Phillips 66 Limited
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02 January 2026

Trade Remedies Authority

Non-Confidential Response.

Re: Phillips 66 comments on AS0067
TRA Statement of Essential Facts, Anti-Subsidy Investigations into Hydrotreated Vegetable Oil Diesel ("HVO") from the United States ("the SEF")

Dear Sirs,

In relation to the SEF, Phillips 66 appreciates the manner of cooperation that the TRA has approached the investigation into AD0068 and AS0067. However, Phillips 66 believes that due to the limitation of time to complete the investigation, and the POI chosen, there are several areas which have not been fully considered and either singularly, or when taken collectively, require that investigation AS0067 be:

- withdrawn, or
- demands that further investigation be undertaken, before implementation.

This is required to prevent an unreasonable conclusion being determined and the countervailing rates being materially overstated.

Summary

1. Overstatement of the subsidy benefit

Phillips 66 Ltd acknowledges that US exports of HVO benefited from the Biodiesel Mixture Credit (BTC) during the period of interest (POI). However, significant changes have been made to the US credit system after the POI. Specifically, the cessation of BTC and introduction of the Clean Fuels Production Credit (CFPC) has the effect of the SEF recommended duty rates overstating the subsidy benefit to US HVO producers by 50%-100%.

The current recommendation duty rates do not reflect present market conditions. Applying these duties risks unfairly penalising US exporters and misrepresenting the UK market dynamics.

2. Incomplete causation analysis

The demand for FAME and bioethanol is driven by the UK RTFO mandate. Bioethanol has a 5.5% minimum and 10% maximum blend requirement into E10 petrol (95RON) and 5% maximum for E5 (97+RON). Whereas, FAME only has a maximum requirement of 7% with no de-minimis.

The demand for HVO, whilst it can be used as a FAME substitute in B7, has its own market as a diesel replacement in the haulier and fleet market.

The SEF does not adequately consider critical factors influencing UK biodiesel demand during the period 2021-2025. It is Phillips 66 view that underestimation of these factors, and their cumulative effect, results in an overstated conclusion on the economic impact of US HVO imports on FAME. It is the case that HVO brought to the UK will to some extent displace the use of FAME. However, the current and likely continued displacement is due to multiple factors: US HVO is only one such factor.

The correct response to the issues being faced by UK FAME producers is not the application of tariffs on non-UK HVO, rather, it's increasing the RTFO mandate and the FAME blend wall.

3. Not "like goods"

Phillips 66 is the only UK producer of Renewable Diesel (RD) at scale. Phillips 66 Ltd does not produce HVO, rather it produces a co-processed renewable diesel at its Humber Oil Refinery. Phillips 66 renewable diesel is an RTFO eligible mass-balanced equivalent to HVO and, therefore, Phillips 66 has a very keen interest on all matters relating to RD of any production method sold/brought to the UK.

As stated by other contributors, acknowledged by the current and past TRA investigations and referenced in the websites of AS0067 Applicants, FAME and HVO are very different products. FAME is a fuel supplement primarily used as a B7 blend in the UK to meet the RTFO mandate whereas HVO is a drop-in replacement for diesel. Whilst HVO can be used to replace FAME, hence, the TRA is treating it as a "Like Product", FAME cannot be used to replace HVO.

It is fully expected that from 1 Jan 2027 there will be a step change in the RTFO target. At this time if blend walls for FAME and bioethanol are not increased (which has limitations due to vehicle manufacturer warrantees) significant volumes of HVO will be required. The restriction of HVO, or increased tariffs, will only significantly challenge the fulfillment of targets by the oil industry (with 24k employees in refining and distribution), as unlike FAME HVO already has a perfect Like Product replacement, diesel, and it is significantly cheaper.

4. The significance of UK RTFO regulation

The SEF was produced on the premise of the UK's current RTFO target and biodiesel blend walls. Whereas the Dept. for Transport and UK fuel and bio industry is currently in discussion to have the RTFO target significantly increased by 1 Jan 2027. The applicants to TD0068 and AS0067 are part of these discussions.

Adding additional cost to diesel replacement products at this time, for the period of five years, is counter-productive to the UK's short-term needs.

We understand the position of the RTFA and the need for it to protect the FAME industry in the UK. However, new HVO production capacity continues to start up in various geographies globally. Making US (and CN) HVO more expensive will only result in importers and wholesalers and end-user sourcing from alternative countries without trade barriers and requests for additional investigations. This was clearly the position as stated by respondents to the TRAs questionnaires.

Making US (and CN) HVO more expense will only result in importers, wholesalers and end-user sourcing from alternative cheap countries and RTFA requests for the next investigation against a lower-cost jurisdiction. This was clearly the position as stated by respondents to the TRAs questionnaires. Increasing the costs of US (and CN) HVO will increase the HVO import costs that will be passed onto the end consumer which will discourage the voluntary purchase of this lower GHG emission product that is supporting the government's overall emission reduction targets.

Phillips 66 requests that the TRA reconsider its analysis as set out in the SEF, AD0067. Where required the TRA should request additional questionnaire data. Upon completion of these steps the investigation should be withdrawn or, at least, the current recommended tariff rates recalculated.

Phillips 66 would welcome the opportunity to work with the TRA further to ensure the conclusion reached takes into account all relevant facts.

Yours sincerely,

Detailed Background:

1. Overstatement of the subsidy benefit

Changes to the US credit system: Extension of the Biodiesel Tax Credit
SEF, Section F2, recognises Biodiesel mixture credit (BTC) as the only credit received by the US exporters under investigation. It was this credit that the TRA based its calculation of subsidy.
The SEF recognises at section 171 that BTC was expected to end 1 Jan 2025. Whilst the bills to extend the BTC referred to in this section were put before U.S. Congress, neither have been enacted and the BTC ceased for periods after 31 Dec 2024.

