

Appendix

Budgetary implications of HVO transition

For the financial year 2024/25, Environment has an allocated fuel budget of £572,000 for use across 93 fleet vehicles. 85 of these are currently utilising HVO and the nine remaining vehicles are electric. The anticipated budget implications of transitioning to HVO across the majority of the fleet, including other fuel types used in mowers and other plant machinery has been estimated at £447,000. This figure is based upon average price per litre for a variety of fuels used across current Council operations.

In contrast, maintaining a fully DERV fleet has been projected at £382,000. Consequently, the additional cost associated with the transition to HVO across the fleet is estimated to be approximately £65,000.

The pricing trend for HVO has been favourable, currently standing at £1.38 per litre a significant decrease from £1.95 per litre recorded in April 2023. The Environment Team will continue to closely monitor HVO pricing trends ensuring that any sustained fluctuations are addressed.

In reviewing the October 2023 report regarding HVO transition, it is evident that transitioning a portion of the fleet (45 vehicles or 48%) would yield benefits resulting in an overall carbon emission reduction for the Council's transport emissions of 77% (625 tCO_{2e}). However, a transition encompassing all suitable fleet vehicles will result in a 91% (738 tCO_{2e}) reduction in the Council's transport emissions. This will result in a 31.5% overall reduction in the Council's carbon footprint.

Should the price of HVO rise significantly, the Environment team will revisit the transition strategy and could potentially revert to the originally identified 45% fleet conversion. It has been determined that HVO prices would need to exceed a £1.82 per litre threshold for reconsideration of full utilisation across the fleet. Figure 1 illustrates fuel pricing of both DERV and HVO since April 2023. This approach would still achieve considerable carbon savings whilst minimising the impact on the budget. A thorough assessment would need to be conducted prior to any such actions being undertaken.

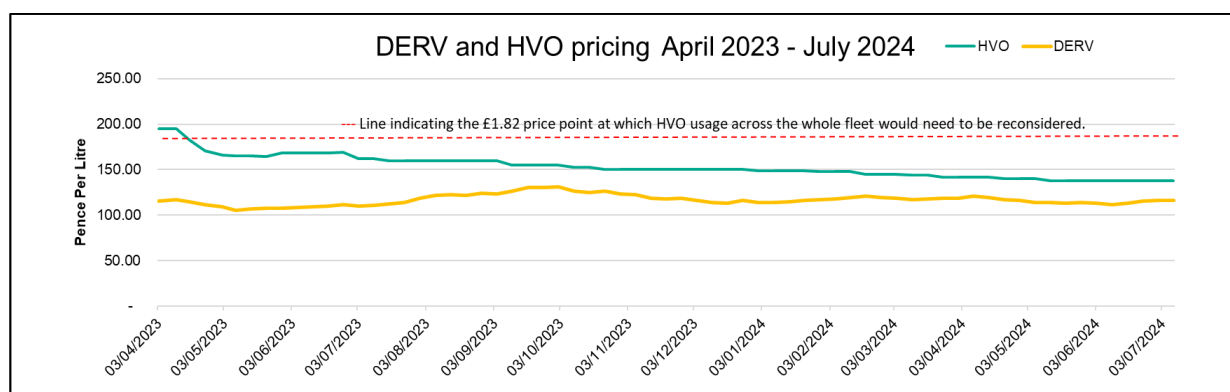


Figure 1: Fuel pricing of both DERV and HVO since April 2023.

The impact of HVO on the Council’s own operation footprint

For ease of comparison, it is anticipated that fuel usage will remain relatively consistent, as illustrated in Figure 2.

