CLYDE&CO

Environment Newsletter
Updates and recent developments

July 2010

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The UK Renewables Obligation at 10 – recent changes, future prospects

Introduction

Since 2000 the UK government has had the power to require that electricity suppliers obtain a certain amount of their electricity from renewable sources. This Renewables Obligation (RO) is intended to promote the generation of electricity from renewable sources, and is a cornerstone of the UK's effort to meet its target of obtaining 15% of its energy needs from renewable sources by 2020. The first order concerning the RO regime was made in 2002, and the RO system was modified in 2006 and 2009, and less substantially in April 2010.

The Renewables Obligation in practice

Under the current RO system, all licensed electricity suppliers must demonstrate to the Office of Gas and Electricity Markets (Ofgem) that a certain proportion of the electricity supplied to their customers in England and Wales has been generated from "eligible renewable sources". The proportion of electricity supplied that must come from renewable sources increases over time; in 2009/10 it was approximately 10%, and for 2010/11, it is approximately 11%.[1]

[1] For more detailed figures, please see http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/policy/renew_obs/renew_obs.aspx .

A licensed electricity supplier can meet this obligation in two ways: by submitting the required number of Renewables Obligation Certificates (ROCs) to Ofgem and/or by paying a penalty (the "buy-out price") for failing to meet its target under the RO. Ofgem distributes the buy-out payments it collects amongst the licensed electricity suppliers who met their obligations under the RO using ROCs alone.

Each ROC represents 1 MWh of renewably generated electricity from eligible sources. Licensed electricity suppliers purchase ROCs principally from accredited generators of renewable energy and other electricity suppliers; ROCs may also be traded.

The Renewables Obligation Order 2009 (ROO 2009) introduced "banding" for ROCs. Until 2009, ROCs were allocated on a one-to-one basis, so that each MWh of renewably generated electricity received 1 ROC. As a result, renewable energy developers focused on onshore wind projects, which offered the lowest cost per ROC. The ROO 2009 introduced a banding system under which different renewable energy technologies began to be differentially subsidised, to increase incentives for technologies such as tidal power and anaerobic digestion which are further from the market but may be deployed on a large scale in the medium to long term.

Renewables Obligation Order 2010

The Renewables Obligation Order 2010 (ROO 2010) amended the ROO 2009 in a number of important ways:

- It extended the regime until 2037 (from 2027) while imposing a 20-year limit on obtaining ROCs from a generating system, increasing certainty for investors in renewable energy generation;
- It removed the 20 ROC/100 MWh limit in the RO, to enable licensed electricity suppliers to meet RO requirements of more than 20% of their supplies;
- It established a new system of feed-in tariffs for micro-generators, to further encourage micro-generation in the UK; and
- It increased the number of ROCs awarded to electricity generated by offshore wind turbines from 1.5 to 2 ROCs/MWh of electricity, again to encourage investment in this form of renewable electricity generation.

Taken together, the changes to the RO system introduced in the ROO 2009 and ROO 2010 could ensure that the RO system will help to underpin ongoing use and further development of renewable electricity generation in the United Kingdom.

Future prospects: the end of the Renewables Obligation as we know it?

Before the UK general election in early May 2010, the Conservative Party pledged that if elected they would replace the RO system with an extended feed-in tariff system to cover large projects. At the time of writing the UK coalition government formed in mid-May 2010 had not yet clarified its position on the issue, but an announcement is expected shortly.

Green Investment Bank Commission Report - quangos

Government to cut nine existing green business quangos to fund the Green Investment Bank

The Green Investment Bank (GIB) Commission published a report on 29th June 2010 (known as the Wigley report) which recommends swapping nine existing quangos and funds for a new Green Investment Bank. This independent report fits well with the government's desire to cut back on public spending and boost low-carbon investment flows.

The report recommends that more than £2 billion of funding could be freed up for the new bank by axing three green quangos and six funds, including the Carbon Trust, Energy Technologies Institute (ETI), Technology Strategy Board and Environmental Transformation Fund.