Legislation	***Status***
Biodiesel Tax Credit Extension Act of 2024 (H.R. 9060)	*Not enacted* – the bill was referred to committee and died in committee without passing.
Biodiesel Tax Credit Extension Act of 2025 (H.R. 3137)	*Not enacted* – the bill remains in committee (no further action has been taken as of now)

Whilst the Biodiesel Tax Credit Extension Act of 2025 (H.R. 3137) has not expired there is no expectation that it will be passed in the current US political climate.

We do recognise that an amendment to the US legislation, known as 45Z, effectively extended the SAF BTC to allow credit for production in 2024 for which blending/product sale did not take place until 2025. This extension ceased to be effective in Sept 2025. This was SAF specific and did not extend to HVO.

Cessation of the BTC: no subsidy
For a countervailing duty to be applied the UK industry must suffer material injury. The US Exporter must be obtaining a benefit from the subsidy system. It is not sufficient that a subsidy is available, it must be taken. With effect from 1 Jan 2025, Phillips 66 ceased to obtain a benefit from the BTC or CPFC.

SEF, Section F4.1 the Clean Fuels Productions Credit (CFPC).
SEF, Section 318, recognises the cessation of the BTC and that this has been replaced by the CFPC. Phillips 66 agrees with the points made here. However, the consequential assumption that the CFPC is equivalent to the BTC is incorrect. The TRA provides no evidence nor did it undertake any analysis during or after its investigation, to demonstrate that an equivalent benefit would be created.

The bill, 45Z, was issued for Congressional review in 2022. Therefore, prior to the commencement of the TRA investigation, and the setting of the POI, it was known that the BTC would be removed and its replacement would result in a significantly lesser subsidy being obtained by Producers from 1 Jan 2025.

CFPC calculation: (a) Industry
The WTO Subsidies and Countervailing Measures (SCM) Agreement, Art 19.4, stipulates that the amount of CVD levied must not exceed the subsidy found to exist “for the product”. An applied duty rate should neutralise the competitive edge from the subsidy but no more than that, upholding the principle that CVDs counteract subsidies, not penalize un-subsidised trade.

The CPFC formula has not been amended since the time of 45Z’s original publication. Based on current GREET values, for HVO produced from U.S. origin used cooking oil, CPFC only gives a 64% subsidy benefit to US producers compared to BTC. While foreign origin used cooking oil (majority of which meets the requirements to qualify under RTFO) does not generate any CFPC. As the TRA is aware, US production of HVO is largely produced from crop and animal fat feedstocks which has the impact of further reducing any subsidy benefit for the production.

In 2022 industry articles were issued that calculated the level of available subsidy under CFPC. See example: https://stillwaterassociates.com/so-long-BTC-hello-cfpc/?cn-reloaded=1

Irrespective of the fact that BTC was available, and claimed, by the US blenders in POI, 2024, it was known by the TRA that CPFC was to replace it and the resulting reduced subsidy impact was public knowledge as early as 2022. On this basis, the CVD rates currently recommended should be recalculated to be representative and comply with SCM.

(b)(i) Phillips 66 : level of subsidy claimed
Redacted - confidential

(ii) non-contingent subsidy
Redacted - confidential

Phillips 66 accepts that the TRA is unable to apply a revised POI, however, it would be completely anomalous that a duty rate was applied that would be overstated at the time of implementation.

Equally, it would be extremely misleading if the SEF was submitted uncorrected and did not recognise the significant change in circumstances that make the published duty rates unreasonable for the implementation period when the data for correct calculation was available at the inception of the investigation.

2. Incomplete causation analysis

Phillips 66 acknowledges the TRAs position in relation to FAME and HVO being treated as like goods, in so far as US HVO is largely produced from UCO and it can be blended in diesel to a B7 blend in competition with UK FAME. However, beyond these there are no common factors between the two products and no areas (bar price) where FAME fairs favourably to HVO as a product. The differences are well documented and set out in this and earlier investigations by the TRA, the EU Commission investigations and even on the websites of the Applicants.

However, Phillips 66 believes that the TRA has incorrectly determined that HVO imports are being used to replace UK FAME, or at the very least, there is insufficient evidence to substantiate the TRA's assertion.

The majority of the US HVO that Phillips 66 has delivered into the UK has been to supply neat (or "drop-in") HVO100 into a separate voluntary demand market, where corporate customers seek to reduce their scope emissions on a voluntary basis to fulfil Corporate Social Responsibility (CSR) targets. The blend wall and customer demand preferences prevent UK FAME from being delivered into this voluntary market, which again brings into question whether the two products should be considered as like goods.

The factors raised below, collectively demonstrate the reasoning for the continued decline in FAME usage in the UK. Individually, they may not be compelling, but collectively – and this is how they should be view - they demonstrate the issue in for UK FAME sales.

Declining FAME demand due to EVs and reduced diesel demand
SEF, "Image 2", clearly shows a decline in the supply of FAME for the period of 2022 to 2024 whilst HVO supply increases. The inference is that the reduction in FAME sales is due to the increase in HVO sales. However, during the same period:

1. Electric vehicle registrations increased from 22.9% to 28.2%
2. Diesel registrations fell by 34% between 2022 to 2024. Diesel sales are now only 6.3% of new registrations.
3. SEF, Section 117, SEF, assumes "consistent diesel consumption". This is clearly an incorrect and unreasonable assumption which does not reflect reality. The indicative trend for diesel fuel sales and all/diesel miles driven is downward due to:
    a. Reasons at (1) and (2) above.
    b. Reduced diesel and increased petrol demand.
    c. Reduction in total miles driven post pandemic.

