

Subject: Scoping Study 2022 should update GHG inventory methods to include all significant sources of statewide emissions, including emissions from international aviation, international water borne navigation and interstate aviation.

Esteemed ARB Staff, Board Members, and Members of the Public,

These comments are submitted on behalf of California River Watch . We appreciate the opportunity to provide these comments in response to the Public Workshop Series to Commence Development of the 2022 Scoping Plan Update to Achieve Carbon Neutrality by 2045, hosted by the California Air Resources Board on June 8, 2021. These written comments expand on a very helpful verbal exchange with Rajinder Sahota, Deputy Executive Officer for Climate and Research during the public comment period (Q&A excerpt begins at 3:34:45 of the [YouTube video](#)).

California River Watch is an Internal Revenue Code § 501(c)(3) non-profit, public benefit corporation organized under the laws of the State of California, with headquarters located in Sebastopol, California, and a mailing address of northern 290 S. Main Street, #817, Sebastopol, CA 95472. California River Watch is dedicated to protecting, enhancing, and helping to restore surface and ground waters of California including rivers, creeks, streams, wetlands, vernal pools, aquifers and associated environs, biota, flora and fauna, and educating the public concerning environmental issues associated with these environs. The impacts of global warming clearly effect water quality, aquatic habitat and associated environs.

California River Watch prevailed in a legal action against Sonoma County's proposed Climate Action Plan based on the County's failure to include, in its GHG Inventory, trans boundary GHG emissions from vehicle miles traveled in the course of tourist travel and export of wine and other products. (Order Granting Petition For Writ Of Mandate, Case NO: SCV-259242, July, 20,2017)

Overview:

Our primary concern is that while AB32 directs the Air Resources Board (ARB) to, "take into account the relative contribution of *each source* or source category to statewide greenhouse gas emissions" [section 38561(e), emphasis added], it has been ARB's practice in previous Scoping Study cycles to exclude from California's GHG Inventory some easily quantifiable and very significant sources of-emissions resulting from activity within California state boundaries. Most notably overlooked in prior AB32 inventories have been emissions from the in-state sale of maritime and aviation fuels for international aviation, shipping activities occurring more than 24 nautical miles from California's coast and interstate aviation.

Although these in-state fuels sales are said to be collected and reported separately, they are missing from the comprehensive inventory that defines compliance with the Statewide GHG Emissions Limit, which is the primary focus of most GHG policy making statewide. Policy makers and members of the public are seeking to understand the true and full scope of California's most significant sources of GHG emissions. We can't manage what we don't measure, so this should be fixed.

In our view, the legislative intent of AB32 was to provide all stakeholders with a comprehensive and unbiased inventory of *each* significant source or source category. While it may be true that ARB and other state agencies do not have the authority to directly *regulate* maritime or aircraft engine efficiency standards, neither do they have the authority to regulate the efficiencies for a range of “covered appliances,” including many large building systems like furnaces, water heaters and HVAC systems. Nevertheless, emissions from these sources have been included in previous statewide inventories. This apparent inconsistency should be corrected in the 2022 update.

Regulatory standards are only one of the many policy tools that may be available to state and local agencies to influence these significant sources of emissions. Regulatory preemption should in no way affect ARB’s *informational* duty under AB32 to collect and report in the State’s GHG Inventory all significant source emissions, particularly those which are growing rapidly, and where local jurisdictions may have land use and/or other powers beyond Federal authority.

The Natural Resources Agency spoke directly to this issue in its FINAL STATEMENT OF REASONS FOR REGULATORY ACTION AMENDMENTS TO THE STATE CEQA GUIDELINES, in response to comments by Sonoma County advocating constraining analysis of vehicle miles travelled to that which is “reasonable, meaningful, and informative relative to the scope of agency authority”. The NRA responded:

“The Agency is not making any change in response to this comment. The comment appears to express concern that the geographic scope of an analysis of vehicle miles traveled may extend beyond an agency’s ability to regulate the impact. CEQA requires analysis of a project’s impacts, **regardless of whether the impacts are within the agency’s jurisdiction**. The Agency appreciates the comment’s concern regarding reasonableness, and notes that subdivision (b)(4) expressly references the standard of adequacy in Section 15151. That section calls not for perfection, but a good faith effort at full disclosure.” (Emphasis added)

Scoping Study 2022 should update methods to include each significant source of GHG emissions resulting from statewide activity in the statewide GHG inventory as originally intended under AB32.