Citing evidence from a recent National Audit Office report that argued that several of the government's green bodies have overlapping roles, the report said the rapid rationalisation of low-carbon quangos should "ensure value for the taxpayer, while improving service delivery and simultaneously freeing up money to support Britain's transition to a low-carbon economy".

It added that a dedicated green bank could draw on some of the people and skills at the existing quangos, while providing a better forum for raising private sector investment for low-carbon projects.

A copy of the report can be found at:

http://www.climatechangecapital.com/media/108890/unlocking%20investment%20to%20deliver%20britain%27s%20low%20carbon%20future%20-%20green%20investment%20bank%20commission%20report%20-%20final%20-%20june%202010.pdf

The government is currently reviewing all quangos. It has already written to all Secretaries of State telling them of the bodies that fail to meet the three main tests. First, is the function technical? Secondly, does it need to be politically impartial? Finally, do facts need to be determined transparently?

In Parliamentary Questions in the House of Lords on 29th June 2010, Baroness Seccombe asked Her Majesty's Government what the process will be for reviewing quangos across government. Lord Taylor of Holbeach replied that "the coalition Government are committed to increasing the accountability of public bodies and to bringing forward a Bill in the autumn". He then stated in response to a supplementary question that the "Prime Minister has asked for all quangos to be assessed against three main tests" (set out above) and that "the Minister for the Cabinet Office will discuss the outcome of this".

We should not underestimate how all embracing the quango assessment is going to be.

REACH: HSE announces first substances it will target in inspections

In June 2010, the Health & Safety Executive (HSE) announced the first two substances that it will trace through the supply chain in order to identify companies that have failed to register substances in accordance with their obligations under REACH , the EU chemicals regime. The substances are ammonium dichromate and methylene diphenyl diisocyanate (MDI).

Ammonium dichromate's uses include production of pigments, magnetic tapes and chemicals. MDI's uses include production of rigid polyurethane foams.

The HSE has said that it will announce more target substances during 2010.

Companies using the substances identified by the HSE will need to ensure that they have complied with registration requirements. Registration for existing substances that had not been pre-registered began in December 2008.

The next significant deadline for registration is 1 December 2010. By that date, pre-registered existing substances should have been registered when supplied at:

- More than 1,000 tonnes per annum.
- More than 100 tonnes per annum and classified as very toxic to aquatic organisms.
- More than one tonne per annum and classified carcinogens, mutagens or reproductive toxicants.

Aviation

The ATA case against the EU ETS

Introduction

On 16 December 2009 the Air Transport Association of America (ATA) and three US airlines (American, Continental and United) commenced their long-threatened action against the inclusion of aviation in the European Union Emissions Trading Scheme (ETS). The case was commenced in London as the UK is the first EU country to implement the early stages of the ETS, but it is almost certain that the case will be referred in due course to the Court of Justice of the EU (CJEU). Success by the ATA and the US airlines would of course have profound implications for the future of EU climate change policy relating to aviation, certainly as regards US airlines, and possibly more widely.

Overview of the ETS

The EU ETS is seen by the European Commission as an essential measure for the EU to implement in order to fulfil its commitment to reduce anthropogenic emissions of greenhouse gases.

The EU ETS commenced on 1 January 2005 and now covers 13,000 installations representing about 46% of the EU's total carbon dioxide emissions in 2010. The EU ETS is a "cap and trade system" - operators must annually surrender allowances (known as "EU Allowances" or "EUAs") equal to the tonnes of CO2 that they emit, but the EU caps the number of allowances that it issues each year, so operators whose emissions exceed their allowances are required to purchase the extra EUAs that they need from the carbon market.

Aviation in the EU ETS

Airlines' CO2 demand is estimated to be 23mt in 2012, rising to 122mt by 2020. The EU Commission is concerned that this rising demand will negate the impact of emissions reductions elsewhere in the European Union, which is why it has been so keen to incorporate aviation within the ETS.

