Aviation and Climate Change
Law & Policy

June 2009
(v.2, no.2)

This Newsletter Is Compliments Of:

Condon & Forsyth LLP
Attorneys at Law
www.condonlaw.com

The Hodgkinson Group
Aviation & Climate Change Advisors
www.hodgkinsongroup.com

Deadlines and Mandatory Reporting Requirements for Aircraft Operators Under the EU ETS

Aviation and Climate Change - Law & Policy is a collaborative effort of the firm of Condon & Forsyth LLP, Attorneys at Law, and The Hodgkinson Group, Aviation and Climate Change Advisors, to address and analyze current topics related to the issue of aviation and climate change.

Published quarterly, each edition of Aviation and Climate Change – Law & Policy is not an opinion or position, but is intended to familiarize the reader with important climate change issues facing the aviation industry and to serve as a resource for comprehensive analysis of potential solutions. It is not a legal opinion and neither provides legal advice for any purpose nor creates the existence of an attorney-client relationship.

The focus of the first edition of Aviation and Climate Change – Law & Policy was the incorporation of the aviation industry within the European Union's Emissions Trading Scheme (the EU ETS). In the second edition, we discussed the inclusion of the aviation industry in the proposed Australian ETS scheme due to commence on 1 July 2010 and we examined actions that airlines are taking in the absence of effective regional and global solutions to climate change issues. In this edition, we present deadlines and important dates as well as reporting guidelines for aircraft operators to comply with the EU ETS Aviation Directive.

Deadlines and Mandatory Reporting Requirements for Aircraft Operators Under the EU ETS

The European Union ("EU") is incorporating aviation into its existing Emissions Trading Scheme ("ETS") as of 2012 but aircraft operator compliance obligations start now. The EU ETS became law on October 13, 2003 under Directive 32003L0087 and incorporated aviation under Directive 32008L0101 dated November 19, 2008 ("Aviation Directive"). The first phase of the EU ETS requires all aircraft operators with flights taking off or landing in any EU country (with certain limited exceptions) to file an emissions monitoring plan that will report emissions for every flight and type of fuel. The Aviation Directive, together with Directive 32009D0339 dated April 16, 2009 (amending Decision 2007/589/EC), sets forth the deadlines and reporting requirements for the aviation industry commencing in August of this year. This edition of the Climate Change Newsletter presents the mandatory deadlines and outlines a general plan of action for aircraft operators.

Deadlines and Other Important Dates

Immediately

Contact your Administering Member State to ascertain specific requirements of the EU agency that has been assigned to regulate your operations. A list of aircraft operators and their Administering Member States is available at the following link, http://ec.europa.eu/environment/climat/pdf/aviation/alloc_operators_110209.pdf.

2009 August 2

Deadline for the European Commission to determine the "historical aviation emissions" – the annual average of CO_2 emissions for the years 2004 through 2006. Aircraft operators will be required to reduce emissions to 97% of historical emissions during the period January 1, 2012 to December 31, 2012.

2009 August 31

Deadline for aircraft operators to submit their mandatory Emissions Monitoring Plan to their Administering Member State.

Deadline for aircraft operators who wish to apply for free CO_2 emissions allowances for the first and second trading periods (2012-2020) to submit their Benchmarking Plan to monitor their tonne-kilometre emissions usage. Free allowances will be allocated to only those operators that have submitted their Benchmarking Plan and participated in the monitoring year (2010).

2009 December 31

Administering Member States will accept or reject the submitted Emissions Monitoring Plans and Benchmarking Plans.

2010 January 01

Deadline for aircraft operators to commence monitoring tonne-kilometre and CO_2 emissions data according to their approved Benchmarking Plan. As specified in the Aviation Directive, 2010 is the "monitoring year" for the aviation industry (for the first and second trading periods[1]) to give the operators a "test drive" in achieving compliance with the EU ETS and for the future determination of the allocation of free allowances.

2011 March 31

Deadline for aircraft operators to submit their reports of verified tonne-kilometre data during the 2010 period to their Administering Member States for future allocation of free allowances.

March 31 will be the annual deadline for aircraft operators to submit annual Emissions Monitoring reports with verified CO_2 emissions data to their Administering Member State.

