









## Concerned Scientists

























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Liane Randolph, Chair California Air Resources Board 1001 "I" Street Sacramento, CA 95814

Sent via email

August 29, 2022

## RE: Scoping Plan Electric Sector Comments: Set Interim Target to Advance Phase Out of Gas Power Generation for Our Communities and Climate

Dear Chair Randolph and Members of the Board:

We are writing to you on behalf of 33 organizations representing hundreds of thousands of community members across California to request that CARB revise the 2022 Draft Scoping Plan to develop an interim target for the electric sector of no greater than 30 million metric tons (MMT) of greenhouse gasses (GHGs) by 2030. This interim target is critical in ensuring that frontline communities near gas plants do not shoulder the burden of California's electrification goal. An interim target serves to protect communities and the climate by necessitating the prioritization of direct emission reductions through the retirement of gas-fired power plants, starting with those in disadvantaged communities.

We are grateful for the direction from Governor Newsom in his July 22, 2022 letter to update the Scoping Plan to include no new gas generation capacity. The letter clearly states Newsom's request for state agencies to "plan for an energy transition that avoids the need for new natural gas plants to meet our long-term energy goals while ensuring reliability and meeting growing demand for electricity." This is a significant and welcome shift from the previously proposed 10 GW of new gas capacity in the May Draft 2022 Scoping Plan Update (Draft Plan), which we estimated would be equivalent to at least 38 new large or 100 new peaker gas-fired power plants. New gas-fired power generation, either in the form of new capacity on existing plants or entirely new plants, is incompatible with the state's climate, public health, and economic goals. We thank the Governor, Board and Staff for adjusting the Plan to ensure no new gas capacity in the next update.

Ensuring we do not build *new* gas in California, however, is the bare minimum we should be doing. To avoid the most destructive impacts of the climate crisis, and to improve air quality in our state's most vulnerable communities, we need to be doing everything possible to safely and reliably transition off of gas fired generation as quickly as possible. The Scoping Plan plays a critical role in realizing this vision. The Board, via revisions to the Scoping Plan that reconcile

with Governor Newsom's direction, needs to adopt a just and ambitious interim target for the electric sector. This will not only help us move faster on our gas retirement and clean electricity goals, but will help prevent existing gas plants from running more frequently to meet increased demand from electrification of other sectors or for possible out-of-state exports, which would increase emissions in frontline communities. Currently, the Draft Scoping Plan projects that the electric sector will emit 38 MMT of greenhouse gasses in 2030 and 30 MMT through 2050, both of which are unacceptable. The Scoping Plan must be updated to more rapidly address existing electric sector emissions by setting an interim target of no greater than 30 MMT by 2030 and to prioritize direct emissions reductions by phasing out gas-fired power plants in disadvantaged communities first. We are also gravely concerned that the draft Scoping Plan overly relies on carbon capture and sequestration or carbon dioxide removal technologies, which can continue to expose frontline communities to unnecessary and harmful air pollution.

Transitioning off of gas-fired generation is critical not only for the sake of the climate, but also for the sake of equity and environmental justice. The vast majority of currently operating gas-fired power plants are located in or near disadvantaged communities,<sup>4</sup> which means those communities are disproportionately burdened by the harmful pollutants that gas plants emit. Some of the highest-polluting gas-fired power plants emit over 100 tons of NOx per year.<sup>5</sup> NOx pollution contributes to a range of public health impacts from asthma to lung cancer and premature death.<sup>6</sup> The state's plan to address gas-fired power generation must therefore include a commitment to phase out the gas plants in disadvantaged communities first.

Fortunately, building new clean energy capacity and transitioning off gas-fired power generation is feasible, cost-effective, and can generate new high-road jobs. Building renewable energy projects is often more cost effective than running existing gas plants and maintaining aging gas infrastructure. The recently passed federal Inflation Reduction Act includes unprecedented levels of federal support for clean energy that will further spur renewable energy projects and enable their rapid buildout. The California legislature and multiple state agencies are actively coordinating on how to address siting, permitting, transmission, and interconnection bottlenecks for renewable energy projects. Thus, rather than relying on polluting fossil fuel power generation, the Scoping Plan should pursue additional distributed energy resources, energy efficiency, demand response, renewable energy, and storage technologies to power and empower our communities.