From 2012 the EU ETS will apply to every operator of an aircraft that lands or takes off from an airport in the EU (for these purposes three other territories will also be covered in addition to the EU, namely Norway, Iceland and Liechtenstein). If an aircraft holds an operating licence from an EU country it will be administered by that country, whereas non-EU carriers have been allocated to an administering member state based on which routes they primarily fly.

The number of allowances issued to the aviation sector (which may be called "Aviation EUAs" or AEUAs", though this is not yet decided) will be expressed as a percentage of the sector's mean average annual emissions from 2004 to 2006. In 2012 this percentage will be 97%. The actual amount of the cap for 2012 will be determined by 30 September 2011. The number of allowances to be allocated to an airline for the year 2012 will be such airline's share of the total attributed aviation emissions in 2010, and will be allocated by 30 December 2012 – the UK government is investigating to what extent there is flexibility in publishing these allocations earlier in order to help operators in making advance decisions about use of resources, scheduling and slots.

In 2012, 85% of allowances will be issued for free. Unless an aircraft operator is successful in reducing its emissions, it will therefore need to find surplus allowances covering 17.55% of its emissions (being 100 - (0.85 x 0.97)).

Further background information on the inclusion of aviation in the ETS can be found at the UK Department of Energy & Climate Change web-site:

www.decc.gov.uk/en/content/cms/what_we_do/change_energy/tackling_clima/emissions/eu_ets/aviation/aviation.aspx.

Relevant legislation

The EU ETS was established pursuant to Directive 2003/87. On 19 November 2008, the European Parliament and Council adopted Directive 2008/101 (the "Directive"), which amends Directive 2003/87 so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the EU. Member States are required to implement the Directive. The UK government has chosen to implement the Directive by a two-stage legislative process. First, the Secretary of State for Energy and Climate Change made the Aviation Greenhouse Gas Emissions Trading Scheme Regulations 2009 (the "Regulations") which entered into force on 17 September 2009, and implement certain provisions of the Directive. There is a consultation underway with regard to the second stage.

The procedural route

Under EU law, only the Court of Justice of the European Union (CJEU) has power to declare EU legislation invalid. While the claimants lack standing to bring a direct challenge against the Directive before the CJEU, they may challenge it in proceedings before the UK courts, which must then make a reference to the CJEU where there is a substantial doubt as to the position under UK law. The ATA's case has therefore brought in the Administrative Court in London and is directed against the Regulations. The UK government opposes the claims made but has no objection to referral to the CJEU. Most airlines which are to be regulated by the UK have to date been complying with the Regulations under protest, pending a legal challenge.

The claimants' case

The primary concerns of the claimants are: first, the obligation to surrender allowances in respect of emissions over flights over third countries' airspace and over the high seas as well as over the airspace of EU Member States; and, secondly, the unilateral application of an emissions trading scheme to aviation outside the framework of the International Civil Aviation Organization (ICAO), which is a specialised agency of the United Nations responsible for codifying the principles and techniques of international air navigation and which fosters the planning and development of international air transport to ensure safe and orderly growth.

More specifically, the claimants seek to challenge the legality of the ETS on the grounds that it is contrary to certain provisions of the 1944 Chicago Convention, the 1997 Kyoto Protocol and the 2007 EU/US Open Skies Agreement. The Chicago Convention established rules relating to airspace, aircraft registration and safety, and details the rights of the signatories in relation to air travel – almost all countries engaged in international air transport are now signatories to it, though air transport between states is also governed by a large number of bilateral arrangements between particular countries. The EU/US Open Skies Agreement was an important step in liberalising air transport between the US and the EU.

Article 1 of the Chicago Convention – sovereignty

The claimants argue that the ETS is contrary to the customary international law principle that each state has complete and exclusive sovereignty over the airspace above its territory, which is restated by Article 1 of the Chicago Convention, as follows:

"The contracting States recognize that every State has complete and exclusive sovereignty over the airspace above its territory".

The claimants argue that the ETS regulates US airlines in US airspace from their point of departure in the US, over US airspace from their point of departure in the US, and across the Atlantic (with in many cases only a small proportion of their journey taking place over EU airspace), by requiring them to give up allowances in respect of such flights, and thus infringes the principle of sovereignty.

