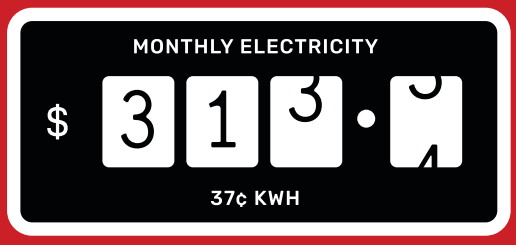
CALIFORNIA GREEN INNOVATION INDEX 2026







18TH EDITION

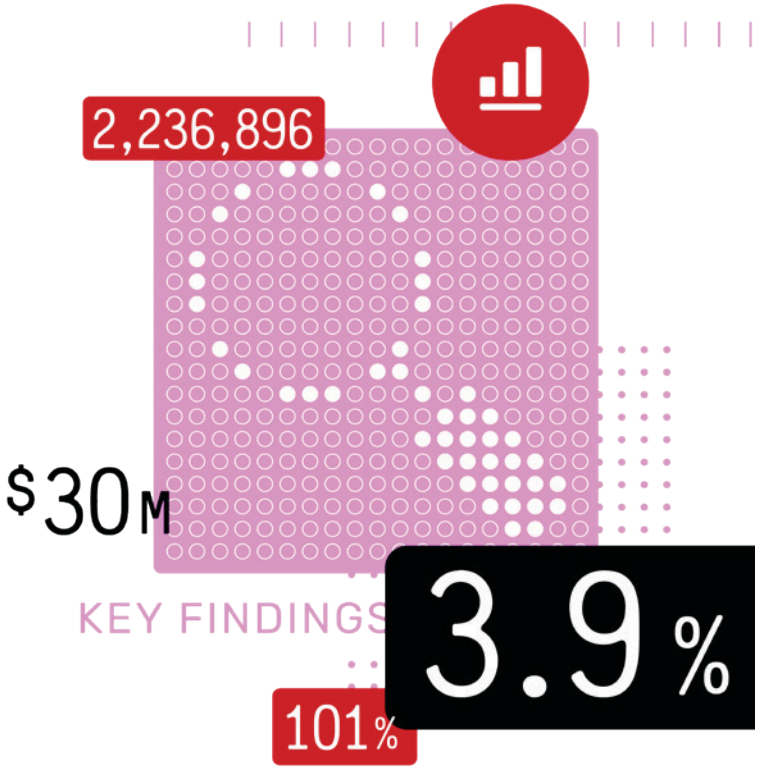
2026

California Green Innovation Index

18TH EDITION

This marks the release of the 18th edition of Next 10's California Green Innovation Index. The 2026 edition continues the shift in format for our readers that we introduced in 2021: a fully online, immersive experience for the Index that allows our readers to dig deep into the data, jump straight to the issues most important to their work, and easily find, interact with, and share the most critical climate and clean energy trends facing the state. This year's edition also continues to include interactive charts, allowing readers to dig even deeper into the data.

This overview provides a snapshot of some of this year's key takeaways. You can learn more about these trends and others at **GreenInnovationIndex.org**. We're excited for you to experience our fifth online edition of the *California Green Innovation Index,* and we hope it can be useful to your work.



As the federal government undoes environmental protections, rolls back funding, and attacks clean energy projects, it is more important than ever that California continue its climate leadership. While the state has made tremendous progress advancing our clean energy economy, more needs to be done to meet our climate goals and decarbonize hard-to-reach sectors without undermining affordability. Key takeaways from this year's analysis include:

KEY FINDING 1
PG. 4

While California not on track to meet 2030 climate goal on time at current pace, real progress has been made.

KEY FINDING 2
PG. 5

Emissions from transportation continue to fall.

KEY FINDING 3
PG. 6

California ZEV adoption slows after federal incentives eliminated.

KEY FINDING 4
PG. 7

California on track to meet 2027 RPS goal at current pace.

KEY FINDING 5
PG. 8

Fossil fuels hit record low share of the power mix.

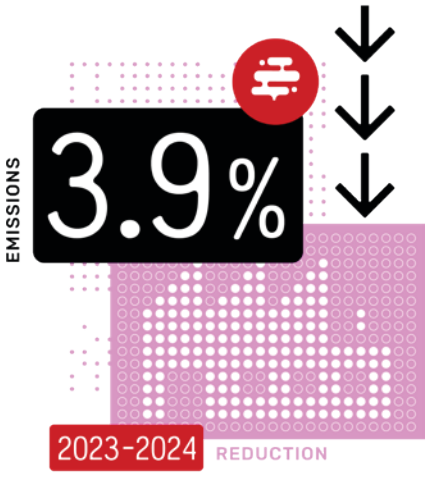
KEY FINDING 6
PG. 9

Energy storage capacity in California continues to skyrocket.

KEY FINDING 7
PG. 10

California's average residential electricity bills higher than the U.S. average but fell in 2025.

View the entire index at
GreenInnovationIndex.org



While California not on track to meet 2030 climate goal on time at current pace, real progress has been made.

