## WHAT HAS THE STATE ACTUALLY ACCOMPLISHED ON CLIMATE CHANGE?

## Joe Matthews

California's fight against climate change is rapidly improving the state and creating a better future. It just isn't doing all that much to slow down climate change.

Yes, California reached its 2020 goals of reducing emissions to 1990 levels with ease. But it is lagging badly in meeting its next target—of slashing emissions 40 percent below 1990 goals by 2030. This insufficient decline in greenhouse gases soaks up the media and political attention, across the spectrum, and has made California's climate change regime a target.

Scientists, environmentalists, and climate-focused politicians criticize the state's lack of progress in meeting its long-term targets on emissions, and conservatives and climate denialists call this a failure that demonstrates the folly of our one-state fight against climate change.

Such criticism may seem straightforward and common-sensical, but nothing about California is ever straightforward and common-sensical, much less dramatic efforts to change it. Indeed, to judge California's climate change by metrics like greenhouse gas emissions is to get things backwards—because the Golden State's fight against climate change is way bigger than climate change.

The cause of fighting climate change is vital not just because it might save civilization, but because it has become the only reliable way for California to do anything truly transformational. Invoking climate change is the last hope for governments, businesses, or other entities who have an enterprise or idea that needs to cut through our governmental dysfunction, crippling legal system, and sprawling fractiousness.

Climate has become the primary way to get Californians and their communities to do any real long-term planning. Over the past generation, climate change has been the number one reason for starting new industries, re-engineering products, seeding social movements, investing in infrastructure, or revamping regional government.

Indeed, climate is so central to California's ability to change its circumstances that, If the threat of climate change didn't exist, we would have had to invent it.

I realize conspiracy theorists will feast on that line, but climate change isn't a con, and this method of using an issue to make much broader change is a proven one. The 20<sup>th</sup> Century War on Poverty, for example, didn't end poverty, but it helped create a suite of supports for people that made life a little brutal, and produced new government jobs that gave many working-class people of color a foothold in the middle class.

When you stop judging California's fight on whether it ended climate change here or worldwide, and judge it instead on what it's actually done, the picture is extraordinary.

The state's pathbreaking cap-and-trade program, despite notable failings, forced polluting industries to better measure and focus on their emissions, in ways they had long resisted. The program has produced billions in revenues for climate-related projects and investments, from changing farming and ranching practices (to sequester carbon and capture methane from cows) to keeping alive the California High-Speed Rail Authority, and the never-ending media controversy about it.

Most notably, the state, and its renewable energy portfolio, helped encourage electric utilities to reduce their fossil-fuel consumption and rely more on renewable energy. And climate concerns—especially around the mega-fires—are changing the grid itself. Utilities have begun a program of pre-emptive shut-offs, and are supposed to be improving their maintenance record. If the utilities don't do better, they could die, or wither, as more communities create their own public power entities. Already, new regulations are being drawn so the grid can better integrate renewables and connect to microgrids.

California has been the center of a revolution in renewable energy, across the board. The most noticeable piece of this is the state's position as a national and international leader in solar power. You can't miss the arrays of panels on more than a million home roofs, on once-vacant lots and formerly agricultural land, and as shade in high school and city hall parking lots. Prices for solar have dropped by nearly half over the last five years. One-fifth of our electricity now comes from solar. And the sun is now big business; an estimated 100,000 Californians work in some part of the solar industry.

While other places debate renewables, California is arguing about the mix. How much can we reduce the "carbon intensity" of fuels and thus reduce greenhouse gases when fuels are burned? Should we really decommission Diablo Canyon nuclear power plant in San Luis Obispo County in 2025, and risk losing its huge and reliable supply of non-carbon power? Should the geothermal sources of Lake and Imperial Counties count as renewables?

Critics of California's climate change fight point to transportation, and the fact that the greenhouse gas emissions from that sector are increasing. That's a problem, reflecting California love of trucks and SUVs, but the transformation of that sector is remarkable. California companies have led in ride-sharing and self-driving technologies—new models that have been sold, at least, as responsive to climate change. The state has created regulations and incentives to encourage more electric cars, the electrification of bus lines, and more efficient vehicles of all times. Planning strategies are reducing the number of miles people drive. And gas stations are now under pressure; the city of Petaluma recently voted to prohibit creating new gas stations, or altering or relocating existing ones.