2011 June 30

Deadline for Member States to submit free allowance applications to the European Commission.

2011 September 30

Deadline for the European Commission to determine the total quantity of allowances to be allocated for the 2012 period; the number of allowances for auctioning; the number of free allowances that will be allocated free to each Member State; and, the benchmark for allocating free allowances to complying operators.

2011 December 31

Deadline for each Administering Member States to publish the allocation of free allowances to each aircraft operator.

Summary of the EU ETS

Pursuant to Directive 32003L0087, the EU established its ETS in 2005 to assist EU Member States' compliance with Kyoto Protocol carbon-reduction targets. *See* European Parliament and Council, Directive 2003/87/EC, Oct. 13, 2003 (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0087:EN:HTML).

Companies subject to a Cap-and-Trade scheme like the EU's (which is the largest in the world) are allowed to release a certain amount of carbon dioxide ("CO_2") emissions (cap) and to trade allowances with other companies subject to the scheme to make up for excess emissions or to sell unused allowances (trade). Under the EU ETS, each allowance to emit CO_2 is equivalent to 1 ton of CO_2.

To date, the EU ETS consists of three Phases – multiple-year spans accompanied by specific carbon-reduction goals, including (1) a cap on CO_2 emissions released by each Member State each year as well as (2) a cap on CO_2 emissions released by each company in the Member State each year. Phase I, which ended on December 31, 2007, allocated 95% of allowances as free of charge. Phase II, which commenced in January 2008 and ends in 2012, allocated 90% of the allowances as free of charge. In addition to increasing the Phase I fine per ton of CO_2 excess emissions from 40 Euros to 100 Euros, the most significant change to the EU ETS in Phase II is the incorporation of the international aviation industry.

Agreement was recently reached by the EU Parliament and Council of Ministers concerning the details for Phase III, which commences in 2013. Phase III aims to reduce CO_2 emissions to 20% below 1990 levels by 2020 and caps the use of offsets to satisfy reduction targets. If an international agreement is reached committing other developed countries and advanced developing nations to reductions like the EU's, *e.g.*, at the United Nations Climate Change Conference in Copenhagen scheduled for December 7-18 later this year, the Phase III reduction goal will increase to 30% below 1990 levels by 2020.↓

2012 January 01
Effective date for incorporating aviation into the EU ETS.

2012 February 28
Beginning in 2012, Member States will annually issue the free allowances that have been allocated to aircraft operators.

2012 December
Aircraft operators must submit their monitoring plans and review their plans prior to the start of the second trading period (January 1, 2013) and to advise of changes in operating procedures or methodology.

2013 April 30
Deadline for aircraft operators to surrender allowances equal to their 2012 CO_2 emissions or risk penalties.

General Plan of Action for Aircraft Operators

Contact Your Administering Member State:

- Typically, EU aircraft operators have been assigned to the Member State that issued the operator's operating license while non-EU aircraft operators have been assigned to the Member State into and from which the operator most frequently flies

- Check the EU's list of aircraft operators assigned to each Member State (*see* Comm'n of the European Communities Notice Pursuant to Article 18a(3)(a) of Directive 2003/87/EC - Preliminary List of Aircraft Operators and their Administering Member States, Feb. 11, 2009 (http://ec.europa.eu/environment/climat/pdf/aviation/alloc_operators_110209.pdf))

    - For all EU and non-EU aircraft operators, ensure accuracy of the assignment of your Administering Member State and the contact information for submitting compliance data

    - For all EU and non-EU aircraft operators, check with your Administering Member State about the particular Member State's methods of compliance

    - For all EU aircraft operators and any EU operators potentially coming within the specific exemptions and exceptions, ensure applicability of EU ETS Aviation Directive to your company

Summary of the EU ETS *(continued)*

The aviation Amendment to the original Directive was adopted by the EU Parliament in July 2008 and the Council of Ministers in October 2008. *See* European Parliament and Council, Directive 2008/101/EC, Nov. 19, 2008 (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008L0101:EN:NOT) ("Aviation Directive"). The Aviation Directive applies to all flights taking off or landing in an EU country after January 1, 2012 and caps aviation CO_2 emissions at 97% of the historical aviation emissions levels (during 2004-2005) for the period January 1, 2012, through December 31, 2012. In 2013, the cap is lowered to 95% of the historical aviation emissions during 2004-2006. It also allocates 85% of the aviation allowances as free of charge and 15% of the allowances for auctioning. The Aviation Directive calculates emissions based on the emissions released during the entire flight when the flight either departs from or lands in an EU Member State.