Emissions decreased by 3.9% from 2023 to 2024, after falling by 3% from 2022 to 2023, making it the largest reduction outside of a recession year. More importantly, GHG emissions in 2024 were also 6.3% lower than during the pandemic shutdown in 2020, showing that California continued to reduce emissions even after the economy reopened and regular activity resumed. However, the state still needs to reduce emissions faster to meet the SB 32 goal of 40% below 1990 levels by 2030 on time. To meet the goal, emissions would need to fall by 4.7% per year on average. From 2019 to 2024, emissions fell on average by 3.05% annually. At that rate, the state would meet the goal in 2034—one year earlier than calculated based on last year's emissions.

2023 → 2024

CALIFORNIA GHG EMISSIONS **DECREASED** BY

3.9%

UP FROM LAST YEAR'S RECORD 3% DECREASE

2024

GREENHOUSE GAS EMISSIONS WERE

6.3%

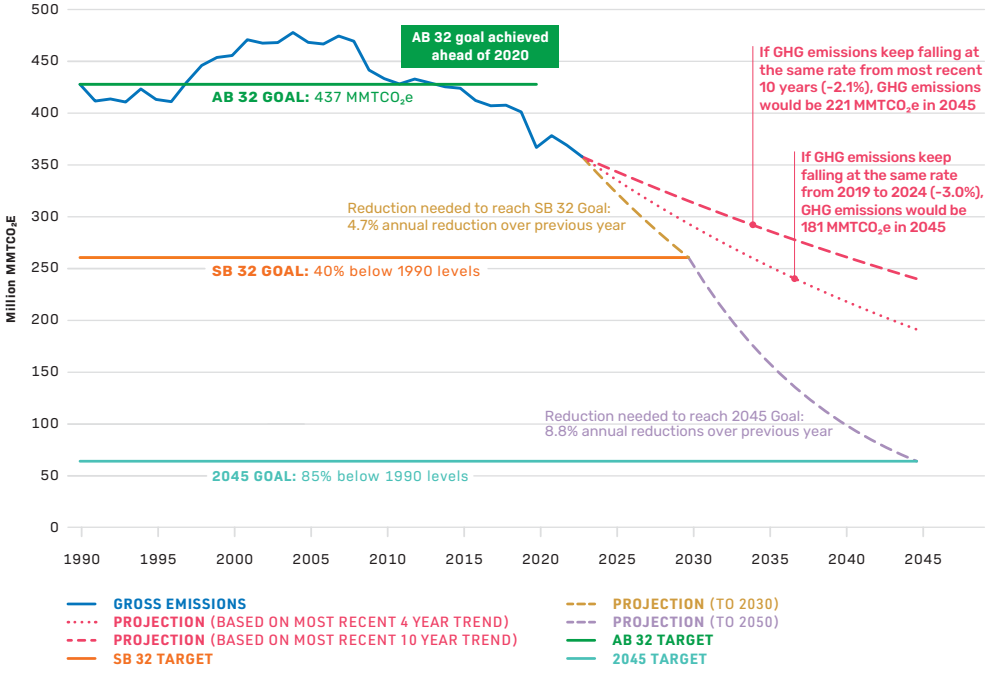
LOWER THAN IN 2020

THE STATE NEEDS TO REDUCE EMISSIONS BY

4.7%

EACH YEAR
TO MEET 2030 GOAL

Figure 1. GHG Emissions and Projected Reduction Goals
CALIFORNIA, 1990-2045



NEXT 10 CALIFORNIA GREEN INNOVATION INDEX. Data Source: California Air Resources Board, California Greenhouse Gas Inventory

Even though emissions decreased in 2024, California still needs to reduce emissions at a greater rate to meet the 2030 goal. In 2023, emissions only need to be reduced by 4.4% each year and by 4.2% in 2022. However, emissions reductions are improving. From 2006 to 2016, emissions reductions averaged 1.2% annually, while from 2014 to 2024, the reductions averaged 2.1% per year. To meet the 2045 goal of 85% below 1990 levels, the state would need to reduce its emissions at a pace of 8.8%—roughly double—assuming the 2030 goal is met on time.

Emissions from transportation continue to fall.

The transportation sector continues to be the largest-emitting sector in California, comprising 38.0% of total emissions in 2024 which is roughly unchanged from 2023. However, emissions from this sector decreased by 4.1% from 2023 to 2024 after falling by 4.6% from 2022 to 2023. This was driven by a significant 17.5% reduction in emissions from heavy-duty vehicles due increasing use of renewable and biodiesels. In 2024, emissions from heavy-duty vehicles remained 47.1% below 2016 levels when the AB 32 goal was met. On the other hand, emissions from light-duty vehicles fell by 1.4% from 2023 to 2024, and by 15.4% from 2016.

