

UKPIA Response to Zero Emissions Airport Target Call for Evidence

Defining Airport Operations

1. Do you agree or disagree with the proposed definition of airport operations for the target?

UKPIA **agrees** with the proposed definition of airport operations for the target.

We recognise the intent in the definition; however, it can be difficult to define in absolute terms due to the variation and complexity of airport operations. For example, while surface access infrastructure including buses and trams can be decarbonised, how and why would car parks be included? In the medium term, there will still be conventionally fuelled cars used by both staff and members of the public to arrive and depart from the airport which will have their own Greenhouse Gas (GHG) emissions. These emissions should be excluded from the scope as they are already covered by other transport decarbonisation legislation such as the RTFO¹ and Zero Emission Vehicle (ZEV) mandates²; if they are included then there is a risk of inadvertently imposing a ban on these vehicles accessing the airports, with significant consequences for public access.

There is also likely to be an indirect effect of scale which will enable the decarbonisation policy objective; for example, when a majority of the infrastructure has moved to low carbon alternatives such as hydrogen or Electric Vehicle (EV) options, then the remaining GHG emitting infrastructure may find it increasingly difficult to source conventional fuels, and effectively be forced to transition.

Finally, while we recognise the UK's intent to be a world leader in decarbonisation through this initiative, it needs to be done in recognition that international aviation is competitive on a global basis. Therefore, attention needs to be paid to the targets to ensure that they do not impose an undue unilateral burden on UK airport businesses, which could affect the competitiveness of the UK aviation industry. UKPIA suggests that an international approach such as through the International Civil Aviation Organisation (ICAO)³ would be a better route to ensure decarbonisation on a level international playing field.

2. If you disagree with the proposed definition of airport operations, what do you think, if anything, should be added to the definition?

UKPIA **agrees** with the proposed definition and has no further comments in addition to our response to Q1.

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/113714/9/RTFO_Compliance_Guidance_2023_Final.pdf

² <https://www.gov.uk/government/consultations/a-zero-emission-vehicle-zev-mandate-and-co2-emissions-regulation-for-new-cars-and-vans-in-the-uk>

³ <https://www.icao.int/Pages/default.aspx>

3. If you disagree with the proposed definition of airport operations, what do you think, if anything, should be removed from the definition?

UKPIA **agrees** with the proposed definition and has no further comments in addition to our response to Q1.

4. What, if any, further views do you have on the proposed definition of airport operations for the target?

UKPIA **agrees** with the proposed definition and has no further comments in addition to our response to Q1.

Emissions scopes

5. Do you agree or disagree on the target being applied for the Kyoto gases as described in the GHG Protocol?

UKPIA **agrees** with the target being applied for the Kyoto gases as described in the GHG protocol. This is consistent with the approach taken in other sectors such as the UK Emissions Trading Scheme⁴ (UK ETS). We would not normally expect airport emissions of some of these compounds such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆) to be material given the technologies involved, however, their inclusion avoids potential conflicts with other policies.

Emission sources in the scope of the target

6. Do you agree or disagree with the list of Scope 1 and 2 emissions sources for airport operations?

UKPIA **agrees** with the list of Scope 1 and 2 emissions⁵ and recognises the intent of these.

7. If you disagree with the list of Scope 1 and 2 emissions sources for airport operations, what, if anything, should be added to the list?

UKPIA **agrees** with the list of Scope 1 and 2 emissions and recognises the intent of these.

Recognising that operations such as refuelling vehicles e.g., bowsers used for refuelling aircraft and equipment used for pushing aircraft back from stands are included in the list of Scope 3 emissions, we have no suggestions for additions to the list in scope.

⁴ <https://www.gov.uk/government/publications/participating-in-the-uk-ets/participating-in-the-uk-ets>

⁵ <https://www2.deloitte.com/uk/en/focus/climate-change/zero-in-on-scope-1-2-and-3-emissions.html>

8. If you disagree with the list of Scope 1 and 2 emissions sources for airport operations, what, if anything, should be removed from the list?

UKPIA **agrees** with the list of Scope 1 and 2 emissions and recognises the intent of these.

There is a risk of double-counting emissions under this scheme with those already covered by other schemes, and care needs to be taken to ensure that this does not occur.

The reduction of emissions from Non-Road Mobile Machinery (NRMM) is already covered under the RTFO. It will also be covered by the bans on the sale of ICE vehicles announced by the DfT. NRMM that is used for construction purposes should therefore not be in scope.

