

TITLE: HYDROTREATED VEGTABLE OIL (HVO) PROCUREMENT

Committee: Operational Services Committee

Date: 18th September 2023

Author: Head of Street Scene

Report No: Y44

Contact Officer:
Head of Street Scene

1.0 ISSUE

1.1. In March, the Operational Services Committee approved the use of HVO fuel in ECSS' waste and recycling collection fleet, provided it did not exceed an agreed cost to ECSS. Since then, the price of HVO has increased above this financial level, meaning ECSS have continued to fuel vehicles with diesel.

2.0 RECOMMENDATION(S)

2.1. Members to note the prohibitive cost of the move to HVO for ECSS waste and recycling fleet at this present time.

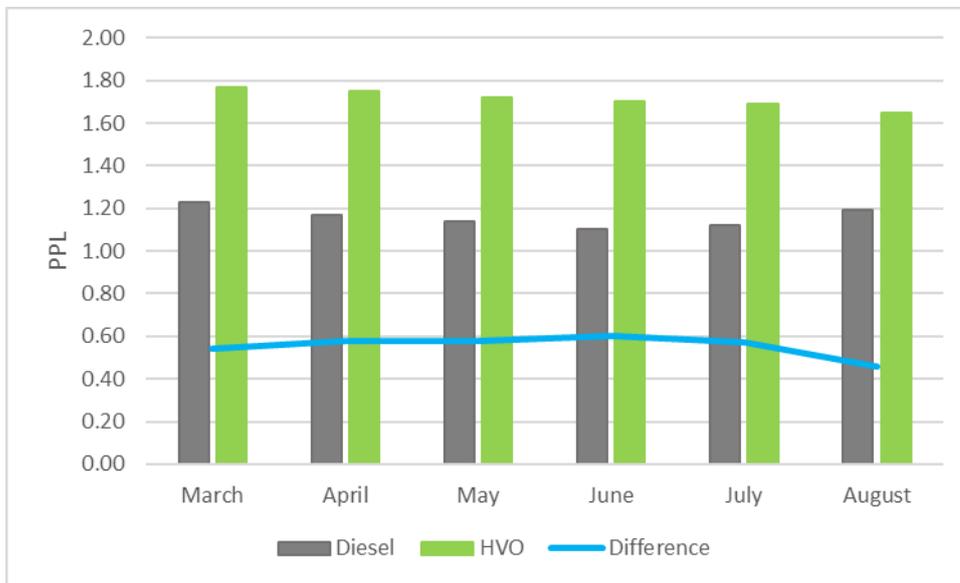
3.0 BACKGROUND/OPTIONS

3.1. The council recognise the need to act fast to reduce our net emissions, of the Council's fleet vehicles, the waste collection vehicles used 270,000 litres of diesel in 2020/21 and emitted 860 tCO₂e (when well to tank is factored in), and therefore responsible for over two-thirds of the council's entire emissions.

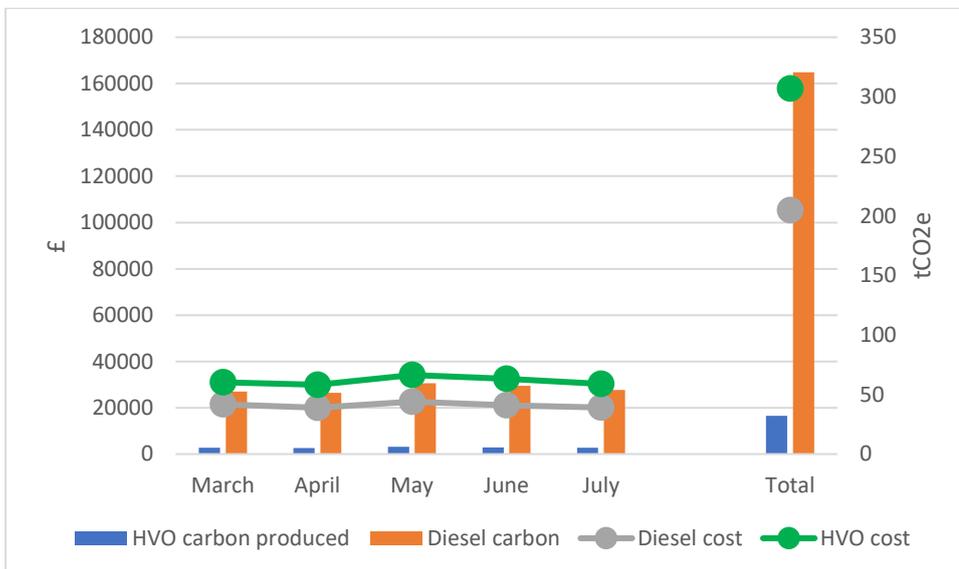
3.2. On 27th March a report was presented at Operational Services Committee regarding the replacement of 10 RCV's. The report outlined low emission fuel options for the new fleet. Hydrotreated Vegetable Oil (HVO) was and still is considered to be the most viable option at present for the Councils waste fleet.