The Aviation Directive exempts airlines with little traffic from, to or within the EU and specifically excludes military, customs, police and firefighting/emergency flights, United Nations' approved humanitarian flights, research flights, and flights with takeoff weights less than 5.7 tons. It also contains a special reserve of free allowances for allocation to start-up airlines or suddenly expanding airlines.

Like other companies subject to the EU ETS, each aircraft operator is responsible for monitoring, reporting and verifying (through an accredited Verifier) its own CO_2 emissions to its Administering Member State. *See European Comm'n Decision Amending Decision 2007/589/EC re Monitoring and Reporting Guidelines for Emissions and Tonne-Kilometre Data from Aviation Activities*, Apr. 16, 2009 (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009D0339:EN:NOT).

Penalties for a non-complying operator include paying a fine of 100 Euros per ton of excess emissions and surrendering the following reporting year an amount of allowances equal to the excess emissions. ↓

Prepare Your Monitoring Plan:

Aircraft operators must submit 2 different Monitoring Plans to their administering Member State. The Emissions Monitoring Plan, which is mandatory under the EU ETS, must demonstrate how the aircraft operator will monitor and report fuel consumption. The Benchmarking Monitoring Plan, which is mandatory under the EU ETS only if the operator elects to apply for free allowances, must include the operator's tonne-kilometre data. Member States will allocate free allowances based on an operator's tonne-kilometre data reported for the benchmarking period of January 1, 2010 to December 31, 2010 in proportion to the total tonne-kilometre data reported by all operators.

Emissions Monitoring Plan (Mandatory for all aircraft operators):

- Identify the aircraft operator and the contact/administrative information for the operator
- Identify the version of the monitoring plan
- Identify the aircraft in the fleet and include the number of each different type of aircraft, the aircraft registration numbers and the fuel consumption calculation method for each type of aircraft[2]
- Identify the types (and number) of additional aircraft the operator expects to acquire and the procedures to update the fleet list over the monitoring year
- Identify procedures for tracking and updating the list of emissions sources
- Identify the procedures for monitoring the list of flights by aerodrome pair for each operator
- Identify quality control measures for monitoring data, including how measurement equipment will be maintained and calibrated
- Identify how monitoring data will be acquired and maintained
- Identify how the operator will monitor fuel consumption data, including:

Summary of the EU ETS *(continued)*

The most significant penalty, to be used only as a "last resort" and applicable only to the aviation industry, is banning the aircraft operator from flying to, from and within the EU.

Many aircraft operators and nations around the world have criticized the Aviation Directive as contrary to international law and unfair to the aviation industry. (For a comprehensive discussion on the legal implications of incorporating international aviation into the EU ETS, please see Appendix I to recently released US General Accountability Office Report entitled "Aviation and Climate Change – Aircraft Emissions Expected to Grow, but Technological and Operational Improvements and Government Policies Can Help Control Emissions" which can be found at http://www.gao.gov/new.items/d09554.pdf.)

EU Member States with few assigned operators may soon join the ranks of those criticizing the Directive based on the assignment of carriers to Member States and the Directive's failure to mandate a use for revenue raised from complying operators. (For assignment of aircraft operators to Member States, *see European Comm'n Notice Pursuant to Article 18a(3)(a) of Directive 2003/87/EC - Preliminary List of Aircraft Operators and their Administering Member States*, Feb. 11, 2009.) *(http://ec.europa.eu/environment/climat/pdf/aviation/alloc_operators_110209.pdf)*

In fact, the Aviation Directive is silent on the use of revenue obtained from complying operators, simply suggesting that Member States "should" use the revenue to address climate change. The lack of a mandatory, climate-change-use of the funds appears to undercut the goal of the ETS and seems more like a tax, resulting in a boondoggle for Member States to which a large number of operators are assigned. Irrespective of the continuing debate about the fairness of incorporating aviation into the EU ETS, aircraft operators must immediately commence compliance with the EU ETS requirements.

