

October 19, 2020

Andrew Wheeler, Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Attention: Docket ID No. EPA–HQ– OAR–2018–0276

Re: *Control of Air Pollution from Airplanes and Airplane Engines: GHG Emission Standards and Test Procedures; Notice of Proposed Rulemaking*

Dear Administrator Wheeler:

The Northeast States for Coordinated Air Use Management (NESCAUM) offer the following comments on the U.S. Environmental Protection Agency (EPA) Notice of Proposed Rulemaking *Control of Air Pollution from Airplanes and Airplane Engines: GHG Emission Standards and Test Procedures* [85 Fed. Reg. 51556-51594 (August 20, 2020)]. NESCAUM is the regional association of air pollution control agencies representing Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. Our member agencies have the primary responsibility in their states for implementing clean air programs that achieve the public health and environmental protection goals of the federal Clean Air Act (CAA).

NESCAUM supports EPA’s efforts to establish greenhouse gas (GHG) emission standards for certain classes of new type design and in-production airplanes used in commercial and business aviation.<sup>1</sup> Aircraft covered under the proposal are responsible for 10 percent of all U.S. transportation GHG emissions and 2.8 percent of total U.S. GHG emissions. The U.S. represents the largest commercial air traffic system in the world and accounted for 202.5 million tons, or 23.5 percent of global carbon dioxide (CO<sub>2</sub>) from commercial aviation in 2017.<sup>2</sup> Prior to the COVID-19 pandemic, the Federation Aviation Administration projected domestic and international revenue passenger miles from the aircraft sector to grow by a combined 4.9 percent per year between 2019 and 2039.<sup>3</sup>

We note, however, the proposed standards for new type design and in-production airplanes are equivalent to those adopted by the International Civil Aviation Organization (ICAO) in 2017 and

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<sup>1</sup> The EPA specifies the proposed standards would apply to certain classes of engines used by certain civil subsonic jet airplanes with a maximum takeoff mass greater than 5,700 kilograms and by certain civil larger subsonic propeller-driven airplanes with turboprop engines having a maximum takeoff mass greater than 8,618 kilograms.

<sup>2</sup> Environmental and Energy Study Institute, Fact Sheet: The Growth in Greenhouse Gas Emissions from Commercial Aviation (October 17, 2019). Available at <https://www.eesi.org/papers/view/fact-sheet-the-growth-in-greenhouse-gas-emissions-from-commercial-aviation>.

<sup>3</sup> U.S. EPA, 2020: Technical Report on Aircraft Emissions Inventory and Stringency Analysis, July 2020.

represent a business as usual (BAU) technology-following trajectory. Moreover, the proposed regulation is not expected to achieve any environmental benefits. As EPA observes:

U.S. manufacturers have already developed or are developing technologies that will allow affected airplanes to comply with the ICAO standards, in advance of EPA's adoption of standards. Furthermore, based on the manufacturers' expectation that the ICAO standards will be implemented globally, the EPA anticipates nearly all affected airplanes to be compliant by the respective effective dates for new type designs and for in-production airplanes. This includes the expectation that existing in-production airplanes that are non-compliant will either be modified and re-certificated as compliant or will likely go out of production before the production compliance date of January 1, 2028. *For these reasons, the EPA is not projecting emission reductions associated with these proposed GHG regulations* [emphasis added].<sup>4</sup>

Several new aircraft from Airbus, Boeing, and smaller aviation manufacturers currently meet the proposed standards and as airline carriers introduce new technology into their fleets, they will outperform the standards. Under the BAU trajectory, all regional and 70 percent of mainline U.S. carriers are projected to be in compliance with the standards by January 1, 2028.<sup>5</sup>

EPA has clear authority under CAA Section 231 to adopt GHG emission standards more stringent than those set forth by ICAO, and ICAO does not preempt member states from doing so.<sup>6</sup> Furthermore, the Agency is obliged to reduce aircraft GHG emissions that endanger the public health and welfare of current and future citizens as determined by a 2016 endangerment finding.<sup>7</sup>

EPA should consider adopting technology forcing GHG emission standards that will realize GHG emission reductions from the aircraft sector. More stringent standards will not only enable U.S. aviation manufacturers to remain competitive in the global marketplace, but also regulate GHGs from the aircraft sector commensurate with other transportation sectors. EPA should also accelerate its January 1, 2028 compliance date for in-production models and establish standards to reduce emissions from in-use aircraft, for example, by retrofitting these aircraft to reduce aerodynamic drag and increase fuel efficiency. Finally, EPA should expand annual reporting requirements for airplane production, airplane characteristics, and test parameters to include aircraft CO<sub>2</sub> emission rates. These data would provide valuable insights into regulatory compliance and can be used to inform future policy development.

Given the unmistakable evidence that impacts from a changing climate are worsening – from record-breaking heat waves, to enormous and widespread forest fires in the West, to more rapidly intensifying hurricanes – it is imperative that EPA take meaningful action to reduce GHG

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<sup>4</sup> 85 Fed. Reg. 51558 (August 20, 2020).

<sup>5</sup> Environmental and Energy Study Institute, Fact Sheet: The Growth in Greenhouse Gas Emissions from Commercial Aviation (October 17, 2019). Available at <https://www.eesi.org/papers/view/fact-sheet-the-growth-in-greenhouse-gas-emissions-from-commercial-aviation>.

<sup>6</sup> 80 Fed. Reg. 37766 (July 1, 2015).

<sup>7</sup> 81 Fed. Reg. 54422 (August 15, 2016).

emissions from all sectors. Therefore, we urge EPA to go back to the drawing board and propose technology forcing emission standards that would achieve reductions in aircraft GHG emissions beyond a BAU scenario.

Sincerely,



Paul J. Miller  
Executive Director

cc: NESCAUM Directors  
Sarah Dunham, EPA OTAQ  
Bill Charmley, EPA OTAQ  
Lynne Hamjian, Cynthia Greene, Bob Judge, EPA Region 1  
Rick Ruvo, EPA Region 2