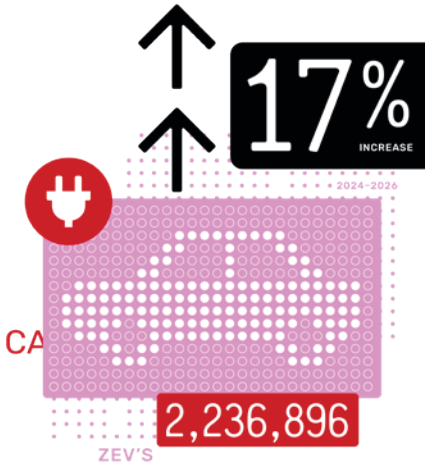
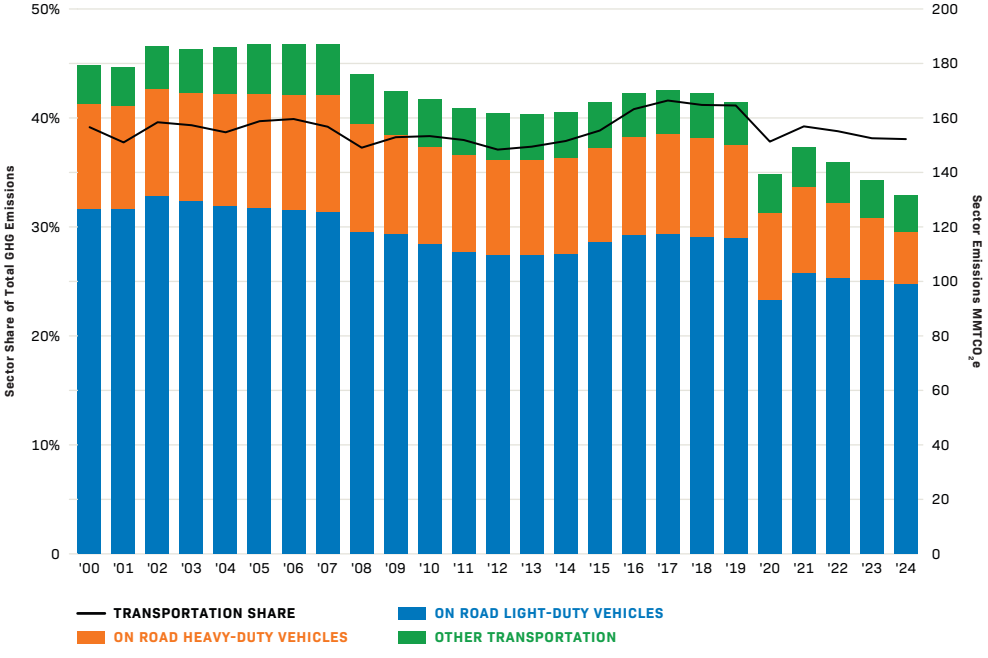


Figure 2. GHG Emissions from Transportation Sector and as Share of Total GHG Emissions

CALIFORNIA, 2000 - 2024



NEXT 10 CALIFORNIA GREEN INNOVATION INDEX. Data Source: California Air Resources Board, California Greenhouse Gas Inventory - by Sector.

Emissions from light-duty vehicles, the largest-emitting subsector within transportation that consists of passenger cars, light-duty trucks and SUVs, and motorcycles, fell below 100 $MMTCO_2e$ for the first time, accounting for 28.7% (99.2 $MMTCO_2e$) of California's emissions in 2024. In 2025, the share of new registrations from light-duty pickup trucks, mini-vans, and SUVs made up 74.3% of new light duty vehicle registrations—up from 72.4% in 2024. Total light truck registrations increased from 1.27 million vehicles to 1.34 million vehicles (+5.7%) while car sales dropped 3.1% from 478,400 to 463,700 vehicles.

2024

THE SHARE OF GHG EMISSIONS FROM THE TRANSPORTATION SECTOR WAS

38%

2024

20.8%

BELOW PRE-PANDEMIC 2019 LEVELS

2024

EMISSIONS FROM HEAVY-DUTY VEHICLES WERE

44.9%

BELOW PRE-PANDEMIC 2019 LEVELS



California ZEV adoption slows after federal incentives eliminated.

California met the 2025 goal of 1.5 million zero-emission vehicles (ZEVs) on-road in April 2023. However, new ZEV registrations fell for the first time ever from 2024 to 2025—from 25.5% of total new vehicle registrations in 2024 to 24.4% in 2025. To reach the 2030 goal of 5 million ZEVs on-road, ZEV registrations in California need to increase by an annual average of 17.45% from 2026 to 2030, relatively unchanged from the 17.50% required previously between 2025 to 2030. In Q3 2025, before the federal tax credit was eliminated, a record 29.1% of new vehicle sales in California were ZEVs. By Q3 2026, it had dropped to 19.1%.