Energy indirect emissions such as from purchased electricity, heating and cooling will be covered under the UK ETS, with a clear trajectory of emission reductions. To avoid double counting these should not be in scope.

9. What, if any, further views do you have on the list of Scope 1 and 2 emissions sources for airport operations?

UKPIA does not have further views on the list of Scope 1 and 2 emissions.

10. What are your views on our current approach to construction and construction vehicles under this target?

The reduction of emissions from NRMM is already covered under the RTFO. It will also be covered by the bans on the sale of ICE vehicles announced by the DfT. NRMM that is used for construction purposes should therefore not be in scope.

11. Do you agree or disagree with the list of Scope 3 emissions sources for airport operations (we ask you answer regardless of whether these sources are within scope for the target)?

UKPIA **broadly agrees** with the list of Scope 3 emissions and recognises the intent of these. While these may not be under the direct control of the airport reporting company, they may form a significant proportion of the airport emissions.

Scope 3 emissions should be included in the same way as Scope 1 and 2 emissions to prevent unintended consequences, such as airports potentially contracting operations to 3rd parties which may reduce their Scope 1 and 2 emissions.

12. If you disagree with the list of Scope 3 emissions sources for airport operations, what, if anything, should be added to the list?

Aircraft refuelling operations can include the use of refuelling vehicles such as bowsers⁶ which historically are likely to be powered by diesel. Similarly, even ATK supplied by hydrant⁷ would require transportation for hoses and aircraft access, which again historically is likely to be diesel powered. These should be included in the list of Scope 3 emissions.

Conversion to hydrogen powered ICEs should be considered⁸. The availability of replacement equipment is also likely to be subject to the various ZEV bans announced by the government and should be taken into consideration.

There are several ways in which ATK can be transported to airports from refineries and downstream terminals, including by pipeline, rail, and HGVs⁹. It may be difficult to include these emissions, and some may be included in existing schemes (such as the UK ETS for power generation for pipeline operations) or the RTFO for the diesel used in the HGV fleet. In the last case our previous comment regarding the UK government deadlines for the introduction of ZEVs would also apply.

We would recommend periodic reviews to ensure that the list remains consistent with the policy objective as technology develops (for example as developments in hydrogen or EV powered aircraft proceed)

13. If you disagree with the list of Scope 3 emissions sources for airport operations, what, if anything, should be removed from the list?

We are concerned about the risk of double-counting emissions on aircraft operations including take-off and landing. These would be covered under existing schemes such as the UK ETS for aviation, or the SAF mandate scheme. They should not be included in the scope of this scheme.

14. What, if any, further views do you have on the list of Scope 3 emissions sources for airport operations?

We have no further views on the list of Scope 3 emission sources.

⁶ <https://refuelin.com/products/aviation-refuellers/>

⁷ <https://www.shell.com/business-customers/aviation/100years/more-uptime/hydrant.html>

⁸ <https://www.cummins.com/engines/hydrogen>

⁹ <https://skybrary.aero/sites/default/files/bookshelf/2477.pdf>

15. Do you agree or disagree that a requirement should be included as part of the target for airport operators to report their Scope 3 emissions in line with ACI requirements at levels 4 and 4+?

UKPIA **agrees** that a requirement should be included as part of the target for airport operators to report their Scope 3 emissions in line with ACI requirements to ensure that the reported figures are a fair reflection of the emissions associated with airport operation.

16. Do you agree or disagree that a requirement should be included as part of our target for airport operators, to ensure those emissions sources, not under operators' direct control, are zero emission by 2040?

UKPIA **agrees** that a requirement for airport operators to ensure that those emission sources not under operators' direct control are zero emission by 2040 should be included. This ensures that reported figures are a fair reflection of the emissions associated with airport operation. It also ensures that there are no unintended consequences, such as airports potentially contracting operations to 3rd parties which may reduce their Scope 1 and 2 emissions. However, attention should be paid to prevent double counting emissions such as under the UK ETS, or the SAF mandate scheme¹⁰.

Exemptions from the target

17. How should any potential exemptions from the target be dealt with?

We would **recommend that no potential exemptions** be included in the scheme. Similar exemptions do not exist in other emission reduction schemes, such as the UK ETS, or the RTFO, which cover all associated emissions in every eventuality. Including exemptions in this scheme risks undermining confidence in the scheme and risks unintended consequences such as operators claiming a wider range of abnormal operations in order to reduce their obligations.