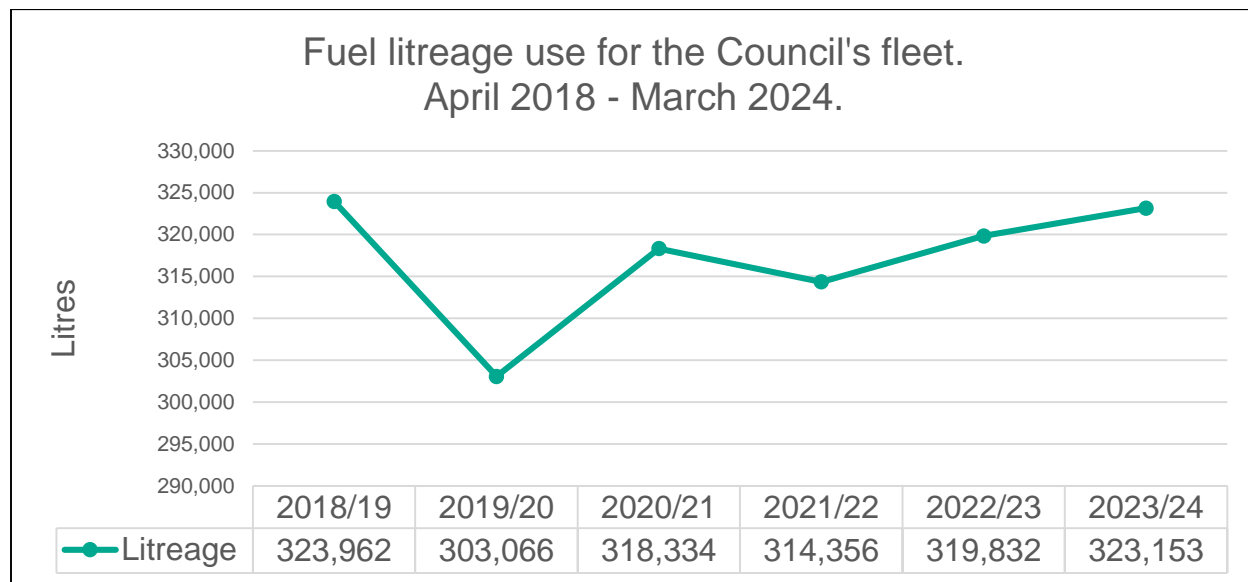


Figure 2: Fuel usage across the Council’s fleet.

It is important to note that the footprint analysis does not include all scope 3 emission data, allowing for a much clearer comparison against previous years. In 2023/24, the Council’s overall carbon footprint encompassing scopes 1, 2 and a portion of scope 3, was recorded at 2,343 tCO₂e, with fleet and plant machinery contributing 35% (812 tCO₂e) of this total (Figure 3).

