HOUSE ENVIRONMENT AND TRANSPORTATION COMMITTEE

Delegate Marc Korman, Chair
Delegate Michele Guyton, Vice Chair

January 29, 2026
1:45 PM
House Office Building, Room 250

Energy and Utility Regulation in Other States

AGENDA

I. Introductory Remarks

II. California Energy Commission
- David Hochschild, Chair

III. Public Utility Commission of Texas
- Courtney K. Hjaltman, Commissioner

IV. Questions

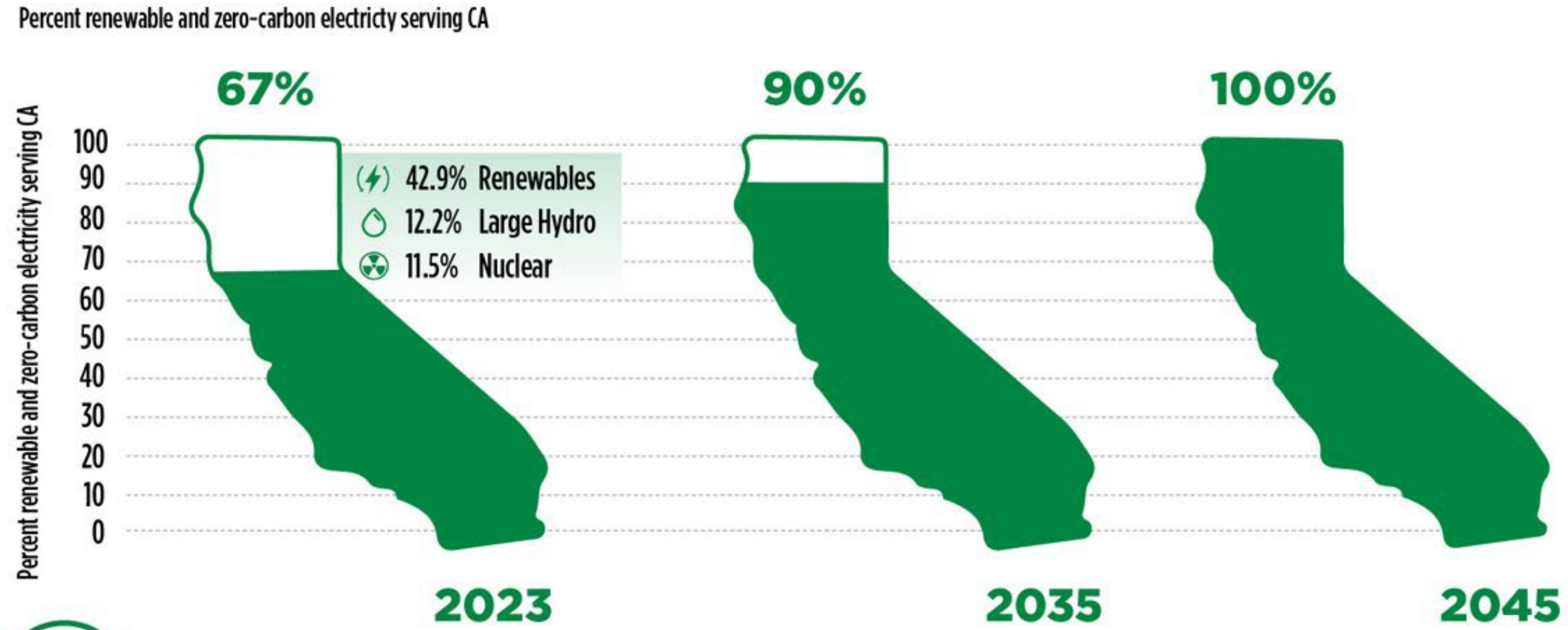
V. Concluding Remarks

Sunrise From the West

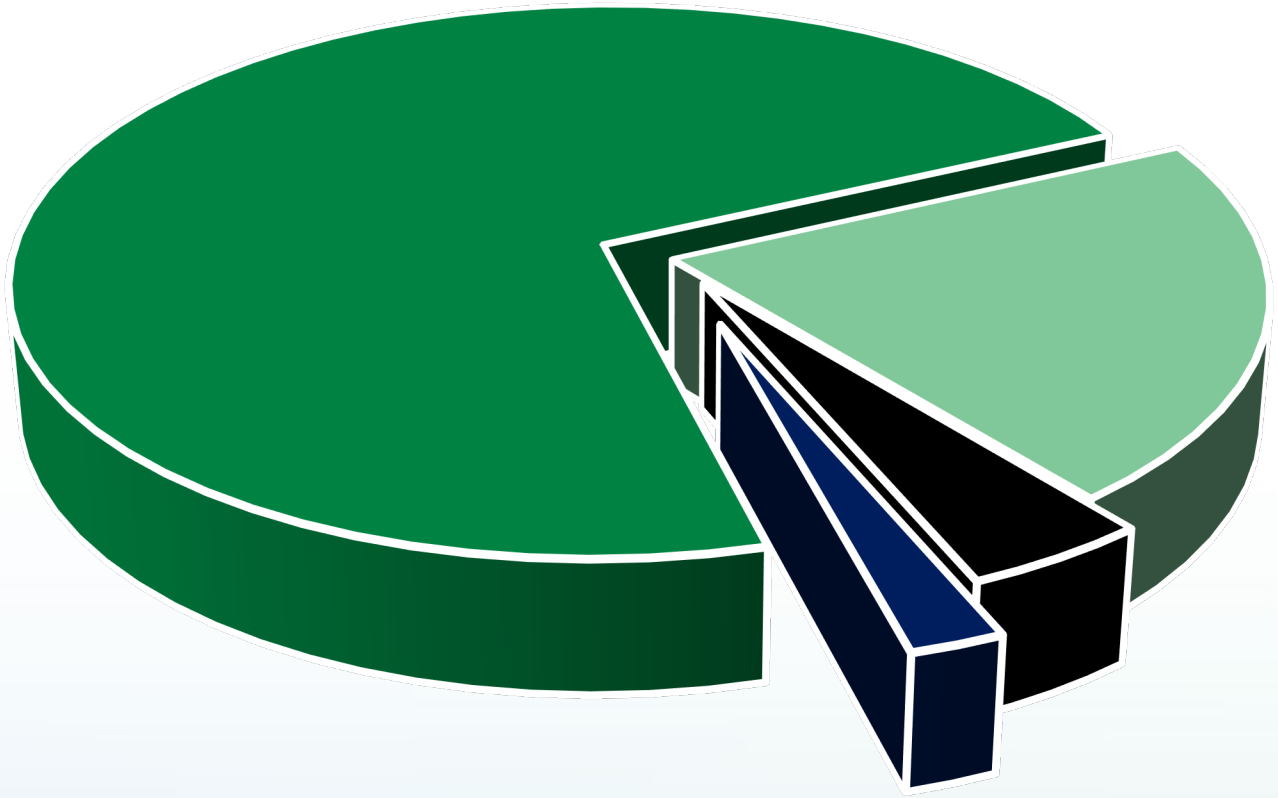
David Hochschild
Chair
California Energy Commission

California is on track to achieve 100% Clean Electricity

with 67% of the state's electricity already coming from renewables and zero-carbon resources



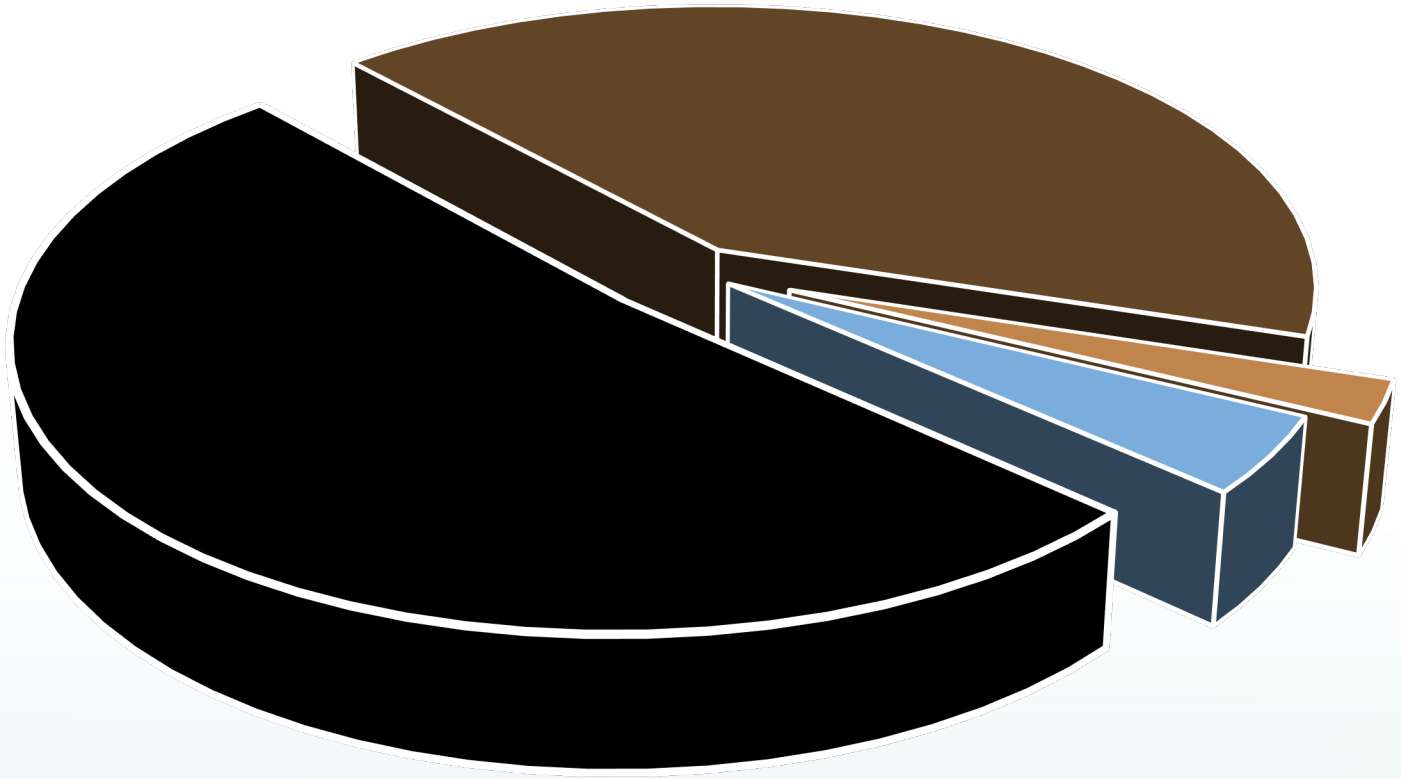
96% of New US Grid Capacity in 2024 Is Clean Energy



72%	Renewables	35.5 GW
21%	Battery storage	10.4 GW
4%	Fossil fuels	2.2 GW
2%	Nuclear	1.1 GW

Data: US Energy Information Administration (EIA)