Setting ambitious interim targets will help catalyze other agencies and decision-makers to invest in or authorize procurement for renewable and zero-carbon energy projects such as wind, solar, geothermal, battery storage, and microgrids, especially for people who have historically been excluded from accessing the benefits of clean energy, including frontline, low-income, rural, and indigenous communities. New renewable energy projects can spur massive job growth, as well. For example, one study projected that a 10 GW of offshore wind by 2040 would generate a

total of 97,000 to 195,000 job-years through 2040 for the construction of the wind facilities and another 4,000 to 4,500 annual operation and maintenance jobs. <sup>10</sup> The CEC's latest offshore wind report suggests that the CEC will consider that target or larger by 2045. <sup>11</sup>

Setting direct emission reduction interim targets is critical to address the climate crisis. CARB's previous analysis shows the Draft Plan is highly unlikely to achieve our state's climate goals, <sup>12</sup> including the SB 100 requirement for California to achieve a zero-carbon electric system by 2045. <sup>13</sup> Furthermore, the International Energy Agency has explained that all advanced economies must achieve a carbon-free electric sector by 2035 <sup>14</sup> and President Biden's Executive Order has also set a goal of 100% carbon-free electricity for the United States by 2035. <sup>15</sup> Without revision, the Draft Plan will put our state behind national and international targets and will likely result in us failing to meet our own policies and mandates. By setting an interim target of no greater than 30 MMT GHGs by 2030, CARB will begin to set us on the path to meet the scale and speed of the climate crisis.

As the Draft Plan explains: "Moving forward, a clean, affordable, and reliable electricity grid will serve as a backbone to support deep decarbonization across California's economy." To help ensure this is true, CARB must implement a target of no greater than 30 MMT GHG by 2030, and prioritize direct emission reductions through the retirement of gas-fired power plants starting with those in disadvantaged communities.

## Sincerely,

- 1. Alan Weiner, Chapter Lead, 350 Conejo / San Fernando Valley
- 2. Janet Cox, Legislation/Policy Director, 350 Silicon Valley
- 3. David Diaz, MPH, Executive Director, Active San Gabriel Valley
- 4. Eric Morrill, Founder, All-Electric California
- 5. Faraz Rizvi, Campaign and Policy Manager, Asian Pacific Environmental Network
- 6. Kristel Rietesel, Administrator, Bay Area Clean Air Coalition
- 7. Cheryl Auger, President, Ban SUP (Single Use Plastic)
- 8. David F. Gassman, Co-Convenor, Bay Area System Change not Climate Change
- 9. Dan Johnson, Architect, Certified Energy Analyst, Beyond Efficiency Inc.
- 10. Alexis Sutterman, Energy Equity Program Manager, California Environmental Justice Alliance
- 11. Barbara Sattler, Leadership Council, California Nurses for Environmental Health and Justice
- 12. V. John White, Executive Director, Center for Energy Efficiency & Renewable Technologies
- 13. Ana Gonzalez, Executive Director, Center for Community Action and Environmental Justice

- 14. Sofi Magallon, Environmental Justice Policy Advocate, Central Coast United for a Sustainable Economy
- 15. Suzanne Hume, Educational Director and Founder, CleanEarth4Kids.org
- 16. Bahram Fazeli, Director of Research and Policy, Communities for a Better Environment
- 17. Nina Robertson, Senior Attorney, Earthjustice
- 18. Michael Colvin, Director, California Energy Program, Environmental Defense Fund
- 19. Jane Vosburg, Board President, Fossil Free California
- 20. Dave Shukla, Operations, Long Beach Alliance for Clean Energy
- 21. Merrian Borgeson, Senior Scientist, Natural Resources Defense Council
- 22. Matthew Baker, Policy Director, Planning and Conservation League
- 23. Ari Eisenstadt, Campaign Manager, Regenerate California
- 24. Chance Cutrano, Director of Programs, Resource Renewal Institute
- 25. Robert M. Gould, MD, President, **Physicians for Social Responsibility San Francisco Bay**
- 26. Peter M. Warren, San Pedro & Peninsula Homeowners Coalition
- 27. Rochelle Altman, Administrator, Santa Barbara Standing Rock Coalition
- 28. magi amma, Convener, Santa Cruz for Bernie
- 29. Daniel Barad, Senior Policy Advocate, Sierra Club California
- 30. Carolyn Chaney, Social Justice Ministry of Live Oak Unitarian Universalist Congregation
- 31. Shoshana Wechsler, Coordinator, Sunflower Alliance
- 32. Mark Specht, Western States Energy Manager, Union of Concerned Scientists
- 33. Susannah Churchill, Deputy Program Director, West, Vote Solar

CC: Governor Gavin Newsom

Lauren Sanchez

Karen Douglas

**CARB Board Members** 

Rajinder Sahota (CARB Staff)

Chanell Fletcher (CARB Staff)

<sup>&</sup>lt;sup>1</sup> Letter from Governor Newsom to the Chair of the California Air Resources Board (CARB) on July 22, 2022 <a href="https://www.gov.ca.gov/wp-content/uploads/2022/07/07.22.2022-Governors-Letter-to-CARB.pdf?emrc=1054d6">https://www.gov.ca.gov/wp-content/uploads/2022/07/07.22.2022-Governors-Letter-to-CARB.pdf?emrc=1054d6</a> (emphasis in original).