One of the key points made by the Treasury Solicitor, defending the claim on behalf of the Secretary of State, is that the EU is not bound by the Chicago Convention because it is not a signatory to it. If this argument is upheld by the CJEU then that would dispose completely of all of the claimants' arguments related to the Chicago Convention.

In any event, the Treasury Solicitor also argues that the fact that operators are required to give up allowances to cover emissions caused by flights which pass over the territory of third countries does not amount to regulation over the territory of a third country state. The claimants do not explain how the sovereignty of the states flown over is infringed, and it is difficult to see how they could. The ETS's requirements have no impact whatsoever on the sovereignty of other states, which remain free to impose emissions schemes and other rules so far as concerns aviation over or into or from their territory.

Article 11 of the Chicago Convention – air regulations

Article 11 of the Chicago Convention reads as follows:

"…the laws and regulations of a contracting State relating to the admission to or departure from its territory of aircraft engaged in international air navigation, or to the operation and navigation of such aircraft while within its territory, shall be applied to the aircraft of all contracting States without distinction as to nationality, and shall be complied with by such aircraft upon entering or departing from or while within the territory of that State."

Article 11 is relied on by the claimants to demonstrate that regulations made by each state may only apply within the territory of that state.

Article 11, however, has a specific purpose and is evidently a non-discrimination provision. It requires that rules which are applied by a contracting state within its airspace shall be applied to aircraft of all nationalities without discrimination, and that the aircraft within that state's airspace shall comply with those rules. As all flights to/from EU Member States would be treated similarly under the ETS, there would be no question of any discrimination.

Further, Article 11 relates to laws and regulations relating to the admission and departure of aircraft and their operation and navigation within a contracting state's territory, and does not apply to environmental legislation regarding emissions trading. Nor does it state that the only regulations which can apply in relation to a contracting state's airspace are those made by the state in question.

Article 12 of the Chicago Convention – rules of the air

Article 12 of the Chicago Convention reads as follows:

"Each contracting State undertakes to adopt measures to insure that every aircraft flying over or manoeuvring within its territory and that every aircraft carrying its nationality mark, wherever such aircraft may be, shall comply with the rules and regulations relating to the flight and manoeuvre of aircraft there in force. Each contracting State undertakes to keep its own regulations in these respects uniform, to the greatest possible extent, with those established from time to time under this Convention. Over the high seas, the rules in force shall be those established under this convention. Each contracting State undertakes to insure the prosecution of all persons violating the regulations applicable."

Article 12 therefore provides that regulations relating to "flight and manoeuvre" shall be uniform across contracting states. According to the ICAO Legal Bureau this extends to rules for the regulation of greenhouse gas emissions. The argument here may be that the emissions charges are levied by reference to fuel burn, and that there is an inherent conflict between the free "operational and navigational activities" of airlines and the need to conserve fuel to avoid higher emissions charges.

Further, the claimants allege that rules in respect of flights over the high seas are solely for ICAO, and that rules which states make regarding flight and manoeuvre of aircraft in their own airspace must be consistent with ICAO rules and regulations.

Like Article 11, Article 12 also has a specific and evident purpose. It requires contracting states to adopt measures to ensure that rules on flight and manoeuvre in their airspace are complied with and are kept uniform with those established from time to time under the Chicago Convention. It also states that the rules in force over the high seas on flight and manoeuvre shall be those established under the Chicago Convention. Article 12 relates to regulations concerning the flight and manoeuvre of aircraft, and it seems unlikely that it also applies to environmental legislation regarding emissions trading.

Article 15 of the Chicago Convention – fees, duties and other charges

Article 15 is headed "Airport and similar charges". The first part of it is concerned with the principle of public use airports being open under uniform conditions to all aircraft, and with principles as to charges for the use of airports and air navigation facilities. In the context of emissions trading attention has focussed on the last sentence, which reads as follows:

"No fees, duties or other charges shall be imposed by any contracting State in respect solely of the right of transit over or entry into or exit from its territory of any aircraft of a contracting state or persons or property thereon."

