Town and Country Planning Act 1990

Applications by London Ashford Airport Ltd

APP/L2250/V/10/2131934 & APP/L2250/V/10/2131936

Site at London Ashford Airport Limited, Lydd, Romney Marsh, TN29 9QL

CPRE/06/D – Greenhouse gas (GHG) emissions: REBUTTAL PROOF

Statement by Sean Furey BSc (Hons) MSc C.WEM MCIWEM FRGS
on behalf of Protect Kent (the Kent Branch of CPRE) on Greenhouse gas (GHG) emissions from additional flights, airport operation, traffic generation and ancillary activities

1 INTRODUCTION

1.1 The light of the Farnborough decision and the inspector's advice we have decided not to present CPRE/06 orally to the inquiry but would like it to stand as a written representation. This is because we do not agree with the Farnborough decision, and objection in relation to LAA remains, but we lack the resources to challenge it under cross-examination.

1.2 This statement of rebuttal primarily takes account of the initial evidence of Mr Stuart Coventry of URS/Scott Wilson, but also refers to the Rebuttal Proof by Ms Louise Congdon (LAA/4/D) and the Proof by Mr Sean McGrath (LAA/14/A).

1.3 Where this statement does not mention or take account of evidence presented as above or elsewhere on behalf of the appellant, this is not to be understood as acceptance by CPRE Protect Kent of such evidence.

2 GENERAL REBUTTAL

2.1 Mr Coventry's evidence dwells on aspects, such as the building design, which although important, is potentially an insignificant contribution to the overall greenhouse gas emissions for the airport and the aircraft using it. We don't know the exact significance, because no quantitative assessment of the emissions arising from the airport AND the air traffic movements (ATMs) associated with it has been done.

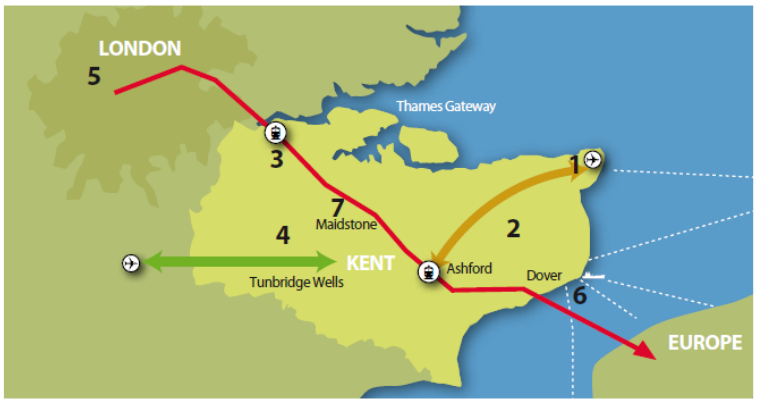
2.2 LAA/11/A provides some figures on carbon emissions however it would have been helpful to have had more transparency on how the figures in the text were arrived at, perhaps in an appendix. Table 1 of this rebuttal is an attempt to summarise the figures provided in the text of Mr Coventry's proof, but shows there are holes and inconsistencies that make it difficult assess whether his logic is sound or not and some of the statements made in the text do not agree with the numbers provided, or those that can be inferred or calculated from them. These are examined in section 3, below.

2.3 It would be useful to know what the baseline year was that was used for 'current' emissions, mentioned in the text.

2.4 Mr Coventry's central argument appears to be that there will be a reduction in carbon emissions as a result of air-travellers coming to Lydd rather than Gatwick (paragraph 4.14 of LAA/11/A). However, to my mind this is an oversimplification. It appears to assume steady state demand, where the reduced number of travellers from Gatwick won't be replaced from elsewhere. Mr Coventry appears to be assuming increasing capacity at Lydd will not be responsible for inducing air travel demand that would not have otherwise occurred and is merely replacing like-for-like demand from Gatwick. Following that assumption, a more relevant comparison would be with Manston which may be a better alternative and has political and policy support.

2.5 There is also a general acceptance across the applicant's case that it is acceptable for 10% or fewer of passengers to use public transport, given the current policy climate of dissuading car use[1]. Looking ahead, Figure 1, shows how KCC see it as a priority to improve train links to Manston and Gatwick, but not Lydd. Hence seems little prospect of low carbon travel alternatives to Lydd. Even if a rail service was extended to Lydd using the Dungeness branch line, it would be diesel because Ashford-Rye-Hastings line is not electrified.