2024 → 2025

NEW ELECTRIC LIGHT-DUTY PICKUPS, SUVS AND VANS SALES **INCREASED**

28.7%

2025

NEW ZEV REGISTRATIONS **FELL** FROM **25.5%** IN 2024 TO

24.4%

2025

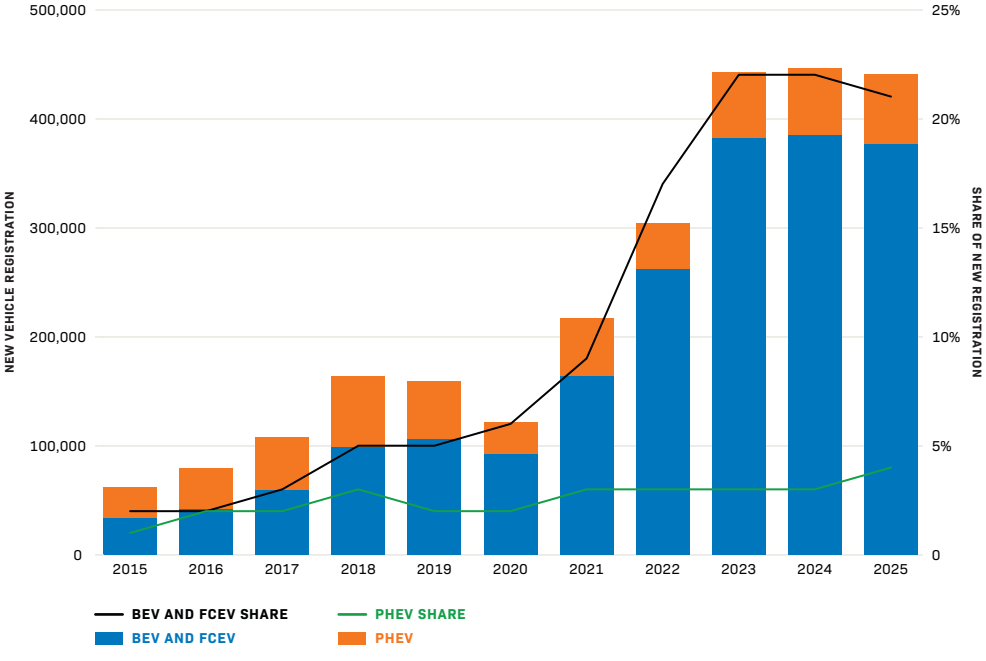
THE PERCENTAGE OF VEHICLES ON-ROAD THAT ARE ZEVS REACHED

7.5%

UP FROM **6.5%** IN 2024

Figure 3. Electric Vehicle Registration and as Percent of Total New Light Vehicle Registration

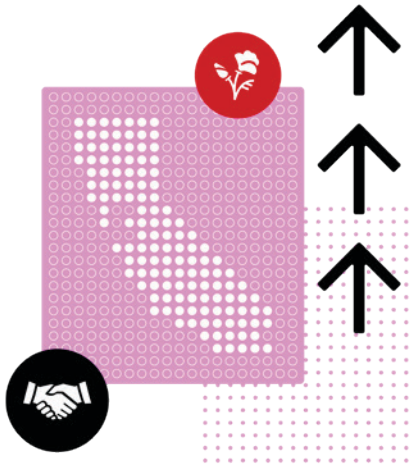
CALIFORNIA, 2015-2025



NEXT 10 CALIFORNIA GREEN INNOVATION INDEX. Data Source: AutoCount data from Experian; California New Car Dealers Association

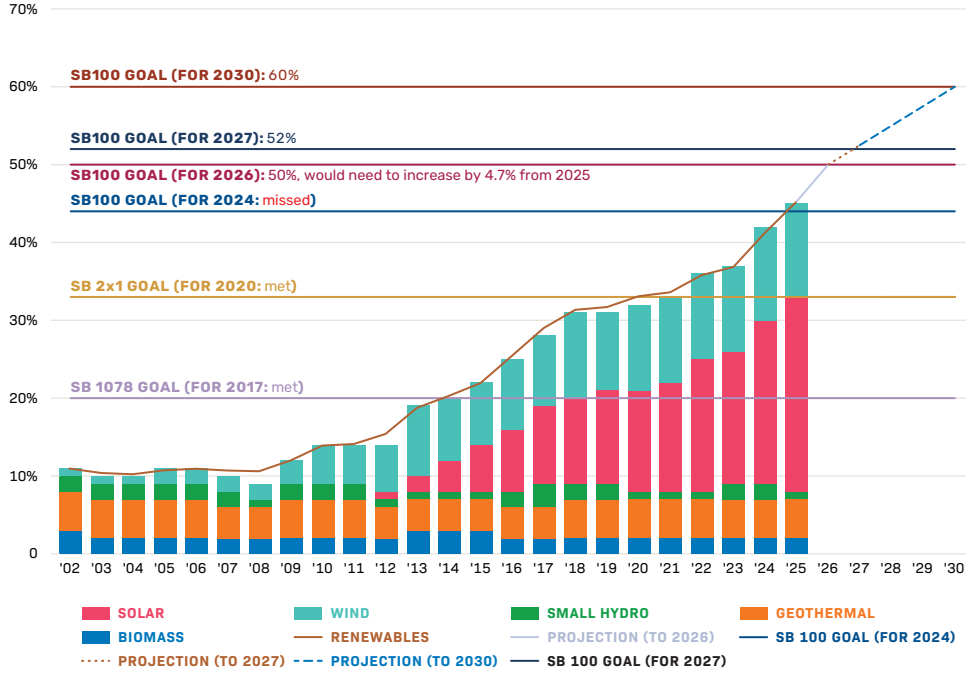
Meeting the 2025 goal early put California in a better position to meet the 2030 goal of 5 million ZEVs on-road, but the elimination of the federal tax incentives has slowed EV adoption. However, the number of electric light-duty pickups, SUVs and vans registered surpassed a million units for the first time in 2025, with 1.24 million vehicles registered, up 28.7% compared to 2024. The state also launched a new MyFirstEV program in 2026 to provide new incentives.[1]