The claimants argue that the imposition of a requirement on foreign aircraft to give up emission allowances would contravene Article 15.

The Treasury Solicitor argues, on the contrary, that the ETS is not a "fee, due or other charge", but rather an administrative scheme which obliges air operators to monitor and report their emissions and gives them the option of whether to operate within their allocated allowances or to exceed those allowances by buying additional allowances. Even if an air operator decides to exercise the latter option, the amount which it pays cannot (it is argued) be characterised as a fee, due or charge, particularly when one looks at the overall context in which the provision appears.

ICAO's Council Resolution on Taxation of International Air Transport states: "Charges are levies to defray the costs of providing facilities and services for civil aviation", whereas the ETS is not "designed and applied specifically to recover the costs of providing facilities and services for civil aviation".

A further counter-argument is that, even if the ETS could be described as a charge, it is not imposed in respect "solely" of the right of transit over or entry into or exit from territory. The Treasury Solicitor cites in support of his defence the 2007 case of R (Federation of Tour Operators) v HM Treasury , in which the judge found that UK Air Passenger Duty was not a due imposed solely in respect of transit, entry or exit, because it was equally payable if the flight did not leave the UK, and was essentially an anti-discrimination provision precluding a state from favouring its national airline or airlines when imposing charges. It is argued that this is also the case with the ETS.

Though not referred to in the UK government's case, there is also Dutch authority to the effect that a departure tax levied by the Government of The Netherlands was not contrary to Article 15, for a variety of reasons but primarily because: (i) there is no indication that the term "charges" should be interpreted to cover taxes, in addition to "fees" and "dues"; (ii) the heading of Article 15 refers to "airport and similar charges"; and (iii) if contracting states had wanted to restrict their sovereign rights to levy taxes, the treaty would have contained clear language to that effect.

Both the UK case and the Dutch case have been criticised. It has been pointed out that the words "due" and "charge" are, by their ordinary meaning, capable of including a tax such as the Dutch tax – indeed, the Spanish, French and Russian texts of the Chicago Convention refer to "taxes". It has also been pointed out that the reference to overflight, in respect of which no airport charges are required, suggests that Article 15 is intended to be an absolute, rather than non-discriminatory, rule. The Convention is concerned with international air transport: indeed, its title is Convention on International Civil Aviation. Hence it is most unlikely that the parties to it intended by the word "solely" to mean that states could impose fees, dues and charges in respect of international air transport provided they also did so in respect of domestic air transport: the parties would not have been interested in what states did as regards air transport within their own territory. Given that the Chicago Convention is concerned only with international air transport, could it really have been intended that the prohibition contained in Article 15 could be by-passed simply by applying the same tax to domestic legislation as well?

Article 24 of the Chicago Convention – customs duty

Article 24 prohibits the imposition of "customs duty, inspection fees or similar national or local duties or charges" in respect of fuel, as follows:

"Fuel, lubricating oils, spare parts, regular equipment and aircraft stores on board an aircraft of a contracting State, on arrival in the territory of another contracting State and retained on board on leaving the territory of that State shall be exempt from customs duty, inspection fees or similar national or local duties and charges."

Although the UK government argues that the ETS is not a duty or charge within the scope of Article 24, it is not apparent how Article 24 would assist the claimants' case even if it were, as it only relates to fuel on board an aircraft while on the ground.

The Open Skies Agreement

The Open Skies Agreement was entered into between the EU and the USA in April 2007. The claimants argue that taxing the consumption of aircraft fuel, including by reference to emissions, is prohibited by Article 11(2)(c), which exempts from taxes "fuel… introduced into or supplied in the territory of a Party for use in an aircraft of an airline of the other Party engaged in international air transportation, even when those supplies are to be used on a part of the journey performed over the territory of the Party in which they are taken on board."

The UK government argues that the ETS does not fall within the categories of taxes, levies, duties, fees and charges from which fuel is to be exempt.