Options are available for to reduce and eliminate emissions from these abnormal activities, such as the use of Hydrogenated Vegetable Oil (HVO) in heritage ICE equipment and the purchase of accredited carbon off-sets.

¹⁰ <https://www.gov.uk/government/consultations/pathway-to-net-zero-aviation-developing-the-uk-sustainable-aviation-fuel-mandate>

Entities subject to the target

18. Do you agree or disagree, that the target should be applied to other entities whose Scope 1 and 2 emissions fall under the definition of airport operations? Please explain your response.

UKPIA **agrees** with the target being applied to other entities whose Scope 1 and 2 emissions fall under the definition of airport operators. This ensures that all associated emissions associated with the airport are reported and obligated.

19. Do you agree or disagree that the operational control approach should be used to apportion responsibility for airport operation emissions under the target?

UKPIA **agrees** that this is the correct approach.

Airports subject to the target

20. Do you agree or disagree that there should be a minimum threshold based on the size of the airport, below which the target does not apply?

UKPIA **agrees** with this approach, at least in the early years of the scheme. This ensures that the largest airports, which are likely to be associated with the highest emissions are targeted in the early years of the scheme's operation.

However, a phased approach should be adopted, where smaller airports become obligated in time as the technology and experience develops. This ensures the overall policy objective is achieved through a clear pathway with ultimately a level playing field for all operators.

21. Which metric should be used to determine an airport's size?

The use passenger numbers alone may not adequately capture the scale of an airport's emissions, As indicated in the Call for Evidence, airport operations can include freight or business flights which can result in significant emissions.

While flight numbers are one option, a better one may be for the airports to estimate their carbon emissions (including those in direct and indirect control) and use this as the basis for determining an airports "size" for the purposes of the scheme. In any event, such an evaluation is likely to be useful in determining the airport's emissions and role in the Net Zero transition.

Finally, another consideration could be the size of the organisation within the airport and its ability to meet the requirements. For example, the core operating teams in very large airports may be quite small with limited spare resource. We would recommend discussions, particularly with the larger airports on their ability to deliver against the intended targets.

22. Which types of airport business operations should the target apply to?

In line with other emission reduction schemes such as the UK ETS, the target should apply to all related business operations including those both directly, and indirectly under the airports control. However there needs to be clarity of scope to ensure that emission reduction targets are not mandated under two or more different schemes such as the UK ETS and the SAF mandate.

How to ensure the target is implemented

23. What policy option do you think is most appropriate for the implementation of the target?

UKPIA believes that a legislative requirement placed on specific entities to reach Zero Emissions by 2040 is the best approach. This is consistent with the approach taken in other sectors including those covered by the UK ETS. It also ensures a level playing field, allowing fair competition between airports and that a target is implemented in a consistent and credible fashion.

24. What are your views on a voluntary approach to implement the target?

UKPIA believes that a voluntary approach to implementing the target is wholly inadequate and contrary to the approach taken in other sectors such as those covered by the UK ETS. In contrast to the aims set out in the Call for Evidence it will not lead to a level playing field, or the target being met in a consistent and credible fashion.

25. If there is a voluntary approach for this target, what should it look like, and how should it ensure the target remains robust and is delivered?

UKPIA believes that a voluntary approach to implementing the target is wholly inadequate and contrary to the approach taken in other sectors such as those covered by the UK ETS. In contrast to the aims set out in the Call for Evidence it will not lead to a level playing field, or the target being met in a consistent and credible fashion.

26. Do you agree, or disagree, that there should be a penalty for non-compliance with the target?

UKPIA **agrees** that there should be a penalty for non-compliance with the target. This is entirely consistent with the approach taken in other emission schemes such as the UK ETS or the RTFO. It serves to drive the right behaviours in meeting the target, by creating financial incentives for investment in decarbonisation technologies. A failure to implement an appropriate penalty for non-compliance is likely to lead to a missed target.

27. If there is a penalty for non-compliance, what should this look like?

Penalties should be appropriate and well-designed to ensure that the most cost-effective transition to Net-Zero is established. This could, for example, follow the way the RTFO is established with the government setting a “buy-out” system where airport operators can purchase carbon credits from the government as a seller of last resort. This establishes a financial incentive for investment in decarbonisation technologies. Credits can also be carried over from one period to the next, subject to appropriate rules.

28. What, if any, specific issues do you anticipate with the target only being applied to airports in England if similar targets are not applied by devolved administrations?