California on track to meet 2027 RPS goal at current pace.



In 2025, the share of renewable sources[2] in California's power mix (including imports) increased to 45.3%, a rise of 4% compared to 2024. This is significant after the record increase of 4.4% last year and considering renewables only made up 36% of the power mix in 2023. Despite these achievements, the state missed the interim SB 100 goal of procuring 44% of retail electricity sales from RPS-eligible renewable sources by the end of 2024. However, it is likely to meet the 2027 goal of 52% on time if it maintains this pace.

Figure 4. California's Path to 60% RPS Goal by 2030
ASSUMING LINEAR GROWTH



NEXT 10 CALIFORNIA GREEN INNOVATION INDEX. Note: Renewables do not include large hydroelectric sources exceeding 30 megawatts. Data Source: California Energy Commission; U.S. Department of Energy, Energy Information Administration

To meet the 2026 goal of 50% of generation from RPS-eligible renewable sources on time, the share of electricity generation would need to increase by a total of 4.7% from 2025 to 2026. While this is larger than the record increase of 4.4%, it is possible given the significant growth over the last two years. At the current pace, California should be able to meet the next interim goal of 52% by 2027 even if it misses the 2026 goal.

SOLAR AND WIND ARE THE LARGEST RENEWABLE SOURCES, MAKING UP

24.8%

AND 12.4%, RESPECTIVELY, OF THE STATE'S TOTAL POWER MIX

2024 → 2025

GENERATION FROM SOLAR (IN-STATE GENERATION AND IMPORTS) ROSE BY

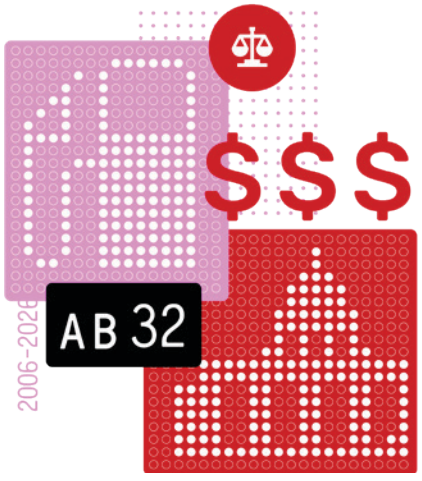
12.1%

2008 → 2025

THE AVERAGE YEARLY GROWTH RATE IN RENEWABLES IN CALIFORNIA WAS

2%

COMPARED TO **0.9%** IN THE REST OF THE U.S.



Fossil fuels hit record low share of the power mix.

The share of fossil fuels in California's power mix continues to decrease. The share of generation from fossil fuels fell to 32.1% in 2025, a drop of 4.2% and the lowest on record. This is roughly half of the 63.9% it was in 2008. Although natural gas remains the largest share (30.4%) of the power mix, in-state generation from natural gas fell by 14.1% to 74,316 GWh in 2025—the lowest level on record. Meanwhile, electricity generation from RPS-eligible renewable sources and large hydroelectric accounted for 56.4% of the power mix in 2025—an increase of 4.1% from 2024.

