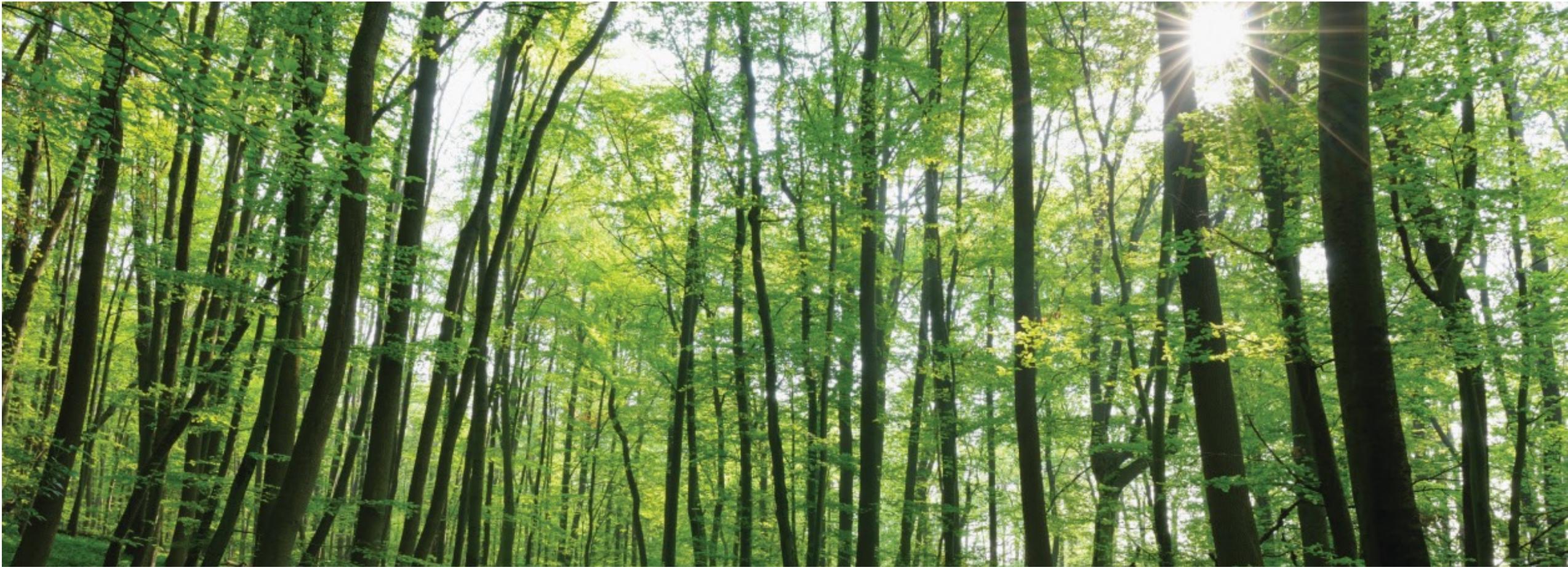


SCG FLEET

June 2021

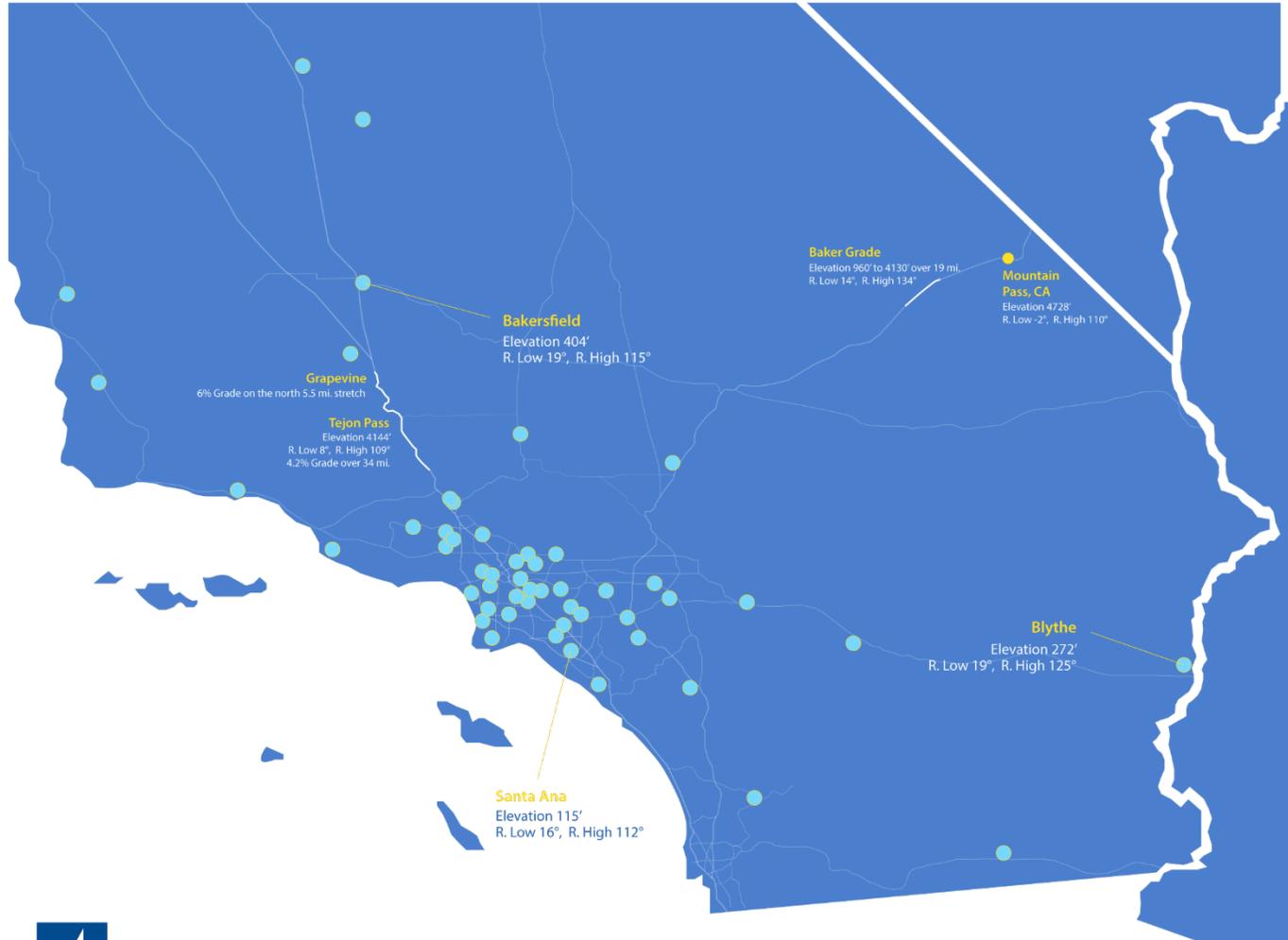


SoCalGas



- As the nation's largest natural gas distribution utility, SoCalGas delivers increasingly clean, safe and reliable energy to 21.8 million consumers through 5.9 million meters in more than 500 communities.
- Our service territory encompasses approximately 24,000 square miles in diverse terrain throughout Central and Southern California, from Visalia to the Mexican border.
- Our Mission is to Build the Cleanest, Safest, Most Innovative Energy Company in America. We believe every Californian deserves a clean, affordable, and resilient energy future.
- SoCalGas is working to achieve that future through innovation, collaboration, and decarbonization.

Current SoCalGas Bases – An Overview



- SoCalGas currently has 52 bases spanning across southern California including serving remote locations with some of the most extreme temperatures recorded:
 - Mountain Pass – requires using the Baker Grade and experiences extreme temperatures: **-2°F**
 - The Grapevine and Tejon Pass – inclement weather and up to a 6% grade
 - Blythe – extreme temperature ranges between **19°F** and **125°F**
- Any ZEV-compliant vehicle replacements considered must be able to endure these conditions, like current fleet vehicles.

Current SoCalGas Fleet – An Overview

- The SCG Fleet can be distilled into 4 categories when considering ZEV mandates and options for powertrain types: Automobiles, Class I Truck, Class II Truck, & Class III+ Truck.
- When discussing long-term commercial fleet planning, the SCG fleet vehicles have high average ages, only possible due to SCG’s fastidious routine maintenance, not typical of most commercial fleets that replace vehicles on a faster timeline.



Automobile

Ex. CNG-powered Honda Civic



Class I Truck

Ex. Chevy Colorado



Class II Truck

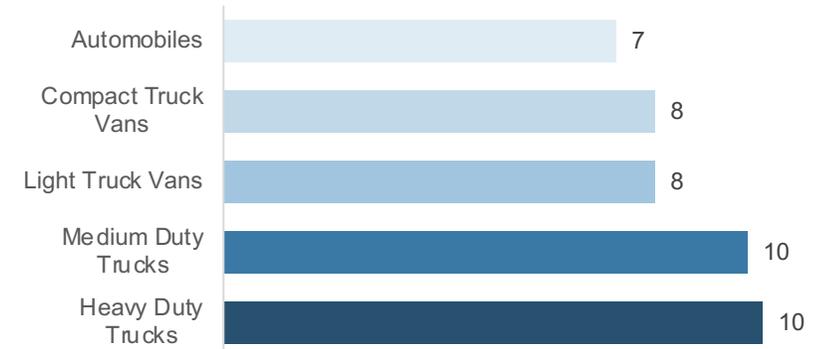
Ex. Ford F-150, F-250



Class III+ Truck

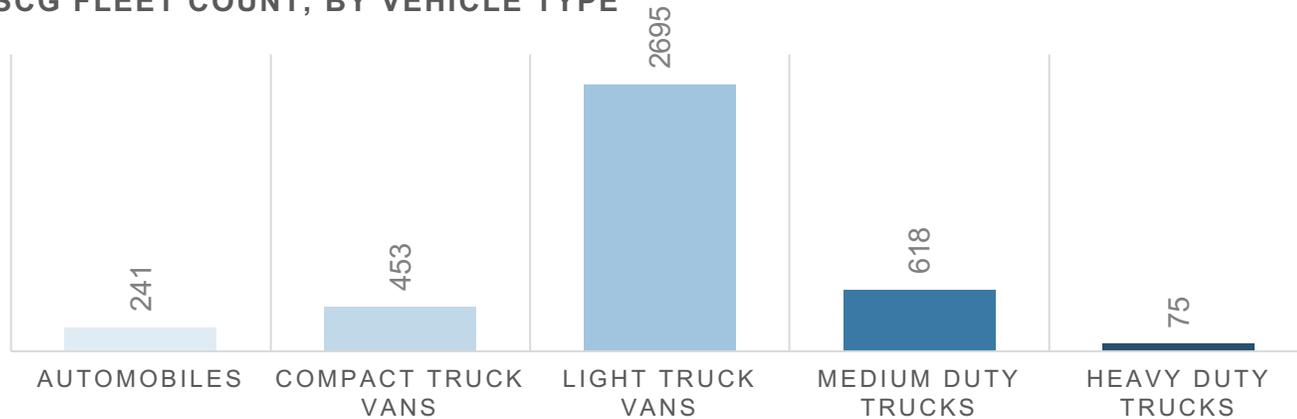
Ex. Ram 5500

AVERAGE AGE (IN YEARS), BY VEHICLE TYPE

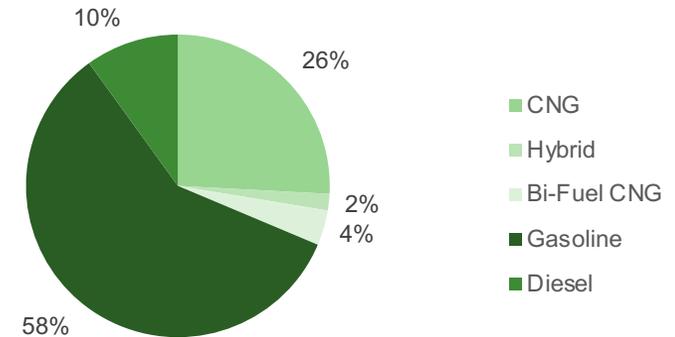


Current SoCalGas Fleet – An Overview (Cont.)

