To:

Rt Hon Heidi Alexander, Secretary of State for Transport Mike Kane, Minister for Aviation, Maritime and Security Low Carbon Fuels Team, Department for Transport CC:

Rt Hon Ed Miliband, Secretary of State for Energy Security and Net Zero Sarah Jones, Minister of State for the Department for Energy Security and Net Zero Rt Hon Jonathan Reynolds, Secretary of State for Business and Trade Hydrogen & Industrial Carbon Capture Team, Department for Energy Security and Net Zero

<u>Urgent appeal to show commitment to UK Power-to-Liquid Sustainable Aviation Fuel</u> (<u>PtL SAF</u>) production and finalise a supportive SAF Revenue Certainty Mechanism before the end of 2025

We, the undersigned, welcome the Government's recent <u>update</u> on its approach to a SAF Revenue Certainty Mechanism, and agree that 'UK PtL could face significant challenges to produce in the UK'. However, we are concerned that without urgent action, these challenges present a risk to plants scaling and producing fuel in line with the SAF Mandate obligation.

The Committee on Climate Change stated within its recent <u>Seventh Carbon Budget</u> that 13 TWh of synthetic fuels need to be produced by 2040 in order to achieve a Balanced Pathway in line with the UK's Net Zero commitment. The UK Government also acknowledged via its <u>SAF Mandate</u> guidance that power-to-liquid (PtL) fuels 'are less reliant on scarce feedstocks and subject to other potential negative environmental impacts' as compared to SAF produced through other pathways.

This comes alongside existing financial support already awarded to several UK PtL plants via the Advanced Fuels Fund totalling over £27 million¹, and the potential provision of additional funds through the current third window, half of which is 'available specifically for projects that use CO₂ (point source or direct air capture) as their main carbon source in fuel production', i.e. the PtL pathway. This funding has been allowing projects — primarily led by SMEs — to progress towards construction with the aim of unlocking further investment. The Government should be delivering complementary levers, including the SAF Revenue Certainty Mechanism, that support the case for UK PtL in line with this existing government funding.

With international and domestic aviation accounting for around <u>8%</u> of the UK's carbon emissions — and <u>expected to rise</u> year on year whilst other sectors decarbonise more quickly — the Government cannot afford to stall on solutions that are best aligned with the delivery of its climate targets. The <u>Aviation Impact Accelerator</u> has stated that 'in some cases, proposed solutions could exacerbate the crisis, such as relying too heavily on biomass for jet fuel without managing its environmental impact'. Therefore, an overreliance on biofuels within the SAF mix would be damaging for nature and climate outcomes. This must be avoided as we tackle these twin crises whilst bolstering UK competitiveness and energy security.

¹ Window 1: Velocys (e-Alto), Window 2: Arcadia e-Fuels (NABOO), OXCCU Tech (OXEFUEL BIOGENIC), Carbon Neutral Fuels (ASAP-DAC), Zero Petroleum (PMZ.2)



Domestic production of PtL fuels for aviation represents a significant economic opportunity, not only by creating direct revenue and employment in the UK, but also by reducing national expenditure on imported fossil fuels. For every £1 invested directly in domestic PtL SAF facilities, it is estimated that at least a further £1 will be invested in new renewable electricity generation, carbon capture and other national infrastructure. This keeps more money circulating within the domestic economy. Furthermore, it enhances the UK's energy security and supports the Government's clean energy mission by enabling aviation to be powered by homegrown renewables, instead of relying on imported fossil fuels.

The UK PtL industry faces critical barriers that other SAF pathways do not, including renewable electricity availability and price uncertainty. Yet, Innovate UK notes that 'the UK is well placed to address these challenges by leveraging knowledge and expertise in technology development and by building on its strong renewable energy industry to bring PtL technologies to scale'. Other pathways like bioethanol have been in production for several decades and seen costs reduced over time, and now is the time to support PtL to do the same. Countries across the globe, including Canada, the United States, France, Norway, Sweden, Denmark and Portugal, are all moving forward to develop national PtL industries, and it is critical that the UK does not miss out on this market opportunity.

As with many aspects of the UK's path to Net Zero, a whole government approach is required. PtL SAF and other synthetic fuels create industrial scale demand for renewable electricity, green hydrogen and captured CO₂ and are therefore vital to underpinning the Clean Power 2030 Action Plan alongside the UK Hydrogen and CCUS Strategies.

The SAF Revenue Certainty Mechanism is one such measure that the Government can deliver that would ensure this industry can attract the necessary investment to start producing fuels here in the UK with the greatest lifecycle emissions savings. The Revenue Certainty Mechanism could be designed to help unblock some of the unique barriers facing UK PtL. This could include a higher strike price within contracts and earmarking part of the scheme for these fuels specifically — reflecting the initial higher capital and feedstock costs associated with the production of these fuels — to ensure domestically produced PtL SAF can compete on a level playing field with SAF produced through other pathways.

We ask the Government to reaffirm its commitment to domestic PtL SAF production in the UK by:

- Urgently engaging with the domestic PtL SAF sector and setting out the next steps towards addressing the acknowledged challenges;
- Finalising the design of the SAF Revenue Certainty Mechanism and accelerating the introduction of required legislation to Parliament in 2025;
- Prioritising support for PtL SAF via the Revenue Certainty Mechanism to help deliver at least 1 PtL SAF plant Final Investment Decision by 2026;
- Publicly recommitting to the current PtL sub-mandate and, moreover, considering expansion to align more closely with EU ambitions, thereby creating a commercial scale market for PtL SAF in the UK from 2030, and;
- Recommitting to limitations on HEFA fuel via the SAF Mandate cap and exclusion from accessing Revenue Certainty Mechanism funding due to potential concerns over its environmental integrity.



As committed and supportive players in the UK PtL industry, we look forward to further engagement with the Government in relation to addressing the acknowledged challenges facing the sector. This includes urgent next steps for the upcoming SAF Revenue Certainty Mechanism, and strengthening and promoting the opportunity presented by the PtL fuel pathway for the UK and beyond.

Yours sincerely,

The undersigned NGOs, investors and PtL value chain players, representing over 130 organisations:

Arcadia eFuels
Aviation Environment Federation
Campaign for Better Transport
Carbon Neutral Fuels
Cleantech for UK
Climate Catalyst
IMPACT on Sustainable Aviation
Kite LLC
OXCCU
SASHA Coalition
Transform Scotland
Transport & Environment
Velocys





