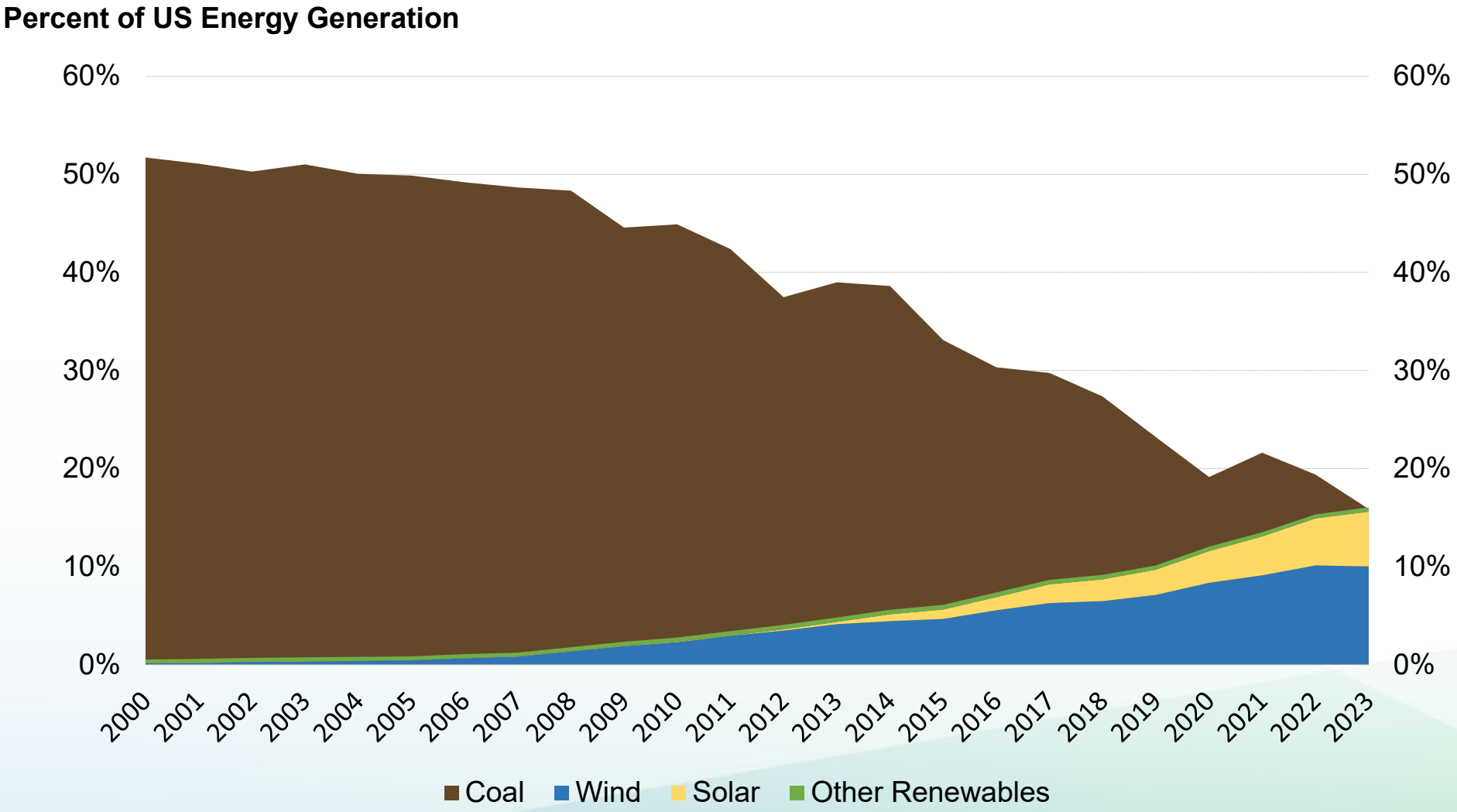
96% of US Grid Retirements in 2024 Are Fossil Fuels



52%	Coal	4.0 GW
42%	Natural gas	3.2 GW
2%	Other fossil fuels	0.2 GW
4%	All other	0.3 GW

Data: US Energy Information Administration (EIA)

Since 2023, Renewables Exceed Coal on US Grid



Data: EIA, Ember

“The people who say it can’t be done should get out of the way of the people who are doing it.”

- Chinese proverb

World's Largest Thin Film Solar PV Project

Desert Sunlight Solar Project
550 MW
Riverside County, CA

Photo: Jamey Stillings, TIME Magazine

World's Largest Geothermal Power Plant

Geysers Geothermal Power Plant
955 MW
Lake County, CA

Photo: Calpine Corporation & Geysers Power Company, LLC.

World's Third Largest Wind Project

Alta Wind Energy
1550 MW
Kern County, CA

Photo: Blattner Energy

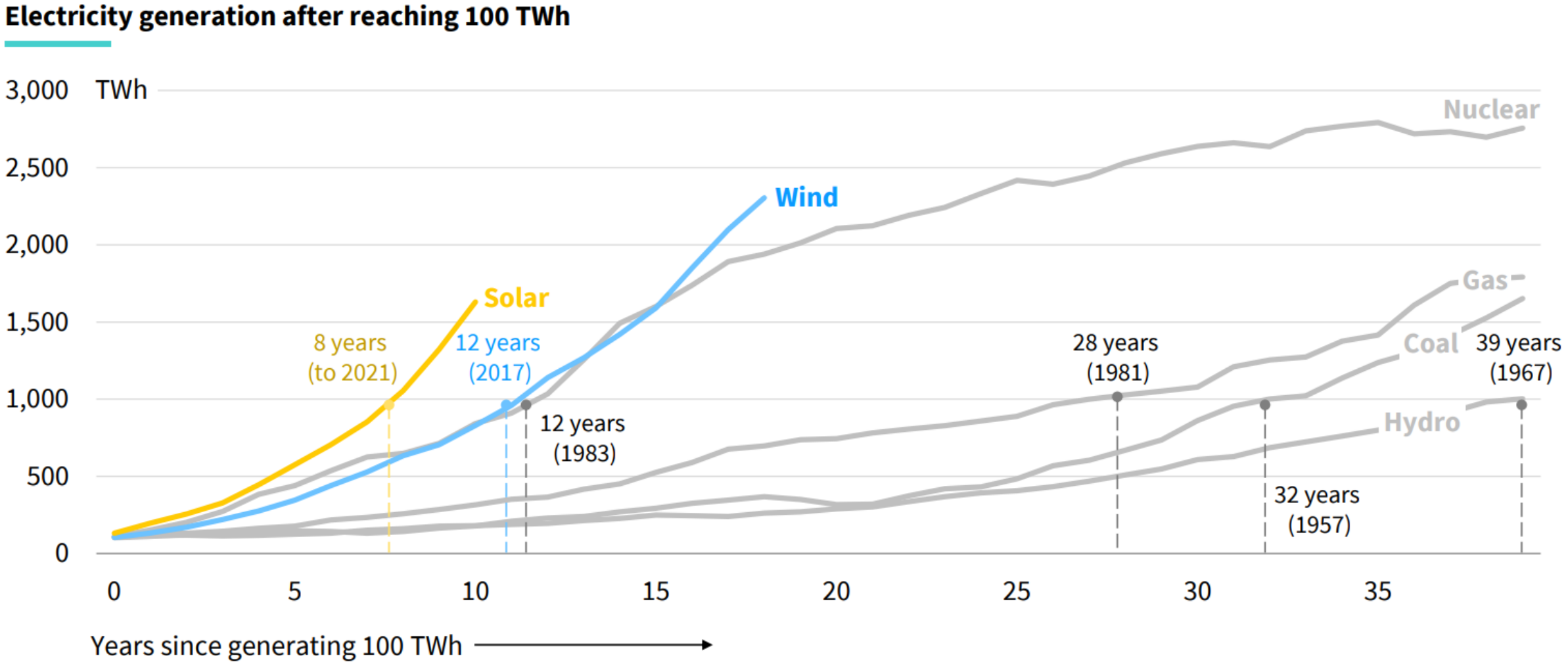
World's Largest Solar Rooftop

Apple HQ
17 MW
Cupertino, CA

Photo: Carles Rabada
Source: CAISO

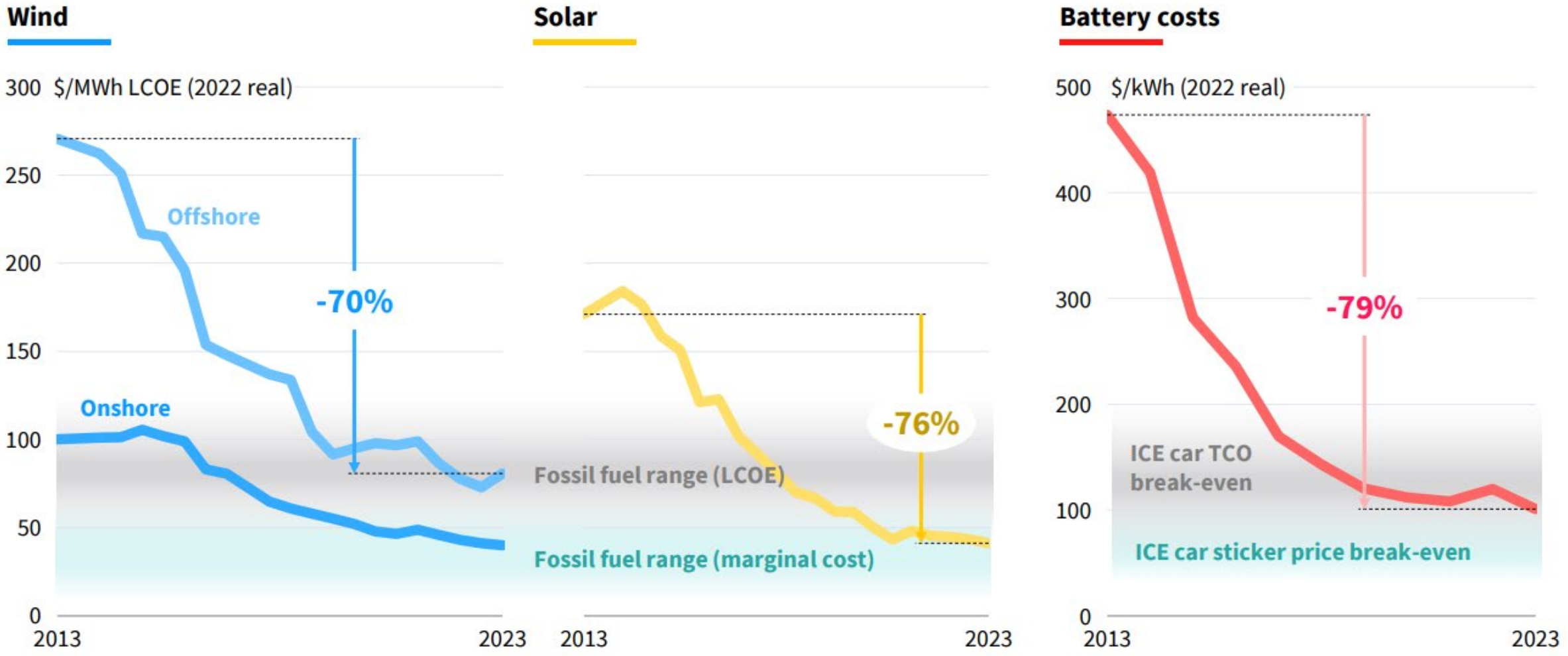
World's Largest Battery Storage Project

Global Renewables Have Scaled at Record Speed...



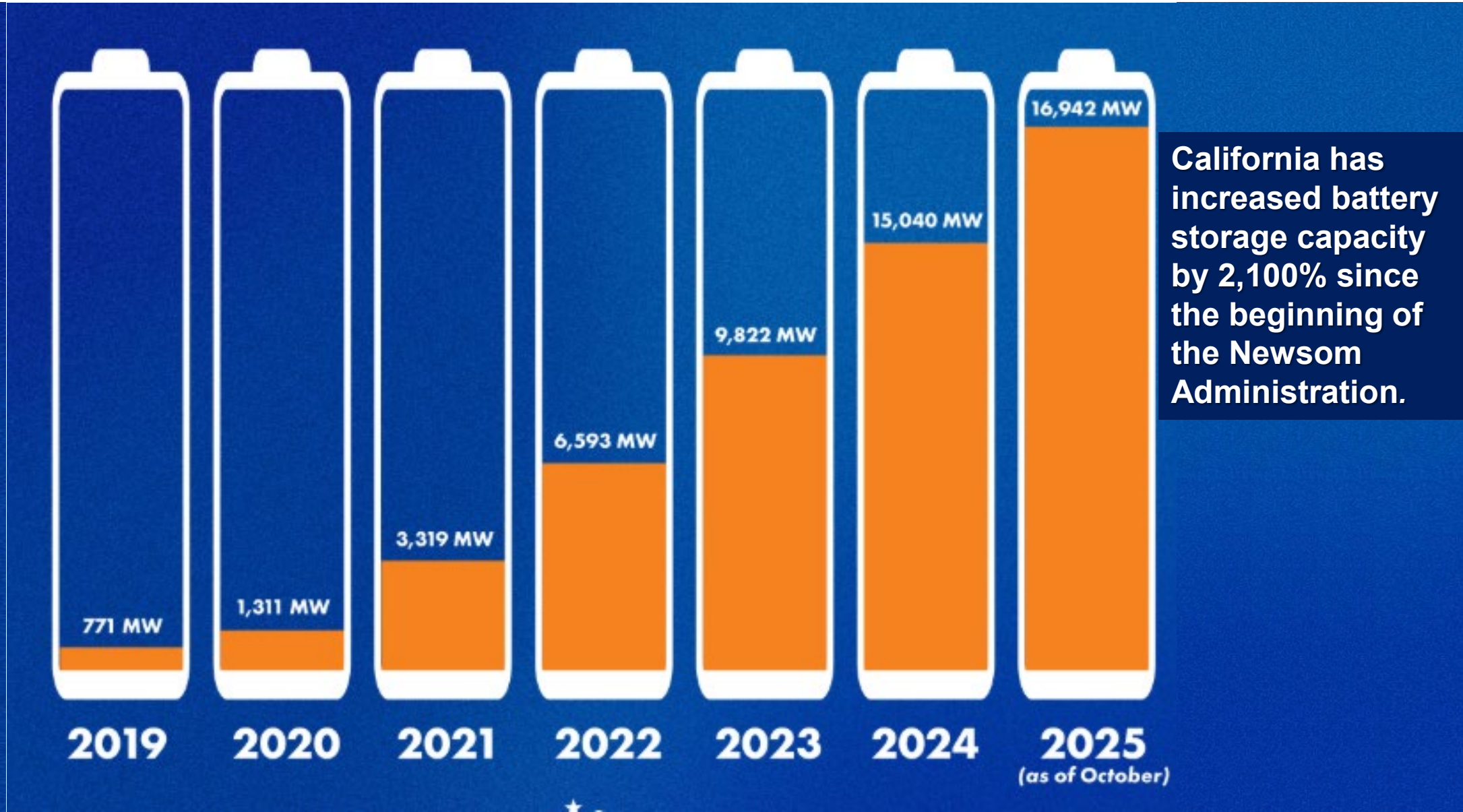
Graphic: Rocky Mountain Institute
Data: Ember 2023 Global Electricity Review and Pinto et al. (2023)

