

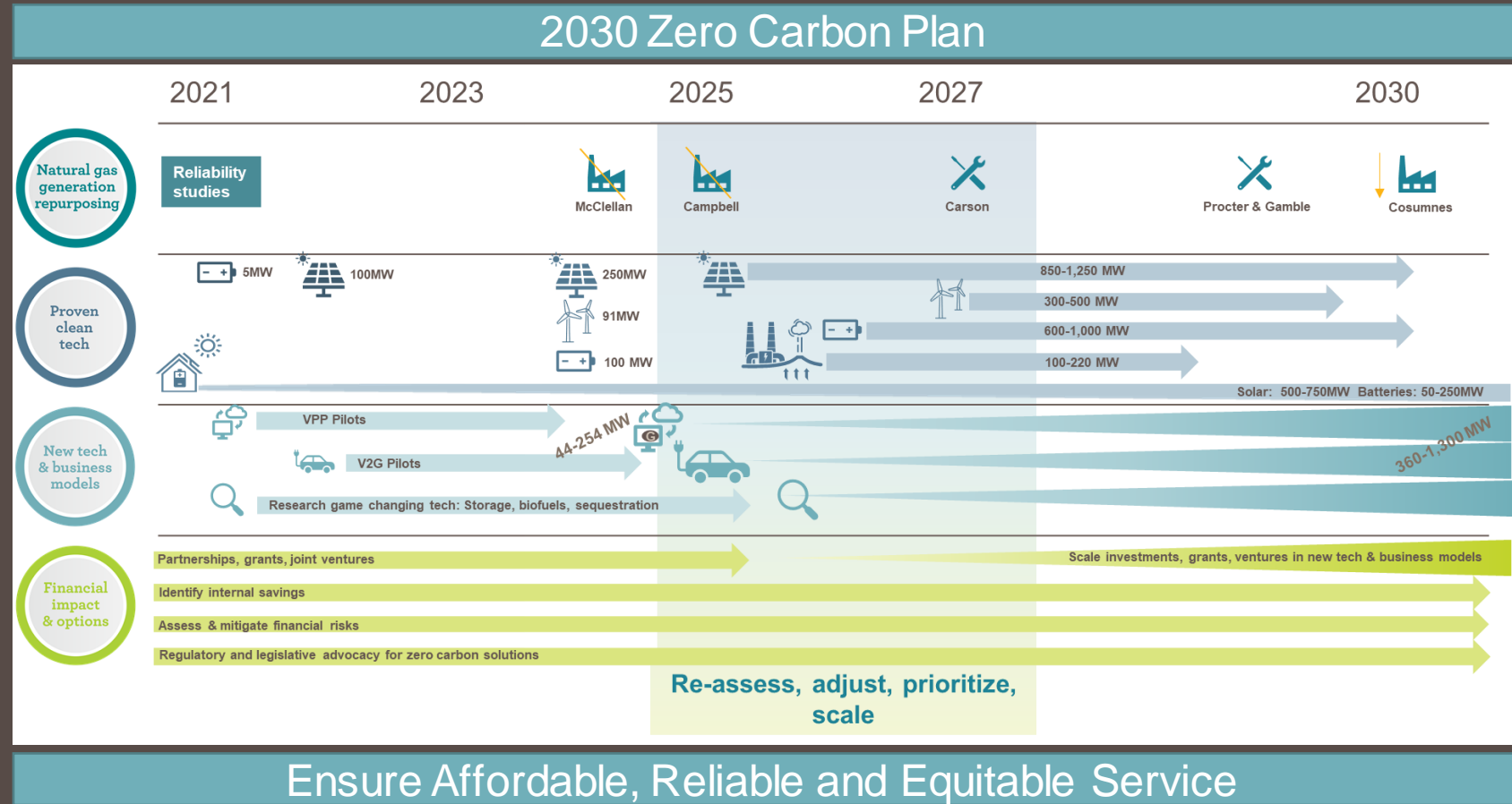
Exhibit to Agenda Item #2

Accept the monitoring report for **Strategic Direction SD-9,**
Resource Planning.

