Neighborhood SolarShares	1,590	1,700	1,829	1,900
•Enrolled premises (Cum.)				
•Single family	318	340	366	380
•Multifamily	1,208	1,292	1,389	1,444
•Accessory dwelling units	64	68	74	76
Commercial SolarShares	441	441	441	441
•Customer accounts				
Total gross GWh sales	830	819	464	820

### Program milestones:

- Green Pricing Programs growth
- Climate Advocate program expanding projects to include Nature Based Solutions
- Significant growth in Residential SolarShares participation

### Looking ahead:

- Launching Multi-Tenant Solar option
- Partnering with Department of General Services (DGS) to pilot Renewable Shares
- Continue to scope Solar for Schools projects with Sacramento City Unified School District (SCUSD) and Twin Rivers Unified School District (TRUSD)
- Exploring local solar options



# Green pricing programs

## Highlights



Climate Advocate charging stations



Environmental Council of Sacramento



CalPERS Greenergy & SolarShares

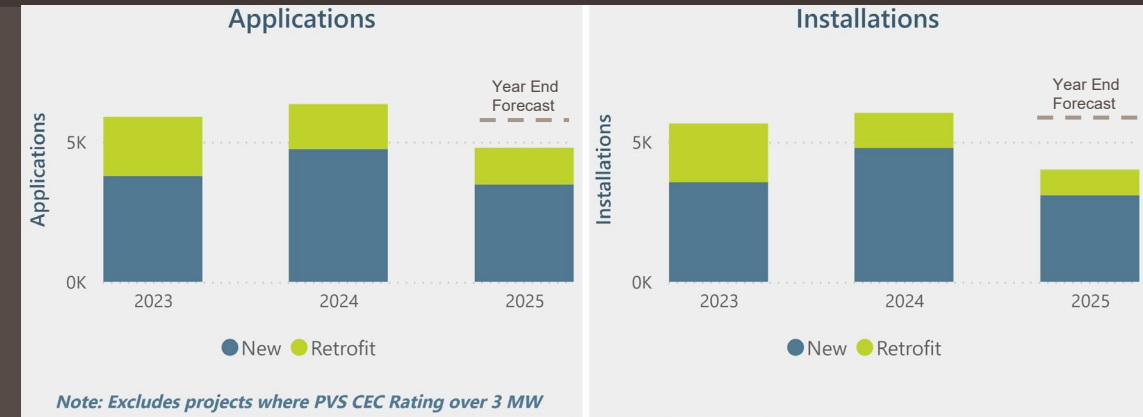




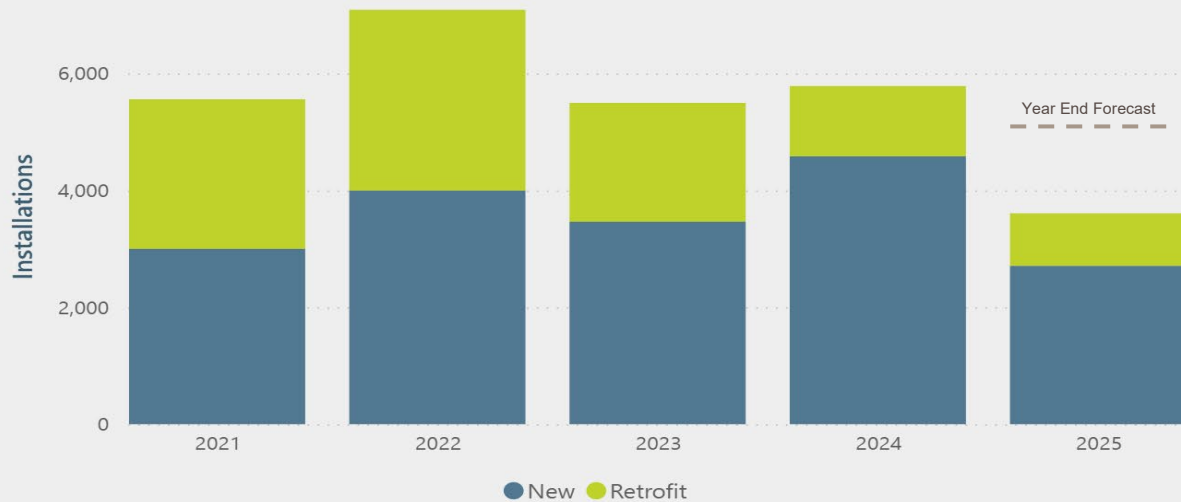
# 2025 progress

## Solar: Behind the meter

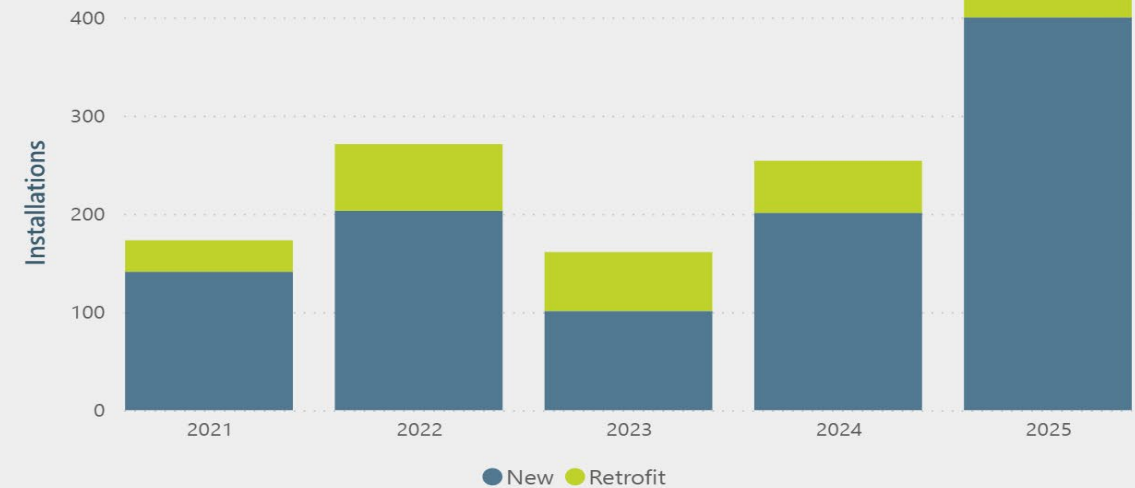
2024 & 2025 Solar Applications & Installations January through Aug 23					
			Variance		
	2024	2025	#	%	
Applications	4,163	4,986	823	20	↑
Installations	3,841	4,096	255	7	↑



Solar Installations - Residential



Solar Installations - Commercial



# Summary & conclusions

- While we've made good progress in our programs, the loss of external funding, policy changes and tariff/supply chain challenges are making achieving the steeper curve more challenging.
- Integrated Distribution Resource Planning analysis and Integrated Resource Planning starting in 2026 will inform new goal trajectories for the DER portfolios.
- Focused efforts will be key to support our partnership with our customers while ensuring affordability, particularly in an uncertain economic environment.

# Questions

