

January 22, 2015

Gina McCarthy, Administrator
Environmental Protection Agency
Mail Code 1101A
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Janet McCabe, Acting Assistant Administrator
Office of Air and Radiation
U.S. EPA Headquarters
Mail Code 6101A
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 set emission standards to curb greenhouse gas pollution from the nation's aircraft fleet. Greenhouse gas emissions from aircraft are currently responsible for more than 3 percent of total U.S. emissionsⁱ and are one of the fastest-growing carbon pollution sources, on track to *triple* by 2050 under business-as-usual scenarios.ⁱⁱ Yet, if the world is to hold the average global temperature increase to or below 2°C in order to avoid the worst effects of climate change, greenhouse gas emissions from all sources must be substantially *reduced* over that same time period.ⁱⁱⁱ 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.^{iv} Aviation emissions play a major part in global warming and must be curbed as quickly as possible.

We hope that EPA has now begun that process in earnest, and will, in May of this year, issue a proposed endangerment finding under Section 231 for aircraft greenhouse gas emissions. If that proposed finding is positive, we hope that EPA will also issue an ANPR considering, inter alia, (a) efforts by the International Civil Aviation Organization (ICAO) to establish, by 2016, global

greenhouse gas emission standards for international civil aviation; (b) work now underway in ICAO to finalize and adopt, by 2016, a global market-based measure to ensure the industry's "carbon neutral growth" from 2020 (i.e., a cap on its net emissions at 2020 levels); and (c) steps that will be needed internationally if the industry is to meet its pledge of a 50% cut in its emissions from 2005 levels by 2050.

Notwithstanding the potential actions by ICAO, however, EPA has an acknowledged duty under the Clean Air Act to set emission standards for the U.S. aviation industry. EPA's regulatory authority over aircraft carbon pollution is broad.^v EPA is well equipped to employ this authority to increase the efficiency of the nation's aircraft fleet, as part of a multi-pillar approach to reducing the total carbon emissions of U.S. aviation. In that context, we hope that in its ANPR EPA will go beyond a discussion of ICAO's efforts, and to consider all means available to EPA and FAA to reduce aircraft carbon emissions, including inviting views on the scope of application of an aircraft greenhouse gas emission standard under the Clean Air Act; analyzing what can be achieved with such a standard in terms of emission reductions; and identifying how improvements in aircraft emissions under the standard can be monitored, reported, and verified. We hope that in fulfilling its mandate under the Clean Air Act, EPA's action will also help catalyze action at ICAO.

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.^{vi} 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.^{vii} EPA estimated greenhouse gas reductions available from engine and airframe changes alone at 13.3 percent.^{viii} 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.^{ix} The Environmental Defense Fund supports the consideration of these kinds of flexibility tools in crafting environmentally strong standards under the Clean Air Act.

In sum, we urge EPA, in the forthcoming advanced notice of proposed rulemaking (ANPR), to consider all measures available to reduce greenhouse gas emissions from new and existing aircraft under Section 231 of the Clean Air Act^x, with the goal of proposing final standards no later than the end of 2015.

We look forward to working with you as you move forward in this important area.



Annie Petsonk
International Counsel, Environmental Defense Fund

ⁱ 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>.

ⁱⁱ Lee, D.S., Lim, L., & Owen, B., *The Impact of the “2020 Carbon Neutral Goal” on Aviation CO₂ Radiative Forcing and Temperature Response* (2013), available at <http://www.cate.mmu.ac.uk/docs/climate-impacts-from-aviation-CNG2020.pdf>.

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

^{iv} 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>.

^v 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 future and existing engines. U.S. EPA, *Control of Pollution from Aircraft and Aircraft Engines*, 38 Fed. Reg. 19088 (July 17, 1973).

^{vi} 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).

^{vii} *Id.*

^{viii} *Id.* at 44470.

^{ix} *Id.* at 44473.

^x 42 U.S.C. § 7471.