...Because Clean Energy Costs Continue to Plunge



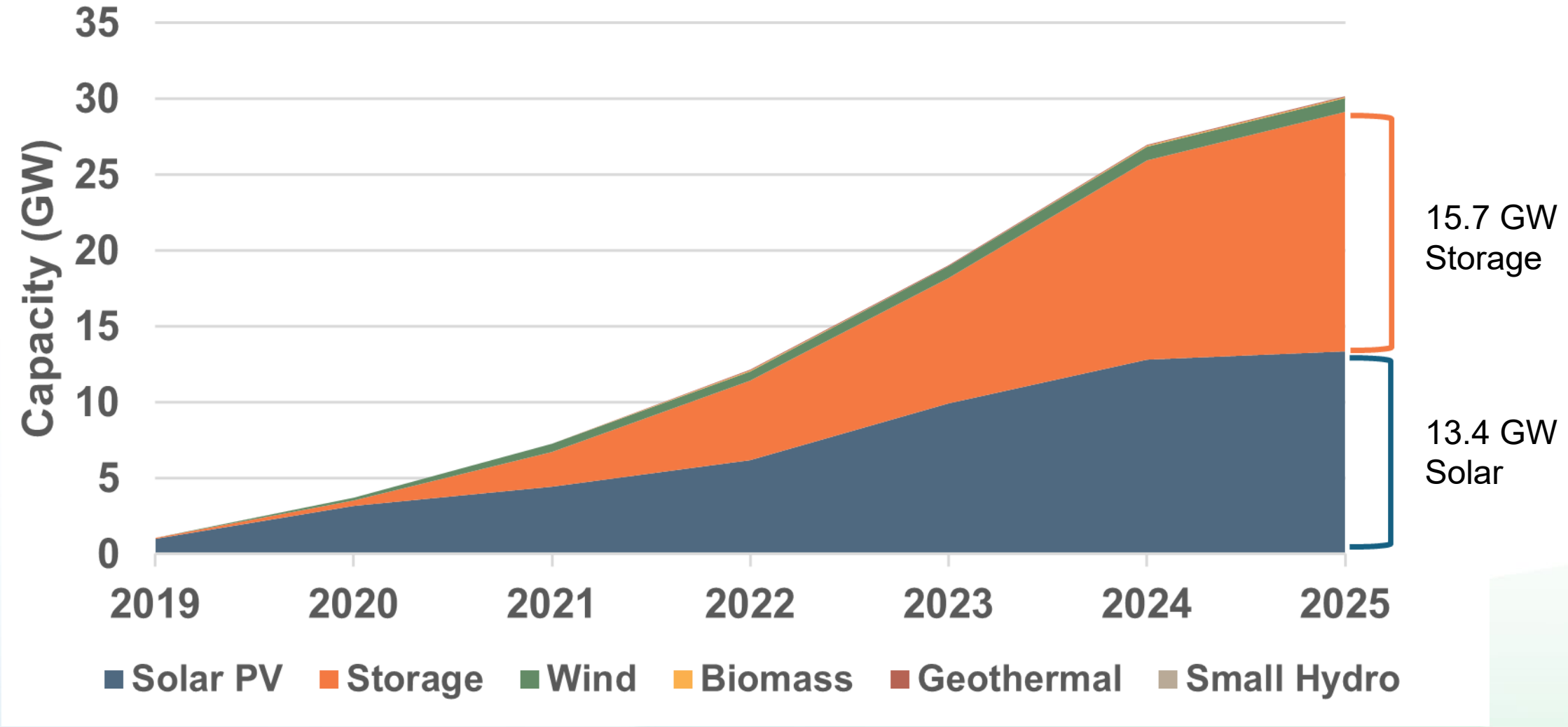
Graphic: Rocky Mountain Institute
Date: Bloomberg New Energy Finance
Note: LCOE is the levelized cost of energy, or the average cost of generation over asset's life

New Record: CA Hits Nearly 17 GW of Energy Storage



California has increased battery storage capacity by 2,100% since the beginning of the Newsom Administration.

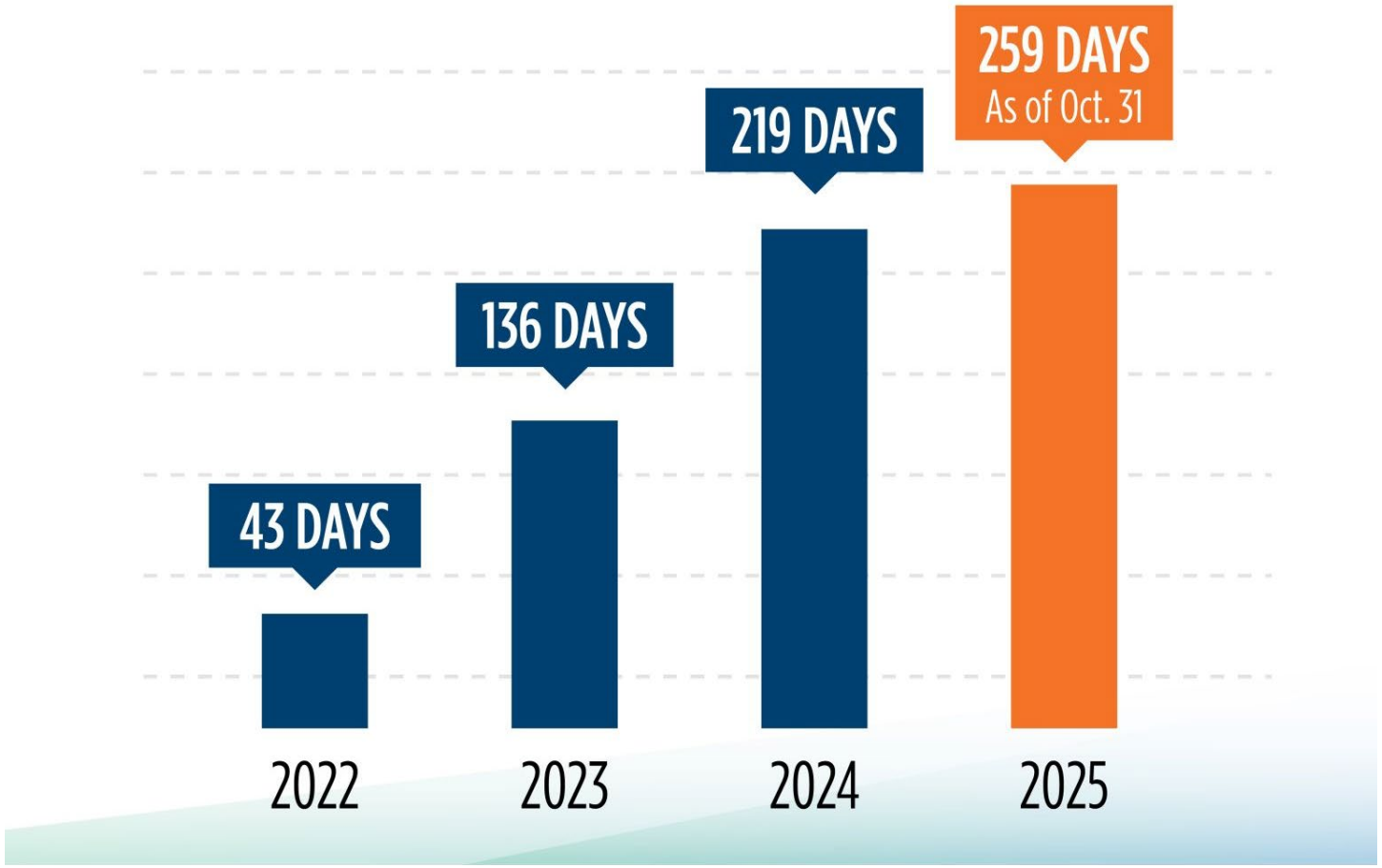
Newsom Administration Energy Progress: 30.2 GW of New, Clean Capacity* in CA Added Since 2019



*Includes clean energy and battery additions

Data: CEC

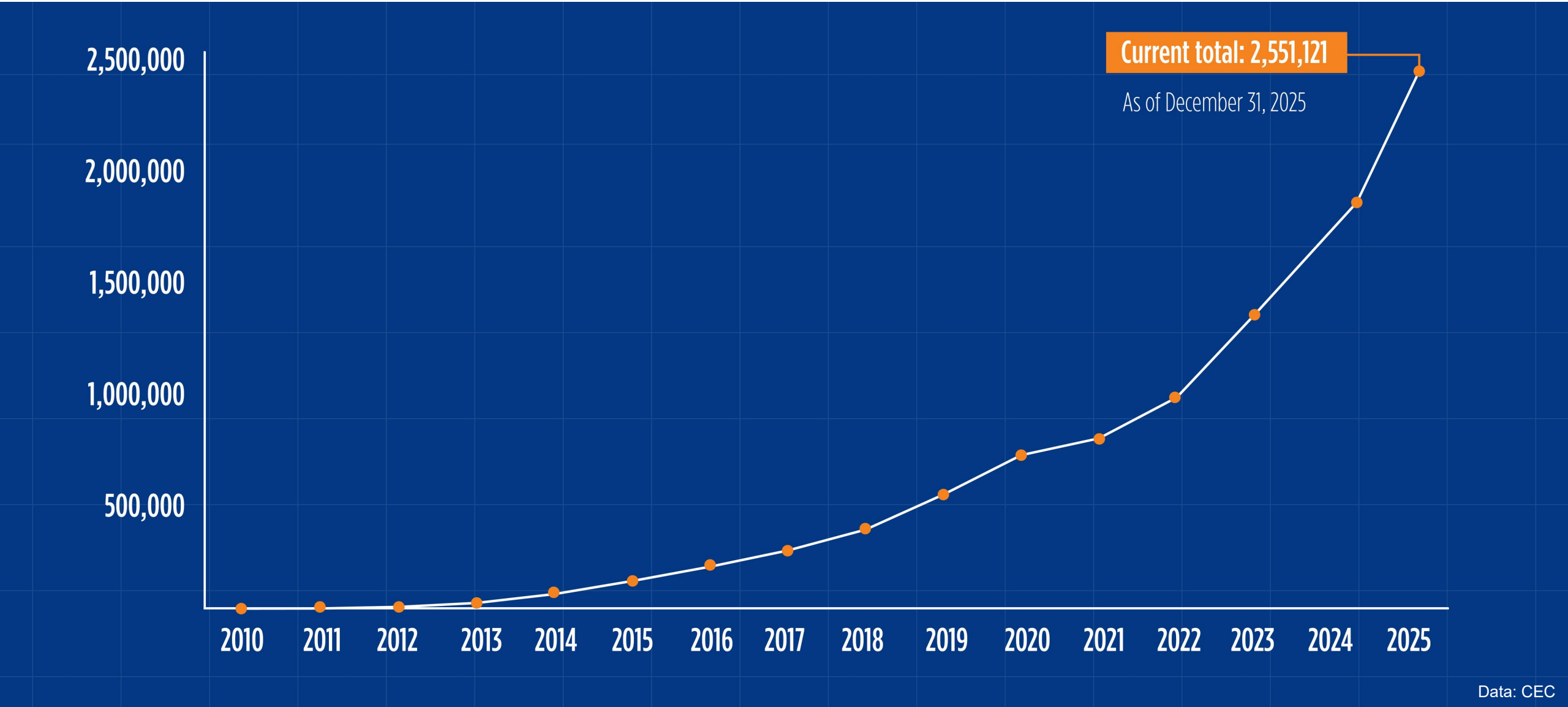
CA Grid Reaches 100% Clean Energy on 9 out of 10 days in 2025



