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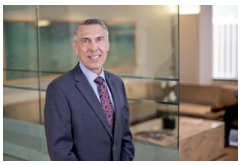

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EPA Takes Initial Step to Regulate Aircraft Greenhouse Gas Emissions

July 28, 2016

On July 25, 2016, the U.S. Environmental Protection Agency ("EPA") issued an "endangerment finding" in connection with greenhouse gas ("GHGs") emissions from commercial aircraft—the first step toward the potential regulation of such emissions.[1] EPA's finding indicates that aircraft GHG emissions "endanger the public health and welfare of current and future generations." While the EPA is not proposing or finalizing aircraft-engine GHG emissions standards at this time, and has not set a schedule to do so, the endangerment finding triggers EPA's duty under the U.S. Clean Air Act to promulgate emission standards applicable to GHG emissions from the classes of aircraft engines included in the finding. Any proposed standards will be open to public comment and review. Citizen groups will also be able to turn to the courts to seek the issuance of applicable standards if EPA does not act.

According to the EPA, aircraft remain the single largest GHG-emitting transportation source not yet subject to GHG standards in the U.S., accounting for 12 percent of GHG emissions from that sector in 2014, and three percent of total U.S. GHG emissions. EPA has previously issued comparable endangerment findings as to GHG emissions from comparable "large" sources, including light- and heavy-duty automobile engines (December 2009), Electric Utility Generation Units pursuant to a "Clean Power Plan" (October 2015), and the Oil and Gas Exploration and Production Sector (June 2016, and see the **O'Melveny Alert dated June 8, 2016**). The Clean Power Plan standards were stayed by order of the U.S. Supreme Court in *West Virginia v. U.S. EPA* in February of 2016.

Classes of engines covered by the endangerment finding include subsonic jet aircraft with a maximum takeoff mass ("MTOM") greater than 5,700 kilograms and subsonic propeller-driven aircraft (e.g., turboprops) with a MTOM greater than 8,618 kilograms. Examples of covered aircraft include smaller jet aircraft, such as the Cessna Citation CJ3+ and the Embraer E170, up to the largest commercial jet aircraft–the Airbus A380 and the Boeing 747. Examples of covered turboprop aircraft include larger turboprop aircraft, such as the ATR 72 and the Bombardier Q400. The EPA did not include smaller turboprops, smaller jet aircraft, piston-engine aircraft, helicopters, and military aircraft in its finding.

The EPA's finding follows efforts by other major economies to reduce GHG emissions from an industry that has remained largely unregulated. The **Paris Agreement** on climate change, adopted in December 2015, obliges all countries to implement meaningful domestic regulations in order to reduce GHG emissions and limit a rise in global average temperature to well below two degrees Celsius above pre-industrial levels. However, the Agreement does not encompass international aviation emissions. Instead, negotiators at the United Nations Framework Convention on Climate Change (UNFCCC)—which houses the new Paris Agreement—deferred regulation to the International Civil Aviation Organization (ICAO).

ICAO, a specialized U.N. agency established in 1944, has historically developed international aircraft environmental standards and related requirements, which individual nations later adopt into domestic law. But until recently, ICAO had been slow in developing an international standard to regulate GHG emissions for the airline industry, with the result that certain national governments undertook to adopt unilateral domestic regulations. In 2012, the European Union adopted a comprehensive **carbon-trading scheme** affecting all flights departing from or landing in an EU country. Following opposition from the U.S., China, and other countries, the EU temporarily suspended the scheme in exchange for a promise that ICAO would soon deliver an international carbon-reduction plan for the airline industry.

More recently, ICAO has been making significant progress toward the adoption of new international standards. As noted in our **February 2016 Client Alert**, ICAO's Committee on Aviation Environmental Protection (CAEP) agreed in February 2016 on the first-ever international standards to regulate CO2 emissions from aircraft.[2] The ICAO Assembly will consider the CO2 standards in October 2016, after which the ICAO may formally adopt the standards in March 2017. ICAO's member countries will then have an obligation to adopt domestic regulations at least as stringent as those set by ICAO. This week's endangerment finding is therefore timed to position the United States to implement domestic regulations consistent with the ICAO standards. The EPA and the Federal Aviation Administration ("FAA") are expected to confer with ICAO/CAEP in developing EPA/FAA proposed aircraft GHG emissions standards.