Phillip 66 contends that much of the decline in FAME supply in the UK is created by the factors above and not in relation to HVO imports. We question if other factors, rather than HVO imports, are damaging FAME supply.

We question the TRA's assumption that the volume of HVO being supplied to the UK is greater than can be consumed by the voluntary market. During the period 2022-2024 the UK market saw growth in HVO, biomethane and SAF sales, and industry publications recorded that large portions of this were being supplied to the voluntary market, generating RTFCs and reducing the need for blending.

i. Increases in double count bioethanol and other biofuel substitutes.

During the period of investigation there has been an increase in the UK supply of double count bioethanol and other fossil fuel replacements (bio-lpg and biomethane into the road transport sector). This increase between 2023 and 2025 (part 2025 being the latest available volumes) equates to a direct replacement for FAME and FAME produced RTFC credits of ~30%.

Phillips 66 Ltd, like many other UK RTFO obligated parties, has increased its purchases of double count bioethanol. Given that bioethanol is cheaper on a pence per litre basis than FAME, use of double count bioethanol and maximising the blend volume in petrol is preferred over FAME blending.

ii. Increases in the HVO voluntary market: haulage and fleet sales

The SEF does not factor the growing size of the UK voluntary market for HVO. There is no Gvt collection of data on the use of HVO and whether it is supplied into the mandatory or voluntary market. However, it is clear from industry publications (see announcements listed below) that there is a large voluntary market and it is growing.

In the year 2023 to 2025 Phillips 66 Ltd sold over 90% of all HVO imports into the voluntary market.

Supplier / Importer	**Published articles (2021–2025)**	**Key Notes**	**Certification / Assurance Schemes**
Certas Energy (DCC plc)	Hundreds of millions of litres annually by 2024; 60% YoY growth reported in 2025	Largest UK distributor; acquired Green Biofuels Ltd in 2024; 28+ HVO depots nationwide	RFAS, Zemo Partnership, ISCC
Green Biofuels Ltd (GBF)	55 million litres (2020–2022); now part of Certas	Early market leader; supplied HVO Gd+ to construction, freight, marine sectors	RFAS, ISCC
Crown Oil	Multi-million litre contracts; 1M litres to RRS Sir David Attenborough in 2024	First UK distributor to convert entire fleet to HVO; nationwide supply	RFAS, ISCC
Watson Fuels	Tens of millions of litres (estimated); no public volume data	Supplies obligated/non-obligated HVO; active in transport, heating, marine sectors	RFAS, ISCC
Rix Petroleum	Regional supplier; volumes not disclosed	Supplies HVO to commercial and agricultural users in Yorkshire and Humber	Not publicly disclosed
New Era Fuels	Distributor of Green Biofuels' HVO	Supplies Green D+ HVO; active in infrastructure and construction sectors	Not publicly disclosed
Mitchell & Webber	Regional supplier in Southwest England	Early adopter; supplies HVO for heating, agriculture, and local councils	Not publicly disclosed

Organisation / Fleet User	Supplier / Partner	HVO Use Case / Sector	Notes / Public Disclosure Source
Royal Mail	Certas Energy	HGV fleet decarbonisation	Named in GREENFLEET award citation (2023)
Silverstone Circuit	Certas Energy	Event generators (F1, MotoGP, Festival)	350,000L HVO supplied in 2025
DHL, Sky, BBC, Aggreko, AWS	Green Biofuels / DCC	Fleet and industrial decarbonisation	Named in DCC 2024 corporate report
RRS Sir David Attenborough	Crown Oil	Marine fuel for polar research vessel	1M litres supplied in 2024
Hounslow Council	Crown Oil	Municipal fleet (refuse trucks)	Case study published by Crown Oil
Bunzl Catering Supplies	Crown Oil	London-based delivery fleet	Case study published by Crown Oil
Simpsons Malt	Crown Oil	28-vehicle agricultural fleet	Case study published by Crown Oil
Kao Data	Crown Oil	Data centre backup generators	First UK data centre to switch to HVO
BCP Council	Crown Oil	Refuse collection vehicles	Case study published by Crown Oil
CEVA Logistics	Not disclosed	450 vehicles on HVO100	Press release (2025)
John Raymond Transport	FORS / Portland Analytics	44-tonne trucks	Webinar testimony (2025)

iii. Structural changes in the UK vehicle fleet

Since 2015 when the controversy around diesel car emissions, and 2021 the covid pandemic, there have been structural changes in the UK car fleet and miles travelled by fuel type.

- Between 2015 and 2021 new diesel car registrations fell by 84%, and between 2021 to 2025 this will have fallen again by 47%.
- In the period post covid (2021-2024 with available data) the number of diesel miles travelled by car has dropped 15% from ~93bn to ~80bn.

Phillips 66 would highlight that the reduction in FAME sales is in a large part due to changes in the structure of the UK car market and changing purchasing patterns relating to UK fuel market.

iv. The use of SAF sales against the RTFO mandate

The UK SAF mandate was not introduced until 1 Jan 2025. Prior to this, the Dept. for Transport permitted sales of SAF to be applied against the RTFO mandate.

During 2024 Phillips 66 Ltd was able to obtain RTFCs for supplies of co-processed SAF it produced at its Humber Oil Refinery. This is only a small volume compared to the total RTFO obligation, but the credits create a displacement for FAME.

v. Import data

There is no import data for the POI showing that HVO imported is being brought into the UK as a diesel blend to displace UK FAME, or that pure HVO imports are being blended to produce B7. The data on diesel imports and component blends is very unclear due to the poor tariff classification in this respect.