2025

GENERATION FROM FOSSIL FUELS FELL TO

32.1%

A RECORD LOW

2025

SOLAR MADE UP

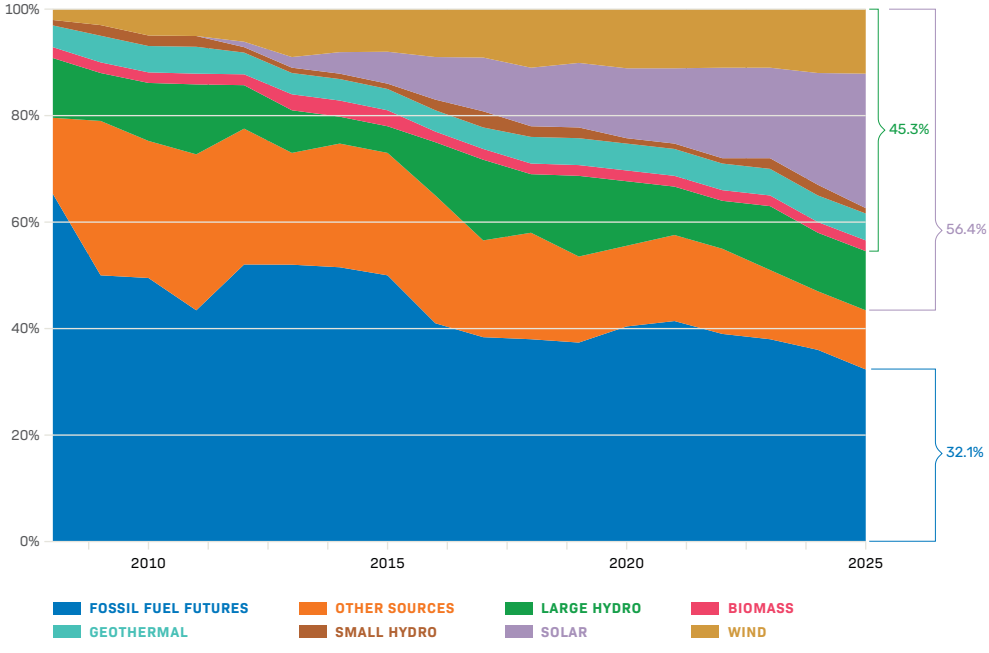
54.9%

OF CALIFORNIA'S RPS-ELIGIBLE RENEWABLE GENERATION

THE INCREASE FROM RENEWABLES WAS MOSTLY DUE TO SOLAR AND WIND, WHICH NOW MAKE UP

37.2%

Figure 5. California Power Mix Percentage by Source
CALIFORNIA, 2008-2025



NEXT 10 CALIFORNIA GREEN INNOVATION INDEX. Data Source: California Energy Commission. Fossil Fuel Sources = Coal, Oil and Natural Gas; Other Sources = Nuclear, Unspecified, and Other

In addition to in-state generation from natural gas falling to a record low, in-state generation and imports from solar (24.8%) and wind (12.4%) combined overtook natural gas for the first time. In-state generation from nuclear, which is carbon-free but not a renewable energy source, accounted for 9.9% of the power mix in 2025, down 4.4% from 2024 but similar to 2021 and 2022 levels. Generation from large hydro, which is greatly influenced by drought conditions year-to-year, accounted for 11.2% in 2025.

Energy storage capacity in California continues to skyrocket.

Utility-scale storage, such as lithium-ion battery and long-duration, is essential for incorporating more renewable energy to the grid and it has grown significantly in California since 2020. In 2025, California approved 5,575 MW of energy storage, exceeding 20,000 MW cumulatively for the first time. Furthermore, California had approved another 8,647 MW as of June 2026. As of October 2026, California had added more than 23,000 MW of utility-scale storage—an increase of over 3,100% from the 700 MW installed in 2019. In 2025, utility-scale lithium-ion battery storage projects expanded into 31 counties across the state, up from 29 in 2024 and only 11 in 2022, with the largest share (25%) in Riverside County.

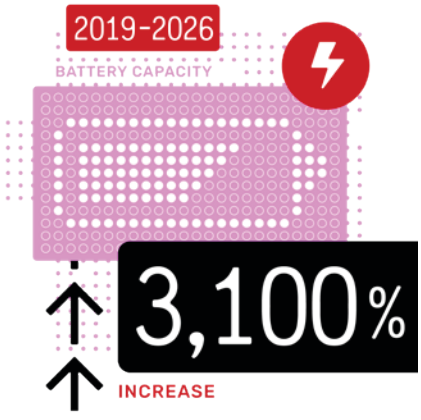
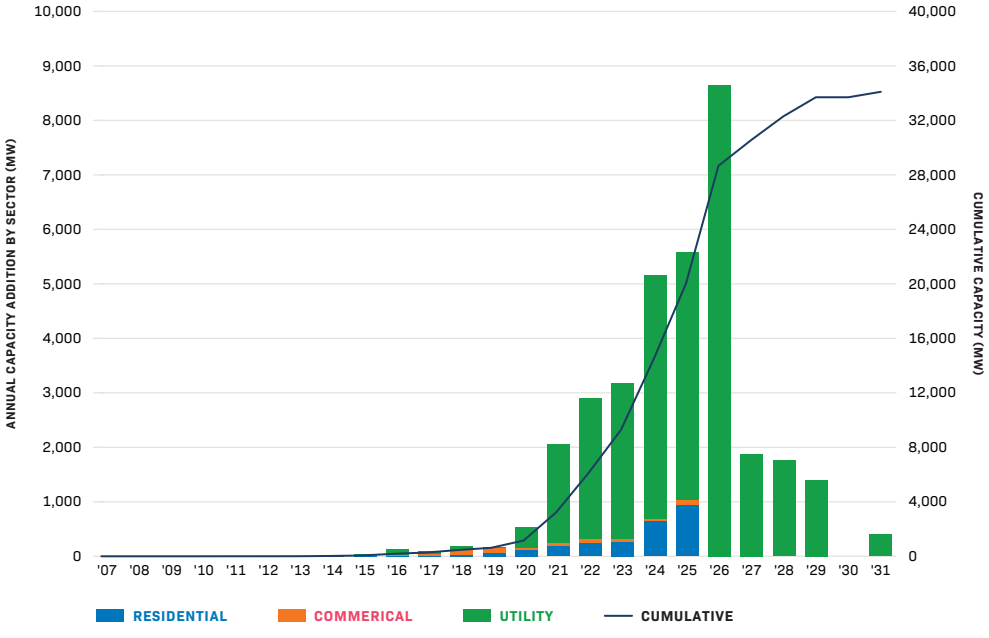


