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Application by Gatwick Airport Limited for the Gatwick Airport Northern Runway Project The Examining Authority's second written questions and requests for information (ExQ2) Issued on Monday 1 July 2024

Climate Change and Greenhouse Gases

CC 2.1

It is clear from the recent Supreme Court Judgement in Finch V Surrey County Council, that proper assessment of the wider effects of emissions and pollution resulting from projects is necessary for the EIA and therefore that this judgement has relevance for the Applicant's DCO application for Gatwick airport expansion. The resulting emissions, pollution and environmental harms resulting from the increased usage of the airport and their impact on both the local area and wider effects on the world are entirely relevant to the EIA and must be fully considered by the decision-making authority.

Legal firm Leigh Day said: "Key to the Court's finding was that, for the EIA regime to function effectively, and for approval for projects with likely significant environmental effects to be given lawfully, those decisions must be subject to public debate and made with full knowledge of the environmental cost. Otherwise, such decisions – so the Supreme Court found – would lack the necessary democratic legitimacy.

The Court held that it was wrong to limit the requirements of EIA by reference to UK policy and legislation designed to control GHG emissions, making the common sense point that combustion emissions were unavoidable and there were no other controls that could be relied upon to reduce their impact." (Appendix Item 1)

Proper public involvement

It is common sense that expansion of the airport to allow increased runway capacity will generate additional environmental harms that are associated with air and surface transport - pollutants that affect airport workers and populations living in the vicinity of airports and their flight paths (Appendix Item 2) and carbon emissions and environmentally harmful non-CO2 emissions (Appendix Item 3) that impact global heating.

Paragraph 21 of the Supreme Court Judgement:

21. The rationale underpinning these public participation requirements is expressed in recital (16) to the EIA Directive:

"Effective public participation in the taking of decisions enables the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and

transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken."

Two important ideas are included within this rationale. First, public participation is necessary to increase the democratic legitimacy of decisions which affect the environment. Second, the public participation requirements serve an important educational function, contributing to public awareness of environmental issues. Guaranteeing rights of public participation in decision-making and promoting education of the public in environmental matters does not guarantee that greater priority will be given to protecting the environment. But the assumption is that it is likely to have that result, or at least that it is a prerequisite. You can only care about what you know about.

Have the local population been properly consulted and made aware of the impact of aviation pollution on their health? Have the wider public been properly informed of the impact of airport expansion on global heating and on their health?

Full knowledge of the environmental cost

From the Supreme Court Judgement:

3. Before a developer is allowed to proceed with a project which is likely to have significant effects on the environment, legislation in the United Kingdom and many other countries requires an environmental impact assessment ("EIA") to be carried out. The object of an EIA is to ensure that the environmental impact of a project is exposed to public debate and considered in the decision-making process. The legislation does not prevent the competent authority from giving development consent for projects which will cause significant harm to the environment. But it aims to ensure that, if such consent is given, it is given with full knowledge of the environmental cost.

and

The 2014 amendments

22. As well as the provisions implementing the Aarhus Convention, it is relevant to note amendments to the EIA Directive made by the 2014 Directive. These included the incorporation in Annex IV of climate and GHG emissions as specific factors which must be addressed in the description of the likely significant effects of the project on the environment (see para 16 above).

23. The rationale for these amendments is explained in recitals (7) and (13) to the 2014 Directive. Recital (7) stated: "Over the last decade, environmental issues, such as ... climate change ... have become more important in policy making. They should therefore also constitute important elements in assessment and decision-making processes."

Recital (13) stated:

"Climate change will continue to cause damage to the environment and compromise economic development. In this regard, it is appropriate to assess the impact of projects on climate (for example greenhouse gas emissions) and their vulnerability to climate change."

24. Further background to the amendments appears from a proposal to amend the EIA Directive sent by the European Commission to the Council on 26 October 2012, accompanied by an impact assessment, and from Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment published by the Commission in 2013 ("the 2013 Guidance") in anticipation of the relevant amendments being made. These documents explain that, although the EIA Directive had previously included "climate" as a factor specified in article 3(1), experience had shown that climate change issues were not being adequately identified and assessed. One of the aims of the 2014 Directive was to change this, including by the incorporation of an explicit requirement to consider GHG emissions. The aim of the 2013 Guidance was to help Member States improve the way in which climate change (and biodiversity) issues were integrated into the EIA process.