Phillips 66 would suggest that the data from HMRC statistics, public and confidential, does not clearly delineate biofuel importation into its constituent parts or use cases.

It is certainly the case that for the period 2023 to 2025 over 90% of Phillips 66 UK imports of HVO went into the following markets.

Phillips 66 infrequently blends HVO into diesel when the product doesn't meet the EN15940 neat HVO specification and cannot be sold as 100% renewable diesel. This is to resolve product quality and operational challenges and not a commercially driven undertaking.

3. The significance of UK RTFO regulation

Other factors directly impact the decision of whether to blend FAME and, therefore, the need to import FAME into the UK. Not least the operation of the UK RTFO system.

Phillips 66 would highlight that the current design and obligation limits of the UK RTFO system impact demand for FAME. The effect of this being that HVO, or any future product that enters the UK market and generates RTFO credits is likely to have the effect of displacing required FAME volumes.

There are currently discussions between the UK Government and the UK biofuels industry to both:

- Increase the RTFO obligation limits from 1 January 2027 and these changes would likely require increased blending and sales of biofuels in the UK.
- Increase the acceptable volume of:
    - FAME blended into diesel, from B7 to at least B10 and
    - bioethanol into petrol.

Phillips 66 contends that the TRA's analysis of matters impacting FAME sales in the UK are not, or not solely due, to the import of HVO. The reduction in FAME demand is partly due to the operation of the UK RTFO system.

RTFC competition

Fuel suppliers aim to meet the RTFO obligation in the most efficient manner.

- It is a commercial decision for any fuel supplier whether to settle its RTFO obligation by creating RTFCs via selling neat biofuels, blending biofuels in place of fossil fuels or buying tickets. A fuel supplier will usually choose the cheapest option so when the value of tickets in the market is lower than the premium a physical biofuel commands over its fossil alternative the fuel supplier will buy tickets instead of blending or selling biofuels. Conversely, if the cost of buying tickets rises above the biofuel cost over fossil, a fuel supplier will blend or sell biofuels instead of buying tickets.

- The sale of HVO produced from waste feedstocks to the voluntary market serves a market with its own demand drivers, separate to RTFO obligation fulfillment but also generates double count tickets for compliance purposes. Every sale of HVO to the voluntary market allows for an equivalent reduction in RTFCs needed from B7 FAME blending.

- The SAF mandate was not implemented in the UK until 1 January 2025. During 2022 to 2024 UK SAF sales were allowed by the DfT to generate RTFCs to be used against the RTFO obligation.

- Bio-methane is a significant and growing diesel substitute for the HGV industry. These sales produce double count tickets that are sold into the RTFC market.

- Whilst there is only a relatively gradual increase in bioethanol supply between 2022 and 2024, during this period there is a significant movement from single and double count ethanol.

Therefore, it would be preferable if this graph was represented in RTFCs generated rather than litres as double count RTFC generation ought to be distinguished.

Countervailing duties: wrong solution at the wrong time

As mentioned above, the UK Department for Transport is currently in discussion with the UK biofuel industry to change the operation of the RTFO, increasing the obligation for RTFCs and blending/sales of biofuels in the UK. Simultaneously, the implementation of increased blending walls will further increase the demand. Changes will require more UK and non-UK biofuels to be supplied at competitive prices to ensure that the obligation can be met.

Phillips 66 maintains, this is not the time to be applying additional duties to non-UK biofuels.
This is also the case in most Western European countries with increasing or GHG based (non-double count) mandates.

Country	Max FAME % in Standard Diesel	At Max FAME Blend?	Using/Importing HVO for Extra Biofuel?
Belgium	7% (B7)	Yes – Fully utilized B7	**Yes** – High 9.9% energy mandate required HVO beyond B7 (no domestic HVO, so imported)
Denmark	7% (B7)	Yes – B7 baseline	**Yes** – Switched to GHG reduction mandate. Likely importing HVO to exceed B7 for higher GHG cuts.
Finland	7% (B7) (cold climate limits FAME)	Yes – B7 (or less in winter)	**Yes (domestic)**– Very high 20%+ targets, met with **domestic HVO** (Neste) instead of imports
France	**10% (B10)** allowed nationally	Yes – **B10 standard** in use	**Yes** – To go beyond B7, France also uses HVO. Has one HVO plant (Total), but also imports to meet quota.
Germany	7% (B7) (B10 from 2024)	Yes – B7 everywhere (B10 just starting)	**Yes** – High GHG mandate (~8–9%) means **imported HVO** is blended on top of B7. No domestic HVO production.
Ireland	7% (B7)	Yes – B7 standard	**Yes** – By 2022 mandate ~13% vol (diesel). Likely requires some HVO import (Ireland has no HVO production).
Italy	7% (B7)	Yes – B7 standard	**Yes (domestic)** – Uses **domestic HVO (Eni)** to exceed B7 for ~10% target. Little reliance on imported HVO
Luxembourg	7% (B7)	Yes – B7 standard	**Yes** – Small country, high target (10% in 2020) – likely imports HVO from neighbours once B7 is maxed.
Netherlands	7% (B7)	Yes – B7 standard	**Yes** – Ambitious ~16% mandate. **Domestic HVO production** (Neste) covers needs, with some imports/trading in EU.