- *The methodology for calculating fuel consumption:* Operators can choose from two methods of calculating actual fuel consumption per flight – (1) The amount of fuel in tanks upon completed uplift for flight less the amount of fuel in tanks upon completed uplift for next flight plus fuel uplift for the next flight; or (2) The amount of fuel in tanks at block-on (engine shut-down) at the end of the previous flight plus fuel uplift for the flight less the amount of fuel in tanks at block-on at the end of the flight

- *The methodology for measuring fuel uplifts and fuel in tanks:* The operator can determine (1) fuel uplift from either the fuel supplier's measurements or the aircraft's on-board measurements systems and (2) fuel in tanks by using the aircraft on-board measurement systems

- *The methodology for ensuring that fuel measurement complies with monitoring and reporting requirements*: Operators are not required to perform an uncertainty assessment as long as they identify:
  (1) Sources of uncertainty and the associated level of uncertainty
    a. maximum uncertainty of fuel consumption must be less than (+/-) 5.0% for operators with less than 50,000 tonnes of CO_2 emission per trading period;
    b. maximum uncertainty of fuel consumption must be less than (+/-) 2.5% for operators with more than 50,000 tonnes of CO_2 emissions per trading period
  (2) Aircraft operators should systematically check the uplift amounts by comparing the fuel supplier's measurements with the aircraft's on-board measurement systems
  (3) An operator is not required to provide proof of uncertainty levels when:
    a. The fuel supplier alone provides the data for the fuel uplifts; or
    b. The on-board fuel uplift measurement systems are supported by calibration certificates. In the event that the certificates are not available, the operator is required to:
    - Provide the aircraft manufacturer's specifications for determining uncertainty of on-board fuel measurement systems; and,
    - Provide the operator's evidence of routine checks on its compliance for the aircraft's on-board fuel measurement systems

- *The methodology for measuring fuel density, including the emission factors to be used for each fuel type*: If fuel remaining in the tanks is calculated in volume units, the operator must convert the calculations to mass (actual density – kg/litre) using either the on-board measurement systems, the fuel supplier's actual density figure at fuel uplift, the temperature of the fuel during uplift provided by the fuel supplier or specified for the aerodrome where fuel uplift occurs (using standard density-temperature correlation tables), or a standard density factor (0.8kg/litre) but only if actual values are unavailable

Benchmark Monitoring Plan For Reporting Tonne-Kilometre During the Year 2010 (Mandatory for operators wishing to apply for allocation of free allowances):

- Identify the aircraft operator and the contact/administrative information for the operator

- Identify the aircraft in the fleet and include the number of each different type of aircraft, the aircraft registration numbers and the fuel consumption calculation method for each type of aircraft

- Identify the version of the monitoring plan
- Identify how monitoring data will be acquired and maintained
- Identify the types (and number) of additional aircraft the operator expects to acquire and the procedures to update the fleet list over the monitoring year
- Identify procedures for tracking and updating the list of aircraft used
- Identify procedures for monitoring and updating the list of flights by aerodrome pair for each operator
- Identify quality control measures for monitoring data, including how measurement equipment will be maintained and calibrated
- Identify the methodology for determining tonne-kilometre data (measured as distance[3] in kilometres multiplied by payload[4]) per flight, including:
    - *The methodology (including procedures, responsibilities, data sources and calculation formula) for determining the distance in kilometres (great circle distance ["GCD"] between the aerodrome of departure and the aerodrome of arrival plus a fixed factor of 95 kilometres).* For each aerodrome pair, also include:
        (1) The ICAO designator of the two aerodromes;
        (2) Total number of flights;
        (3) Total mass of passengers and checked baggage;
        (4) Total number of passengers;
        (5) Total number of passenger-kilometres;
        (6) Total mass of freight and mail;
        (7) Total tonne-kilometres
    - *The methodology for determining the mass of freight (including mail), the mass of passengers and the mass of checked baggage[5]; and*
    - *The measurement device for determining the above applicable masses per flight*
- Identify the tonne-kilometre and passenger-kilometre data for all flights during the year

UPCOMING EVENTS

The United Nations Climate Change Conference in Copenhagen, Denmark – COP 15

The 15th Session of the Conference of the Parties (COP 15) to the UN Framework Convention on Climate Change will be held in conjunction with the 5th Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP 5) in Copenhagen in December 2009. David Hodgkinson, The Hodgkinson Group, will be attending as a credentialed Australian representative.

