



*From Targets to Delivery: A Practical Agenda for  
Achieving California's Clean Electricity Goals*

*April 2026*

Dear Climate and Clean Energy Leaders:

I'm running for State Senate to bring pragmatic solutions to California's biggest challenges and to restore faith that government can actually deliver. California's clean energy transition is one of the most important tests of that proposition.

California initially responded to demand increases from trends like industrialization, residential electrification and the rapid adoption of air conditioning by instituting path-breaking energy efficiency standards. Appliance standards, building codes, and lighting improvements flattened per-capita consumption in California even as it rose in the rest of the country. These were solutions to energy security, environmental quality and cost, not yet to climate change.

In 2006, California passed AB 32, the Global Warming Solutions Act, mandating that California reduce emissions to 1990 levels by 2020. This matched the requirements of the Kyoto Protocol. The California Air Resources Board (CARB) put in place the mechanisms to meet this goal, and it was, in fact, met in 2016.

The Intergovernmental Panel on Climate Change's (IPCC) successive assessment reports showed that greater reductions were required to keep warming below the critical 2°C level, and California stepped up again to lead. SB 32, the Global Warming Solutions Act of 2016, made the targets even more ambitious. Emissions were capped at 40% below 1990 emissions by 2030. This target was aligned with what the European Union was committing to under the Paris agreement, which was informed by scientific consensus. California continued to set targets to align with scientific consensus and international policy, passing a goal of an 85% reduction by 2045. CARB, the legislature, and both Governors Brown and Newsom have instituted electrification mandates designed to get us to the goal. The mandates dictate 100% clean electricity by 2045, 100% zero emission car and light truck sales by 2035, and full carbon neutrality by 2045.

We were able to meet the 2020 goal but the more aggressive goals will be more challenging. As of 2023 California had achieved very meaningful reductions but was not on pace to meet the 2030 goal, and if we don't meet that, the 2045 goal will be even more challenging.

Electrification fundamentally transforms both the scale and shape of demand and changes the infrastructure required to meet it. Advancements in energy efficiency, while critical, no longer flatline load growth on their own. The task became to build out energy production capacity as fast as possible without impacting affordability and reliability.

And then AI happened, which dramatically increased load, and we began to truly grapple with climate change. We are already seeing extreme heat driving unprecedented demand for power, longer and more destructive fire seasons, and growing instability in the jet stream — the river of air that regulates weather patterns across the entire northern hemisphere — with consequences that extend

far beyond California's borders. The most vulnerable communities bear the greatest burden of these impacts. We need to achieve success in decarbonization not only because we are an environmental leader, but because if we show that it can be done, others will follow — and the stakes for all of us could not be higher.

And now geopolitical exposure, once the driving force for the development of solar power, has made the need to exit dependence on oil more urgent than ever. With the war in Iran, we've become vulnerable once again. Prices at the pump in California today exceed 1970s energy crisis prices, with the closure of several refineries a factor as well. Transportation electrification is now a critical step as a path to affordability and energy independence.

Transportation electrification also means cleaner air, particularly for the communities that live nearest to freeways, ports, freight corridors, and warehouses, and that bear a disproportionate share of vehicle pollution's public health burden. Continued electrification of buildings and industry is essential to meeting California's 2030 and 2045 targets.

California has the right goals. What we need now is disciplined execution — on interconnection, on transmission, on distribution, and on the regulatory architecture that ties it all together. As your State Senator, I will make that my work. I hope this agenda sparks conversation and I welcome your engagement as we push California to deliver on the commitments we have already made.

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## Executive Summary

California has set ambitious clean energy goals: one hundred percent zero carbon power by 2045, one hundred percent zero emission vehicles by 2035, and carbon neutrality by 2045. These goals are necessary and achievable. But making good on our promises will require something California has historically struggled with: disciplined execution at scale.

Our challenge is institutional. Interconnection queues move too slowly. Distribution infrastructure in many parts of the state is a century old and inadequate for the future we hope is ahead of us. Transmission capacity must expand significantly to move clean power from resource-rich regions to population centers. And the regulatory architecture that governs all of this was designed for a different level of demand and a different ambition.

This brief proposes six specific reforms to accelerate delivery:

- Regional California Environmental Quality Act (CEQA) assessments for transmission and generation projects, publicly funded and conducted at the appropriate scale
- Stronger milestone-based discipline in the California Independent System Operator (CAISO) interconnection queue to reduce delay and cost volatility
- Cost allocation reform for network upgrades that serve broad system benefits
- Anticipatory distribution planning that gets ahead of electrification demand rather than reacting to project proposals
- Managed charging standards and grid communication protocols for electric vehicles
- Standardized permitting and interconnection timelines for distributed energy resources

Beyond these near-term reforms, this brief raises longer-term questions that California must begin to answer: whether our regulatory architecture is calibrated for the speed and scale of the transition ahead and whether it has the flexibility to respond to significant changes in demand forecasts, how we protect affordability as infrastructure investment accelerates, whether utility incentive structures are aligned with the outcomes we need, and whether our planning processes are actually built to drive execution at the scale required.