Portugal	7% (B7) (B15 at some stations)	Yes – B7 common (B15 optional)	Partial – Met ~7% target with B7. Some additional HVO used in recent years as mandate rises (Portugal has tiny HVO co-production
Spain	7% (B7)	Yes – B7 standard	**Yes** – Rising mandates (~9.5%+) require HVO. Some domestic HVO is co-produced additional HVO imported as needed.
Sweden	7% (B7) (fleet B30 allowed)	Yes – B7 (plus far more via HVO)	**Yes** – Extremely high bio share (30% GHG reduction) met with **imported HVO** well beyond B7

4. Not “like goods”

A thorough analysis of chemical composition, functional use, market segmentation, and regulatory context reveals significant differences between HVO and FAME. Treating them as “like goods” oversimplifies these differences and risks a flawed injury analysis. Below, we address the TRA’s arguments for the “like goods” designation and provide counterpoints, supported by technical data and market evidence, to demonstrate why HVO and FAME should not be deemed like products in this case. We use the TRA’s own criteria for like goods – physical characteristics, commercial likeness, functional likeness, production method, and other relevant factors – as a framework for comparing HVO and FAME.

a) Physical and Chemical Differences

The TRA acknowledges that HVO and FAME have different production processes (hydrotreated vs. esterified biodiesel) but can contend that:

- they are similar enough in physical characteristics to be considered like goods – both are liquid fuels derived from vegetable oils/wastes and used in diesel applications.
- HVO and FAME batches use the same feedstocks (e.g. used cooking oil), and
- both can be blended into diesel, implying a degree of physical interchangeability in the fuel supply.

In terms of chemistry and properties, HVO and FAME diverge sharply, more than what would typically be considered “like goods.” Key physical differences include:

Chemical Composition: HVO is composed of paraffinic hydrocarbons virtually identical to conventional diesel (C15-C18 alkanes). It contains no oxygen molecules. FAME, by contrast, is an oxygenated ester (fatty acid methyl ester) with the formula roughly $C_{19}H_{36}O_2$ per molecule. The presence of oxygen in FAME leads to different polarity and reactivity, causing instability and hygroscopic behaviour that diesel/HVO do not have. Essentially, HVO is chemically a “drop-in” diesel , whereas FAME has distinct chemical functionality and cannot directly displace fossil diesel without engine modifications. This is reflected in industry standards: HVO must meet EN 15940 (paraffinic diesel fuel) specifications, whereas FAME must meet EN 14214 (biodiesel) specs and is usually blended into EN 590 diesel only up to certain limits.

Fuel Stability and Shelf Life: Because of its chemistry, FAME is less stable – it oxidises over time, can form sediments/gums, absorbs moisture (leading to microbial growth), and has a shelf life of only a few months before quality degrades. HVO, being saturates with no double bonds or polar groups, is highly stable, with a shelf life of up to 10 years in storage without significant degradation. This difference matters commercially: HVO can be stored and used like conventional diesel (good for emergency generators, seasonal equipment, etc.), whereas FAME-blended fuels require faster turnover and careful management to avoid spoiling. A UK fuel supplier (Oilfast) explicitly highlights HVO’s “very stable fuel with a long shelf life… superior performance in storage and application than either fossil diesel or FAME”. Such stark differences in physical behaviour undercut the notion of HVO and FAME being alike in physical characteristics.

Cold-Weather Performance: typically FAME has poorer cold flow properties and can gel or crystallize at higher temperatures than diesel/HVO due to higher cloud point and pour point, especially if saturated fats are in the feedstock. This is why standard B7 diesel in winter must carefully manage FAME content to meet cold specs. Most HVO has excellent cold-weather performance, often better than fossil diesel (it remains fluid to very low temperatures depending on grade). This means only HVO (or kerosene blends) can serve arctic-grade diesel needs; FAME cannot without additives or reducing blend levels. Again, physically they behave differently when the temperature drops.

Energy Content and Emissions: HVO's energy content (≈43 MJ/kg) is on par with fossil diesel, whereas FAME contains about ~8-10% less energy per litre (due to oxygen content). Engines running on high FAME blends see a mileage drop and often slightly increased NOx emissions compared to diesel. HVO, on the other hand, can slightly reduce NOx and particulate emissions relative to fossil diesel because of its purity (it's high cetane, zero sulphur/aromatics). These environmental performance differences are well-documented: for instance, HVO yields lower NOx than FAME in combustion tests. This further distinguishes their functional quality as fuels.

Given these differences, HVO and FAME are not "like" in a physical or chemical sense beyond the superficial level of both being liquid biofuels. They are produced via completely different processes (one in an oil refinery with hydrogen, the other in a biodiesel plant with methanol catalyst), resulting in different classes of molecules.

Thus, on physical criteria, the two fuels do not "closely resemble each other in all respects," which is the bar for like goods.

b. Functional Use and Engine Compatibility

The TRA's rationale for considering HVO and FAME as like products hinges on functional likeness – i.e., both serve as bio-based diesel fuel components. In the limited context of blending into conventional diesel (up to 7% by volume), HVO and FAME can perform a similar function: they both enable fuel suppliers to meet renewable fuel mandates and both can power diesel engines when blended. From the end-user perspective (a driver filling up with B7 diesel), there is no discernible difference – the engine runs on the fuel regardless of whether the bio portion is FAME or HVO. In other words, HVO and FAME share the same general end-use: they are combusted in diesel engines to propel vehicles, thus fulfilling the same functional role of reducing fossil diesel consumption.