Figure 1 - Proposed infrastructure improvements to support air travel[2]



21st Century Kent Infrastructure improvements

Manston Airport will have a new multimodal interchange linked to the high speed rail network. It will form part of a co-ordinated national airport network. There will be a new Lower Thames Crossing creating better links with the North and the East of England. There will be a high speed rail connection between Ashford and Gatwick. Crossrail will be extended to Ebbsfleet and Gravesend. Kent's economy will be truly integrated with the rest of the UK by means of a national high speed rail network, while improvements to the A21 transport corridor will enhance connectivity within West Kent and links to Hastings.

1 Manston Airport and Thanet Interchange
2 Extend High Speed rail from Ashford to Thanet
3 New Lower Thames Crossing
4 Link Gatwick Airport to High Speed Rail network
5 Extend Crossrail to Ebbsfleet
6 Port of Dover Expansion
7 Maidstone Parkway

2.6 The central question remains of whether it is in the public interest to increase the capacity of the high-carbon air transport network at Lydd to serve a localised population in Kent and East Sussex that already has the choice of lower carbon alternatives, such as train, ferry, car and high capacity aircraft from Gatwick (e.g. the Airbus A380), and when there is already an airport at Manston capable of taking larger aircraft.

2.7 Given that the Climate Change Act will require drastic cuts in carbon emissions from the rest of the economy, including all businesses in Shepway, it needs to be clear whether LAA is efficient in terms of jobs per unit of CO_2e.

2.8 In her rebuttal proof, Ms Congdon is keen to assert that Aviation White Paper has not been materially affected by the Climate Change Act 2008 nor the Heathrow Judgement. This is mistaken but there are has been a clear shift in policy emphasis in tackling climate

[1] For example: "Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen" Local Transport White Paper, January 2011.

[2] CD11.27 - KCC (2010) "21st Century Kent A BLUEPRINT FOR THE COUNTY'S FUTURE"

change. Because any one scheme can be seen a miniscule part of the overall UK emissions it is all too easy to fall into the trap of allowing 'just a little bit more'. It is this 'death by a thousand cuts' that is the big risk. This is why we do not agree with the inspector in the Farnborough Case that aircraft emissions from an airport are not a planning matter because extending the capacity at an airport like Lydd is locking the UK into high GHG emission transport (as explained in 3.5.1 of my proof) in the same way as building a coal-fired power station without carbon capture and storage.

2.9 There are current no low-carbon technology options for passenger jet aircraft nor any commercially viable on the horizon. Biofuels, the most likely alternative, have unproven life-cycle carbon benefits and are either associated with highly unsustainable land management, which is driving deforestation and habitat loss, or lead to competition with agriculture which in turn drives up the cost of food.

3 SPECIFIC REBUTTAL

Section 3

3.1 Paragraph 3.18 of LAA/11/A - Mr Coventry states: "*On 25th October 2010, Philip Hammond, the Transport Minister in the Coalition Government, made his first major speech on aviation. The speech did not confirm the previous Labour government's commitment to reduce aviation's CO2 emissions to 2005 levels by 2050,"* It is equally noteworthy that he did not overturn the previous policy position, as the Coalition Government have done in many areas of policy, such as the stated intention to abolish regional strategies and the Infrastructure Planning Commission (IPC). That being the case, a more logical interpretation is that at this time, the previous government's target still applies, and therefore is germane to this inquiry. Indeed, in his following paragraph, Mr Coventry concedes that the Committee for Climate Change (CCC) the on-going commitment to the 2005 levels by 2050 target for aviation is reiterated out in the Fourth Carbon Budget (December 2010), as was presented in my proof.

Section 4

3.2 Paragraph 4.5 - Mr Coventry states; *"Although the ACI guidance includes these emissions (for departing aircraft only) in Scope 3, for more precision it would be necessary to know much more detail on aircraft routes than presently available to undertake that calculation."* To my mind, the passenger forecast data provided by Ms Congdon in her evidence (LAA/4/C Appendix D) provides a basis on which to produce a low and high growth forecast of greenhouse gas emissions.

3.3 Paragraph 4.5 - also states: "It is also becoming the practice for UK airports to report their carbon footprint without that contribution" (referring to emission from aircraft in flight other than landing and take-off cycle). That is largely irrelevant and should carry little weight: In both the evidence put forward by myself and Mr Coventry the importance of carbon emission from aviation in general, not just the immediate airport operations, is set out. In addition, it is important to remember that in relation to greenhouse gas emissions there is a physical reality to the gases emitted and the cumulative radiative forcing effect that will alter global heat balance. There are no accountancy cheats in physics. Mr Coventry appears to have disregarded paragraphs 4.76 and 4.77 of the ACI Guidance offers an important preamble to the matter of aviation emissions:

"4.76 Careful consideration should be given to the inclusion of aircraft emissions in airport inventories. These are Scope 3 emissions and need to be included for completeness and credibility."