The target should be applied to all airports across the UK, not only those in England. While English airports tend to be larger, with higher emissions, allowing divergence in airport emission reduction targets does not create a level playing field and may lead to unintended consequences such as flights moving to airports with a low obligation (and potentially lower operating costs) with a potential to increase overall emissions. The UK government should therefore work with the devolved administrations to create aligned emission reduction schemes across the UK.

Barriers to implementation

29. What do you think are the main barriers in implementing the target?

The Call for Evidence indicates several potential barriers to implementing the target as well as studies in this area and we agree with these.

Financial investment is required to achieve the desired decarbonisation. This could be limited by several factors, such as the lack of financial penalties for non-compliance with the target, creating a business case for investment. Another barrier could be the competitiveness of the UK as a place to invest (including the relative incentives for airport decarbonisation at an international level).

Finally potential barriers to wider UK decarbonisation such as planning delays, available construction and engineering skills and the availability of raw materials such as EV components also apply to the implementation of the target under this scheme.

30. Do you have an approximation of the scale of investment required to achieve this target?

UKPIA has no information available on the scale of investment required to achieve the target.

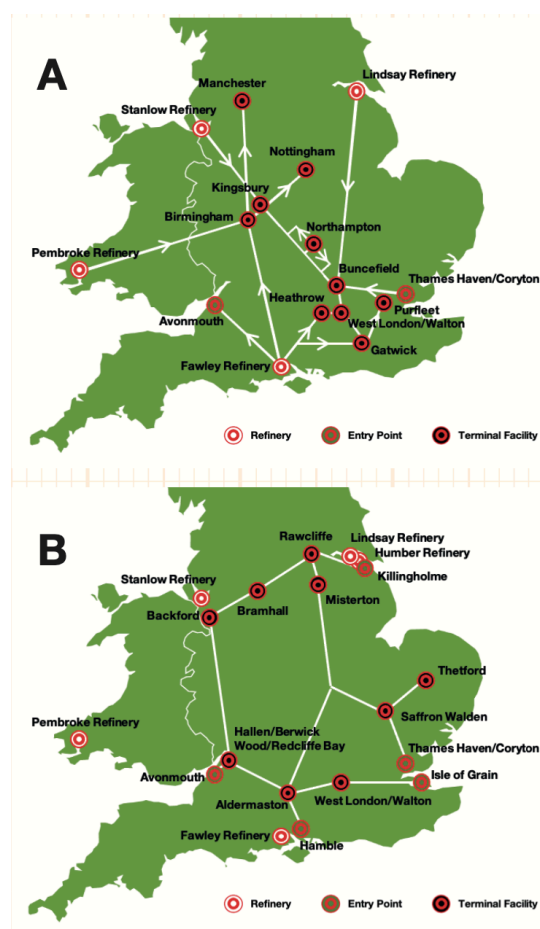
31. What financial government initiatives would help to achieve this target?

Ongoing and potentially enhanced financial support for key components of the UK decarbonisation, such as battery manufacture, and low carbon electricity supply will be critical to the UK meeting this target.

Support for Low Carbon Fuels (LCFs) could benefit both costs of SAF and allow a route to decarbonisation for existing vehicles and should be included in the net zero airport strategy.

The cluster approach can also assist in meeting the net zero airport strategy by supplying low carbon hydrogen and sustainable aviation fuel at the scale required for aviation decarbonisation. This requires the use of clusters to be expanded across the UK to ensure that the needs of aviation centres such as in the southeast of England are effectively supplied.

Figure 1: English Aviation fuel supply networks ¹¹



32. What non-financial government initiatives would help to achieve this target?

Workforce skills will be key to meeting the UK decarbonisation aspirations and work is required in this area. This includes developing the UK labour force through for example training and apprenticeships as well as allowing entrance for suitable personnel into the UK. A failure to address these issues is likely to lead to a widespread failure to meet the UK's decarbonisation aspirations.