Note: Analysis is limited to CAISO territory
Data: CAISO

2020: Governor Newsom Signs Mandate for 100% of New Vehicles to be Zero Emission by 2035

California Surpasses 2.5 million ZEV Sales in 2025



Data: CEC

Larger-Scale EV Charging Infrastructure

Electrify America Station
San Francisco, CA
20 Indoor EV Charging Stalls

Larger-Scale EV Charging Infrastructure

Tesla Supercharger
Lost Hills, CA
164 EV Charging Stalls

Largest Port Based Truck Charging Depot in the World

Forum Mobility Harbor Depot
Port of Long Beach, CA
Able to charge 44 trucks simultaneously

Partnership with Climate United to purchase up to 500 class 8 electric trucks—the largest single order of these trucks in US history

Lamppost EV Charging Platforms

Voltpost Pilot
Level 2 Charging

Off-Grid Solar EV Charger with Battery

EV Arc Charger
Beam Energy
San Diego, CA

Electric Semi-Trucks Take the Road

Frito Lay Warehouse
Modesto, CA

- **500 Mile Range Tesla Electric Semi**
- **2 Hour Charging Time**

EV Charging combined with MW-level storage

Electrify America
Baker, CA

Vehicle-to-Grid Electric School Buses

Oakland Unified School District

- 74 ZEV buses from Zum
- Bidirectional charging

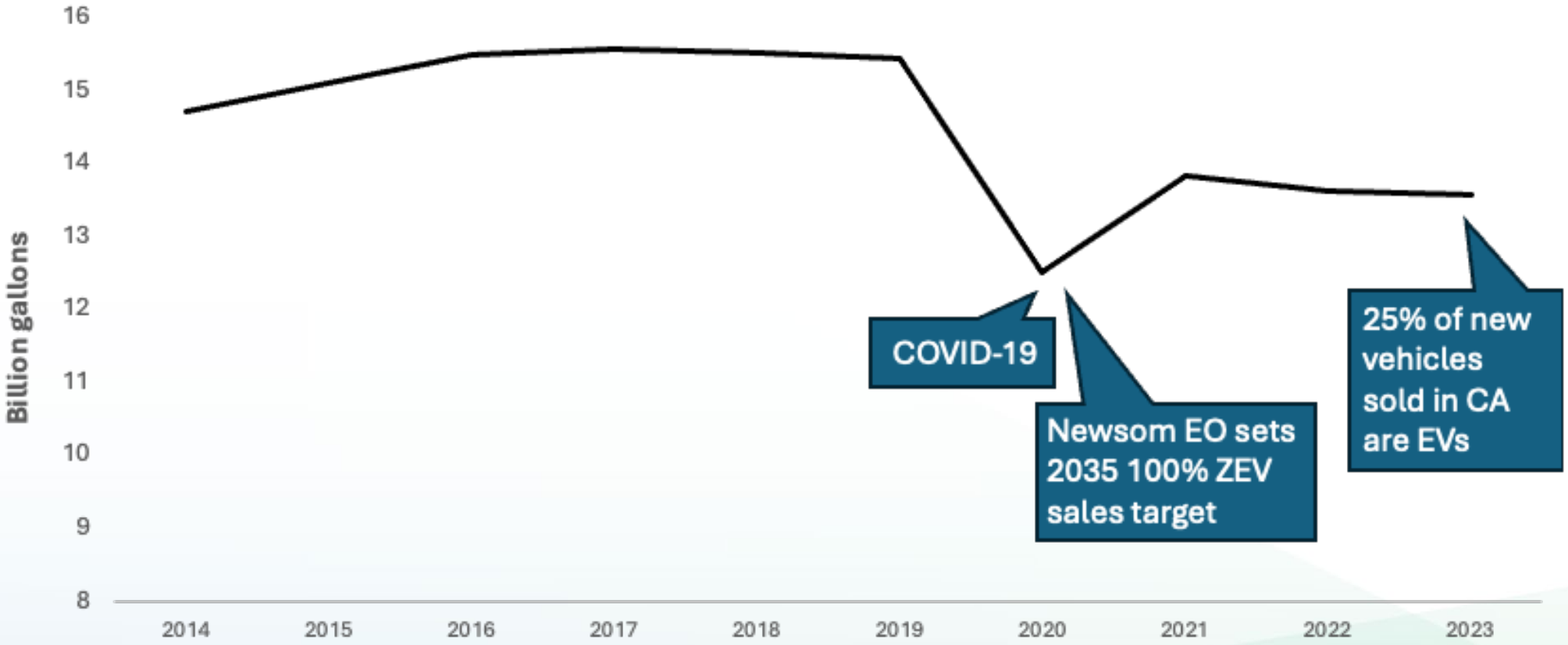
Medium Duty EV Chassis

Harbinger Motors
Garden Grove, CA

First Fully Electric Class 6 Armored Vehicles

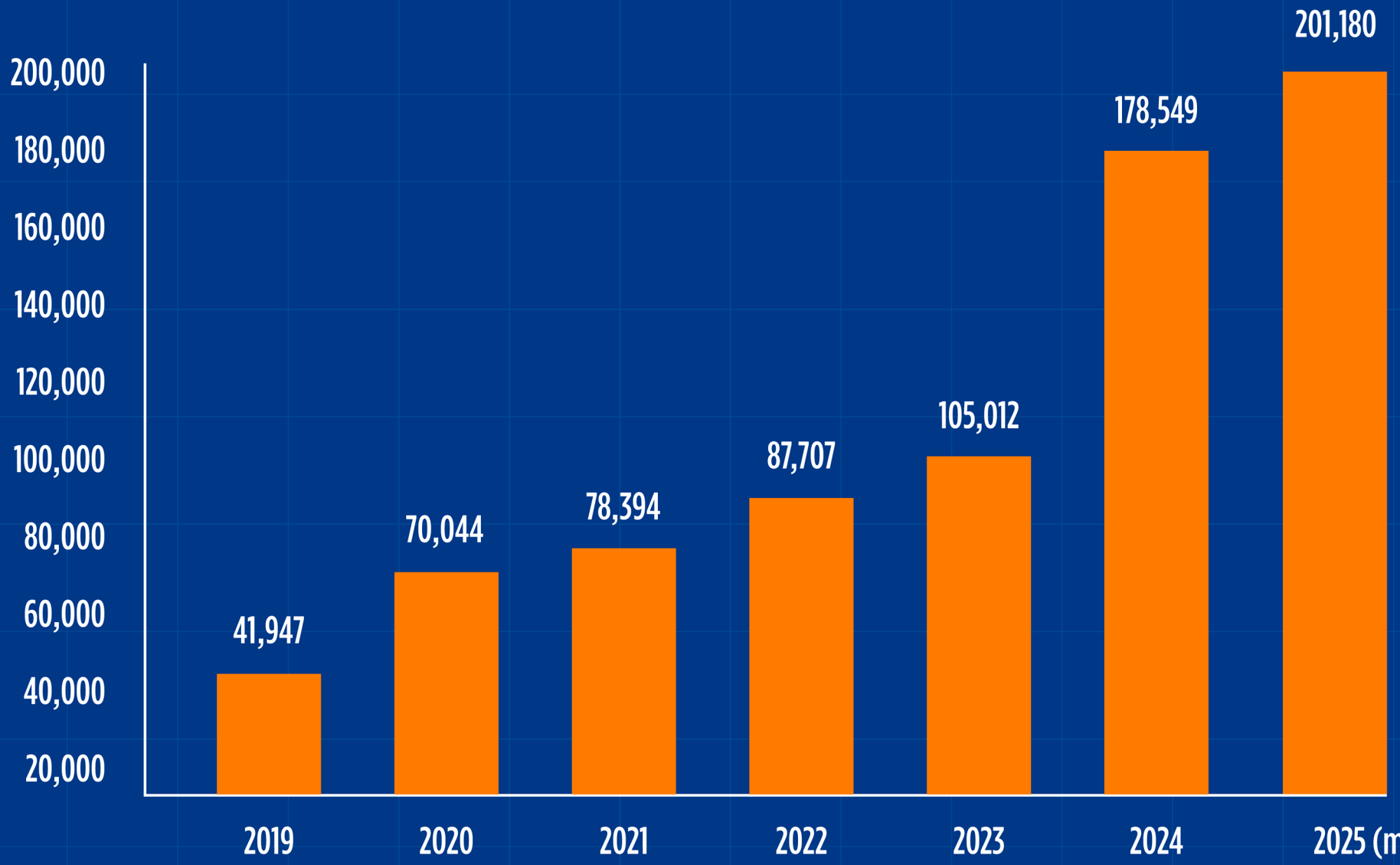
LOOMIS in partnership with LA-based electric truck manufacturer Xos

Gasoline Consumption in CA Has Already Peaked



Source: California Tax and Fee Administration

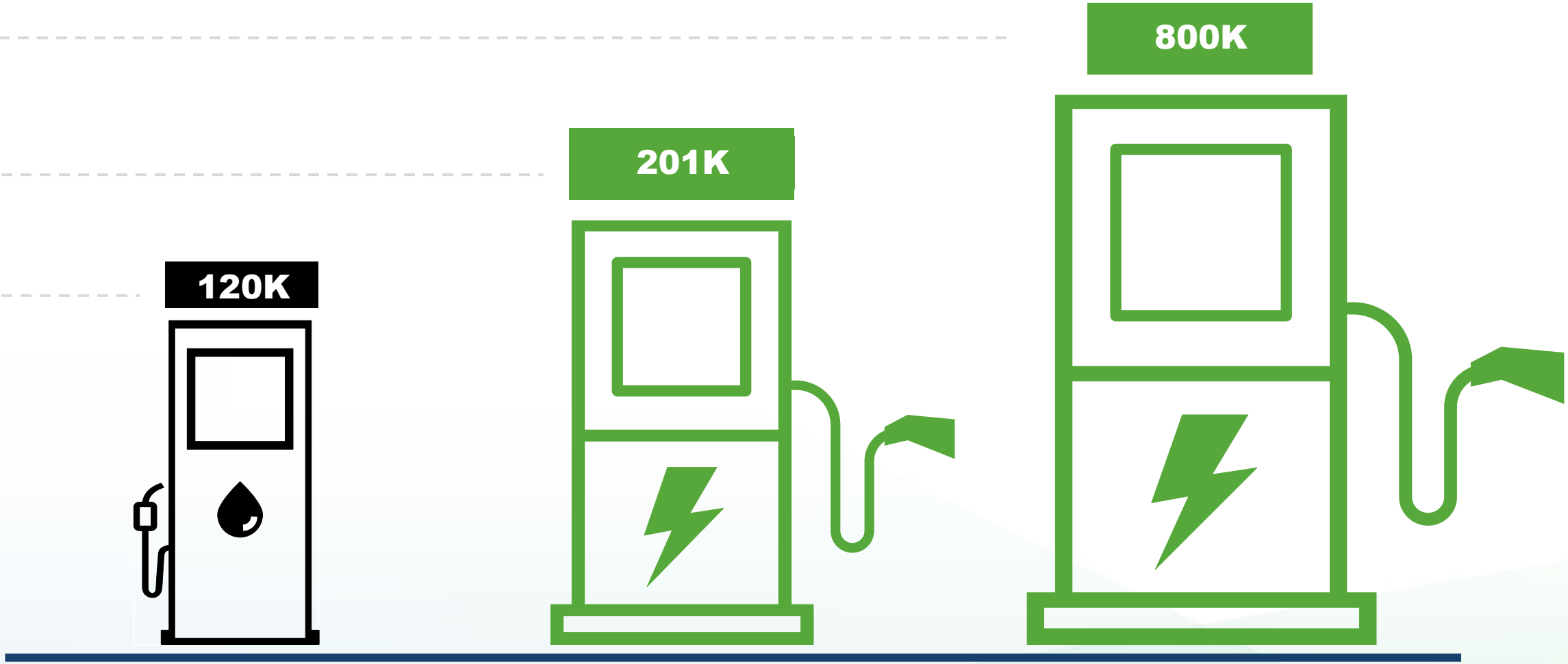
Electric Vehicle Chargers in California



Source:
California Energy Commission

Note:
Growth for year 2019-2020 due to addition of shared private charger data; and 2023-2024 due to new charger installations and additional data sources for charger counts.