While there is a narrow overlap in end-use (both can be part of a diesel blend), the breadth of functional applications and ease-of-use for HVO far exceed those of FAME. This asymmetry means the two fuels are not truly interchangeable from a functional standpoint, except in one limited scenario (low-blend diesel). Points to consider:

"Drop-in" Fuel vs. Blend Component: HVO is a true drop-in alternative to diesel – it can directly replace conventional diesel entirely. Fleet operators can (and do) run vehicles on 100% HVO (also called neat renewable diesel) with no engine modifications and with full performance, even mixing freely with fossil diesel in the tank. Modern standards like ASTM D975 (US) and EN 15940 (EU) recognize HVO as a stand-alone fuel. By contrast, pure FAME (B100) is generally not usable in standard diesel engines without modifications. FAME must be blended with fossil diesel to B7 or, in dedicated fleets sometimes B20/B30, to avoid engine issues. At high concentrations, FAME's different combustion characteristics can damage engines not specifically built or retrofitted for B100.

Engine Manufacturer Limits: Vehicle manufacturers universally allow up to 7% FAME in fuel (that's the EN590/B7 specification). Some manufacturers and models allow higher blends (B20 or B30), but typically with caveats (certain engine families, warmer climates, or with additional maintenance). Only recently are a few specialised engines warranted for B100 FAME – and those are niche and come at a premium cost. In short, the typical diesel vehicle on the road is not warranted for high FAME content. On the other hand, using HVO carries no such restrictions. All engine makers that have evaluated HVO treat it as fully compatible with diesel – often explicitly stating HVO is approved for use at 100% in their engines. No engine modifications or separate maintenance regime is needed for HVO. This is reflected in industry practice:

Fuel Infrastructure and Handling: HVO's drop-in nature also means it can utilise the existing fuel infrastructure (pipelines, storage, vehicles) with minimal adjustments. FAME, due to its solvent properties and water affinity, raises compatibility concerns (it can dissolve certain tank sediments or coatings, and it requires separate storage to avoid contamination beyond B7). Many fuel depots avoid storing high-FAME blends, whereas storing HVO is no different than storing diesel. This translates into different use cases: HVO can be logistically deployed wherever diesel is used, including back-up power systems, remote construction equipment, etc., without infrastructure changes. FAME is mostly locked into the controlled environment of refinery/terminal blending.

Performance and User Experience: For the vehicle operator, running on HVO is seamless – the vehicle experiences either identical or slightly improved performance (higher cetane number leads to easier ignition and slightly smoother combustion). Running on high-FAME blends, in contrast, can require more frequent filter changes (due to solvent effect cleaning out deposits), careful monitoring of cold start performance, and acceptance of a minor fuel economy penalty. Heavy-duty fleet users often report that transitioning from B7 to B30 FAME requires operational adjustments, whereas transitioning from B7 to HVO100 does not – it's invisible to the driver. This difference in functional quality means that users do not view HVO and biodiesel as equivalent products. In fact, many fleets that are unable to use B100 biodiesel are turning to HVO to achieve deeper carbon reduction precisely because HVO can replace diesel entirely without headaches.

In summary, HVO can serve as a one-for-one diesel replacement across all diesel-consuming applications; FAME cannot. FAME's functional role is essentially a diesel enhancer – great for blending up to a limit, but not a standalone fuel for broad use. The TRA's own Statement of Essential Facts implicitly recognised this when it noted (paraphrasing) that "FAME is primarily used as a B7 blend component, whereas HVO is a drop-in diesel replacement". This fundamental difference in use undermines the like-good classification.

c. Commercial Market Differences (Demand, Pricing, and Segmentation)

The TRA argue that HVO and FAME are sold into the same general market for biodiesel/biofuel in the UK. Both generate Renewable Transport Fuel Certificates (RTFCs) under the RTFO scheme when used in road fuel, and they can be substitutes from a fuel supplier's perspective: for meeting a given biofuel quota, a supplier could use either FAME or HVO (whichever is more cost-effective or available). The TRA sees domestic FAME producers and importers of HVO as competitors in supplying renewable content to UK diesel – thus commercially alike. Pointing out that pricing trends for HVO and FAME are correlated as both are influenced by feedstock costs and biofuel credit values, and that an increase in HVO imports supplied at low prices would directly pressure FAME sales in the UK, indicating commercial interchangeability.

In practice, the markets for HVO and FAME in the UK have been segmented, not fully unified, especially during the period of investigation (2021–2024). Treating them as one "like" market overlooks crucial differences in who buys these fuels, for what purpose, and at what price. Key distinctions include:

Distinct Customer Bases & Channels: Domestic FAME producers primarily sell B100 FAME or concentrated blends to large fuel blenders and obligated fuel suppliers for compliance blending. The end result is B7 diesel at the pump – a commodity product where FAME content is invisible and the driver does not know or care. HVO imports, on the other hand, have been largely sold directly to end-users or niche fuel providers serving environmentally conscious fleets. A significant portion of imported HVO bypasses the standard petrol station market and goes straight to truck fleets, bus companies, construction firms, etc., often delivered as neat HVO or high-HVO blend fuel for use in captive fleets. These are customers who deliberately seek out HVO for its performance and GHG benefits – a voluntary green market that has developed in the UK. Importantly, FAME biodiesel has little to no presence in this voluntary market. Fleet operators that want higher bio-blends for sustainability have tended to avoid FAME beyond B20 because of the practical issues noted earlier; instead, many have opted for HVO as soon as it became available, despite its higher cost

These factors indicate two parallel markets: one where FAME dominates, subject to price (obligated B7 blending), and another where HVO dominates, through product characteristics and market demand (niche high-blend usage). The TRA's analysis should not conflate these as one and the same. Whilst there is competition, e.g. a fuel supplier could choose to fulfil its RTFO obligation by buying HVO RTFCs or using more FAME – but a large portion of HVO demand was additional and came from customers not served by FAME producers in the first place.

