



January 22, 2015

Gina McCarthy, Administrator  
Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Janet McCabe, Acting Assistant Administrator  
Office of Air and Radiation  
U.S. EPA Headquarters  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Michael Huerta, Administrator  
Federal Aviation Administration  
800 Independence Avenue, SW  
Washington, DC 20591

**RE: Request for Strong Clean Air Act Standards to Curb Aircraft Greenhouse Gas Emissions**

Dear Administrators McCarthy and Huerta and Acting Assistant Administrator McCabe:

We write to express strong support for the important rulemaking process now underway at the Environmental Protection Agency, in consultation with the Federal Aviation Administration, to

*Alaska • Arizona • California • Florida • Minnesota • Nevada • New Mexico • New York • Oregon • Vermont • Washington, DC*

Vera Pardee, Senior Attorney • 351 California St., Ste. 600 • San Francisco, CA 94104  
Phone: (415) 436.9682 x317 • Fax: (415) 436.9683 • [vpardee@biologicaldiversity.org](mailto:vpardee@biologicaldiversity.org)

set emission standards to curb greenhouse gas pollution from the nation's aircraft fleet. We urge EPA to analyze all measures available to reduce greenhouse gas emissions from new and existing aircraft under Section 231 of the Clean Air Act<sup>i</sup> in the forthcoming advanced notice of proposed rulemaking (ANPR), with the goal of proposing final standards no later than the end of 2015.

Greenhouse gas emissions from aircraft are currently responsible for more than 3 percent of total U.S. emissions<sup>ii</sup> and are one of the fastest-growing carbon pollution sources, on track to *triple* globally by 2050 under business-as-usual scenarios.<sup>iii</sup> Yet, if we are to avoid the worst effects of climate change by holding the average global temperature increase to or below 2°C above pre-industrial levels, greenhouse gas emissions from all sources must be substantially *reduced* over that same time period and must reach near-zero levels well before the end of the century.<sup>iv</sup> If global emissions from the aviation industry were compared to those of countries, in 2011 aviation would have ranked seventh, just after Germany and well ahead of Korea;<sup>v</sup> they play a major part in global warming and must be curbed as quickly as possible.

EPA has now begun that process. In May 2015, it will issue a proposed endangerment finding under Section 231 for aircraft greenhouse gas emissions; if that proposed finding is positive – as it no doubt will be – EPA will also issue an ANPR, which will consider efforts by the International Civil Aviation Organization (ICAO) to establish global aircraft emission standards by 2016 and will discuss the use of Section 231 to implement ICAO standards.<sup>vi</sup> Unfortunately, on the subject of greenhouse gas reductions ICAO has a 17-year old history of delay and broken promises. Whether ICAO will act and if so, whether ICAO standards will actually reduce emissions remains highly uncertain. EPA, however, has an acknowledged duty under the Clean Air Act to set domestic emission standards regardless of whether ICAO proceeds. Thus, we urge EPA to go beyond a discussion of ICAO's standard-setting efforts and to analyze all means available to EPA and FAA to reduce aircraft carbon emissions. An ANPR in May 2015 that lays the groundwork for truly meaningful U.S. aircraft greenhouse gas emission standards will begin to fulfill EPA's domestic mandate under the Clean Air Act, and could also act as a catalyst spurring long-delayed international action.

EPA's regulatory authority over aircraft carbon pollution is broad, and includes regulatory authority over both new and existing aircraft.<sup>vii</sup> EPA is well equipped to employ this authority to increase the efficiency of the nation's aircraft fleet and thus to reduce its carbon emissions. As a recent report demonstrates, all U.S. airlines are profitable even though the efficiency difference between the most and least efficient airlines is an astounding 27 percent.<sup>viii</sup> Clearly, major reductions in aircraft carbon pollution can be achieved without affecting profitability.