CA Now Has More EV Chargers Than Gas Nozzles



Not to scale

Source: CEC
Note: Estimate is conservative, as EV chargers often have more than one charging cable

California's vs World's Leading Economies

2012

Rank	Country
#1	UNITED STATES
#2	CHINA
#3	JAPAN
#4	GERMANY
#5	FRANCE
#6	UNITED KINGDOM
#7	BRAZIL
#8	RUSSIAN FEDERATION
#9	ITALY
#10	CALIFORNIA

2025

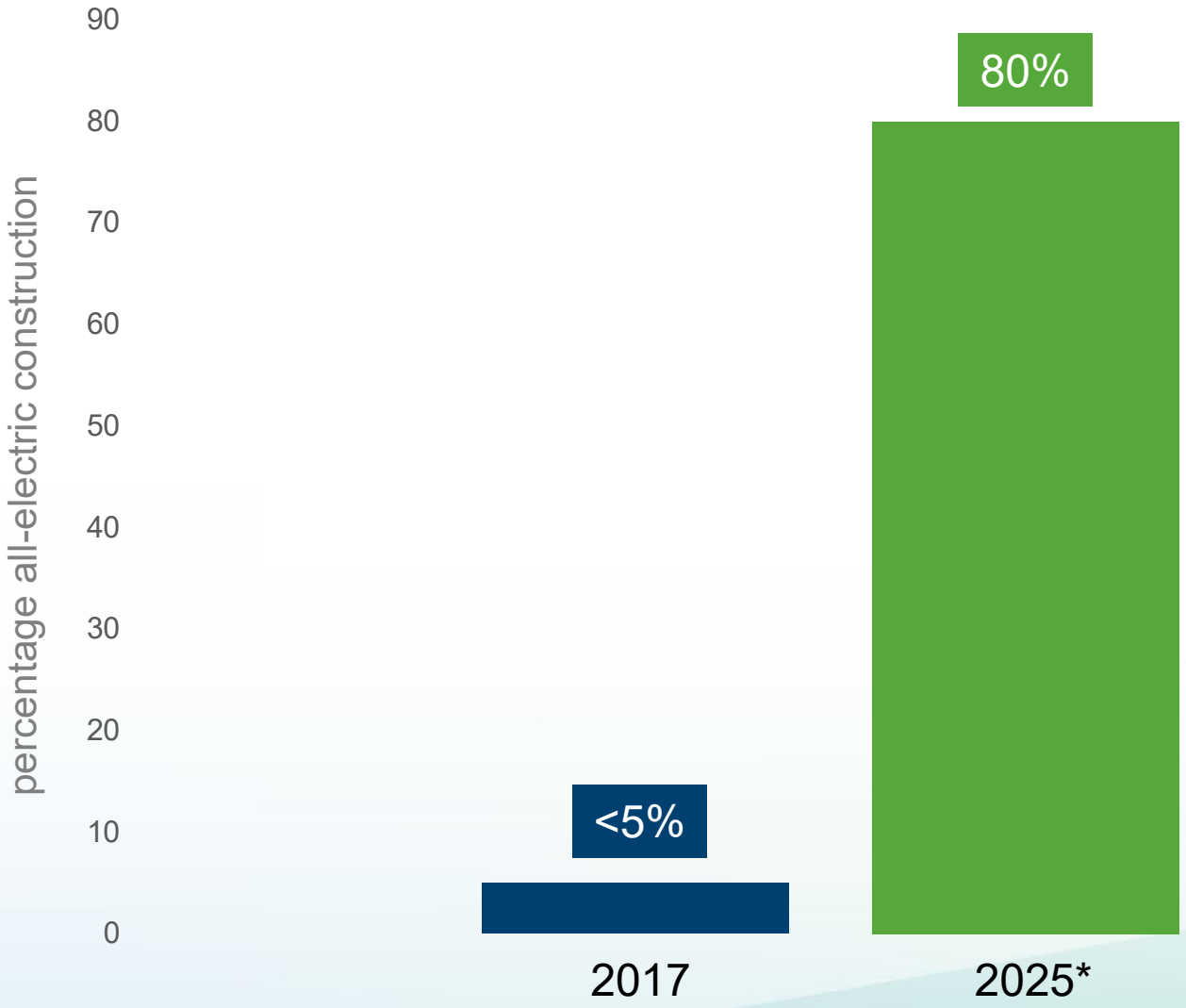
Rank	Country
#1	UNITED STATES
#2	CHINA
#3	GERMANY
#4	CALIFORNIA
#5	JAPAN
#6	INDIA
#7	UNITED KINGDOM
#8	FRANCE
#9	ITALY
#10	CANADA

Source: International Monetary Fund; Bureau of Economic Analysis
Note: Countries / states are ranked by Gross Domestic Product.

1900. Where is the First Car?

1913. Where is the Last Horse?

All-Electric Construction in California



*preliminary analysis, for single family homes in last 12 months

Source: CEC/CBIA

California Energy Commission Solar Mandate

2020: Solar Required on All New Homes | **2023:** Solar Required on All New Buildings

California Energy Commission Building Code

2025: Bringing Heat Pumps Mainstream for Space & Water Heating

Heat Pump Water Heater

$200 BILLION

avoided energy costs over the last 50 years from the State's efficiency standards

70% amount of California's electricity used by homes and businesses

25% amount of the states total greenhouse gas (GHG) emissions that homes and businesses are responsible for

$4.8 BILLION

statewide energy cost savings expected from the standards for 2025


Electrification of Almost Everything

PG&E Technician Removing my Gas Meter (October 2025)