Price and Value Differentiation: Because HVO offers extra value to certain customers (in terms of decarbonisation or operational advantages), it generally commands a price premium over FAME. Industry data from Zemo's 2023 Renewable Fuels Guide show HVO in the UK costs about 15–30% more per litre than fossil diesel, whereas biodiesel (FAME) blends typically cost about the same as or only slightly more than fossil diesel. This pricing reflects HVO's positioning as a premium product.

Phillips 66 recognises there have been times due to global market pricing that HVO prices have fallen very near to that of FAME, but these are few instances and this is not the case currently or when the RTFO mandate increases in 2027.

The biodiesel price is constrained by the buy-out price of RTFCs and the cheapest way obligated parties can meet the mandate. In effect, HVO has been competing on value, not on undercutting price. It's noteworthy that even with higher prices, HVO found buyers (again, due to uses FAME couldn't satisfy), whereas if HVO were simply a cheaper drop-in for obligated blending, we would expect it to be priced lower than FAME to displace it. The reality observed is the opposite: HVO was often pricier, limiting direct substitution in cost-sensitive blending decisions. This undermines the notion that HVO surging imports "stole" FAME market share solely via price competition; rather, HVO created its own market segments because certain consumers were willing to pay for its unique benefits.

UK Production Status: The fact that the UK has no native neat HVO production means any HVO in the UK market is, by definition, imported. The domestic industry (the intended beneficiary of the trade remedy) produces only FAME, or the Renewable Diesel produced by Phillips 66 (where Phillips 66 does not see any unfair competition from US HVO imports). If HVO and FAME were truly like goods in the market, one would expect domestic producers to be able to pivot or compete in the same product space. But UK biodiesel companies cannot simply make HVO to compete – they lack the refinery processes and have different facilities geared to FAME. This practical reality means imported HVO filled a supply gap that domestic industry could not fill: for example, when fleet operators demanded neat renewable diesel, the only way to supply that was via imports. Thus, treating them as like goods – as if domestic producers could replace HVO if not for the imports – is somewhat artificial. In trade law terms, one usually defines the domestic "like product" to include anything closely resembling the imported good that is produced domestically. Here, that logic is stretched to include a product that the domestic industry does not actually produce (they produce a different biofuel with notable differences). The domestic industry is not losing sales of HVO – they had none to begin with – they lost some sales of FAME, but as argued below, that has multiple causes beyond HVO. This unique situation (no domestic HVO production) weighs against a straightforward like-good finding and calls for careful analysis of whether the competition is direct or indirect.

Evidence of Displacement (or Lack Thereof): The TRA's SEF observed a concurrent rise in HVO supply and drop in FAME supply in recent years and inferred a causal displacement. But the commercial data to support a direct substitution is lacking. The TRA appears to have assumed that because HVO import volumes increased beyond the niche voluntary market's absorption, the excess must have gone into displacing FAME in B7. The voluntary market itself has been growing and could absorb significant HVO volumes. In commercial terms, HVO was not the sole competitor to FAME and RTFC generation – it was part of a broader shift in how UK fuel suppliers met their renewable targets (with more diverse fuels and credit trading). This means the competitive interaction between HVO and FAME is more complex than a like-for-like product battle.

Considering these factors, the commercial "likeness" (TRA principle D4.2) is not strongly fulfilled. HVO and FAME have different market positioning: one as a premium, import-only, high-blend fuel largely outside the standard supply chain; the other as a domestically-made, mandated blend component in standard fuel. Whilst they intersect in the regulatory compliance market, but even there HVO has mostly complemented or added flexibility rather than simply acting as a cut-price replacement for

FAME. The domestic industry's own association (RTFA) and major producers recognise HVO as a separate category – Argent Energy's website openly compares "HVO vs Biodiesel" and highlights where each fits best, implying they are related but distinct solutions rather than identical competitors. This industry view aligns with treating them as related but not "like" products under the law.

4. Regulatory Factors: RTFO Mandates and Blending Limits

The TRA assert that regulatory conditions (the RTFO targets, blend wall limits, etc.) apply equally to HVO and FAME in many respects, thus reinforcing their substitutability. For example, both fuels count toward the Renewable Transport Fuel Obligation (RTFO) quotas and earn certificates (especially if made from waste feedstocks, both get "double-counting" credits). In the SEF, the TRA assumed a given level of diesel demand and an obligation percentage, under which an increase in HVO supply would necessarily reduce the need for FAME, since the total required biofuel volume was fixed (a zero-sum game logic). Essentially, within the mandate framework, one litre of HVO fulfils the same obligation as one litre of FAME (if both are waste-derived), so the TRA likely views them as directly interchangeable from a policy compliance standpoint – one can replace the other to meet the government mandate.