Progress extends from the local to the global. California has altered the auto industry worldwide. In 2015, it was our state's regulators who first learned that Volkswagen had designed software to cheat emissions testing on 11 million cars. Last year, it was California that negotiated agreements with five global carmakers, including Ford, Honda and Volvo, to cut greenhouse gas emissions more than they were required to by the U.S. government. The Golden State also has been reducing emissions from commercial trucks, most recently with new rules requiring truck manufacturers to transition to electric trucks in 2024.

Beyond cars, climate change has turned transportation upside down. These days, Los Angeles—of all places—is a national leader in transit, with a fully funded, 50-year program for expanding its already robust Metro system of rail and busways. Bay Area leaders are knitting together existing systems, and promising expansions. San Diego County is considering a "5 Big Moves Plan" to create a transportation system as fast and convenient as driving.

And transit is gaining beyond the metropolis. Fresno has embraced <u>bus rapid transit—light rail</u> <u>on wheels</u>—and the Coachella Valley has opened and is expanding <u>CV Link</u>, which will provide a dedicated transportation for pedestrians, bicyclists and gold cart drivers between eight cities and two tribal lands. To reduce driving and pollution by super-commuters, those unfortunate Californians who commute three hours or more across our mega-regions, the Metrolink regional rail in Southern California is being extended, and the ACE train service is being expanded to connect San Jose all the way to Modesto and Merced.

While transportation and electricity have been at the heart of the climate change fight, the resulting transformation has touched every issue. The mental health crisis, including high levels of anxiety, are rooted in, among other things, worries about climate-related disaster. While the pandemic has inspired emergency investments in public health, telemedicine, and homelessness programs like Homekey, it will be climate change, and the future emergencies it produces, that will justify making those investments permanent.

Climate change is a contributor to major changes in American childhood. Young people cite climate change as one reason why they are having fewer children. California's schools and universities have adjusted curriculum and research priorities to the point that the state is a leader in climate education.

And what industry has gone untouched? The bags we use, the straws through which we drink, the mowers we use on our lawns, the crops we grow, the warehouses and ports that move our goods, the materials with which we repair our homes have been altered by California's fight against climate change.

Climate has even shaken up a California water system that seemed locked in litigation and time. Pioneering toilet-to-tap water recycling has been adapted in Orange County and elsewhere. Stormwater capture systems are being put into place. The mayor of Los Angeles—of Los Angeles—declared the goal of becoming self-sufficient in water. With farmers building deeper wells in the drought, California took the historic step of regulating groundwater in 2014.

Climate change has forced the upgrade of efficiency standards for building construction, and upended the debate over housing. All sides of the debate justify their policies with climate change. Anti-growth forces have used climate as an argument to stop housing, including by putting boundaries on urban and suburban growth. Deadly mega-fires have led to reconsideration of housing and growth in California's peripheral places. But pro-housing forces have cited housing as a reason for changing zoning to allow housing in more places, and for building more dense and smaller housing in the core. The YIMBY movement, or Yes in My Backyard, supports urban infill housing in part on climate grounds—they want housing closer to job centers, to

reduce commutes and pollution. In this way, climate change has put California's NIMBYs, at long last, on the defensive.

Climate change has helped fuel a new era of political and social activism in California. The climate-fueled movement to ban hydraulic fracking, which produces natural gas, has become a statewide force. Climate has refocused many environmental groups on environmental justice, and the fight to stop so many polluters in poorer communities of color. Black Lives Matter has made climate justice central to its policy and organizing work.

Climate change also has contributed to the politicization, and the polarization, of our society. The stakes are now higher—we are fighting for the survival of humanity, and who can compromise on that?

Much of that polarization affects national and state-level politics, but climate change can create conflict—and opportunities—at the local level too. Coastal communities are now doing battle over how to respond to sea-level rise—by building walls to meet higher waves, or tearing down shoreside development and retreating inland. Mountain communities are struggling with the long-term decline in California snow, and the tourism it brings from skiers and snowboarders. And cities, especially in our hotter and drier places, are looking for ways to increase shade and stay cool. The mayor of Los Angeles—again, can you believe it, Los Angeles?—publicly pledged to reduce temperatures by three degrees Fahrenheit by 2035.

Even small California towns have added climate plans to their general plans. In the small Salinas Valley settlement of Gonzales, population 9,000, the climate plan has sparked a transformation. Two windmills were constructed to power a growing agricultural-industrial park of food processors that has given Gonzales a stable economic and employment base. Now the city, to protect those businesses and its electricity from climate disruption, is building the largest multiuser microgrid in California.

In climate-obsessed California, even the smallest places think big.

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