## **The Challenges**

The economics of clean energy have never been more favorable. The Los Angeles Department of Water and Power (LADWP) contracts with utility-scale solar projects at four cents a kilowatt hour. By contrast, California's natural gas peaker plants, which run during periods of peak demand, deliver electricity at roughly twenty cents per kilowatt hour. Even after transmission, distribution, and utility costs are added, clean energy is now more affordable than the fossil fuel alternative. For the first time, the economic case and the climate case are pointing in the same direction. It is the very affordability of renewable energy that can serve as the driver for implementation.

The question has now become how to achieve electrification for a higher load — and we don't yet know what demand will exist in 2045 — on these ambitious timelines, and how to do that at a reasonable cost. The answer requires both building clean supply faster, managing when demand hits the grid, and making sure we continue to lead on efficiency.

Here's what inspires me: in undergoing and even accelerating the energy transition, we make our systems more resilient and more affordable, we foster innovation, and we develop pathways to good jobs that will power our clean energy future.

The critical question is whether our regulatory systems are built for the task, capable of executing on the goals we have set and flexible enough to adapt as our understanding of 2045 demand continues to evolve. Our problem plainly lives in the execution sphere rather than the goal-setting sphere.

## **Interconnection**

California's regulatory framework has delivered a substantial increase in renewable energy generation. Multiples of this, though, will be required to meet our goals. The current process incorporates some forward planning, but is fundamentally set up for project-by-project power addition. For the most part, each project is proposed by a developer, it enters a queue, studies are run to assess integration with the grid as a whole, upgrades are triggered based on the studies, creating unpredictable costs that can kill viable projects or ultimately drive up the prices paid by ratepayers.

Interconnection delays substantially slow the ability of new clean power projects to get their shovels in the ground, and so does permitting by local jurisdictions, multiple state agencies including the Coastal Commission and regional water boards, and California Environmental Quality Act lawsuits.

## **Transmission**

Significant new transmission capacity is required to deliver clean power from resource-rich regions to the communities that need it. Building the necessary infrastructure requires herculean effort. New high-voltage lines require around a decade of siting, environmental review, and permitting before

construction can begin, and the specialized equipment required can take three to five years to procure. These lead times mean that transmission investments we need for 2045 must be initiated well before 2035.

## **Distributed Energy Resources**

Some argue that distributed energy resources (DERs) — rooftop solar, behind-the-meter storage, and localized generation — can enable demand response, demand flexibility, and virtual power plant aggregation to meaningfully reduce the need for large-scale transmission expansion. DERs will play an essential role in resilience, peak demand management, and localized grid support.

California needs all of the above. However, at the scale required to meet California's 2045 targets, distributed resources alone cannot replace the need for utility-scale generation and expanded transmission. The most cost-effective clean energy resources are often geographically concentrated, and accessing them requires a modernized bulk transmission system. DERs should be integrated strategically as part of a comprehensive system, not viewed as a substitute for backbone infrastructure.

## **Distribution**

The distribution systems in many areas of California were built in a different time, for different use. In my area, some parts of the distribution system are a century old. This system is inadequate for foreseeable demand, and some of it, particularly in very high fire hazard severity zones, starts wildfires. It's not prepared for bi-directional flow, and it's radically insufficient to power fully electric transportation. Unmanaged EV charging is, in fact, one of the primary near-term threats to distribution grid stability, and managing that load requires standardized communication protocols and regulatory frameworks that California has not yet put in place. Components necessary for upgrades often take years to be delivered. Distribution challenges create years-long delays in execution.

These delays are where my concern lies. Delays in distribution upgrades, generation and transmission threaten our ability to electrify our homes and the transportation sector and to meet our goals. We can't let our process paralysis undermine our ability to lead the way to radically reduced carbon emissions. And we hardly have a future without succeeding here.

## **Proposals**

### **Regional CEQA Assessments for Transmission and Generation Projects**

Energy zones or transmission corridors should produce regional Environmental Impact Reports (EIRs) which would allow site-level review to be more limited. These analyses would be publicly funded, thereby removing the conflict inherent in developer-funded reviews. The goal is not to eliminate environmental review. It is instead to conduct environmental review at the appropriate scale, regionally and cumulatively, rather than repeatedly on individual projects which are already aligned with statewide climate policy. Meaningful public participation would occur at the regional level and well prior to specific plans being locked in.