Whilst a large number of ETS allowances will be issued to airlines for free (at least in the initial trading period commencing in 2012), there will be at least three elements of the ETS scheme which could be argued to constitute a tax, levy, duty, fee or charge: first, the allowances which would be purchased through the public auction, secondly the excess or surplus emissions which would need to be covered by the purchase of additional allowances on the open market and, thirdly, any fines imposed for failure to surrender sufficient allowances at the end of each reporting period.

In 1999 in Case C-346/97 Braathens the CJEU held that a Swedish tax on emissions, calculated on fuel consumption, amounted to a tax on fuel, on the grounds that, as there was a direct and inseverable link between fuel consumption and the polluting substances emitted in the course of consumption, the tax at issue "must be regarded as levied on consumption of the fuel itself". While the judgment is not directly relevant, the same reasoning could possibly be applied to the ETS.

Unlike most of the issues raised by ATA, the argument in relation to the Open Skies Agreement will, of course, only assist the US airlines; however, other bilateral agreements may contain equivalent restrictions on the taxation of fuel which might be capable of being similarly extended so as to restrict 'taxation of emissions'.

The Kyoto Protocol

The claimants' final argument is that the Kyoto Protocol provides that the parties shall pursue reduction of greenhouse gas emissions from international aviation "working through the ICAO".

The UK government points out that the Kyoto Protocol does not require states to work exclusively through ICAO. This is also a curious argument for US companies to raise as the USA has famously not ratified the Kyoto Protocol.

Conclusion

As mentioned previously, success by the ATA and the US airlines would have profound implications for the future of EU climate change policy relating to aviation. A very interesting aspect of the case is that if their arguments made in relation to the Chicago Convention fail but their arguments in relation to the Open Skies Agreement succeed then the US airlines could lose their battle to have the ETS as a whole declared invalid, whilst winning their personal fight to prevent the ETS being applied to US airlines. This could then leave the door open for other non-EU airlines to investigate their countries' bilateral aviation arrangements with EU member states and perhaps launch similar actions.

Aviation Emissions

The 2nd Progress Report to the Parliament Committee on Climate Change (June 2010) titled "Meeting Carbon Budgets – ensuring a low-carbon recovery" reports as follows on aviation emissions:

"Emissions Trends

Aviation emissions (on a bunker fuel basis) fell by 4% in 2008 as passenger demand fell 2%. In 2009, demand fell by a further 7% due to the recession, suggesting that aviation emissions will show a significant decline for 2009 when the data is released in 2011.

There have been emissions reductions in both international and domestic aviation:

- International aviation emissions fell by around 4% in 2008 from 35.4 $MtCO_2$ to 34.1 $MtCO_2$,
- Emissions from domestic aviation dropped by 5% in 2008 from 2.3 $MtCO_2$ to 2.2 $MtCO_2$.

Growth in demand and emissions is expected to resume as GDP returns to growth. Analysis for the Committee's review of UK aviation emissions suggests that there is scope for limited demand growth (e.g. 60%) in the period to 2050 consistent with the economy-wide 80% emissions reduction target:

- The emissions impact of demand growth could be offset by improvements in the carbon intensity of flying;
- Given likely improvements in carbon intensity, demand growth of up to 60% would be compatible with returning aviation emissions to 2005 levels in 2050. Higher levels of demand growth would be possible if more rapid improvements in carbon intensity occur;
- With aviation emissions at 2005 levels, and together with deep cuts in other sections (e.g. 90% in domestic CO_2 emitting sectors), this could achieve an 80% emissions cut economy-wide in 2050.

We noted that the 60% passenger demand increase could be consistent with a range of policies as regards capacity expansion at specific airports and carbon taxes. The new Government has announced plans to cancel runway expansion at Heathrow and Stansted and is considering whether to replace air passenger duty with a per-plane tax; further analysis is required to establish whether these approaches could limit demand growth to 60%.

We expect that the Government will respond to the Committee's recommendations on the aviation sector in 2010.