Background:

The US is far and away the largest global source of aviation emissions, and California our nation’s top-most polluting state (34.2 MTCO_{2e}, 2017). CA generates more than double the emissions of second-ranked New York, which makes our state responsible for about 18.5% of the entire US aviation industry

total (185 MTCO₂e 2017).

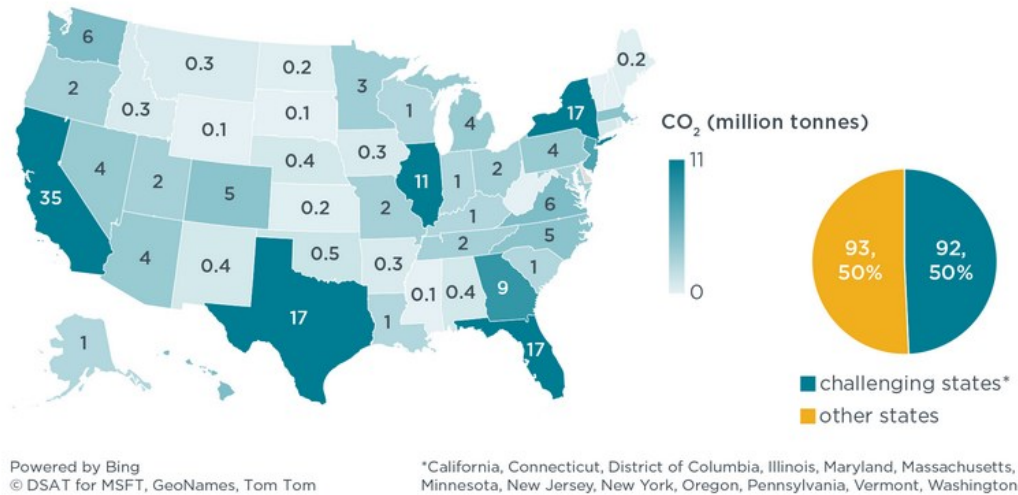


Figure 1. Total passenger flight CO₂ emissions (million tonnes) by state in 2019.

<https://theicct.org/publications/aviation-CO2-US-feb2021> (Table 1, Figure 1).

If CA was a nation-state, our aviation emissions would be ranked third globally, between China and UK).

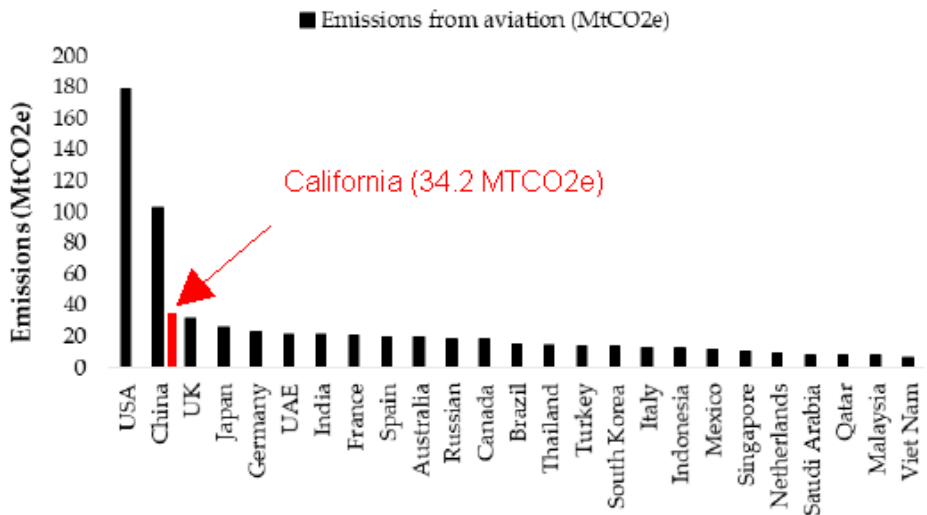


Figure 1. Top 25 countries with the highest contributions to GHG emissions from the aviation sector in 2019 (Source of data: [11]).

Source (California added): <https://www.mdpi.com/2071-1050/13/7/3656/pdf>

As shown, there is no question that significant quantities of aviation and maritime fuels are being sold within the State of California. AB32 requires CARB to track all *significant* sources of emissions *statewide*:

(i) “Greenhouse gas emission source” or “source” means any source, or category of sources, of greenhouse gas emissions whose emissions are at a level of significance, as determined by the state board, that its participation in the program established under this division will enable the state board to effectively reduce greenhouse gas emissions and monitor compliance with the statewide greenhouse gas emissions limit.

