

# RIBBLE VALLEY BOROUGH COUNCIL

## REPORT TO COMMUNITY SERVICES COMMITTEE

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meeting date: 9 JANUARY 2024  
 title: HYDROTREATED VEGETABLE OIL (HVO) FEASABILITY RESULTS  
 submitted by: ADAM ALLEN - DIRECTOR OF COMMUNITY SERVICES  
 principal author: WINSTON ROBINSON – HEAD OF ENGINEERING SERVICES

### 1 PURPOSE

- 1.1 The purpose of this report is to update committee on the trial use of Hydrotreated Vegetable Oil (HVO) in refuse vehicles.
- 1.2 The report concludes that nearly all vehicles could be converted to use HVO and significantly reduce the Council's CO2 emissions, however this will come at an increased cost of circa 98k per annum at current prices. It is recommended that a proposal be put to Policy and Finance Committee for the additional revenue funding to switch all qualifying vehicles to HVO along with a 15k capital request for an additional tank.
- 1.3 Relevance to the Council's ambitions and priorities
  - Community Objectives - To help make people's lives healthier with a cleaner environment.
  - Corporate Priorities - To sustain a strong and prosperous Ribble Valley.
  - Other Considerations – To contribute to the Council's Climate Change Strategy and, in particular, the reduction of carbon emissions.

### 2 BACKGROUND

- 2.1 In September 2021 the Council adopted the Ribble Valley Borough Council Climate Change Strategy 2021 – 2030 under which the Council's ambition was to become carbon-neutral by 2030. The Council measures its carbon emissions annually through One Carbon World. It is the role of the Climate Change Action Group to review the Climate Change Strategy with the Economic Development Committee to ensure an action plan is implemented effectively.
- 2.2 The feasibility of using Hydrotreated Vegetable Oil (HVO) for all refuse vehicles was included in a report to the Economic development Committee on 28<sup>th</sup> September 2023.
- 2.3 The Council's vehicle fleet is the largest, single contributor to the authority's carbon emissions.
- 2.4 The fleet of vehicles includes 12 refuse collection vehicles, 2 car park enforcement vans, 2 dog warden vans, 3 general vans, 1 Ford Pickup, 1 Iveco Tail Lift, 3 Ford Transit vans, 2 Ford Rangers, 3 Flat-Back Wagons, 1 Tractor, 1 JCB and 6 mowing machines. Of these vehicles, all but the 2 dog warden vans run on diesel. The 2 dog warden vans are now electric.

- 2.5 Community Services Committee on the 14<sup>th</sup> March 2023 agreed a twelve-week trial of Biofuel for some of the Council's vehicle fleet.
- 2.6 The use of HVO as a vehicle fuel can result in up to 90% reductions in CO<sub>2</sub> emissions, it is 100% renewable and a sustainable fuel source. As such, HVO is the best opportunity for Council to make the greatest reduction in CO<sub>2</sub> emissions.
- 2.7 It was agreed by officers that the greatest benefit would be to trial a refuse collection vehicle (RCV). The manufacturer of the vehicles, Dennis Eagle, informed officers that any RCV that is 'Euro 6 Compliant' could run on HVO, without any modifications. Vehicles that were not Euro 6 Compliant could not run on HVO. Ten of the current fleet of RCV's are Euro 6 Compliant, 2 are not.
- 2.8 A trial has been undertaken using one refuse collection vehicle, without any vehicle issues and with fuel consumption remaining similar to diesel. Consultation has also taken place with other Authorities that have switched to HVO and there have been no reported issues.
- 3 ISSUES
- 3.1 Currently, all diesel vehicles at the depot fuel up at the diesel tank using a vehicle fob such that the telematics inform the admin office software of all the relevant details each time a vehicle takes on fuel.
- 3.2 During the trial the temporary HVO tank was less secure with only an external guage showing the amount of fuel in the tank and no detail about the vehicle that was being fuelled.
- 3.3 The existing diesel tank could be converted to HVO at very little cost, however as a small number of vehicles will still need to run on diesel, a smaller diesel tank will be required with suitable telematics. It is proposed that this would be installed at an additional cost of 15k.
- 3.4 The current unit cost of diesel delivered to the depot is £1.19/ltr. The current unit cost of HVO delivered to the depot is £1.69/ltr. Over the last financial year 2022-2023 the depot vehicles used 195,932 ltrs, with the cost of diesel being £233,159.08. For the same period HVO would have cost £331,125.08. The use of HVO as a vehicle fuel would increase the annual fuel budget at the depot by £97,966 (42% increase)

## RISK ASSESSMENT

- 4.1 The approval of this report may have the following implications:
- Technical, Environmental and Legal – The use of Hydrotreated Vegetable Oil instead of diesel for the Council's vehicle fleet could reduce Carbon emissions by up to 90% leading to a cleaner environment and healthier lives.
  - Financial Implications – The use of Hydrotreated Vegetable Oil as a fuel in place of diesel for all the vehicles in the Council fleet would, at current unit rates, cost Council an additional annual sum of £97,966
  - Political – None.
  - Reputation – Council enhances its reputation as a Council promoting the environment and healthy living.

- Equality and Diversity – None as a direct result of this report.

## 5 RECOMMENDED THAT COMMITTEE

- 5.1 A funding request be submitted to Policy and Finance Committee to allow the conversion to HVO for all eligible vehicles. This will amount to additional revenue of 100k per annum and a one off installation cost of 15k.

WINSTON ROBINSON  
HEAD OF ENGINEERING SERVICES

ADAM ALLEN  
DIRECTOR OF COMMUNITY SERVICES

## BACKGROUND PAPERS

None

For further information please ask for Winston Robinson, on extension 4523

REF: WR/COMMUNITY SERVICES/9<sup>th</sup> January 2024