3.3. At the time the report was brought to Committee, HVO costs were generally tracking an average of 20p per litre above the cost of diesel. It was agreed that where HVO costs increased beyond the monthly average plus 5p, then ECSS should continue to run vehicles on diesel.

3.4. In preparation for the delivery of the new RCV's, soft market testing has been undertaken with HVO suppliers along with any required infrastructure requirements. At present the cost of HVO is running at between £1.65 - £1.92 per litre. ECSS are paying an average of £1.15 per litre for diesel, HVO is tracking at £0.50 - £0.77 per litre which is £0.25 – £0.52 per litre beyond the recommended threshold agreed by Committee on the 27th March. The chart below displays a comparison of the price per litre (PPL) over the last six months.



For Members information, the carbon cost of using diesel over HVO has been an estimated 288 tCO₂e of carbon. The chart below compares the financial and carbon costs of both fuel types in the period since the last report.



- 3.5. ECSS are exploring options with our neighbouring authorities to bulk purchase HVO in the hope that we may see a reduction in price per litre. At present there is no centrally located tank available for the larger quantities required for supplying the anticipated number of vehicles used by all authorities. ECSS are not a party to the Greater Cambridge (City and South Cambs) and Huntingdon framework for supply of HVO, ECSS will need to undertake a procurement process of their own for supply as well as looking at storage at the depot (if this was the most suitable location). In the meantime, to facilitate an immediate switch to HVO should the price PPL drop, ECSS have arranged for a temporary tank to be available at the depot.
- 3.6. The introduction of the new RCV's will provide more efficient, less polluting vehicles even when run off diesel. New vehicle technology, will enable us to ensure driver behaviour and operational management contribute to optimising fuel efficiency, providing both a cost and CO₂ emission saving.

4.0 ARGUMENTS/CONCLUSION(S)

- 4.1. The Council remains committed to reducing its net emissions as quickly as possible, whilst being mindful of ensuring the service operates within a financially stable model. At present, the price of using HVO is above the threshold at which the Committee agreed, and therefore the service continues to operate using diesel.
- 4.2. The demand for HVO is currently out pacing the production and this is being reflected in the increasing cost per litre: since March costs of HVO are tracking at between £0.50 – £0.77 per litre higher than diesel.
- 4.3. As a result of the increased cost of HVO, in line with the decision made at Operational Services Committee on 27th March, ECSS will continue to operate the waste and recycling collection vehicles on diesel. ECSS will undertake a procurement process for the supply of HVO and look at storage options to ensure that they have access to a supply when costs drop to an acceptable level.

5.0 FINANCIAL IMPLICATIONS / EQUALITY IMPACT STATEMENT / CARBON IMPACT ASSESSMENT

- 5.1. The table below provides the cost comparison from February to July, 2023 for the use of diesel compared to HVO at the price agreed at committee, and the lowest and highest price per litre:

Month	RCVs litres	Diesel 1.15	HVO 1.40	HVO 1.65	HVO £1.92
February	15,347	£17,649.05	£21,485.80	£25,322.55	£29,466.24
March	17,489	£20,112.35	£24,484.60	£28,856.85	£33,578.88
April	17,105	£19,670.75	£23,947.00	£28,223.25	£32,841.60
May	19,853	£22,830.95	£27,794.20	£32,757.45	£38,117.76
June	19,117	£21,984.55	£26,763.80	£31,543.05	£36,704.64
July	17,906	£20,591.90	£25,068.40	£29,544.90	£34,379.52
Total	106,817	£122,839.55	£149,543.80	£176,248.05	£205,088.64

- 5.2. Equality Impact Assessment not required.

6.0 CARBON IMPACT ASSESSMENT (CIA)

- 6.1. In summary, the CIA concluded as follows:
- 6.2. The Council is committed to and recognises the need to act fast to reduce our net emissions as quickly as possible, and as deeply as possible, on our journey to net zero emissions. The Council has brought forward by 10 years, from 2050 to 2040, its own net zero carbon emissions target date.
- 6.3. Details gathered on the Council's 2020/21 carbon footprint shows the largest single contributing area is a consequence of the Council's fleet vehicles. Of the Council's fleet vehicles, the vehicles operated by ECSS consumed over 270,000 litres of diesel in 2020/21 and emitted around 860 tCO₂e (when well to tank is factored in) and are therefore responsible for over two-thirds of the Council's entire emissions.

- 6.4. HVO provides a viable transitional alternative until the other RCV markets (such as electric RCVs) mature. It significantly reduces emissions by up to 90% (compared with conventional fossil fuels), is similar in cost to diesel and has been successfully trialled and adopted by other Councils.
- 6.5. Whilst the purchase of new vehicles will have a negative impact arising from the embodied carbon of such vehicles (i.e. the energy and emissions arising from the manufacturing of the new vehicles), such negative implications can reasonably be assumed to be offset within a short period of time as a consequence of having more fuel-efficient vehicles, together with such new vehicles consuming a low carbon fuel.

7.0 APPENDICES

None

Background Documents:

None