Electric Induction Cooktop

Channing Street Copper Company
Berkeley, CA

All-Weather Window Heat Pumps

Gradient
San Francisco, CA

Largest All-Electric Hospital in the US

UC Irvine Health
Irvine, CA

Street Sweeping Goes Electric

CalTrans EV Street Sweeper
Davis, CA

Electrification of Public Safety

Tesla Police Fleet
South Pasadena, CA

Ford F-150 Lightning Police Fleet
Fort Bragg, CA

Electric Rental Trucks

Electrification of the Waterfront

Electric Harbor Cranes, Electric Tugboat & Electric Ferry

Caltrain: From Diesel to Electric in 2024

Supplemental Information

for the Maryland House Committee on Environment and Transportation

Accompanying the Testimony of

Courtney K Hjältman

Commissioner

Public Utility Commission of Texas

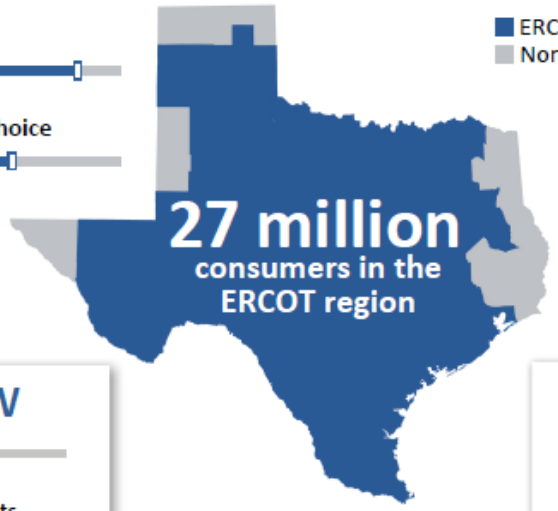
January 29, 2026

PUCT Jurisdiction – Electric Industry

ERCOT region

90% of Texas Load

75% of load has retail choice



103,609+ MW
Installed Capacity

1,873+
Active Market Participants

85,508 MW
Peak Demand *August 10, 2023*

Non-ERCOT region
**includes only non-ERCOT IOUs*

1.3 million
consumers

16,659 MW
Generation Capacity

80
Generation Units

15,204 MW
Peak Demand

54,100
miles of transmission lines

1,250
Generation Units

299 Electric Service Providers (Texas)
**includes both regulated non-opt in entities*

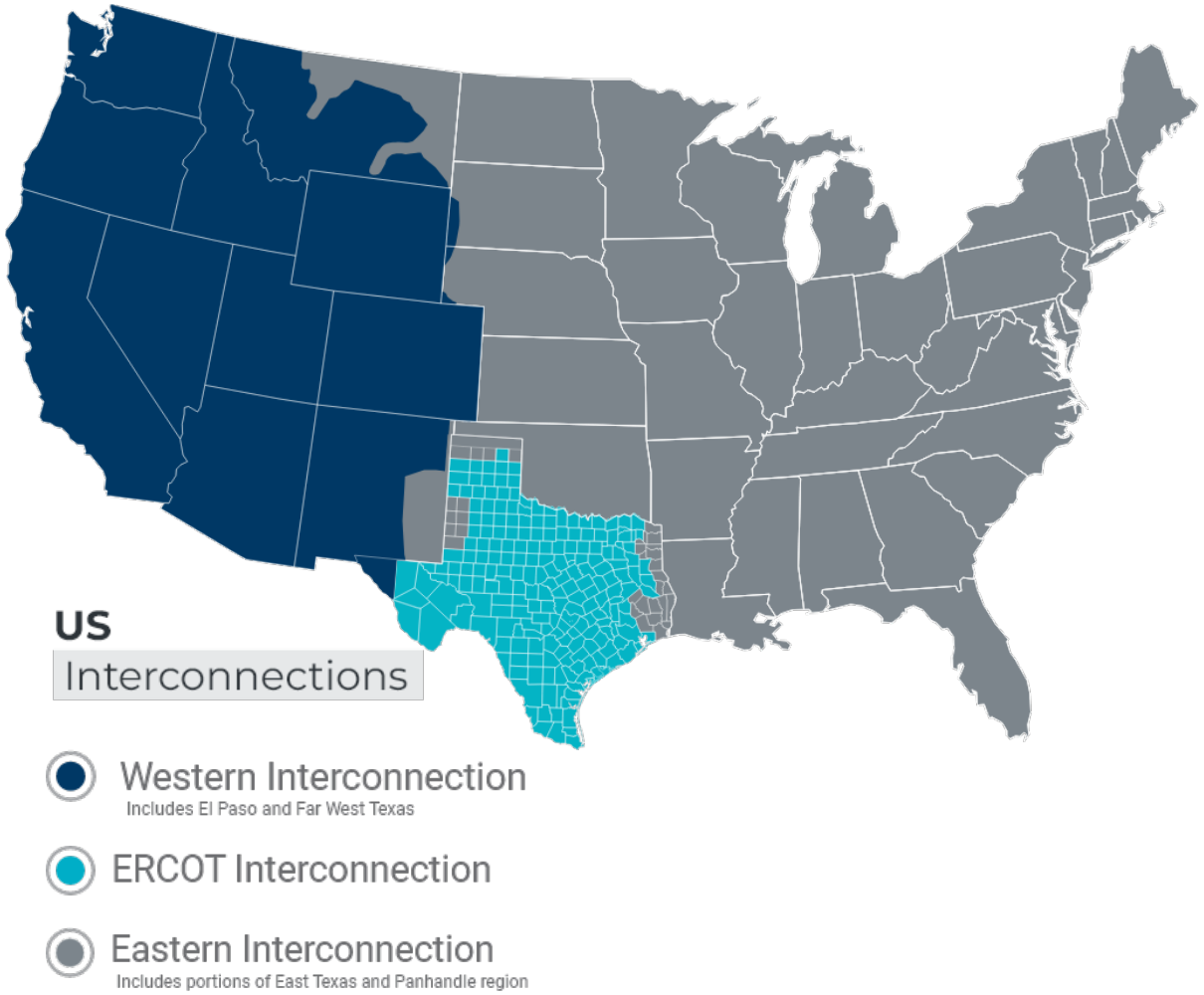
Retail Electric Providers

Electric Cooperatives

Municipally Owned Utilities

IOUs

The ERCOT Region

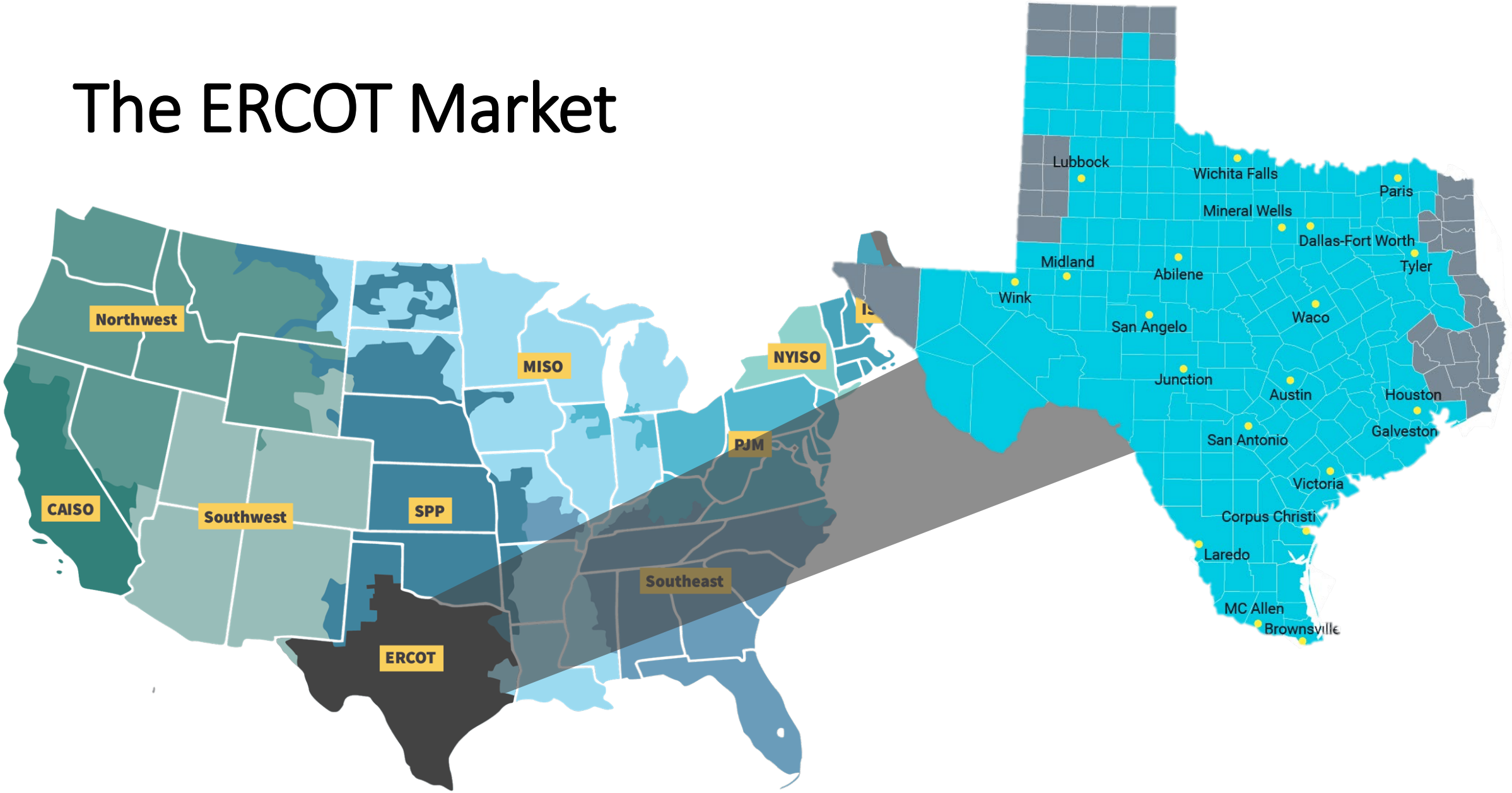


The ERCOT grid:

- Serves 90% of Texas electric load
- Covers 75% of Texas land
- Comprises more than 54,000 mi. of transmission lines
- Includes 1,250+ generation units (including PUNs)

ERCOT's connections to other grids are limited to ~1,220 MW of direct current (DC) ties, which allow control over the flow of electricity

The ERCOT Market



ERCOT the ISO

As a part of restructuring the Texas electric market in 1999, the Texas Legislature assigned ERCOT four primary responsibilities:

- **Maintain system reliability**
- **Facilitate a competitive wholesale market**
- **Ensure open access to transmission**
- **Facilitate a competitive retail market**

ERCOT is a nonprofit organization regulated by the Public Utility Commission of Texas, with oversight by the Texas State Legislature.

ERCOT is not a Market Participant and does not own or maintain generation or transmission/distribution wires.

Competitive Market Framework

ERCOT plays an integral role in all areas.

Generation

Competitive Production

Transmission & Distribution

Regulated Open Access

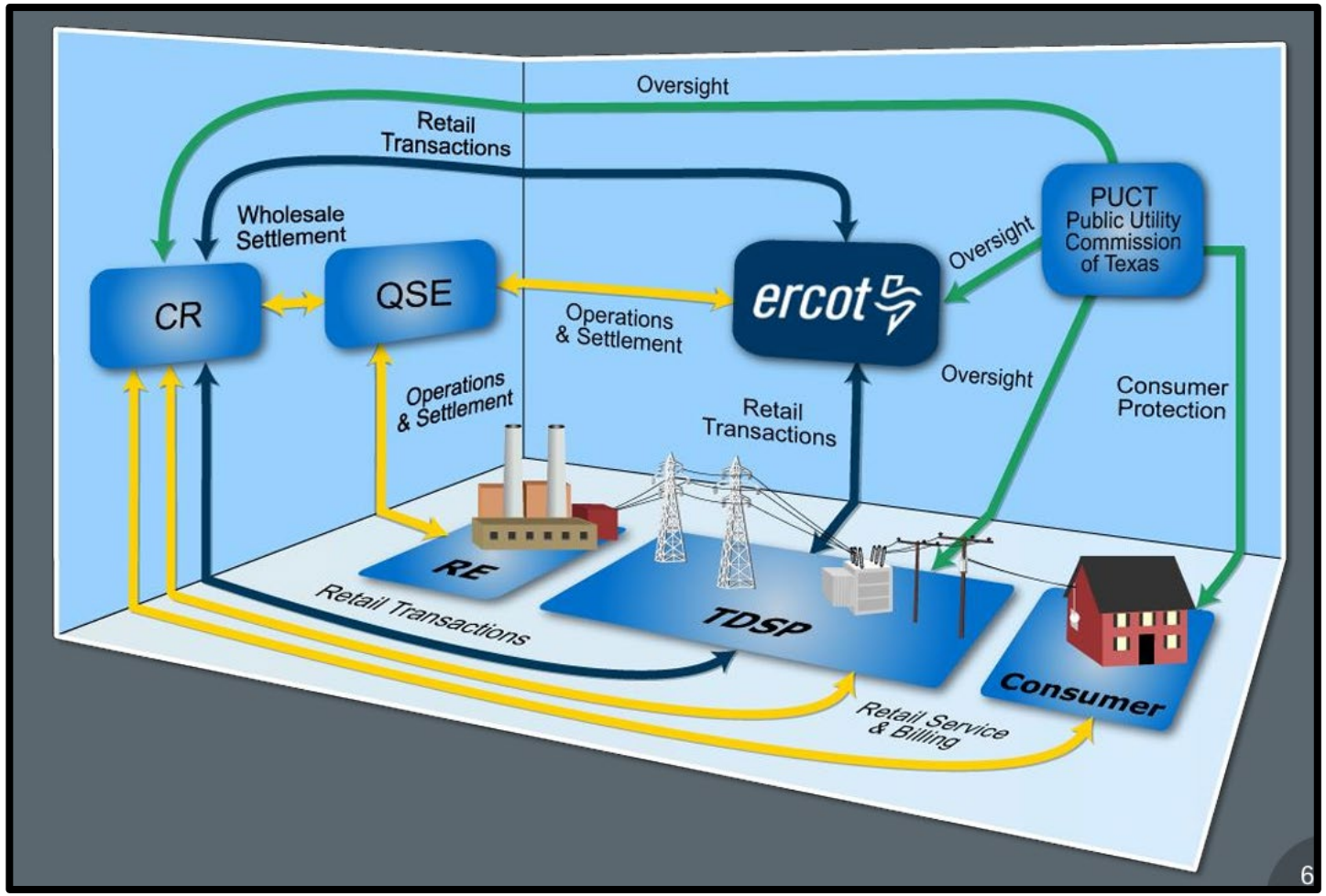
- Transmission and distribution lines and related facilities are owned and operated by regulated utilities. They operate in the ERCOT market.

Retailers

Competitive Sales

- Retailers compete to serve consumers' electric load in ERCOT.
- Municipal and cooperative utilities sell power to one fourth of the ERCOT market.
- Nearly 100% smart meters