"4.77The ACRP (2009) guidebook recommends that the emission from an entire flight be included in the inventory of the departure airport."

3.4 This further emphasised in paragraph 6.41 of the ACI guidance:

"6.4.1 The emissions from aviation as a whole are dominated by aircraft in flight."

3.5 As part of the justification for not including aircraft emissions in flight is that in the ACI guidance it comes under Scope 3b as 'Sources that the Airport Operator cannot reasonably influence.' With an established runway, this might be the case, but this application is specifically to lengthen the runway, which the applicants claim, will allow larger passenger jet aircraft to use the airport. The current runway can accommodate turboprop passenger aircraft, which produce lower CO2e/passenger-km, and business jets. So in wanting to extend the runway they want to encourage the use of larger, higher-emission jet-engine aircraft on longer routes. Therefore this application will directly influence aircraft emissions from flights to and from their airport and so providing forecast data appear reasonable.

3.6 Paragraph 4.6: states that the Scope 1 emissions for the 'with development' was estimated at 'approaching' 400 tonnes, which equates to 2% of the total airport emissions. From this we can work back to 100% of the 'with development emissions' being 20,000 tonnes/year. However, the sum of the other numbers provided in the text (Scope 1: 400; Scope 2: 415; Scope 3: 13,500) is 16,015 tonnes/year). It would be useful to have clarification on this discrepancy and whether this due to a rounding error or information not included in the proof.

3.7 Paragraph 4.9: states current emissions are about 1,700 tonnes/year, and breaks this down in general aviation and staff travel but does break this down into 3a and 3b, or its components, despite defining the components in paragraph 4.4. It mentions that 15% of the general aviation emissions are business jets (presumably 15% of overall total, not 15% of the general aviation emissions), yet it is difficult to see the significance of this figure given that equivalents for the other two scenarios have not been provided, despite it being highlighted as a growth area in the 'fallback/no development scenario'.

3.8 Paragraph 4.10: In interpreting this I have assumed that the figures of 6,000 and 500 tonnes for general aviation and staff travel and airport activities is additional to the figures from the 'current' baseline.

3.9 Paragraph 4.11 says that general aviation would increase by 6,000 tonnes/year and that general airport activities would increase by 7,500 tonnes/years, presumably compared to the current baseline. What is seemingly remarkable about these figures is that the fallback/no development scenario would seemingly have the same level of general aviation activity as the 'with development' scenario with its 500,000 passengers and 40,000 Air Traffic Movements. Is this correct? If so then one might expect such activity in the fall-back scenario to have significant job creation potential, which is the central public benefit of the applicant's proposal.

3.10 Paragraph 4.12 – Mr Coventry asserts that Lydd will have the advantage of producing

lower emissions than the equivalent at a more congested airport, such as Gatwick. However, looking at the broader picture, the passenger forecast data presented in LAA/4/C Appendix D shows a gradual growth of passenger numbers across a number of routes which are likely to entail many years of partially filled aircraft. When looked at across the whole flight the kgCO2e/passenger/year associated with occasional stacking at a major airport is likely to be insignificant compared to the kgCO2e/passenger/year from regular flights with low occupancy rates. Again LAA have provided no data that might test these assumptions.

3.11 Paragraph 4.13: As is highlighted in our rebuttal of Mr Sowerby's evidence, the traffic assessment only appears to consider out-going passengers from Kent & East Sussex and makes no account inbound travellers or the large number of small aircraft users that are included in the 40,000 ATMs/year.

3.12 In regard to the terminal design on energy matters, we regard it as critical energy and water use, and light pollution are minimised so we would want to see these key design conditions, if approved. The terminal building should be an exemplar and achieve BREEAM rating 'Excellent' our 'Outstanding'.

4 CONCLUSION

4.1 The central assertion from Mr Coventry's evidence, repeated by Mr McGrath in LAA/14/A, is the GHG emissions associated with the airport and its operations is less than the emissions saved by passengers traveling to Lydd rather than Gatwick. However, as shown in this rebuttal, it is not clear how this argument can be sustained based on the very partial figures and calculations presented in Mr Coventry's evidence.