EPA has been analyzing measures to reduce carbon emissions from aviation since at least 2008, when it discussed technological controls, operational measures to reduce emissions, and standard-setting approaches in an ANPR.<sup>ix</sup> There, EPA analyzed available technological changes to future and existing aircraft engines, alterations or additions to airframes to reduce drag and weight, air traffic management and operational changes, and modifications of aircraft fuels.<sup>x</sup> EPA estimated greenhouse gas reductions available from engine and airframe changes alone at 13.3 percent.<sup>xi</sup> EPA also discussed setting declining airline fleet average greenhouse gas emission standards similar to those it later promulgated for passenger vehicles, based either on

engine emissions or as “an operational declining fleet average program . . . designed to consider the whole range of engine, aircraft and operational GHG control opportunities” EPA had analyzed.<sup>xii</sup> In its 2008 response to the ANPR, the airline industry committed to deliver fleet-wide fuel efficiency improvements of 30 percent by 2025 based on voluntary airline investment and operating initiatives efforts alone.<sup>xiii</sup> In sum, EPA’s preparatory work and industry’s own response demonstrate that aircraft emission reductions can readily be implemented in a cost-effective manner.

We urge you to utilize the ongoing rulemaking process to prepare for strong domestic aircraft emission standards that begin to reduce greenhouse gases as soon as possible. We look forward to continuing to work with you on this important task.

Sincerely,

Vera Pardee  
Attorney for Center for Biological Diversity

Sarah Burt  
Earthjustice

John Kaltenstein  
Friends of the Earth

Joanne Spalding  
Sierra Club

Ben Longstreth  
NRDC

---

<sup>i</sup> 42 U.S.C. § 7471.

<sup>ii</sup> U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2012 (April 2014)* at ES-2, Tables 2-15, 3-12, 3-50, 3-52, available at <http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html#fullreport>.

<sup>iii</sup> Lee, D.S., Lim, L., & Owen, B., *The Impact of the “2020 Carbon Neutral Goal” on Aviation CO<sub>2</sub> Radiative Forcing and Temperature Response* (2013), available at <http://www.cate.mmu.ac.uk/docs/climate-impacts-from-aviation-CNG2020.pdf>.

---

<sup>iv</sup> Intergovernmental Panel on Climate Change, *Climate Change 2014, Synthesis Report* at 20 (2014), available at <http://ipcc.ch/report/ar5/syr/>.

<sup>v</sup> Kwan, Irene and Rutherford, Daniel, International Council on Clean Transportation, *U.S. Domestic Airline Fuel Efficiency Ranking, 2013* (“ICCT Report”) at 1, 2 (2014), available at <http://www.theicct.org/us-domestic-airline-fuel-efficiency-ranking-2013>.

<sup>vi</sup> *Id.*

<sup>vii</sup> Section 231 requires EPA to investigate emissions of air pollutants from aircraft and set pollution standards for any class or classes of aircraft engines, 42 U.S.C. §§ 7471(a), 7471(a)(2)(A), and EPA has previously set pollution standards for new and existing engines. U.S. EPA, *Control of Pollution from Aircraft and Aircraft Engines*, 38 Fed. Reg. 19088 (July 17, 1973).

<sup>viii</sup> ICCT Report, *supra* note iv at 2.

<sup>ix</sup> U.S. EPA, *Advanced Notice of Proposed Rulemaking: Regulating Greenhouse Gas Emissions Under the Clean Air Act*, 73 Fed. Reg. 44354, 44470-44473 (July 30, 2008).

<sup>x</sup> *Id.*

<sup>xi</sup> *Id.* at 44470.

<sup>xii</sup> *Id.* at 44473.

<sup>xiii</sup> Comments by Nancy N. Young, Vice President, Environmental Affairs, Air Transport Association of America at 4-5 (November 26, 2008), available at <http://www.regulations.gov#!documentDetail;D=EPA-HQ-OAR-2008-0318-1777>. As the ICCT report demonstrates, the airline industry has not delivered on that commitment, and efficiency improvement has stalled out. ICCT Report, *supra* note iv.