Figure 6. Energy Storage Power Capacity in California
CALIFORNIA, 2007-2031



NEXT 10 CALIFORNIA GREEN INNOVATION INDEX. Data Source: California Energy Storage System Survey, California Energy Commission. Note: baed on approved date. Data last updated on June 15, 2026

The California battery storage industry proliferated starting in 2021 and the landscape of energy storage projects in California is rapidly evolving. The average storage duration for lithium-ion energy storage systems that became operational in 2025 were longer in California (3.2 hours) than the rest of the U.S. (2.8 hours). As of the end of 2025, California had 11,052 MW (11 GW) of proposed energy storage capacity in the pipeline for 2026 to 2031 while the rest of the U.S. had 57,380 MW (57.3 GW).

2025

CALIFORNIA APPROVED

5.7GW

OF ENERGY STORAGE, **EXCEEDING 20 GW** CUMULATIVELY FOR THE FIRST TIME

OF THE AMOUNT ADDED IN 2025,

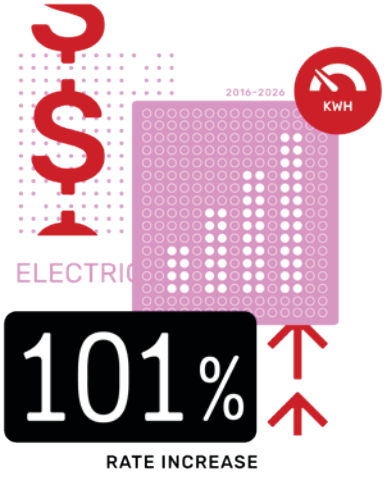
4.5GW

WAS UTILITY-SCALE ENERGY STORAGE

CALIFORNIA HAD ALREADY APPROVED ANOTHER

8.6GW

BY JUNE 2026—**MORE THAN IN ALL OF 2025**



California's average residential electricity bills higher than the U.S. average but fell in 2025.

Despite having the most expensive kilowatt-hour electricity rates, California's residential electricity bills had been below the U.S. average for years. However, California's once-held advantage of having a lower average bill has vanished in the wake of the pandemic. In 2015, residential electricity bills were 19.4% below the national average, but it has shifted to 3.3% higher than the U.S. average in 2025. While California households averaged $153 per month compared to the U.S. average of $147 in 2025, it was lower than the $161 monthly bill in 2024. In 2025, California had the 18th-highest household electricity bill in the U.S., an improvement from the 8th-highest in 2024. Californians in 2025 paid less on average than households in Florida or Texas.

2015 → 2025

RESIDENTIAL ELECTRICITY BILLS IN CALIFORNIA HAVE BEEN INCREASED BY

29%

2015 → 2025

TOTAL U.S. RESIDENTIAL BILLS INCREASED MODESTLY BY

.5%

2024 → 2025

AVERAGE RESIDENTIAL ELECTRICITY BILLS GREW IN THE U.S. BY 3.8% BUT FELL BY

5.2%

IN **CALIFORNIA**

Table 1. Electricity Prices and Bills (Inflation-Adjusted) by Sector

CALIFORNIA & THE UNITED STATES, 2015 and 2025

		PRICE PER KWH	AVERAGE MONTHLY BILL		
SECTOR	REGION	2025	2015	2023	10YR % CHANGE
RESIDENTIAL	CALIFORNIA	$0.32	$119.00	$153.00	28.67%
	FLORIDA	$0.15	$174.00	$163.00	-6.49%
	NEW YORK	$0.26	$147.00	$150.00	2.05%
	PENNSYLVANIA	$0.19	$150.00	$158.00	5.44%
	TEXAS	$0.15	$175.00	$169.00	-3.21%
	VIRGINIA	$0.15	$167.00	$158.00	-5.03%
	U.S. WITHOUT CA	$0.16	$150.00	$147.00	-2.23%
INDUSTRIAL	CALIFORNIA	$0.21	$4,510.00	$5,061.00	12.24%
	FLORIDA	$0.09	$7,818.00	$4,916.00	-37.13%
	NEW YORK	$0.09	$16,425.00	$7,329.00	-55.38%
	PENNSYLVANIA	$0.09	$15,405.00	$31,848.00	106.74%
	TEXAS	$0.06	$6,225.00	$2,306.00	-62.96%
	VIRGINIA	$0.09	$34,882.00	$26,183.00	-24.94%
	U.S. WITHOUT CA	$0.08	$9,693.00	$6,610.00	-31.81%
COMMERCIAL	CALIFORNIA	$0.26	$1,154.00	$1,374.00	19.03%
	FLORIDA	$0.11	$843.00	$704.00	-16.53%
	NEW YORK	$0.20	$1,228.00	$1,042.00	-15.09%
	PENNSYLVANIA	$0.12	$651.00	$545.00	-16.34%
	TEXAS	$0.08	$834.00	$796.00	-4.64%
	VIRGINIA	$0.09	$985.00	$1,439.00	46.11%
	U.S. WITHOUT CA	$0.12	$835.00	$775.00	-7.17%

