

REPORT FROM: ASSISTANT DIRECTOR OPERATIONAL SERVICES

TO: CLIMATE EMERGENCY WORKING GROUP

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## DECARBONISATION OF PENDLE BOROUGH COUNCIL'S FLEET UPDATE

### **PURPOSE OF REPORT**

To provide Members with an update on the financial impact and carbon emission savings created through the use of Hydrated Vegetable Oil within the Council's recycling and landscape maintenance fleets and to advise on the extension of HVO usage into the mechanical street cleansing service.

### **RECOMMENDATIONS**

- **1.** That the information within the report be noted.
- 2. That the working group acknowledges the continued use of alternative fuels within the recycling and Landscape maintenance fleet and the subsequent increases in costs for both fuel and infrastructure that will be incurred.
- 3. The working group support the continued investigation into the use of Hydrated Vegetable Oil across the remaining fleet.

# **REASONS FOR RECOMMENDATIONS**

- **1.** Members are fully advised on the usage, associated costs and carbon savings created by the use of HVO.
- 2. To ensure the Council meet its target to reduce emissions from its transport fleet as set out within the Climate Emergency Action Plan

### **ISSUE**

- 1. Pendle Council declared a Climate Emergency in July 2019 and has committed to taking action to become carbon neutral by 2030 or as soon as possible after that date.
- 2. Within the Climate Emergency Action Plan 2020- 2025 we have identified an objective of supporting and enabling sustainable travel.

- **3.** Actions that Pendle will take are listed as being the introduction of electric vehicles into PBC's transport fleet and explore options for bio-gas from recycled vegetable oil
- **4.** In 2021 after completing investigation into electric vehicles our attentions turned to HVO which is described as being a cleaner burning alternative to standard diesel that can be used in both road and off road applications.
- 5. The Climate Emergency Working Group considered a report on the use of hydrated vegetable oil for the Council's fleet of vehicles when they met on the 14<sup>th</sup> September 2021. They agreed:-

"That the Policy and Resources Committee be recommended:-

- (1) To approve the introduction of alternative fuels for the Council's fleet of vehicles and subsequent increases in costs for both fuel and infrastructure.
- (2) To approve further investigation into the benefits of hydro vegetable oil and gas to liquid through accepting the offer of support from Go Plant Fleet Services.
- (3) To approve the use of alternate fuels as required.
- "Members were advised that should they wish to progress this option, further growth of up to £28,000 would be required in the annual revenue budget. This would then require further revenue savings to be found from other Council services through the budget setting process".
- **6.** The minutes of the Climate Emergency Working Group were presented at the Policy and Resources Committee on the 14<sup>th</sup> October were Members resolved that the introduction of alternative fuels for the Council's fleet of vehicles be approved along with the subsequent increases in costs for both fuel and infrastructure for a trial period of six months.
- 7. The trail commenced on Monday 4<sup>th</sup> April 2022.
- **8.** Hydrated Vegetable Oil was initially introduced into six of the Council's large goods fleet each vehicle being used on recycling rounds.
- **9.** From the 4<sup>th</sup> April through to the beginning of September 2022 the six vehicles had used 15,940 litres of HVO
- **10.** As previously reported emissions are recorded as being 2.30kg per litre lower than diesel fuel resulting at the time of the update in a carbon saving over the trial period of 36,662kg of Co2.
- **11.** The setback in moving to HVO was anticipated to be with local infrastructure and cost. At the time of reporting there are still no local forecourts supplying HVO fuels and as such we continue to use re-purposed storage tanks at the Fleet Street Depot.
- **12.** In relation to costs HVO was recorded to be between 10 and 15 pence per litre higher than road diesel. At the time of writing this report HVO remains on average 13p per litre more expensive than diesel.
- **13.** Based on information collated following the previous update in September 2022 through to the 31<sup>st</sup> March 2023 the Council incurred additional costs of £1981.79p for fuel by using HVO.

- **14.** From 1<sup>st</sup> April 2023 through to 31<sup>st</sup> October the Council has incurred additional costs of £2768.86p in purchasing HVO fuel over Diesel.
- **15.** Within the report presented to the Climate Emergency Working Group in September 2021 we estimated that the cost of HVO based on full fleet usage would increase expenditure on fuel to somewhere in the region of £24,000 and £27,000.
- **16.** Following the introduction of HVO we are now able to report that the increase has not been as significant as predicted and with 11 out of 31 diesel powered vehicles now running on HVO the Operational Services has only incurred £6,626.65p of increased costs.
- **17.** Moving from costs to emissions Members are reminded that emissions from HVO powered vehicles are recorded as being 2.30kg per litre lower than diesel fuel. Based on the recorded usage of 44,235.70 litres of HVO from September 2022 a carbon saving of 101,742.11kg being achieved.
- **18.** Recent investigation has identified that HVO is reported to adhere to EN15940 standard for paraffinic fuels resulting in a higher number of manufacturers allowing the fuel to be used in their engines. Recent conversations with Aebi Schmidt representatives has resulted in the opportunity of expanding the use of HVO into the Council's mechanical sweeping fleet.
- **19.** With support from Members Operational Services will seek appropriate approval from the vehicle provider to allow the use of HVO to be extended to the mechanical sweeping fleet.
- **20.** Members should be aware that should fuel prices reduce it is likely that the gap between HVO and road diesel will widen increasing fuel costs to the levels as previously indicated.

### **IMPLICATIONS**

**Policy:** None arising directly from the report

**Financial:** Cost identified within the report show an additional £6,626.65p has been spent purchasing HVO over road diesel.

**Legal:** None arising directly from this report.

**Risk Management:** HVO is reported to be a safe alternative to diesel with no modifications or special storage requirements needed. Vehicles operating on HVO can return to diesel fuel if required without the need for tanks being drained or vehicle modification.

**Health and Safety:** None arising directly from the report.

**Sustainability:** None arising directly from the report.

**Community Safety:** None arising directly from the report.

**Equality and Diversity:** None arising directly from the report.

APPENDICES: None.

LIST OF BACKGROUND PAPERS: None.