Reconductoring (replacing existing power lines with higher-capacity conductors on the same towers) should be encouraged because it is an efficient use of existing resources and because the process allows for simultaneous hardening of lines. Doing this work or building new transmission lines on previously-studied corridors should not require new CEQA analysis, though when these lines run through Very High Fire Hazard Severity Zones, the California Public Utilities Commission (CPUC) wildfire mitigation standards or approved hardening practices must be utilized.

### **Strengthen Milestone-Based Interconnection Discipline**

Late-stage withdrawals from the California Independent System Operator (CAISO) interconnection queue can trigger additional studies, causing delay and reallocating upgrade costs among remaining projects. This volatility increases financing risk and slows deployment of otherwise viable projects. California should work with CAISO and federal regulators to strengthen milestone discipline and reduce restudy churn. State procurement policy should reinforce readiness and alignment.

### **Cost Allocation Reform for System-Benefiting Upgrades**

Under current interconnection rules, projects are assigned the cost of network upgrades necessary to connect to the grid. When upgrades serve multiple present and future resources, late-stage withdrawals can leave remaining projects bearing disproportionate costs. This first-mover exposure increases financing risk and can delay otherwise viable clean energy deployment. Where upgrades clearly expand network capacity or are necessary to meet state-mandated procurement targets, cost allocation frameworks should reflect their broader system benefit rather than placing disproportionate burden on individual projects.

### **Require Anticipatory Distribution Planning**

Distribution planning has historically been reactive, with upgrades triggered by individual interconnection requests. Deep electrification of buildings and transportation — combined with the

need to build approximately one million additional housing units — requires a shift toward anticipatory planning. In many cases, distribution constraints delay or prevent housing and commercial projects from moving forward or coming online, particularly when upgrades are identified late in the process. Utilities should identify electrification priority zones, forecast load growth at the circuit and substation level, and plan upgrades in advance of confirmed demand. Planning frameworks should incorporate standardized EV charging readiness across residential, commercial, and depot applications, require bidirectional flow capability as a default design principle, provide transparent hosting capacity data, and align distribution investment with adopted state decarbonization targets.

Distribution planning must account not only for projected electrification load but also for wildfire mitigation and infrastructure hardening in high-risk zones.

### **Mandate Managed Charging Standards and Grid Communication Protocols**

Widespread or total vehicle fleet electrification has the potential to create severe demand spikes during evening hours when solar production is waning and households are powering up for the evening. Commercial fleet operators will be attentive to their costs and so time of use metering should influence their use of the grid. Individual consumers may not care about the cost differential, and the interface for adjusting charging time may be hard to find and operate. And utilities have no standard communication protocol for car chargers so utilities can't manage EV charging at scale.

EVs sold in California should be required to display a prominent prompt when plugged in during peak hours offering to schedule off-peak charging based on the driver's departure time. CARB should develop a standardized communication protocol that allows utilities to send demand response signals directly to the vehicle, and require that all EV chargers sold in California be capable of receiving and responding to those same utility demand response signals through a compatible standardized protocol.

This is an area where California can lead the way and raise the bar for the national market as it did with emissions standards.

### **Standardize DER Permitting and Interconnection Timelines**

Electrification requires predictable and timely permitting and interconnection processes. Inconsistent local permitting requirements and prolonged utility interconnection review can delay distributed energy projects and increase soft costs. California should establish statewide model permitting guidelines and standardized interconnection timelines for code-compliant distributed energy resources, while providing capacity funding to local jurisdictions and utilities to implement them effectively. Clear review pathways, transparent hosting capacity data, and defined processing timelines would reduce uncertainty and accelerate deployment of projects that improve resilience and reduce peak demand.

The recommendations above focus on improving execution within existing systems. They reduce delay and volatility. But the scale of electrification now underway may require us to move beyond incremental reform and consider whether our planning architecture fully reflects the magnitude of the transition. Electrification is bold change, and bold questions must be answered.

### **Is Our Regulatory Structure Working?**

California's clean energy transition is guided by multiple institutions. The California Air Resources Board (CARB) sets emissions targets and develops the Scoping Plan to achieve them. The California Energy Commission (CEC) conducts load forecasting and energy planning and has siting authority over certain large energy facilities. The California Public Utilities Commission (CPUC) regulates investor-owned utilities, oversees procurement, and sets retail rates. The California Independent System Operator (CAISO), a federally regulated nonprofit, plans transmission and operates the wholesale electricity market.