Board Policy Committee and Special SMUD Board of Directors Meeting
Wednesday, September 8, 2021, scheduled to begin at 5:30 p.m.
Virtual Meeting (online)

SD9 Goals Past/Present/Future

2004	SD-9 established
2009	Accelerated Renewables Portfolio Standard (RPS) goal
2010	1 st large community-owned utility in California to achieve a 20% RPS goal
2012	Reduced normalized emissions by 30% below 1990 levels
2018	Set pathway to achieve 2040 Net Zero regionally
2020	1 st major utility to use carbon as its efficiency tracking metric; 33% RPS and reduced normalized emissions by ~54%; Board declared a climate emergency
2021	SMUD Board updated SD-9 to include 2030 Zero Carbon Goals



2030 Zero Carbon Plan – Implementation Update



Natural Gas Generation

- Studies of reliability and the impacts of retiring McClellan and Campbell.
- Industry outreach, research and new technology pilots.



Proven Clean Technology

- Locational analysis, system impact studies and economic valuation.
- Competitive solicitation for new renewables and storage resources.
- Explore delivery for out-of-area renewables and low hydro impacts.



New Technology and Business Models

- Launch portfolio of pilots and research.
- Information technology system upgrades.
- Integrate DERs in operations, distribution and grid planning process.

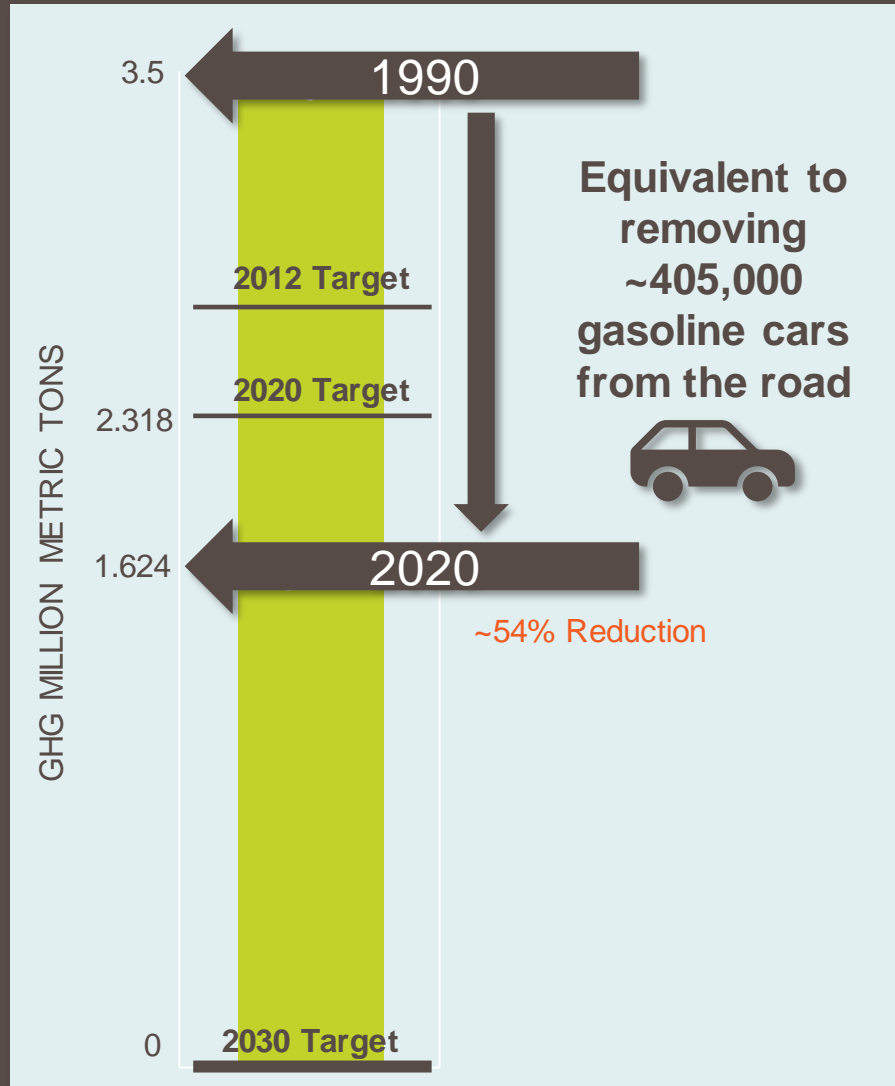


Sustainable Communities

- Expanded workforce development programs – partnerships with the California Mobility Center and other community-based organizations.
- “Energy Career Pathways” solar training class.

- **Plan to do a comprehensive 2030 Zero Carbon Plan update twice a year.**
- **The first one, in March 2022, will include a public report on 2030 Zero Carbon Plan progress.**

2020 Performance: Greenhouse Gas (GHG) Targets and Goals



2020 SD-9 GHG Footprint & Near-Term Targets ¹	
Source	GHG Emissions (000 MT)
Net SMUD Carbon Emissions ²	1,925
Normalizing Adjustments ³	-301
2020 SMUD Normalized Emissions	1,624
2020 Target	2,318

¹ The thermal power plant emissions, SMUD's largest source of emissions, have been independently verified.

