HVO

Up to 90%

CO2 reduction

Project Outline

On 15th November 2023, HDC started a trial of using HVO

The trial will run between 15th November 23-15 June 2024.

Two tanks on site with combined capacity of 90,000 litres.

Total of 54,000 litres of HVO ordered and supplied to Eastfield House Depot over length of project
(1/10 of what HDC use of standard road diesel annually)

HDC-15 units involved, mixture of plant, machinery and vehicles, across a diverse mix of services, age profiles and types (light goods v heavy goods).

Cambridge Fire and Rescue-a variety of appliances and support vehicles

Cambridgeshire Constabulary-patrol vehicles and support vehicles.

Aims of the project

- Three phases to the projects- Transition to HVO, running on HVO, transition back to standard road diesel.

To evaluate the performance of HVO in terms of engine efficiency, power output, fuel consumption, and overall vehicle operation.

Compatibility-If they need I? can they use it? Emergency response.

Assessing the overall economic viability of adopting HVO on a larger scale.

Identify gaps in the supply chain, production capacity, transportation, and availability.

A pilot project allows to identify and address potential risks on a smaller scale before committing to a larger-scale adoption

So far there has been no impact operational. It’s working great.

OK, so what's the Catch ?

HVO is more expensive, HVO is anywhere from £0.15p-£0.50p per litre more expensive.

An increase of £0.50 per litre could increase fuel costs for HDC by up to £240k PA on top of our current fuel spend./

Does it deliver value?

This is a high carbon saving Impact for low cost, easy option to implement than many other potential carbon impact saving proposals.

Transferring to HVO would reduce the vehicle fleet emissions of HDC from 1,300 tco^2e to around 200 tco^2e PA, a total estimated annual reduction of 1,100 tco^2e.

In terms of cost per ton of CO^2 saved this project offers exceptional value costing £217 per ton of CO^2 saved, as a comparator, two recent decarbonisation projects, Pathfinder House and Ramsey had a total cost of £8,636 per ton of CO^2 saved.

HVO is viewed as a steppingstone towards becoming net zero by 2040.

Longer term context?

Moving to HVO longer term will significantly reduce CO2 footprint by up to 90% instantly.

For HDC that would be 1,100 tco^2e. annually with no capital investment required.

Battery and Hydrogen technology is still in its infancy, too expensive, and could not be deployed fully into the services.

Significant infrastructure planning and capital expenditure required before battery/hydrogen could be used.

HVO would serve as a stepping stone in the full transition to net zero

Beyond HVO, we can explore shared infrastructure, processes, buying power, management tools. Experience

Questions Please?