Has the current EIA given a sufficient account of both the carbon emissions and the non-CO₂ emissions - that are known to have a similar, or larger, effect on climate - of the flights resulting from increased runway usage?

Does the EIA need updating with current knowledge on fine particulate air pollution? (Appendix 2)

Reliance on assumptions

Paragraph 108 of the Supreme Court Judgement:

"An assumption made for planning purposes that nonplanning regimes will operate effectively to avoid or mitigate significant environmental effects does not remove the obligation to identify and assess in the EIA the effects which the planning authority is assuming will be avoided or mitigated." (Appendix Item 4)

GAL has relied on assumptions based on the UK Government's Jet Zero Strategy in ES Appendix 16.9.4 Paragraph 1.2.9 and 1.2.10:

1.2.9 Importantly both the Air Quality methodology for LTO, and the EMEP/EEA Guidebook approach for CCD, do not include for specific future trends in aviation emissions expected to arise from the UK Government's Jet Zero Strategy (Department for Transport, 2022). As such, three additional considerations have been introduced into the assessment of future aircraft emissions: ♣ an average improvement in aircraft engine efficiency each year beyond 2038; ♣ the inclusion of Sustainable Aviation Fuels (SAF) which reduce the GHG emissions attributable to aviation fuel use; and ♣ the introduction of zero emission aircraft in future years.

1.2.10 These three mechanisms combine to reduce emissions in future years from the calculated fuel/emissions arising from the Air Quality and EMEP/EEA approaches.

Have these assumptions also been relied on in the EIA?

In the Issue Specific Hearing on Climate Change GAL repeatedly referred to the UK Government's Net Zero Strategy as justification for assuming increases in fuel efficiency and the use of SAFs which are yet to be proven. Paragraph 108 of the Judgement would appear to make clear that 'assumed' emission reductions cannot be relied upon.

Appendix

1. **'Historic Supreme Court judgment rules planning permission for oil production at Horse Hill, Surrey is unlawful and must be overturned'** Leigh Day
2. **'Health Impacts of Aviation UFP Emissions in Europe'**, CE Delft, May 2024
3. **'Non-CO2 emissions: NGOs, airlines and aviation industry actors call upon the European Commission to monitor non-CO2 emissions on all flights'** Transport & Environment, May 6th 2024
4. **Supreme Court Judgement Finch v Surrey County Council**, June 2024

1 'Historic Supreme Court judgment rules planning permission for oil production at Horse Hill, Surrey is unlawful and must be overturned' Leigh Day, 20th June 2024

In a ground-breaking judgment the Supreme Court has today, Thursday 20 June 2024, ruled that planning permission for fossil fuel production should not be granted unless and until a planning authority has properly assessed the climate impact of the project and specifically assessed the downstream greenhouse gas (GHG) emissions that will inevitably arise from the combustion of the fuel.

Posted on 20 June 2024

In so doing, the Supreme Court declared that Surrey County Council's decision to grant planning permission for oil production at Horse Hill, near to Gatwick Airport, was unlawful, bringing to a successful conclusion a five-year battle fought by campaigner Sarah Finch (supported by the Weald Action Group) against the development.

In their judgment, Lord Leggatt, Lord Kitchin and Lady Rose ruled that the council should have taken into consideration the "Scope 3" downstream GHG emissions of the crude oil to be extracted from the Horse Hill site in its environmental impact assessment (EIA) before deciding whether to grant planning permission for the development.

They held that it was unlawful to grant planning permission, without assessing the unavoidable indirect effects on climate of the inevitable burning of the extracted petroleum.

The case centred around the correct interpretation of the EIA Regulations 2017. The Supreme Court found that downstream GHG emissions are an indirect effect of the development and must – as a matter of law – be assessed before granting planning permission for fossil fuel development.