¹¹ <https://online.flippingbook.com/view/609189063/68/>

Opportunities for implementation

33. What, if any, opportunities do you think exist that could be exploited in the implementation of the target?

We agree with the opportunities presented in the call for evidence including the development of decarbonisation infrastructure such as hydrogen refuelling equipment. Further details were presented in the Mission Zero report¹² from Rt Hon Chris Skidmore MP

34. What technologies are important to achieve this target?

UKPIA have identified several technologies^{13,14} that can be exploited in the implementation of the target such as

- Low carbon fuels including Sustainable Aviation Fuel (SAF), Hydrogenated Vegetable Oil (HVO), hydrogen and biomethane
- Hydrogen Internal Combustion Engine vehicles (ICE, including potentially re-engined vehicles)
- Low carbon electricity supply

35. Are current government policies sufficient to encourage transition to these technologies?

In our view, the current government policies are **not** sufficient to encourage transition to these technologies in the UK. The UK is not the only country aiming to decarbonise, and different approaches are being taken in other countries. These include the Inflation Reduction Act (IRA)¹⁵ in the US and ReFuelEU¹⁶ in the EU. These schemes are offering significant incentives to decarbonise, including for example financial incentives for SAF and low carbon hydrogen in the US. International companies looking to invest will invest in the locations which offer the best business cases.

There is a significant risk that the current UK government approach, including delays to enabling legislation such as the Energy Bill¹⁷ is not sufficient to attract this investment.

¹² <https://www.gov.uk/government/news/net-zero-review-uk-could-do-more-to-reap-economic-benefits-of-green-growth>

¹³ <https://online.flippingbook.com/view/609189063/>

¹⁴ <https://online.flippingbook.com/view/111037/>

¹⁵ <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/the-inflation-reduction-act-heres-whats-in-it>

¹⁶ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12303-Sustainable-aviation-fuels-ReFuelEU-Aviation_en

¹⁷ <https://bills.parliament.uk/bills/3311>

36. How could the implementation of this target help to support the future shift of airports to integrate hydrogen?

The target should create a framework, including potential penalties for non-compliance, which will successfully compete for finance and attract investment in the infrastructure for hydrogen integration.

However, the target would need to be complementary to the SAF mandate scheme as hydrogen demand in aircraft is likely to be significantly higher than that use in airport infrastructure in the future. If the SAF mandate scheme does not incentivise hydrogen sufficiently then there is unlikely to be investment in either aircraft technology or hydrogen infrastructure. This means that due to a lack of a viable business case, investment in the necessary hydrogen infrastructure is unlikely to occur.

37. How, in your view, should airports look to develop export potential in regard to their transition to zero emission operations?

Airports should look to develop export potential regarding their transition to net zero as this presents a real opportunity for the UK.

However, for this to happen, the UK needs to establish a first mover advantage created by clear and attractive government policy. As outlined in our response to Q35, given US and EU movement in this area there is a risk that the UK will be left behind, allowing technologies and expertise to be developed overseas. We would therefore encourage the UK Government to follow the findings of the Net Zero review and move quickly to establish the UK as an attractive place to invest in UK decarbonisation technology.

Measuring and reporting of emissions

38. What ideas, if any, do you have for how a progress reporting requirement could operate?

Operators permitted under the UK ETS scheme need to submit verified annual emissions to the appropriate Competent authority and the process for this is very well established. This is the most credible approach to reporting emissions and should be extended to this scheme.

A defined standard such as ISAE 3000¹⁸ for verification should be followed by entities covered by the target.

Over time there may be benefit in integrating the UK ETS scheme with the net zero airport scheme. This can offer a synergistic approach, ensuring that all carbon emissions are treated in an equal and consistent manner.

¹⁸ <https://www.iaasb.org/publications/isae-3000-revised-assurance-engagements-other-audits-or-reviews-historical-financial-information>

39. How frequently should progress towards the target be reported?

UKPIA recommends consistency with the UK ETS scheme where emissions are reported on an annual basis as an initial approach. However prudent operators would normally calculate their emissions on a more frequent basis to confirm their position relative to their target and this could be reported (although they should be treated with caution as they may not be verified).

40. What are the metrics that you think progress should be measured against?

UKPIA would recommend that emissions should be reported and measured in the first instance, as well as the operator's performance in meeting the necessary reporting requirements.

41. Do you agree or disagree, that there should be a defined standard that should be followed by the entities covered by the target to allow for effective monitoring of progress towards the target?

UKPIA agrees that a defined standard such as ISAE 3000 should be followed by entities covered by the target. This ensures a level playing field for all and enhances credibility in the scheme. The approach is common in other emission reduction schemes such as the UK ETS and the RTFO.

42. What are, if any, the specific issues you anticipate with regards to increased emissions reporting?

UKPIA suggests that training of personnel carrying out reporting will be essential to effective delivery. However, provided sufficient notice and reporting clarity is provided then we do not expect this to be unmanageable.