Conclusion:

The aviation industry has been incorporated into the EU ETS and compliance is mandatory for the affected aircraft operators, which must promptly submit their plans to monitor and forecast CO_2 emissions and track tonne-kilometre data if they wish to receive free allowances. Indeed, if an affected operator fails to submit its Emissions Monitoring Plan and its Benchmarking Monitoring Plan by August 31, 2009, that operator will be compelled to pay for all of its CO_2 emissions from 2012 until 2020. Therefore, aircraft operators flying from, into and within the EU will find it extremely costly if they fail to comply with the EU ETS deadlines.

[1] The first trading period is 2012; the second trading period is 2013-2020.
[2] Emissions shall be calculated by multiplying fuel consumption by the emissions factor (3.15 CO_2/fuel for jet kerosene). The fuel consumption figure (which represents fuel consumed in mass units [tonnes] during the reporting period) shall also include all fuel used by the auxiliary power unit.
[3] Article 3.7.1.1 of Annex 15 of the Warsaw Convention provides the method for calculating the great circle distance ("GCD"), which shall be calculated by using Aeronautical Information Publications ("AIP") data. Operators may submit data for distances calculated by software or by a third party as long as the data conforms to the requirements of the Warsaw Convention and AIP.
[4] Payload must be calculated by the following formula: mass of freight and mail + mass of passengers and checked baggage. In determining mass, an aircraft operator may use the actual or standard mass in the mass and balance documentation or the operator may use an alternative methodology which it has proposed to its Member State and which the Member State has approved. The actual freight and mass figure should exclude both the service weight and the tare weight of all non-payload pallets and containers.
[5] Mass of passengers is determined from the number of passengers (not crew). The operator may apply either the actual or standard mass for passengers and checked baggage or a default value of 100kg for each passenger and their check baggage but the operator must consistently apply the same method during the entire trading period.

Editors

David Hodgkinson - *Principal*
The Hodgkinson Group
+61 402 824 832
d.hodgkinson@hodgkinsongroup.com

Roderick D. Margo - *Partner*
Condon & Forsyth LLP
310.557.2030
rmargo@condonlaw.com

Marshall S. Turner - *Partner*
Condon & Forsyth LLP
212.894.6750
mturner@condonlaw.com

Laura A. McGinn - *Associate*
Condon & Forsyth LLP
212.894.6748
lmcginn@condonlaw.com

Stephen R. Stegich - *Partner*
Condon & Forsyth LLP
212.894.6710
sstegich@condonlaw.com

Editions of Aviation and Climate Change: Law & Policy

Also available at http://www.condonlaw.com

September 2008	(v.1, no.1)	The EU ETS and the Aviation Industry: A Swirling Controversy and the International Debate
February 2009	(v.2, no.1)	Aviation Included in Australia's Emissions Trading Scheme From 2010; Worldwide Legislative & Regulatory Overview of Aviation and Climate Change; Voluntary Airline Action in the Absence of a Global Solution to the Aviation Climate Change Problem – The Relevance of Offsets
June 2009	(v.2, no.2)	Deadlines and Mandatory Reporting Requirements for Air Carriers Under the EU ETS

Contact Us For More Information

CONDON & FORSYTH LLP
Attorneys at Law
www.condonlaw.com

7 Times Square, New York, N.Y. 10036
(tele: 212.490.9100)

1901 Avenue of the Stars, Suite 850, Los Angeles, C.A. 90067
(tele: 310.557.2030)

THE HODGKINSON GROUP
Aviation & Climate Change Advisors
www.hodgkinsongroup.com

Suite C, 23 Everett Street, Crawley WA 6009
Australia
(tele: +61 402 824 832)