Triennial Strategic Research Plan — Fiscal Years 2021-2024

The California Air Resources Board's Triennial Strategic Research Plan serves as a roadmap for research planning over a three-year period, and ensures that our research portfolio addresses policy and program needs. It guides CARB's annual selection of research contracts, which can be fulfilled through in-house work, external contracts or collaborative research projects. The Plan acts as a resource for those interested in CARB's research priorities for the 2021-2024 fiscal years, informing sister agencies, universities and communities of our priorities in order to encourage engagement and collaboration.

CARB's goals, as outlined in the Shared Vision and Roadmap, guide the 2021-2024 Plan:

- Providing healthful air for all Californians
- Achieving carbon neutrality (net zero CO₂ emissions) and thereafter 'net negative,' by balancing CO₂ emissions with removal or elimination of CO₂, then removing or sequestering more CO₂ than is emitted
- Reducing emissions in communities heavily burdened by pollution and environmental stressors

The core of the plan is made up of research initiatives, which consist of broad topics (Health, Environmental Justice, Economics, Air Quality, Mobile Sources, Climate and Sustainable Communities) defining CARB's most pressing research priorities. The Plan also describes ongoing work, which builds on past research and informs future research.

CARB Research Supports Policies and Programs

CARB sponsors a research program that is guided by its mission to provide sound and timely scientific results that support its policies and programs. Established by the Legislature in 1971, the program has formed the basis of CARB's regulatory programs since its inception. CARB's research goals — informing health-based air quality standards, reducing air pollution exposures, and protecting California from impacts of climate change — are met through a diverse portfolio of projects. Research initiatives in the 2021-2024 Triennial Plan aim to keep focus on long-term air quality and climate goals, while also reflecting CARB's evolving priorities, as outlined by legislative statutes and the Governor's executive orders. Topics receiving greater or new emphasis in the current Triennial Plan, for example, include wildfires, COVID-19, carbon neutrality, equity and transportation trends. Additionally, the research program will increase efforts to engage additional regional universities and foster cross-university and community partnerships.

How Do We Operationalize Racial Equity in CARB Research?

One important new chapter in the Triennial Plan outlines CARB's commitment to operationalize racial equity in our research. Initiating this commitment will be informed by a community engagement process set to begin this summer. CARB will gather community input to help determine how best to break down barriers that prevent more robust community engagement. Overcoming these barriers is essential and will lead to research that addresses community needs and can be more easily integrated into community-led efforts. In addition, community and equity voices can shape broader statewide research efforts.

The Board adopted Resolution 20-33 on Oct. 22, 2020, committing to racial equity and social justice at every level of CARB's operations. This new chapter marks the beginning of work to develop a framework that includes racial equity in CARB's research projects and processes, breaks down barriers to authentic engagement and leads to more equitable outcomes.

More Information

Direct CARB research program questions to research@arb.ca.gov.