SCG FLEET COUNT, BY VEHICLE TYPE



SCG FLEET, BY FUEL TYPE



- 66% of fleet vehicles are “Light Duty Trucks” – i.e., Classes II & III
- 30% of SCG fleet vehicles are equipped to run on CNG, a bridge fuel used where ZEV-compliant fuel sources are not available, yet.

ZEV Considerations

- SCG has 52 base locations, many on the fringes of California, located in desert climates with others that require vehicles to routinely climb steep grades.
- If the environment SCG's fleet vehicles traverse is one challenge, the other is the duty cycles they must endure—these vehicles carry equipment, embark for field work during the day and may sit idling for hours.
- ZEV-compliant replacements *must* match the capability of current SCG fleet vehicles.
- Potential replacements under consideration (long-term to meet ZEV mandates):



Replacement for Automobile
Ex. Toyota Mirai



Replacement for Class I & II Trucks
Ex. Ford F-150 Lightning



Replacement for Class III+ Trucks
Ex. Hydrogen-converted Trucks

- While zero emission options exist for passenger cars and midsize, ½ Ton pickup trucks, any vehicles above currently do not have ZEV-compliant options—a hydrogen conversion will have to be engineered for Class III+ vehicles.

SoCalGas' Future ZEV Fleet

- In preparation of the 2035 ZEV mandate, SCG is creating plans for the future of its fleet.
- Planning includes consideration of currently available zero emissions vehicles—such as the hydrogen-powered sedans and EV entrants like the Ford F-150 Lightning.
- For Class III & up trucks, hydrogen conversions are being explored—its critical these trucks can meet current fleet duty cycles.
- Hypothetically, hydrogen-converted trucks will take time to develop; in the interim CNG, particularly renewable CNG, remains as a bridge fuel.

Major Group	1st Rep.	2nd Rep.	Vehicle Phase-out and Replacement														
			0 2021	1 2022	2 2023	3 2024	4 2025	5 2026	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035
Light Truck	2026	N/A							BEV								
Light Truck	2026	N/A							BEV								
Light Truck	2027	N/A								BEV							
Light Truck	2027	N/A								BEV							
Light Truck	2031	N/A											BEV				
Light Truck	2031	N/A											BEV				
Medium Truck	2027	N/A								HFCEV							
Medium Truck	2035	N/A															HFCEV
Medium Truck	2027	N/A								HFCEV							
Medium Truck	2029	N/A										HFCEV					
Medium Truck	2029	N/A										HFCEV					
Medium Truck	2034	N/A														HFCEV	
Medium Truck	2034	N/A														HFCEV	
Medium Truck	2035	N/A															HFCEV
Medium Truck	2035	N/A															HFCEV
Medium Truck	2035	N/A															HFCEV
Medium Truck	2035	N/A															HFCEV
Medium Truck	2035	N/A															HFCEV
Medium Truck	2035	N/A															HFCEV
Light Truck Service Body	2031	N/A											HFCEV				
Light Truck Service Body	2028	N/A									HFCEV						
Light Truck	2023	2033			HEV										BEV		
Light Truck	2031	N/A												BEV			
Light Truck	2028	N/A										BEV					
Light Truck	2028	N/A										BEV					
Light Truck	2028	N/A										BEV					
Light Truck	2023	2033			HEV											BEV	
Light Truck	2026	N/A								BEV							
Light Truck Service Body	2023	2033			CNG											HFCEV	
Light Truck Service Body	2031	N/A											HFCEV				
Light Truck Service Body	2031	N/A											HFCEV				
Light Truck Service Body	2031	N/A											HFCEV				