Key to the Court's finding was that, for the EIA regime to function effectively, and for approval for projects with likely significant environmental effects to be given lawfully, those decisions must be subject to public debate and made with full knowledge of the environmental cost. Otherwise, such decisions – so the Supreme Court found – would lack the necessary democratic legitimacy.

The Court concluded that the reasons given by the council for refusing to carry out this assessment were inadequate. The Court held that it was wrong to limit the requirements of EIA by reference to UK policy and legislation designed to control GHG emissions, making the common sense point that combustion emissions were unavoidable and there were no other controls that could be relied upon to reduce their impact. For similar reasons, the Court also dismissed an argument that the fact the oil would need to be refined somehow excused a failure to assess its impact at the earliest possible stage.

It follows that planning authorities in England and Wales must now assess the climate impact of any proposed fossil fuel developments that come under the EIA regime, and

that the assessment must include consideration of the nature and magnitude of the proposed GHG emissions that would be caused by combustion of the oil to be produced at the site.

Sarah's claim was supported by both Friends of the Earth and Greenpeace UK. Both organisations had intervened in the case and are expected to hail the decision as a huge victory in their ongoing campaigns to prevent fossil fuel extraction. The Office for Environmental Protection also intervened, using its powers to do so for the first time since its creation in November 2021.

Sarah was represented by Leigh Day lawyers Rowan Smith, Carol Day and Julia Eriksen, who instructed Marc Willers KC (Garden Court Chambers) and Estelle Dehon KC and Ruchi Parekh (Cornerstone Barristers) to act on her behalf. Sarah's Supreme Court appeal was funded with support from Law for Change.

The proposed expansion of the Horse Hill Developments Ltd site, with five drilling cellars, four hydrocarbon production wells, four gas-to-power generators, a process, storage and tanker loading area, seven 1,300-barrel oil tanks, and a 37-metre drill rig would have allowed large-scale production of up to 3.3 million tonnes of crude oil for sale and use as transport fuel for 20 years.

Sarah brought a High Court claim for judicial review on behalf of the Weald Action Group in 2019, arguing that the emissions from burning the oil are "indirect effects" under the EIA Regulations and should have been assessed by Surrey County Council planners before granting planning permission.

Her claim was originally rejected by Mr Justice Holgate. Sarah appealed that decision. Her appeal was also dismissed, albeit by a majority of 2 to 1 judges, who concluded that downstream GHG emissions may be an indirect effect of a development for the production of fossil fuel, but that it was ultimately a matter of planning judgment for the planning authority whether those emissions are truly a likely significant effect of the proposed development. The two judges also concluded that the reasons given by Surrey County Council for deciding that the downstream GHG emissions were not an effect of the development were sufficient and lawful.

In the Supreme Court, Sarah argued that the Court of Appeal's decision was wrong on both counts. Three of the five Supreme Court Justices agreed and allowed her appeal, whilst the other two Justices dissented.

The Supreme Court's decision is historic and of major importance in the fight to prevent further fossil fuel extraction in the UK.

Sarah Finch said:

"I am absolutely over the moon to have won this important case. The Weald Action Group always believed it was wrong to allow oil production without assessing its full climate impacts, and the Supreme Court has shown we were right.

“This is a welcome step towards a safer, fairer future. The oil and gas companies may act like business-as-usual is still an option, but it will be very hard for planning authorities to permit new fossil fuel developments – in the Weald, the North Sea or anywhere else – when their true climate impact is clear for all to see.

“I thank the Weald Action Group, Friends of the Earth and everyone who has been part of our long journey through the courts. And I thank my lawyers for their commitment and hard work.”

Sarah Finch is represented by solicitors [Rowan Smith](#), [Carol Day](#) and [Julia Eriksen](#) at law firm [Leigh Day](#).