ERCOT Market Participants



PUCT: Public Utility Commission of Texas

TDSP: Transmission or Distribution Service Provider

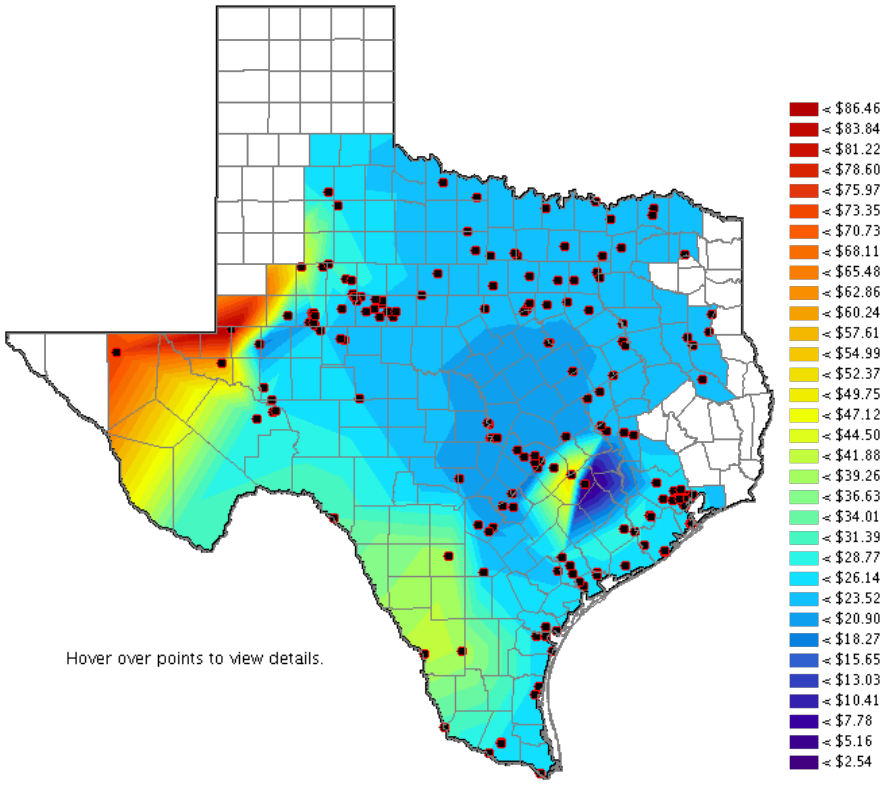
QSE: Qualified Scheduling Entity

RE: Resource Entity

CR: Competitive Retailer

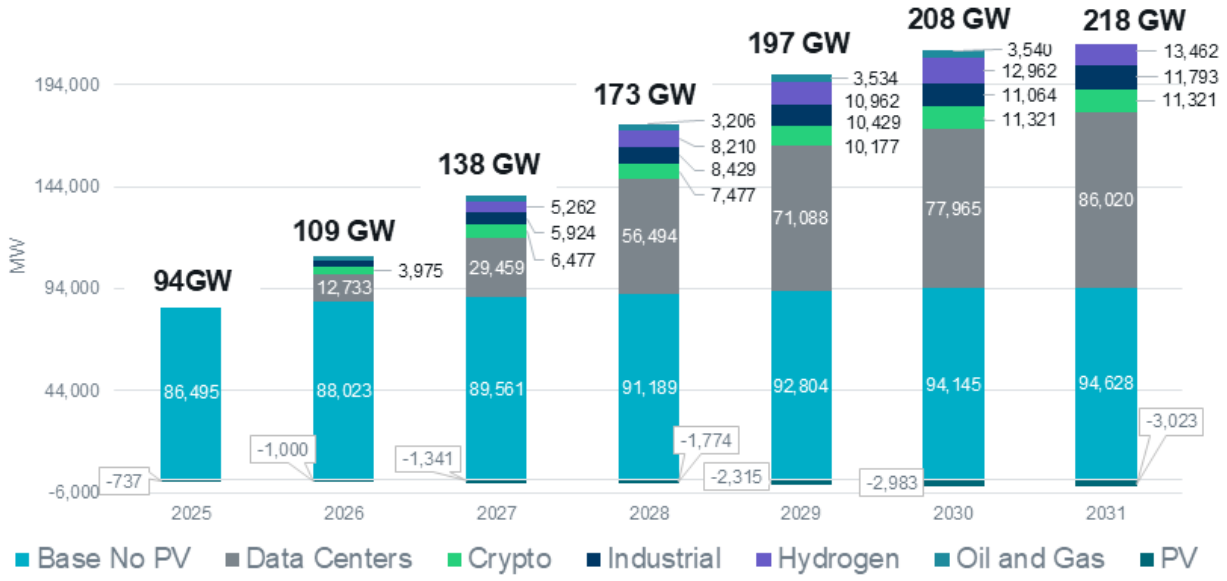
Energy-Only Market

- Energy-only market; $5,000/MWh scarcity pricing reflected through operating reserve demand curves
- Generator and energy storage self-commitment; ERCOT makes residual reliability commitments if needed
- Voluntary Day-Ahead Market (DAM); Ancillary Services procured and co-optimized with energy in DAM
- All generators (including renewables and energy storage) submit offers for generation output
- Real-Time Market clears every five minutes, using generation with the lowest offers to serve the load, subject to unit operational and transmission constraints; Ancillary Services again co-optimized with energy in real time
- All generators (including renewables and energy storage), other than some small distributed generators, receive output level instructions and Locational Marginal Prices



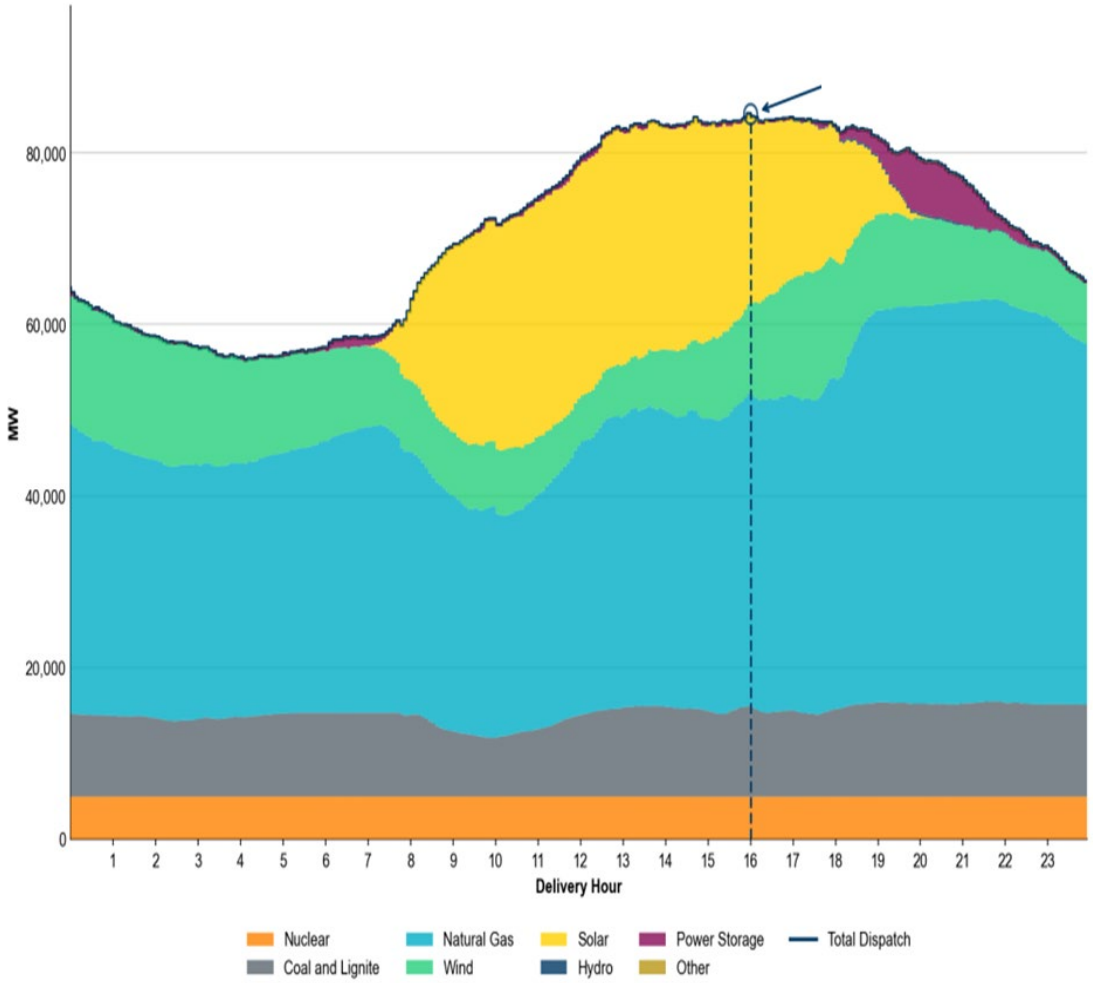
ERCOT Large Load Interconnection Queue

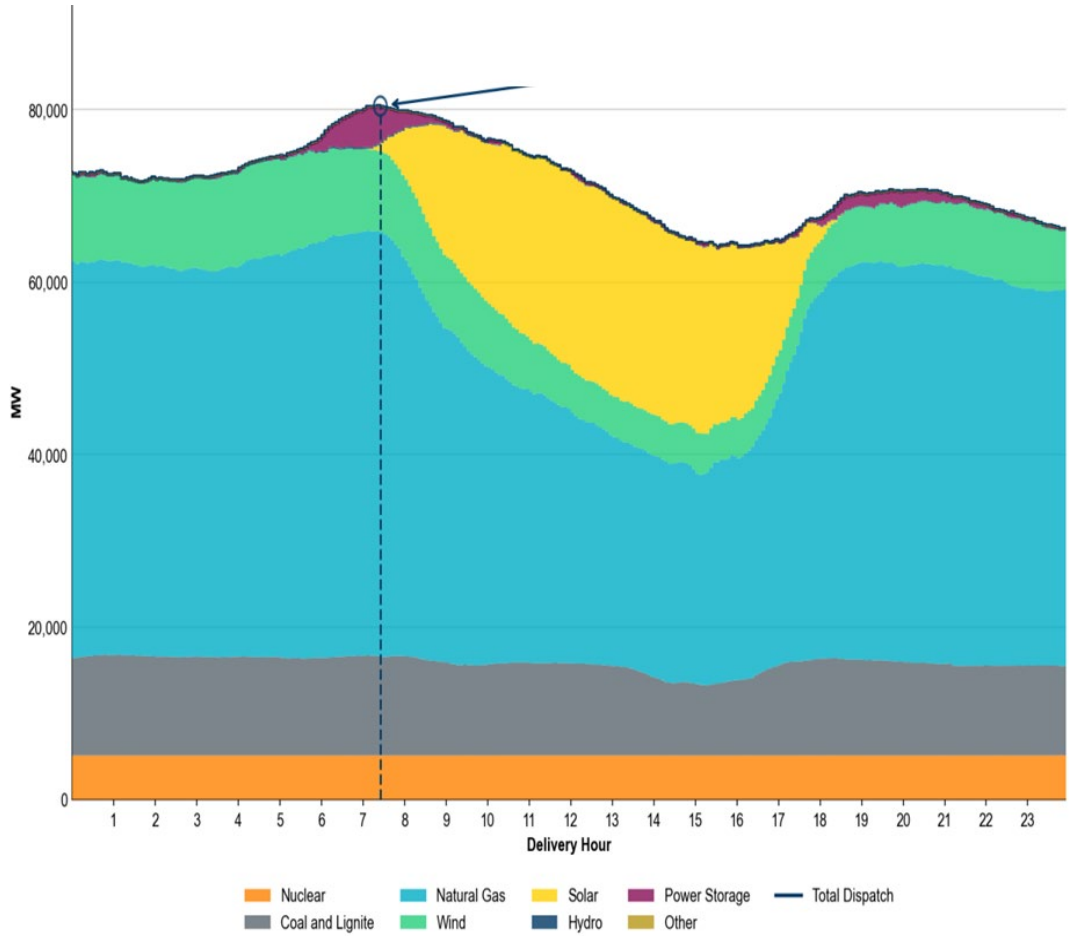
Data provided by Transmission Service Providers to ERCOT showing all phases of interconnection process
PV indicates photovoltaic (solar) generation



	2025	2026	2027	2028	2029	2030	2031
Data Centers	3,717	12,733	29,459	56,494	71,088	77,965	86,020
Crypto	1,868	3,975	6,477	7,477	10,177	11,321	11,321
Industrial	973	2,757	5,924	8,429	10,429	11,064	11,793
Hydrogen	5	357	5,262	8,210	10,962	12,962	13,462
Oil and Gas	1,334	2,186	2,851	3,206	3,534	3,540	3,606
PV	-737	-1,000	-1,341	-1,774	-2,315	-2,983	-3,023

Peak Day Dispatch in Summer & Winter 2025





Peak and Net Peak Load Projections

From the December 2025 Report on the Capacity, Demand and Reserves (CDR) in the ERCOT Region, 2026-2030

	Load for the peak Load hour		Load for the peak Net Load hour (Load minus wind and solar generation)	
Year	Base Summer Forecast	Summer Peak Load Hour (Hour Ending)	Base Summer Forecast	Summer Peak Net Load Hour (Hour Ending)
2026	94,159	5:00 p.m.	81,411	9:00 p.m.
2027	103,725	5:00 p.m.	91,088	9:00 p.m.
2028	120,875	5:00 p.m.	108,314	9:00 p.m.
2029	127,905	5:00 p.m.	115,532	9:00 p.m.
2030	138,010	5:00 p.m.	126,198	9:00 p.m.