<sup>&</sup>lt;sup>2</sup> Draft Scoping Plan, Figure 4-5, p. 162 (indicating new gas in graphic of "Projected electricity resources needed by 2045 in the Proposed Scenario"); *see also* Mahone, et al, *CARB Draft Scoping Plan: AB32 Source Emissions Initial Modeling Results*, March 15, 2022 Workshop Presentation at Slide 26, https://ww2.arb.ca.gov/sites/default/files/2022-03/SP22-Model-Results-E3-ppt.pdf (stating "[i]n Alt 3 scenario,

model builds  $\sim$ 90 GW of solar and  $\sim$ 40 GW of batteries to meet SB100 retail sales target. All gas remains online and  $\sim$ 10 GW of new gas is built.").

- <sup>3</sup> One of the most recently proposed gas plants rejected by the California Energy Commission was the Puente Power Plant, which would have been 262 megawatts. Peaker plants in California range widely in size, primarily between 50 and 100 MW (for example, the Henrietta, Ripon, and Olive peaker plants are each 96-100 MW); the 100 new peakers estimate assumes the new peakers average 100 MW.
- <sup>4</sup> PSE Health Energy. Natural gas power plants in California's disadvantaged communities (April 2017) <a href="https://www.psehealthyenergy.org/wp-content/uploads/2017/04/CA.EJ">https://www.psehealthyenergy.org/wp-content/uploads/2017/04/CA.EJ</a> .Gas .Plants.pdf.
- <sup>5</sup> CARB Facilities Search Results sorted by NOx pollution https://www.arb.ca.gov/app/emsinv/facinfo/faccrit.php?sort=NOXHi&showpol=&co =&ab =&facid =&dis =&cit y =&fsic =4911&fname =&fzip =&grp=2&dbyr=2016&all fac=C&all tox=&chapis only=&CERR=&dd=.
- <sup>6</sup> U.S. Environmental Protection Agency. Integrated Science Assessment for Oxides of Nitrogen -- Health Criteria. EPA/600/R-15/068. January 2016. Available at: https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=310879.
- <sup>7</sup> Charles Teplin, Mark Dyson, Alex Engel, and Grant Glazer. *The Growing Market for Clean Energy Portfolios: Economic Opportunities for a Shift from New Gas-Fired Generation to Clean Energy Across the United States Electricity Industry*. Rocky Mountain Institute, (2019), p.15, available at https://rmi.org/cep-reports.
- <sup>8</sup> Inflation Reduction Act of 2022, H.R. 5376, 117th Cong. (2022).
- <sup>9</sup> See, e.g., California Public Utilities Commission Rulemaking 17-07-007, Order Instituting Rulemaking to Consider Streamlining Interconnection of Distributed Energy Resources and Improvements to Rule 21 (filed July 13, 2017).
- <sup>10</sup> Rose, A., Wei, D., and Einbinder, A. USC Schwarzenegger Institute for State and Global Policy. *California's Offshore Wind Electricity Opportunity*. (Aug. 2021), p.6, *available at* http://schwarzeneggerinstitute.com/images/files/OSW Report.pdf.
- <sup>11</sup> California Energy Commission, Draft Commission Report on Offshore Wind Energy Development off the California Coast (May 2022), p.54 (This suggests the CEC may consider establishing a megawatt planning goal for 2045 ranging from 10 GW to 14.3 GW for 2045 (informed by both the ISO 2021–22 Transmission Plan and the ISO 20-year Transmission Outlook).
- <sup>12</sup> See CARB Carbon Neutrality Report, pp. 4-6 (Oct. 2020), <a href="https://ww2.arb.ca.gov/sites/default/files/2020-10/e3">https://ww2.arb.ca.gov/sites/default/files/2020-10/e3</a> cn final report oct2020 0.pdf (explaining that the 15 MMT by 2045 scenario "represents the highest risk scenario, from a climate mitigation perspective, because it has the highest remaining direct GHG emissions, and relies on relatively untested [carbon dioxide removal] strategies which are not widely commercialized. The scenario also has the highest remaining quantity of fuel combustion, which means the air quality impacts, though far improved relative to today, will likely be highest among the three carbon neutral scenarios evaluated. Both the climate risks and the technology adoption and implementation risks of relying so significantly on [carbon dioxide removal] are high.").
- <sup>13</sup> SB 100 (De León, 2018); Public Util. Code Section 454.53(a), (d)(2).
- <sup>14</sup> IEA, Pathway to Critical and Formidable Goal of Net-Zero Emissions by 2050 Is Narrow But Brings Huge Benefits (May 18, 2021), <a href="https://www.iea.org/news/pathway-to-critical-and-formidable-goal-of-net-zero-emissions-by-2050-is-narrow-but-brings-huge-benefits">https://www.iea.org/news/pathway-to-critical-and-formidable-goal-of-net-zero-emissions-by-2050-is-narrow-but-brings-huge-benefits</a>.
- 15 U.S. Whitehouse, President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target (April 22, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/.
- <sup>16</sup> 2022 Draft Scoping Plan Update, p.156 https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf.