



# CAPITOL WEEKLY

COVERING CALIFORNIA GOVERNMENT AND POLITICS

## OPINION

### SB 100: the clean energy plan that keeps California hooked on gas



BY **RYAN PICKERING** POSTED 09.24.2024

OPINION – California has long been a climate leader, but now we face a critical choice: continue investing billions in a system that keeps us hooked on natural gas, or embrace nuclear energy to fully decarbonize the grid.

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#### SB 100: the clean energy plan that keeps California hooked on gas



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## **SB 100: The Clean Energy Plan That Keeps California Hooked on Gas**

**By Ryan Pickering**

OPINION – California’s clean energy future is at risk. Despite ambitious goals and a trillion-dollar investment plan, the state is still on track to burn natural gas for decades to come unless we change course.

SB 100, the 100 Percent Clean Energy Act, mandates that all retail electricity come from renewable or zero-carbon sources by 2045. However, new research exposes a critical flaw: even with massive investments in solar, wind, and batteries, there will be significant energy gaps that can’t be fully addressed by batteries alone.

Batteries, while essential for short-term energy storage and grid stabilization, are limited by their charge-discharge cycles, typically offering only four to six hours of support. During cloudy, windless days—often stretching for days or even weeks—batteries will need to be recharged by natural gas plants to meet demand. Modeling by Dr. Leonard Rodberg for the Anthropocene Institute shows that even with extensive battery deployment, natural gas would still need to fill over 80 percent of the shortfall during these periods, leaving California burning nearly as much gas in 2045 as it does today.

The solution lies in integrating a large, firm, dispatchable emission-free resource (DEFR) into California’s energy mix. Nuclear energy is uniquely suited to this role, providing reliable, continuous power at the scale required to decarbonize the grid. Unlike the combination of renewables, storage, and gas backup—which increases complexity and drives up costs—nuclear offers a stable, carbon-free baseload, available day and night. Nuclear works best alongside renewables and storage to phase out natural gas, optimizing grid flexibility and ensuring a truly clean energy system for California.

To achieve the vision of SB 100, California must lift its decades-old moratorium on new nuclear plants. Research shows that advanced nuclear can meet the state’s energy needs at no greater cost than its current plan, while eliminating reliance on fossil fuels.

California has long been a climate leader, but now we face a critical choice: continue investing billions in a system that keeps us hooked on natural gas, or embrace nuclear energy to fully decarbonize the grid. The time to act is now—our energy future depends on it. Download the full report <https://bit.ly/3zhXG2e>.

*Ryan Pickering is an energy policy researcher and solar industry veteran based in Berkeley, California, focused on balancing nuclear and renewable energy to achieve a sustainable future.*