² Net of wholesale sales

³ Adjustments for load, wind, hydro, and REC banking



2020 Performance: RPS and Renewable Procurement and Project Development

2020 Renewables Portfolio Standard of 33% was achieved

Project Name	Type	MW	Equivalent Homes	Status
South Fork Powerhouse	Small Hydro	3	1,000	Online (2020)
Wildflower	PV	13	4,050	Online (2020)
Chili Bar	Small Hydro	7	3,400	Online (2021)
Rancho Seco 2	PV	160	37,400	Online (2021)
Hedge Battery	Battery	4	800 (peak)	Late 2021
NTUADrew Solar	PV	100	33,100	Late 2021
Sacramento Valley Energy Center	PV	250	74,200	2023
	Battery	100	20,000 (peak)	2023
King's Country (Slough House)	PV	50	14,850	2023
Solano 4	Wind	91	28,300	2024-2025
Local Solar	PV	340+	89,000	Planning (2024-2025)
Local Battery	Battery	170+	34,000 (peak)	
Total		1,200+	285,000+	

2020 Performance: Clean Distributed Generation and Storage

Customer Solar

Residential		Commercial		SB-1		Total	
Installed Systems	MW	Installed Systems	MW	Installed Systems	MW	Installed Systems	MW
4,924	22.2	149	13.38	38	0.19	5,111	35.78



Customer Energy Storage

Residential Battery		Commercial Battery		Totals	
Installed Systems	MW	Installed Systems	MW	Installed Systems	MW
416	2.96	2	0.206	418	3.166

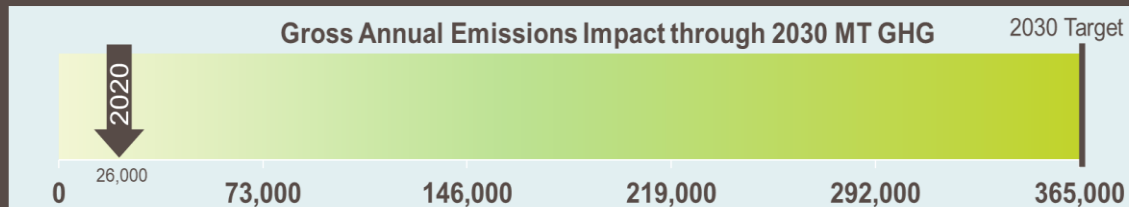


2020 Building Energy Efficiency, Building Electrification, Transportation Electrification

Building Energy Efficiency and Electrification

2020 Highlights

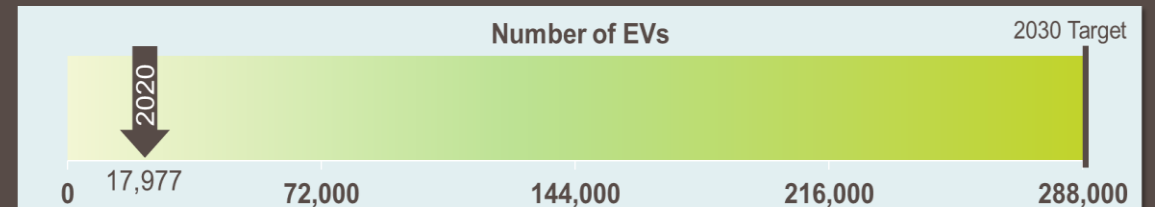
- Adopted carbon-based target for energy efficiency and building electrification (1st in nation).
- Programs supported 230 newly built all-electric homes as well as many retrofits for existing homes.
- Energy efficiency and building electrification upgrades for our income-qualified customers.



Transportation Electrification

2020 Highlights

- 1,500 EV Incentives
- California Mobility Center – expanded workforce development programs including outreach and job readiness training for underserved residents.
- New virtual offerings including our “EV Concierge” service and “Virtual Ride and Drive” video



Conclusion:

We have met or exceeded SD-9 in 2020



2020 normalized GHG emissions below the 2020 goal



2020 Renewables Portfolio Standard was achieved



Expanded support of distributed energy resources and energy efficiency/electrification, with equity in mind



On track with early 2030 Zero Carbon Plan implementation priorities

Request the Board accept the 2020 SD-9 monitoring report