Rowan Smith said:

“Our client is delighted the Supreme Court has held Surrey County Council’s decision unlawful. The Court recognised that, because there was no doubt the oil would be burnt and release damaging [GHG] emissions into the air, such climate impact was an indirect effect of the project and should have been assessed as part of it. Key to the Court’s conclusions was that such decisions must only be authorised after proper public involvement and in the full knowledge of the environmental cost. Crucially, the Court recognised that climate change is a global problem and that the damaging impact of emissions on the climate is not limited to where they originate. This truly historic judgment has very significant implications for the future assessment of fossil fuel projects and a number of cases currently before the Courts.”

2 'Health Impacts of Aviation UFP Emissions in Europe', CE Delft, May 2024

Particulate emissions from aviation, and especially emissions of ultra fine particles (UFP) have detrimental effects on human health: – Many studies have found causal relations between aircraft emissions, and UFP in particular, and worsening symptoms of asthma and respiratory diseases. – UFP has been found to cause COPD, pulmonary fibrosis (scarring of the lungs), and lung cancer. – Long-term exposure to UFP has been linked to effects on the cardiovascular system like hypertension. – Aircraft UFP emissions have been found to potentially cause or worsen diabetes and dementia. – PM2.5 emissions positively correlated to mortality and morbidity. Globally, approximately between 14,000 and 21,200 early deaths each year are due to PM2.5 emissions by aviation.

The reason that the impacts of UFP emissions are worse than the impacts of larger particulates is that they can travel further through the human body, and that their surface area relative to their mass is larger so that they can transport relatively more toxins. Children and elderly are more at risk than the average population.

In addition to health risks, PM emissions from aviation also cause the formation of contrails, which contribute to global warming. Reducing PM emissions would have both health and climate benefits.

People living around airports or under busy flight paths are more exposed to aviation related UFP (and aviation-related PM in general) than the general population, and so are airport workers. Their exposure depends on many factors, such as atmospheric circumstances, distance to runways and flightpaths, and fuel composition. There has been no comprehensive study of the health impacts of aviation UFP emissions in Europe (although the impacts around Schiphol have been estimated).

This report presents a crude first-order estimation of what the health effects caused by aviation-related UFP around major European airports could be. It finds that aviation UFP may possibly cause a total of nearly 280,000 cases of high blood pressure, 330,000 cases of diabetes and 18,000 cases of dementia around the 32 airports in the scope of the study, based on current population and UFP concentration levels. However, these values are a crude first-order estimate and should be confirmed by epidemiologic studies.

Aircraft UFP and PM emissions are mainly caused by the combustion of fuel, and to a smaller extent by the use of lubrication oils. For the fuel burning related emissions, the composition of the fuel impact the number of particulates emitted. In particular, the amount of emitted PM critically depends on the amount of aromatics (and all cyclic structures) in the fuel, and the sulphur content of the fuel. Aromatics are the main cause for formation of non-volatile PM (nvPM). Naphthalenes cause more UFP than single ring aromatics. The sulphur content is directly related to the formation of sulphuric acids, which in turn can both form sulphuric volatile PM (vPM) and attach to non-volatile particles. For the lubrication oil related emissions, these emissions could

be reduced through the development of superior technologies for controlling oil emissions.

This means that aviation UFP and PM emissions can be reduced by reducing the concentration of aromatics and sulphur in jet fuel. There are two ways to achieve this, 46 220396 – Health Impacts of Aviation UFP emissions in the EU – May 2024 namely through hydrotreatment of fossil fuels, thus saturating the aromatics and removing sulphur, and by blending fossil jet fuel with non-aromatic sustainable aviation fuels. To ensure the widespread deployment of hydrotreated fossil jet fuel in the EU, amending the Fuel Quality Directive or the ReFuel Aviation regulation could be appropriate regulatory pathways, while on a global scale amending existing standards or developing new ones could help achieve the same goal.

3 'Non-CO2 emissions: NGOs, airlines and aviation industry actors call upon the European Commission to monitor non-CO2 emissions on all flights' Transport & Environment, May 6th 2024

Non-CO2 effects from aviation, including nitrous oxides emissions and contrail formation, are known to have an impact on the climate. While our knowledge of these effects today may not be as extensive as that of CO2, scientific consensus, gathered by EASA in its 2020 report, highlights that their warming effects could have a similar impact as CO2, or even larger.