Carbon budgets and the EU ETS

We previously advised that international aviation emissions should be reflected but not explicitly included in the first three carbon budgets, pending resolution of potential discrepancies between current UK emissions estimates (on a bunker fuels basis) and possible EU ETS allocation methodologies. Since 2008, the monitoring and verification of aviation in the EU ETS has been finalised suggesting that inclusion of international aviation emissions in budgets will be appropriate in the near future:

- From 2012, aviation emissions (both domestic and international) will be covered by the EU ETS;
- The reporting framework suggests that emissions will be reported both by airline (for administration) and by Member State (for auctioning);
- Reporting by Member State is likely to be on the basis of all departing flights and as such could be consistent with the bunker fuels methodology;
- Explicit inclusion of international aviation emissions in carbon budgets would therefore be appropriate, subject to data availability and accuracy.

The Committee will consider the issue in more detail in conjunction with possible revisions to the first three budgets given in the changing international framework either later in 2010 or in 2011, or as part of specific advice required under the Climate Change Act on inclusion of international aviation and shipping in the net carbon account, due by 2012."

Shipping Emissions

The 2nd Progress Report to the Parliament Committee on Climate Change (June 2010) titled "Meeting Carbon Budgets – ensuring a low-carbon recovery" reports as follows on Shipping Emissions:

"Emissions Trends

Shipping emissions as measured on a bunker fuels basis rose by 10% in 2008 to 12.8 $MtCO_2$. Emissions rose in both international and domestic shipping:

- International shipping emissions rose by around 11% in 2008 from 6.7 $MtCO_2$ to 7.5 $MtCO_2$.
- Domestic shipping emissions grew by around 9% in 2008 from 4.9 $MtCO_2$ to 5.4 $MtCO_2$.

We have previously noted concerns with bunker fuels as a measure of emissions for shipping, suggesting that this may actually understate UK emissions, given that ships delivering to the UK may bunker for fuel elsewhere.

Given the importance of shipping emissions in the context of the 2050 target, we will consider alternative methodologies for allocating emissions as part of a broader shipping review to be carried out in 2011. This will underpin advice on whether and how international shipping should be included in the net carbon account to be provided by 2012 as required under the Climate Change Act.

It will be important that growth in shipping emissions is constrained in order that climate change goals are achieved. In our December 2008 report, for example, we showed that the 80% emissions reduction target for 2050 could be achieved with shipping emissions in 2050 at around 2005 levels on a bunker fuel basis, and with cuts above 80% in other sectors. Conversely it is not clear how the 80% target could be achieved with significant growth in shipping emissions.

Allocating shipping emissions

Bunker fuels is the methodology used to report shipping emissions as a memorandum item to the UNFCCC. However, it is not clear that bunker fuel estimates of shipping fuels present an accurate picture of shipping emissions at the UK level, particularly for international shipping given scope for bunkering for fuel at multiple ports along shipping routes. For example, over the period 1990-2008, international traffic to/from UK ports grew by 32% whereas international shipping emissions on a bunker fuels basis grew by only 12%, suggesting that increasing UK activity is not being fully picked up in emissions estimates due to international bunkering patters and UK refinery capacity.

Recent major studies at Global, EU and UK levels have all used methodologies based on shipping activity (e.g. estimates of actual fuel used onboard ships for movements), and those have found significantly higher emissions compared to bunker fuels.

The Committee will continue to monitor developments in emissions methodologies for shipping, with particular emphasis on evolving analysis on activity-based estimates and forecasts.

Levels for reducing emissions

We have previously argued that the ideal lever for constraining shipping emissions is a global sectoral agreement, with an EU-only approach as a second-best solution. However, there has been limited progress on implementing a global market-based instrument, notwithstanding IMO progress on energy efficiency design and operational indices for ships. In parallel, the EU has made a commitment to include international shipping in its climate and energy package and targets by 2013 if the IMO have not achieved an international agreement by end-2011.

We will consider appropriate levers further in the context of our review of shipping emissions to be carried out in 2011."

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