WEBINAR SERIES

SoCalGas Fleet

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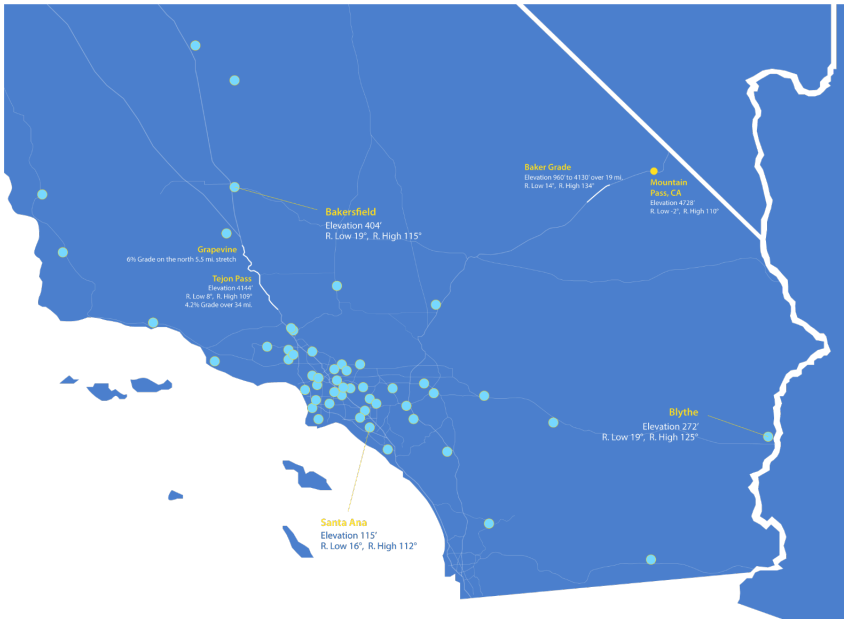
SoCalGas

- 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

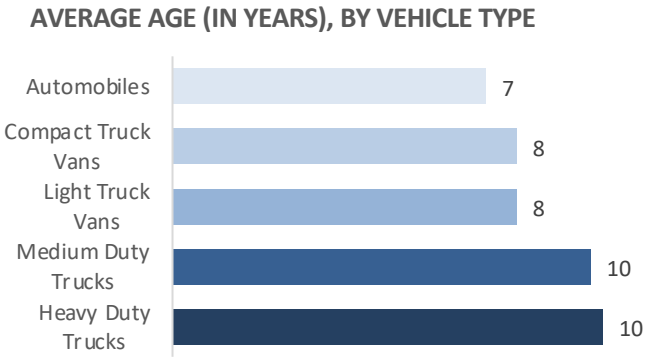
Ex. Chevy Colorado

Class II Truck

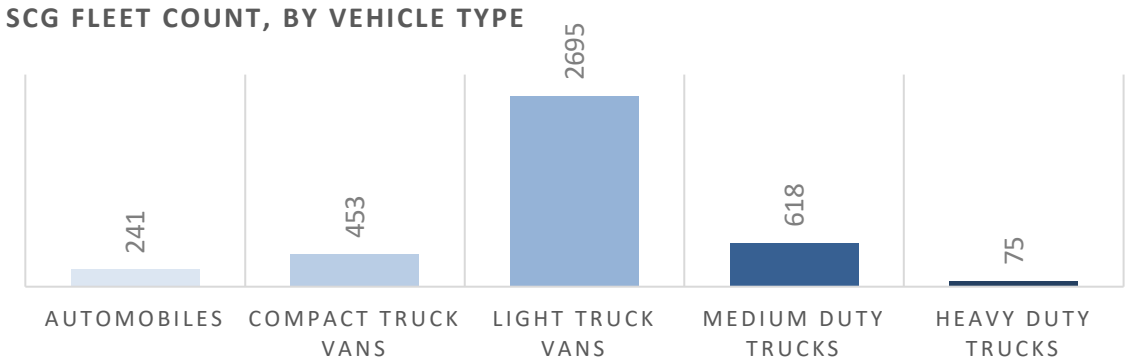
Ex. Ford F-150, F-250

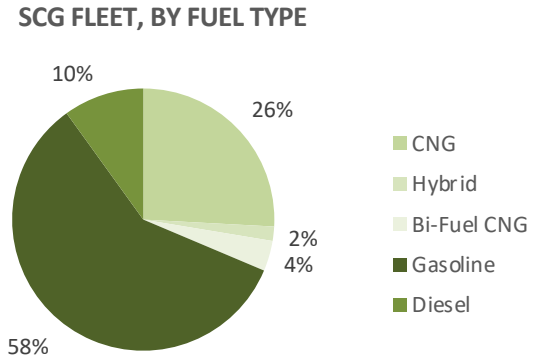
Class III+ Truck

Ex. Ram 5500



Current SoCalGas Fleet- An Overview (Cont.)





- 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.

ZEV Considerations

- 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.

			Vehicle Phase-out and Replacement														
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Major Group	1st Rep.	2nd Rep.	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	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	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				

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