Acknowledging their environmental impact, the groundbreaking EU ETS agreement adopted in 2022 has paved the way for addressing non-CO2 effects by requiring the development of a Monitoring, Reporting and Verification (MRV) framework. This represents a historic first step to understand and act as appropriate on non-CO2 effects, as it can help boost research and inform policymakers and the aviation industry on the best set of policies and incentives for their effective mitigation.

A key feature of the MRV framework is the full geographic scope of the reporting. It includes all flights entering or leaving the European Economic Area (EEA). This is consistent with the general scope of the EU ETS Directive for other transport modes and their non-CO2 emissions. Shipping companies are required as of 2024 to monitor maritime non-CO2 emissions (nitrous oxide (N2O) and methane (CH4)) for voyages to, from, and within the EU.

It is critical that the full geographic scope is retained, as it is the only scientifically sound basis to understand the impact of aircraft types and geographies, and allow a better understanding of the impacts of long-haul flights which research shows to cause more warming and present larger mitigation opportunities. It is vital that activity in areas such as the North-Atlantic region, with a high concentration of contrail formations, are monitored and understood.

That's why a coalition of NGOs, airlines and other aviation industry actors are coming together to call upon the European Commission to maintain the full scope of the non-CO2 MRV.

4 Supreme Court Judgement *Finch v Surrey County Council*, June 2024

“Other environmental regimes

106. The further reason given by the developer and accepted by the council for confining the assessment to direct GHG emissions from sources within the well site boundary was that the council should not concern itself with emissions that will occur “downstream” when the oil produced from the wells is processed and used because such processes are regulated by other, non-planning regimes and the council “can assume that these regimes will operate effectively to avoid or mitigate the scope for material environmental harm” (see para 36 above).

107. Para 122 of the developer’s environmental statement, which made this argument, quoted from the National Planning Policy Framework (July 2018), para 183, which stated: “The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these Page 31 are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. ...”

Reference was also made in footnotes to para 122 to the National Planning Practice Guidance, Minerals, para 012, which was in similar terms, and to *R (Frack Free Balcombe Residents Association) v West Sussex County Council* [2014] EWHC 4108 (Admin). This case was cited for the proposition that a “local planning authority may consider that matters of regulatory control can be left to a statutory regulatory authority to consider.”

108. It was a clear legal error to regard this aspect of planning policy as a justification for limiting the scope of an EIA. An assumption made for planning purposes that nonplanning regimes will operate effectively to avoid or mitigate significant environmental effects does not remove the obligation to identify and assess in the EIA the effects which the planning authority is assuming will be avoided or mitigated. This is clear from a line of authority referred to in the *Frack Free Balcombe Residents Association* case. In *R (Lebus) v South Cambridgeshire District Council* [2002] EWHC 2009 (Admin); [2003] Env LR 17, paras 41-46, Sullivan J held that it is an error of law to reason that no environmental statement is needed because, although a project would otherwise have significant effects on the environment, mitigation measures will render them insignificant. What is required in such a case is an environmental statement setting out the likely significant effects and the measures which can be taken to mitigate them; see also *R (Champion) v North Norfolk District Council* [2015] UKSC 52; [2015] 1 WLR 3710, paras 49-51. The same principle must apply in determining the scope of the assessment required where an environmental statement is carried out.

109. As pointed out in those cases, the requirement in the EIA Directive to describe “measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment” (see para 104 above) implies that the potentially

significant environmental impacts of a development should be described together with the measures expected to avoid or reduce them. The public is thereby able to understand the assumption made and to comment on it.

110. In any case it does not appear that there are any separate pollution control or other non-planning regimes which could be relied on to avoid or reduce the combustion emissions which would be indirect effects of the project proposed here. No such regimes have been identified in these proceedings. Indeed, it follows from the agreed fact that it is inevitable that oil produced from the well site will be refined and will eventually undergo combustion, which will produce GHG emissions, that the combustion emissions are unavoidable if the project proceeds and no pollution control regime could be relied on to prevent or reduce them.”