Generation Capacity and Planned Additions

From the May 2024 Report on the Capacity, Demand and Reserves (CDR) in the ERCOT Region, 2025-2029

ERCOT – Operational Generation Capacity for Summer Peak Demand (MW)

Resources	2025	2029
Installed Summer-rated Capacity, Thermal	66,107	66,107
Hydroelectric, Peak Average Capacity [1]	455	455
Switchable Capacity	3,680	3,680
Switchable Capacity unavailable to ERCOT	-1,345	-732
Available Mothballed Capacity[2]	136	136
Capacity from Private Use Networks	2,870	3,217
Coastal Wind[3], Panhandle Wind[4], Other Wind[5]	10,961	10,961
Solar Utility-Scale, Peak Average Capacity Contribution (76% of installed capacity)	17, 670	17,670
Storage, Peak Average Capacity Contribution	0	0
Operational Generation Capacity	**100,533**	**101,493**

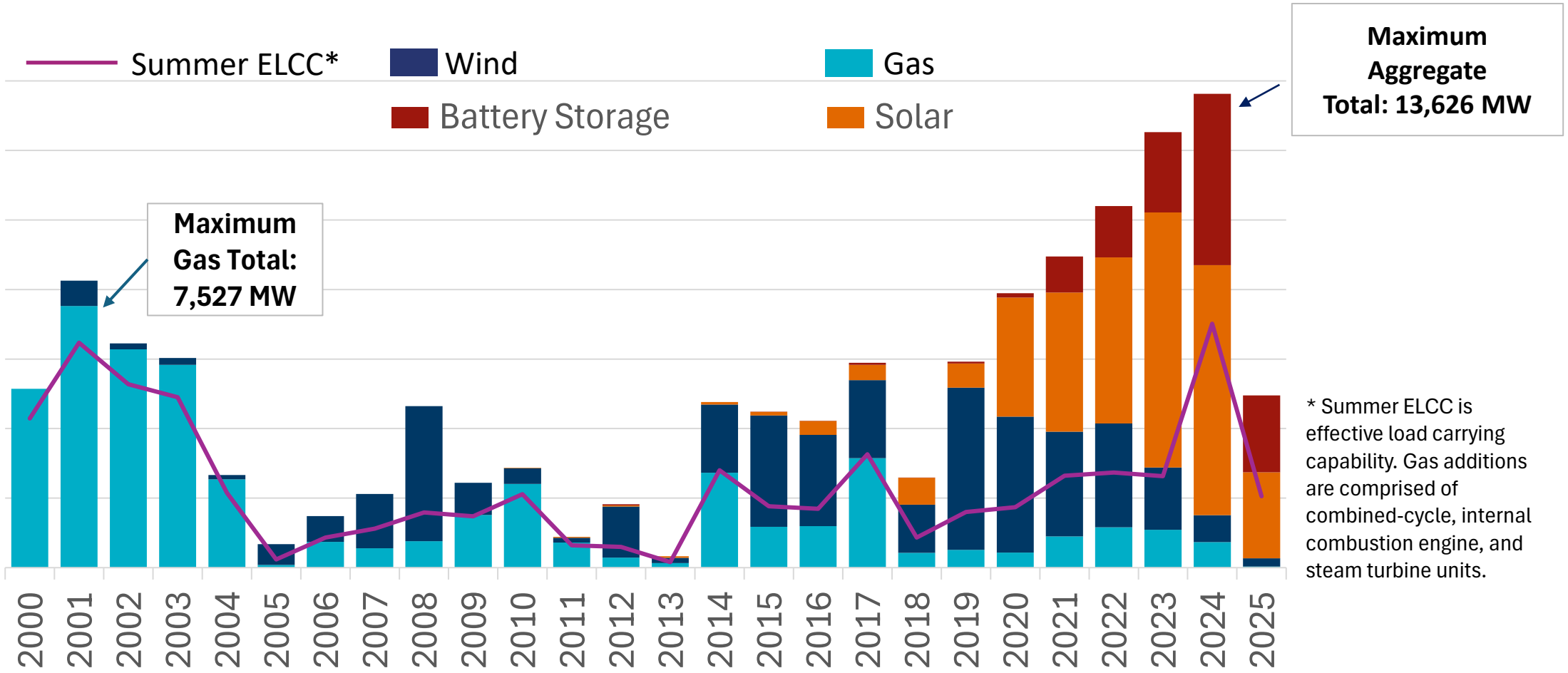
Notes:1- Contribution at 80% of installed capacity, 2-Inactive but not decommissioned generating units, 3-Peak average capacity contribution at 60% of installed capacity, 4- Peak Average Capacity Contribution at 29% of installed capacity, 5- Peak Average Capacity Contribution at 22% of installed capacity.

ERCOT Planned Generation Resources (MW)

Resources	2025	2029
Planned Resources[6] with Signed IA, Air Permits and Adequate Water Supplies	694	972
Planned Coastal Wind, Panhandle Wind, and Other Wind with Signed IA	270	1,010
Planned Solar Utility-Scale[7]	13,281	28,019
Planned Storage[8]	0	0
Planned Generation Capacity	**14,245**	**30,001**
Non-Synchronous Ties	**817**	**817**
Total capacity	**115,596**	**132,312**

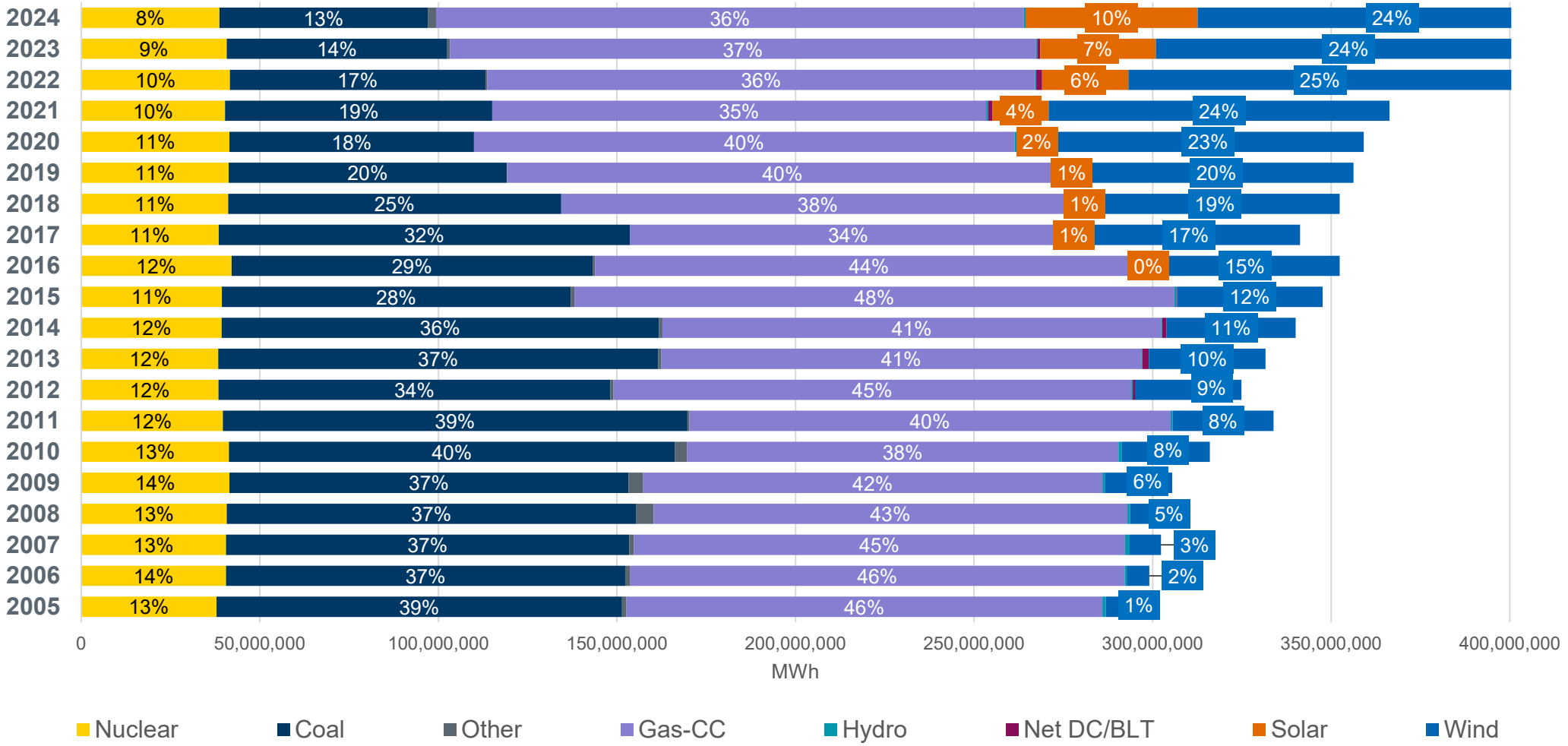
Notes: IA- Interconnection Agreement, 6- Excludes wind, solar or storage, 7- Peak average capacity contribution at 76% of installed capacity, 8- at peak average capacity contribution

Capacity Additions by Year

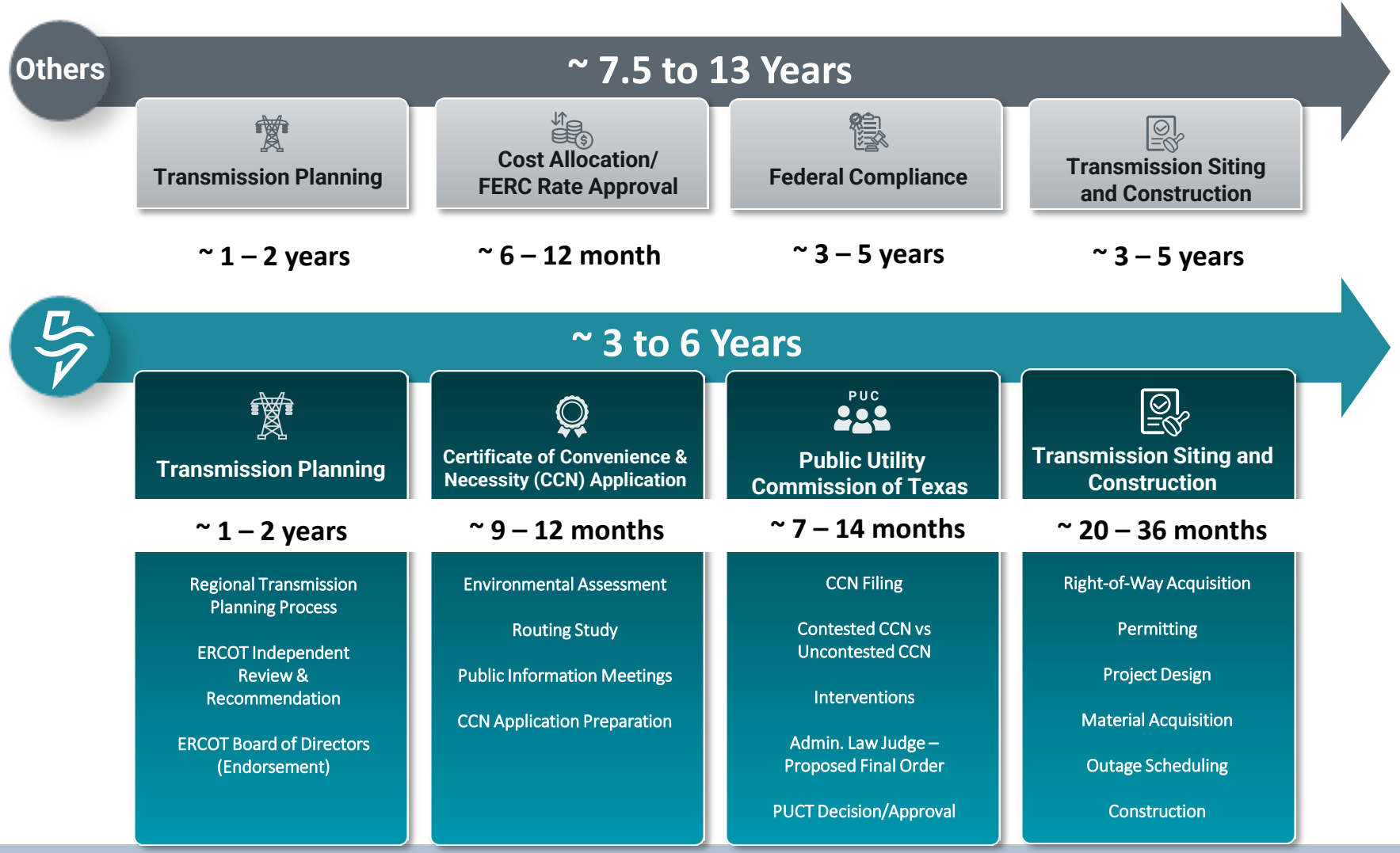


* Summer ELCC is effective load carrying capability. Gas additions are comprised of combined-cycle, internal combustion engine, and steam turbine units.

Generation Capacity by Type, 2005-2024



ERCOT Generation Interconnection Process



Helpful Resources

- PUCT Office of Public Engagement:
  https://www.puc.texas.gov/agency/about/ope/
  512-936-7374
  public@puc.texas.gov
- ERCOT Grid Insights:
  https://www.ercot.com/about/news/grid-insights
  GovernmentRelations@ERCOT.com
- Senate Bill 6 (89th Texas Legislature):
  https://capitol.texas.gov/BillLookup/History.aspx?LegSess=89R&Bill=SB6

Thank You!

Contact: CommissionerHjaltman@puc.texas.gov

*Please be aware, Commissioner Hjaltman and her staff make every effort to adhere to state and professional ethical standards, including those in Chapters 572 and 2001, Texas Government Code, and Chapter 36, Texas Penal Code. Commissioner Hjaltman encourages frank and open conversation about policies and rules, new technology, and other concerns that may arise. **However, visitors are prohibited from discussing contested cases, including active or future rate cases, and applications for loans, grants, or contracts currently pending or contemplated at the Commission.** If you have any concerns about this policy, please let us know before your scheduled meeting.*