While HVO and FAME both play roles in the RTFO scheme, the design of that scheme and related regulations accentuate their differences and have created conditions where HVO's role diverged from FAME's. Important points include:

Blend Wall Constraint: The UK (like the EU previously) enforces a blend limit of 7% FAME in diesel (B7), primarily for technical reasons (engine compatibility and fuel standard EN590). This cap means that even if more biodiesel is desired for greenhouse gas reasons, FAME cannot exceed 7% (but has deliberately no minimum) of the diesel pool without regulatory change or segregated higher-blend pumps. By 2021-2024, obligated fuel suppliers were already supplying near the max that could be blended. If the Department for Transport increases the RTFO target (which it has signalled it will by 2027) without immediately lifting the blend wall, the only practical way to increase bio content in diesel beyond 7% is through HVO. This is critical: the regulatory blend limit makes HVO functionally necessary for growth in renewable diesel content, because FAME cannot legally/procedurally go beyond B7. Even within the POI, this was relevant – obligated parties who wante to over-comply or generate extra credits when the FAME blend wall is met within the diesel supply chain can only do so with HVO. So from a regulatory perspective, HVO can carve out a role when FAME hits a hard limit. This limit undermines the idea that HVO simply replaces FAME one-for-one; after ~7% blend, FAME has no room to compete. It is notable that TRA's Section 117 assumption of "consistent diesel consumption" (thus a fixed bio requirement) was flawed – diesel use was dropping (due to EVs, etc, see above.), but even if it had been steady, one cannot exceed B7 with FAME. HVO opened the possibility of exceeding that, serving demand that FAME physically could not.

RTFO Obligation Nuances: The RTFO sets an overall renewable quota (by energy content) for fuel suppliers. Within that, suppliers choose how to meet it via various options: blending FAME in diesel, ethanol in petrol (up to E10), using HVO in diesel, supplying biogas, or simply buying RTFC credits on an open market. During 2022–24, multiple factors reduced reliance on FAME to meet the target:

These dynamics mean that by the time HVO imports started growing, FAME volumes were already constrained by external factors. In fact, even if HVO had not been available, domestic FAME demand might not have grown – it might have been supplanted by more ethanol or credit trading due to the structural incentives. The TRA must be careful not to misattribute the cause of FAME's decline solely to HVO. There are many "other causes" of injury (in trade remedy terms, they should not be attributed to imports). The existence of these factors shows that HVO and FAME were not operating in a vacuum of head-to-head competition, but in a complex policy environment where HVO often filled gaps left by FAME or made up for shortfalls in meeting targets.

Domestic Policy Recognition of Differences: The UK Department for Transport and industry experts explicitly recognize that HVO and FAME have different limitations and roles, which is why current policy discussions include raising the biodiesel blend limit (to B10) and encouraging HVO. In fact, the applicants of this very case (UK biodiesel producers) are part of industry calls to increase blend limits and overall targets. This tacitly observes that under today's rules, domestic FAME has problematic supply limitations– so imports of HVO were not just competition, they were also supplementing the UK's decarbonization efforts by going where FAME couldn't (beyond B7, or into fleets wanting >B7). TRA's decision should account for this regulatory complementarity. Punitive measures on HVO imports, premised on them being just "like" FAME, risk hampering the UK's near-term climate goals if not carefully calibrated.

The TRA's own regulations mandate that injury caused by other factors (like regulatory limits or demand changes) must not be attributed to imports. Here, a significant portion of FAME's challenges arise from such factors, not inherently from HVO being a similar product.

Implications for Injury and Remedy: Phillips 66 concedes this is a very difficult area and that there is overlap in the mandatory biofuel market. However, if HVO is mis-classified as a like product to FAME, the risk is that the TRA overestimates the injury caused by HVO imports and imposes measures that might not actually revive the domestic industry. For instance:

Causation: The decline in UK FAME production/sales was due to multiple forces (EV uptake, increased ethanol use, credit market dynamics, etc.). Blaming it predominantly on HVO (apart for a short period due to global pricing and US subsidy – both no longer in existence) will lead to a false conclusion of material injury "by reason of" imports. If HVO and FAME were treated as distinct markets, one might find the FAME market was shrinking for reasons largely beyond import competition (indeed, some domestic producers were also importing HVO or shifting strategy). This is important to ensure the TRA's decision meets the WTO requirement of not attributing other factors' effects to imports.

Public Interest: The UK needs both waste-based FAME and HVO to meet climate targets. As noted, come 2027 the UK will likely need significantly more HVO (since FAME supply cannot fully deliver higher targets without a B10 shift). Imposing a countervailing duty treating HVO as interchangeable with FAME might offer short-term reprieve to FAME producers, but at the cost of making HVO scarcer or costlier when it is needed to complement FAME in the near future. The TRA has a mandate to consider wider economic interests; ensuring the UK has adequate renewable fuel supply is one of them.

Legal Robustness: In trade remedy cases, a clear definition of like product is fundamental. If challenged, one side can argue that the TRA's grouping of HVO with FAME is not fully supported by the evidence of differences (as laid out here). Normally, "like product" interpretations are broad in antidumping/countervail to include similar products – but there is a line where products are so different in physical and usage characteristics that they are not directly comparable. Here, the industry believe the like-good finding is borderline.

Phillips 66 request the TRA to revisit the like goods analysis in light of the above points. At minimum, the final determination should explicitly acknowledge the critical differences between HVO and FAME, and ensure that injury analysis accounts for these – for example, by adjusting the causation narrative to factor in non-import reasons for FAME's decline and by weighing the implications of no domestic HVO production. If the evidence shows that HVO imports did not, in fact, substantially displace FAME in the marketplace (beyond a short period of time), the TRA might conclude that the domestic industry's issues are not "materially" caused by the imports, which could justify terminating the case under Regulation 64. Alternatively, if duties are still considered, the TRA might opt for a more nuanced measure (or even a lower rate) recognising that imported HVO fills a role domestic FAME cannot – meaning a punitive duty could harm UK consumers more than it helps producers.

Annex B

Phillps 66 Co Renewable Diesel sales excel sheet showing the 2025 PTC claim volumes

Redacted – confidential

Phillips 66: Change to US Federal Policy for HVO subsidy from Blenders Tax Credit ("BTC") to Clean Fuel Production Tax Credit ("PTC")

Redacted – confidential