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200520060AB32

Indeed, the State of California Attorney General and 12 other jurisdictions are suing the EPA to force it to set regulatory emissions standards on aircraft manufacturers:

<https://theicct.org/sites/default/files/publications/Aviation-CO2-US-feb2021.pdf>

The brief in that case lays out many of the issues involving Federal *regulatory* preemption over aviation engine fuel efficiency standards:

<https://oag.ca.gov/sites/default/files/Petition%20for%20Review%20%28FINAL%29.pdf>

However, the brief says nothing about *informational* preemption, which ARB appears to assume imposes limits on its authority to quantify aircraft and maritime fuels as a “source” in the statewide GHG inventory.

The ICCT paper (Feb. 2021, link above) also reports that San Francisco and Los Angeles are already reporting full-length air travel emissions in their own local GHG inventories. To our knowledge, no one has claimed these local jurisdictions ought to be preempted by the Federal government from doing so. If ARB is under the impression that Federal informational preemption applies uniquely to States, but not to Local governments, this rationale should be made explicit in the Scoping Study Update.

In addition, AB32 requires ARB to use “best available economic models, emission estimation techniques, and other scientific methods” [section 38561(d)]. The collection and reporting of aviation emissions information is clearly recommended as inventory best practice by both the IPCC GHG Inventory guidelines (for nation states) and the ICLEI US Community protocol (Appendix D, TR-6B):

<https://www.ipcc.ch/report/2019-refinement-to-the-2006-ipcc-guidelines-for-national-greenhouse-gas-inventories/>

<https://icleiusa.org/us-community-protocol/>

In line with these long-standing protocols, ICLEI USA staff (personal communication, C. Hart) recommends that local communities with airports under their jurisdiction or significant tourism activities should report aircraft emissions in their local GHG inventories. If ARB believes that there are flaws in these protocols that require ARB to deviate from following them in California, then these findings should be made explicit in the next Scoping Study Update.

The IPCC guidelines recommend that nation-states INCLUDE all transportation by aircraft within that country’s boundaries. However, current practice by ARB is to track and include only trips by air that

take-off and land inside the borders of the state of California (as if California was its own nation-state reporting directly to the UNFCCC). If ARB believes that the IPCC guidelines for Nation-States apply directly to California, that finding should be made explicit in the next Scoping Study Update.

If all emissions **from California-based aircraft** and maritime sources were being tracked and reported comprehensively such that local decision-makers could easily see their contribution to the statewide total, then our concerns might be more easily dismissed. However, a team of PhDs at ICCT who are tracking all these aviation emissions data have recently stated that some of these regional aircraft emissions are actually falling through the cracks:

*“While the data provided by the U.S. DOT on airline operations and fuel burn are relatively comprehensive, improvements can be made. A number of errors in the public data have been found by both Airline Data Inc. and ICCT. While every attempt is made by U.S. DOT to correct errors, questions arise about the enforcement power of the department to ensure airlines are reporting correctly and revising errors when necessary. In addition, there are **data gaps** with regards to regional air carrier fuel burn in Form 41; the **regional carriers are not reporting fuel burn because the fuel is purchased by the mainline carriers, but the mainline carriers are also not reporting the fuel consumption.** The U.S. DOT and airlines should work together to ensure that regulators, research organizations, and the general public have access to complete, comprehensive data needed to make informed decisions that support and promote a more sustainable aviation future.” (page 18)*

https://theicct.org/sites/default/files/publications/LCC-emissions_growth-mar2021.pdf

We agree with ICCT, all stakeholders need “*access to complete, comprehensive data needed to make informed decisions that support and promote a more sustainable aviation future.*” If ARB’s off-inventory tracking of California aircraft emissions are not subject to data gaps similar to those described above, this finding should be made explicit in the next Scoping Study Update.

In our view, ARB shouldn't continue waiting around for Federal action to fix these gaps in California's own legislatively mandated statewide emissions inventory. Scoping Study 2022 is the correct time to initiate these important California GHG inventory updates, on which Our Common Future depends.

Most Respectfully Submitted by,

Jerry Bernhaut and Tom Conlon, on behalf of California River Watch.