This division of responsibilities evolved during a period of relatively flat load growth and incremental renewable deployment. Today, as electrification accelerates and timelines compress, there is far less room for error in coordination. We must examine whether this institutional architecture is calibrated for the scale and speed of the transition ahead, and, if it is not, how we can strengthen alignment, clarify accountability, and improve planning integration across agencies.

California's regulatory structure as described above governs electricity generation, transmission, and distribution. But meeting our 2030 and 2045 goals will require deploying a broader range of technologies, including hydrogen, geothermal, and potentially others not yet fully defined. Each of these adds permitting layers beyond the four agencies described here, involving the California Geologic Energy Management Division (CalGEM), the State Lands Commission, regional water boards, and others, with no single agency holding the lead. The California Environmental Protection Agency (CalEPA) sits nominally above several of these agencies but lacks the authority to coordinate them for specific projects or enforce common timelines.

Other states have addressed this by designating a single coordinating authority responsible for guiding projects through the full permitting stack regardless of technology type. California should ask whether it needs a similar structure, and whether the current architecture, designed for a narrower set of technologies and a slower pace of deployment, is adequate for the scale and diversity of what we now need to build.

### **Are Utility Incentives Aligned With the Outcomes We Need?**

As electrification accelerates and infrastructure demands increase, California must ensure that utility incentive structures are aligned with the outcomes we seek. The traditional cost of service model rewards capital investment, but it does not consistently reward speed of delivery, cost discipline, or timely interconnection. Expanding performance based mechanisms and tying utility earnings more

directly to measurable outcomes such as interconnection timelines, wildfire risk reduction, reliability performance, and distribution readiness for electrification would better align incentives with the state's decarbonization and affordability goals.

The scale and urgency of the transition also invite a broader examination of institutional alignment. Responsibilities are divided across state agencies and implemented through regulated utilities. California should assess whether current governance and incentive structures are calibrated for rapid electrification and rising load, including answering questions about the appropriate role of investor-owned utilities in delivering publicly mandated infrastructure. Modernization may not require wholesale restructuring, but it does require clear accountability, aligned planning timelines, and confidence that utilities are positioned and incentivized to deliver the infrastructure the state has mandated.

### **How Can We Ensure Affordability With the Scale of Upgrades Required?**

Achieving California's climate and electrification goals will require significant investment in generation, transmission, distribution, and wildfire hardening. Under the current model, most of these capital costs are recovered through utility rates. While this structure has historically financed grid development, it places the burden primarily on ratepayers, including low- and moderate-income households for whom energy costs represent a disproportionate share of income. Rate design reforms can mitigate some of this impact, but the scale of infrastructure required invites a broader question: whether certain long-lived backbone investments should be treated more like other forms of public infrastructure, with financing mechanisms that distribute costs more broadly and over longer time horizons. Large new load sources, including AI data centers, should bear a meaningful share of the infrastructure costs their demand creates.

### **How Can We Build Accountability Into Climate Law Implementation?**

California has no shortage of ambitious goals. What it has struggled with is delivery, and with building the flexibility to adapt when circumstances change, as they inevitably do. Markets shift. Demand projections that seemed settled prove inadequate. The clean energy transition has already been reshaped by electrification at a scale that wasn't anticipated, by the sudden explosion of AI data center load, and by geopolitical shocks that moved faster than any planning process. A legislature that passes laws and moves on is not equipped for a transition of this complexity. California needs not just better implementation but institutional mechanisms that treat course correction as a feature, not a failure.

California's legislature has no required process for examining whether major climate laws are being implemented effectively, whether funding is producing results, or whether new circumstances require course corrections. Some of the problems already identified in this brief - the interconnection backlog, distribution grid inadequacy, permitting fragmentation - might have been caught earlier had systematic implementation reviews been required. Should California mandate regular biennial

reviews of major climate and energy legislation, with agencies reporting on progress and barriers and legislative committees required to hold hearings on those reports? The clean energy transition is too consequential and too subject to changing circumstances to proceed without a legislature that treats implementation as its ongoing responsibility.

## **Conclusion**

California has set ambitious climate and electrification goals. Those goals are necessary and achievable. But achieving them will depend less on new targets and more on disciplined execution.

The transition ahead is not only technological. It is institutional. It requires coordinated planning across agencies, aligned incentives for utilities, financing structures that protect affordability, and regulatory processes calibrated to the scale of infrastructure we must build.

As a legislator, I will prioritize reforms that improve alignment, strengthen accountability, and accelerate infrastructure delivery while protecting reliability and ratepayers. Climate leadership now means ensuring that our institutions have the tools to deliver on the commitments we have already made.

California has the right goals. What we need now is the honesty and rigor to assess whether we are meeting them, and the will to change course when we find we have not. We owe that to the people of California, of the United States, and of the world who are watching to see whether it can be done.