Table 1 - Carbon Footprint figures derived from LAA/11/A[3]

Source	Description	Scenario Emissions (tonnes CO_2e/year) Current	Fall Back/ No Dev.	Airport expansion
Scope 1: Airport Owned or Controlled Sources				
On-site Power plant	Airport-owned heat, cooling and electricity production	?	?	?
Airport fleet vehicles	Airport-owned (or leased) vehicles for passenger transport, maintenance vehicles and machinery operating both airside and landside.	?	?	?
Airport maintenance	Activities for the maintenance of the airport infrastructure: cleaning, repairs, green spaces, farming, and other vehicles	?	?	?
Ground support equipment (GSE)	Airport-owned equipment for the handling and servicing of aircraft on the ground.	?	?	?
Emergency Power	Diesel generators for emergency power	?	?	?
Fire practice	Fire training equipment and materials	Not included?	Not included?	Not included?
Waste disposal on-site	Airport-owned waste incineration or treatment from airport sources	Not included - all waste taken off-site?		
SCOPE 1 TOTAL		140[4]	140[5]	400[6]
Scope 2: Off-site Electricity Generation				
Power requirements from grid for on-site use, especially terminal buildings	Emissions made off-site from the generation of electricity (and heating or cooling) purchased by the airport operator.	340[7]	340	415
SCOPE 2 TOTAL		340[8]	340[9]	415[10]
Scope 3: Other Airport-RelatedActivities and Sources				
Scope 3A: Sources an Airport Operator Can Influence				
Aircraft main engines	Aircraft main engines during taxiing and Queuing/Aircraft operations on the ground	?	?	?
Aircraft Auxiliary Power Units (APU)	Aircraft Auxiliary Power Units (APU)	Not included?	Not included?	Not included?
Landside Road traffic/Ground Access Vehicles (GAV)	All landside vehicles not owned by airport operator, operating on airport property.	?	?	?
Airside vehicle traffic	All vehicles operated by third parties (tenants, airlines, etc) on airport airside premises	?	?	?
Corporate Travel	Flights taken on airport company business	Not included?	Not included?	Not included?
Tenants' ground support equipment	Tenant or contractor owned GSE for the handling and servicing of aircraft on the	?	?	?

[3] The format of the table follows that in the ACI Guidance Manual: Airport Greenhouse Gas Emissions Management (November 2009) highlighted by Mr Coventry.
[4] LAA/11/A Para. 4.6
[5] LAA/11/A Para. 4.6
[6] LAA/11/A Para. 4.6. Also states that this figure is 2% of the overall total (100% is therefore 20,000 tonnes/year, depending on the rounding error in the 2% figure)
[7] Inferred from Scope 3 total
[8] LAA/11/A Para. 4.7
[9] LAA/11/A Para. 4.7
[10] LAA/11/A Para. 4.7

Source	Description	Scenario Emissions (tonnes CO_2e/year) Current	Fall Back/ No Dev.	Airport expansion
(if any)	ground, if airport could provide alternative fuels or otherwise influence operation.			
Construction	All construction activities, usually conducted by contractors.	Not included?	Not included?	Not included?
SCOPE 3A TOTAL		**?**	**?**	**?**
Scope 3B: Sources an Airport Operator Cannot Influence				
Aircraft main engines	Aircraft main engines in the LTO cycle, excluding taxiing (Landing emissions could be Scope 3A.)			
	As above for general aviation	1190[11]	1445 +6,000[12] = 7445	1445+ 6,000[13] = 7445
	As above for passenger aviation	?	?	?
	As above for business jets	255	?	?
Aircraft main engines	Aircraft emissions during cruise on flights to or from airport (ACRP recommends that an airport report whole-of-flight emissions for departing flights)	**Excluded**	**Excluded**	**Excluded**
Ground Support Equipment (GSE)	Tenant or contractor owned GSE for the handling and servicing of aircraft on the ground. (Could be Scope 3A if airports provide alternative fuels supplies.)	Not included?	Not included?	Not included?
Landside Road traffic/Ground Access Vehicles (GAV)/ Passenger and staff travel to airport	All landside vehicles related to the airport, operating off-site and not owned by airport operator, including private cars, hotel and car rental shuttles, buses, goods delivery trucks, freight trucks. (Passenger and staff vehicle trip would include whole of journey from home.)	255[14]	255+500[15] = 755	255+7,500[16] =7755
Electricity and other external energy/Power purchased by tenants	Emissions from generation of electricity, heating and cooling purchased by tenants including airlines	?	?	?
Aircraft and engine maintenance	Airline or other tenant activities and infrastructure for aircraft maintenance: washing, cleaning, painting, engine run-ups	Not included?	Not included?	Not included?
Rail traffic		Not included – no rail connection		
Waste disposed of off-site		Off-site waste incineration or treatment from airport sources.		
SCOPE 3B TOTAL		**?**	**?**	**?**
SCOPE 3 TOTAL		**1,700[17]**	**8,200**	**15,200**
TOTAL EMISSIONS		**2,180**	**8,680**	**16,015**

[11] Para 4.9 - Inferred from (85% of 1700 (general aviation - 15% of 1700 (business jets))
[12] Para 4.10
[13] Para 4.11
[14] Para 4.9 15% of 1700
[15] Para 4.10
[16] Para 4.11
[17] Para 4.9