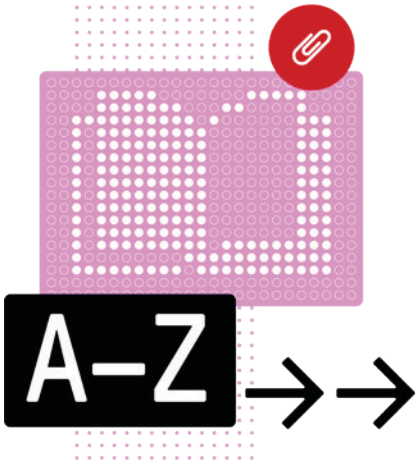
Additionally, California's average monthly commercial electricity bill ($1,374) has become considerably more expensive relative to the U.S. average ($821) during the last decade—from 33.5% higher in 2015 to 65.7% higher in 2025. Overall, California's businesses had the 3rd-highest average bill among the 50 states in 2023, surpassed by only Hawaii ($1,380 per month) and Virginia ($1,439 per month). California has the second-highest in residential ($0.39/kWh), commercial ($0.35/kWh), and industrial ($0.30/kWh) sectors—behind only Hawaii. However, California's average industrial bills are below the U.S. average. Rising rates have been driven by wildfire-related expenses, transmission upgrades, and other capital expenditures.

About Next 10's California Green Innovation Index

Next 10's *California Green Innovation Index* tracks the state's progress in reducing greenhouse gas emissions, spurring technological and business innovation, and growing businesses and jobs that enable the transition to a more resource-efficient economy. The 2026 *Index* is the 18th edition published by Next 10.

Next 10 is an independent, nonpartisan organization that educates, engages and empowers Californians to improve the state's future. Next 10 was founded in 2003 by businessman and philanthropist F. Noel Perry. Next 10 is focused on innovation and the intersection between the economy, the environment, and quality of life issues for all Californians.

Advisors to the California Green Innovation Index



Next 10 thanks the following expert advisors for their generous time and guidance on this project over the last twelve editions:

Dan Adler
Senior Advisor for Climate Finance, Governor's Office of Business and Economic Development

Merrian Borgeson
California Climate and Energy Policy Director, NRDC

Morrow Cater
Founding Principal, Cater Communications

Ralph Cavanagh
Retired Energy Co-Director, NRDC

Kate Gordon
CEO, California Forward

Michael Hanemann
Professor & Julie A. Wrigley Chair in Sustainability, Department of Economics, Arizona State University

Hal Harvey
CEO, Energy Innovation: Policy and Technology LLC

Elliot Hoffman
CEO, REV

Mark Jacobson
Prof. of Civil and Environmental Engineering, Director of the Atmosphere/Energy Program, Stanford University

Dan Kammen
Class of 1935 Distinguished Professor of Energy in the Energy and Resources Group and the GoldmanSchool of Public Policy. Director, Renewable & Appropriate Energy Laboratory, U.C. Berkeley

Joel Makower
Chairman and Executive Editor, GreenBiz Group Inc.

Walter McGuire
Owner, McGuire & Co., Inc./Flex Your Power

Manuel Pastor
Professor of Sociology and American Studies & Ethnicity, Director of the USC Program for Environmental and Regional Equity, University of Southern California

Former State Senator Fran Pavley
Environmental Policy Director, USC Schwarzenegger Institute

Wendy Pulling
Director, ESG Integration, University of California, Office of the Chief Investment Officer

Dan Skopec
Vice President, Regulatory Affairs, Sempra Energy Utilities

James (Jim) Sweeney
Professor of Management Science and Engineering, Senior Fellow at Precourt Institute for Energy, Stanford University

Tim Woodward
Managing Director, Prelude Ventures LLC

Endnotes

1. "As Trump cedes global clean car race to China, Governor Newsom fights back with instant ZEV rebates for first-time buyers." Office of Governor Gavin Newsom. Available at: https://www.gov.ca.gov/2026/07/13/as-trump-cedes-global-clean-car-race-to-china-governor-newsom-fights-back-with-instant-zev-rebates-for-first-time-buyers/
2. RPS-eligible resources include biomass, small hydro, geothermal, solar, and wind.

To learn more, visit greeninnovationindex.org



www.next10.org

© Copyright 2026 Next 10