California is pursuing some of the world's most ambitious clean energy goals, including a legally mandated zero-emissions electricity sector and statewide GHG emissions neutrality **by 2045**. When it comes to the energy transition, the stakes for the incoming governor are high: a **massive surge in electricity demand** from electric vehicles, building electrification, and data centers could increase grid costs and strain reliability; winding down oil production and refining will have significant implications for consumers and workers; switching from fossil gas to electricity poses huge infrastructure complications; and the state must navigate these issues with reduced federal support.

While the details of completely overhauling an energy economy are complicated, the overarching challenge is managing the fossil fuel phaseout. Retiring natural gas power plants and oil refineries too quickly risks price spikes, power outages, and local economic downturns, but delaying locks in dangerous carbon emissions and stranded assets. The incoming Governor will need to balance the two while promoting economic development statewide.

There is some good news. California is already a global battery storage leader, **adding over 13,000 megawatts** since 2021 to ensure grid resilience. Furthermore, the state has consistently met its renewable energy targets, recently experiencing **over 200 days** in a single year where renewables provided 100% of the state's power for a portion of the day. However, the next phase of the transition will prove even more complex, and a new layer of affordability concerns will shape the policy conversation.

The next governor will need to tackle several key issues including:

- **Sequencing the Fossil Phaseout:** The state must carefully manage the retirement of gas plants, the decommissioning of gas networks, and refinery closures to avoid fuel shortages while protecting communities and thousands of energy workers.
- **Managing the Surging Data Center Demand:** With data centers expected to add **10 gigawatts** of new load over the next decade, the Governor must link facility permitting to verifiable 100% clean energy commitments to avoid adding new fossil fuels to the grid.
- **Navigating Federal Roadblocks:** From offshore wind facing federal opposition to state clean vehicle regulations under threat, California must aggressively pursue alternative legal, policy, and funding pathways to deploy critical infrastructure.

Ensuring a reliable, clean, and affordable energy system while protecting our communities will demand bold leadership from California’s next governor.

You can read more about **Energy Transition** issues facing California’s next governor and access all of CLEE’s climate issue briefs at **California Climate Vote**. Read the other posts in the series here:

- **Transportation**
- **Electricity Affordability**
- **Water**
- **Building Decarbonization and Energy Efficiency**
- **Housing and Climate**
- **Wildfire**
- **Recapping “Our Climate Future”: A California Gubernatorial Candidate Forum**