The new energy-efficiency standards would result in an estimated 4 percent

reduction in fuel consumption for new aircraft starting in 2028 compared with 2015 deliveries. Depending on the size of the aircraft, actual reductions would be from zero to 11 percent, with a bigger emphasis on larger commercial airplanes, according to analysts with the International Council on Clean Transportation.[3]

Strategies for reducing GHG emissions generally include reducing fuel use through aircraft design and increasing operational efficiencies. Fuel use is driven in large part by aircraft weight. According to the International Air Transport Association, each 5.5 pounds of weight reduced on an airplane means a one-ton reduction in carbon emissions per year. New aircraft are expected to take greater advantage of lighter-weight, composite materials and more fuel-efficient engines. Operational improvements range from taxiing with a single engine and fitting winglets to improve plane aerodynamics, to carrying less ice and fewer magazines onboard. Some airlines have already started using biofuels made from sustainable feedstocks, including non-edible natural oils and agricultural wastes.

ICAO's standards and the implementation of national regulations will also mark an important step in addressing global GHGs from a growing source of emissions. Global aviation emissions, which represent over 3 percent of global GHG emissions today, are set to increase seven times by 2050 compared to 1990 levels. ICAO's proposal to stabilize CO2 emissions at 2020 levels could result in 650 million tons of avoided greenhouse gas emissions between 2020 and 2040. Nonetheless, some have criticized the proposal for relying too heavily on offsets and for yielding no more GHG reductions than would normally result from technological and operational improvements in the industry. In addition, ICAO members still need to determine when developing countries' aviation emissions will be phased into the new program and how GHG-reduction efforts at ICAO will be coordinated with the UNFCCC to support the Paris Agreement.
Airlines for America, which represents major airlines including American Airlines, Southwest, United, and FedEx Express, has expressed support for the EPA action, but cautions that any future domestic regulatory actions must be in alignment with international standards. This suggests that the airline industry will be primarily focused on evaluation and comment on the proposed regulations rather than considering a legal challenge to the EPA endangerment finding. The industry will likely be watching the outcome of litigation regarding the EPA's Clean Power Plan. As noted, the U.S. Supreme Court stayed implementation of the Plan in February and sent the case back to the D.C. Circuit, which has set an en banc hearing for September.

This alert has been published in *Law360*, available **here**.

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[1] The official version of the finding is to be published in the Federal Register. The EPA has made available an interim version **here.**
[2] Also, see our April 19, 2016 Client Alert regarding two environmental organizations' lawsuit regarding EPA's alleged failure to act on aircraft

emissions.

[3] INTERNATIONAL CENTER FOR CLEAN TRANSPORTATION, INTERNATIONAL CIVIL AVIATION ORGANIZATION'S CO2 STANDARD FOR NEW AIRCRAFT (Feb. 2006), available **here**.

[4.] *Emissions Reduction Targets for International Aviation and Shipping*, Study for the ENVI Committee, Directorate-General for Internal Policies, at 21 (European Commission 2015), available **here**.

[5.] Arthur Nelson, *European Diplomats Criticise UN Plan to Curb Airline Emissions*, THE GUARDIAN, Apr. 7, 2016, available **here**; Jeff Tollefson, U*N Agency Proposes Greenhouse-Gas Standard for Aircraft*, NATURE, Feb. 9, 2016.

This memorandum is a summary for general information and discussion only and may be considered an advertisement for certain purposes. It is not a full analysis of the matters presented, may not be relied upon as legal advice, and does not purport to represent the views of our clients or the Firm. Eric Rotheberg, an O'Melveny partner licensed to practice law in New York, Bob Nicksin, an O'Melveny counsel licensed to practice law in California, and Remi Moncel, an O'Melveny associate licensed to practice law in California, contributed to the content of this newsletter. The views expressed in this newsletter are the views of the authors except as otherwise noted.