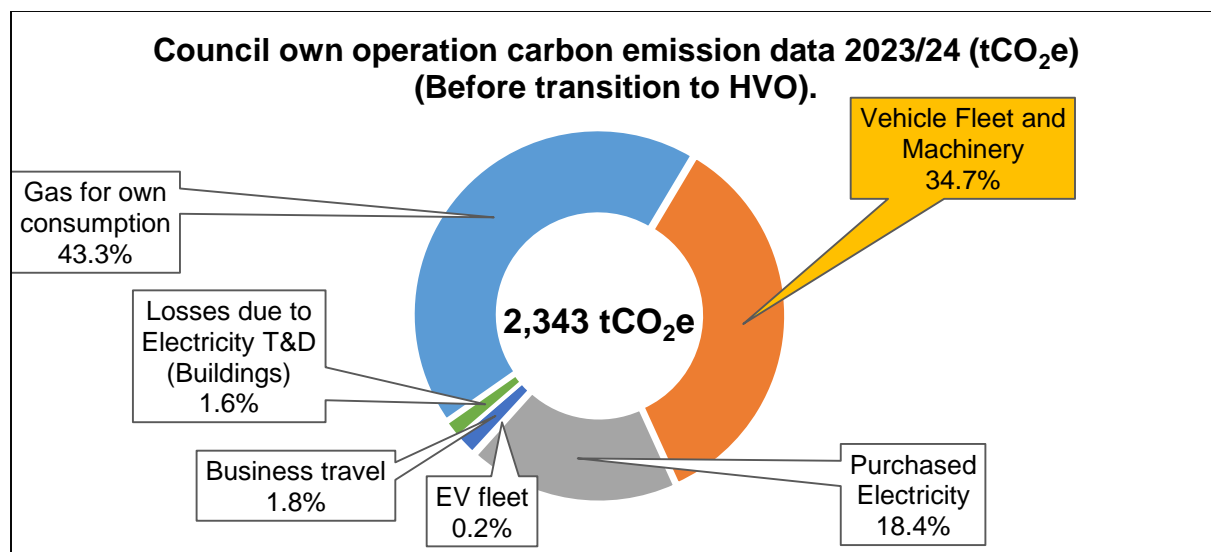


Figure 3: Council own operation footprint for 2023/24.

The transition to HVO across nearly the entire fleet (and excluding mowers and other plant equipment) is projected to have a considerable impact on emissions. It is anticipated that carbon emissions for the Council’s own operation footprint will amount to approximately 1,605 tCO₂e (Figure 4), with fleet and plant machinery contributing 74 tCO₂e (4.6%), a reduction of around 91% (738 tCO₂e) in associated fleet emissions. Consequently, the overall operational footprint of the Council is expected to experience a 31.5% decrease compared to the previous year. This would be primarily attributed to fleet fuel changes.

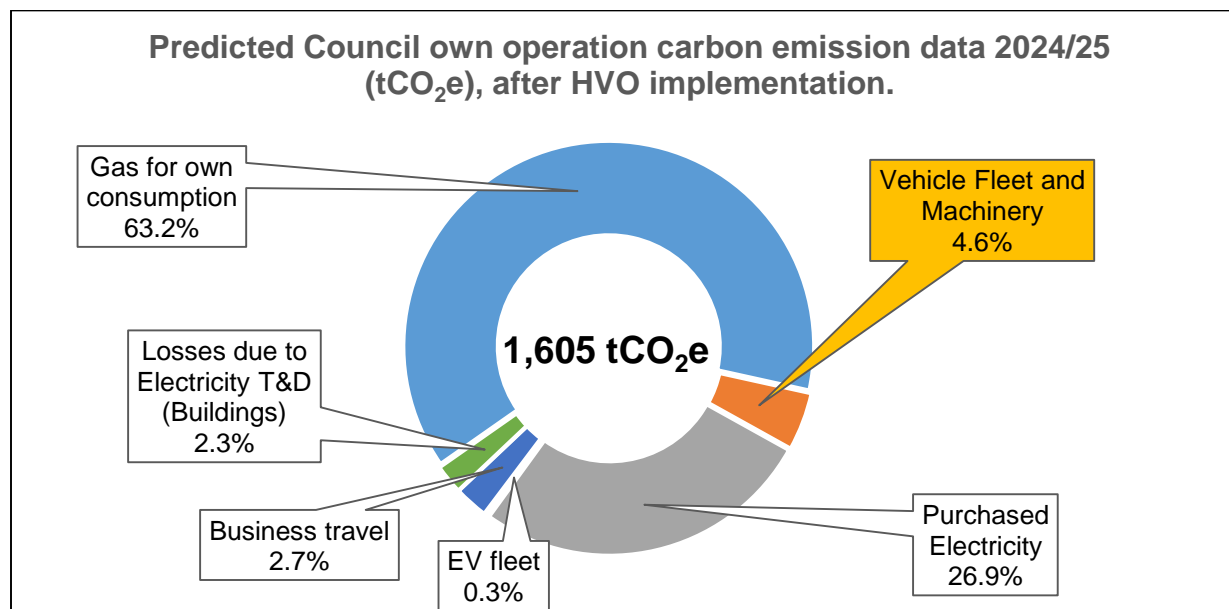


Figure 4: Predicted Council own operation footprint following the fleets transition to HVO.

The anticipated trajectory towards carbon neutrality by 31 December 2027 is further highlighted in Figure 5, demonstrating that carbon emission reductions are no longer plateauing. This trend shows the effectiveness of a transition to HVO.

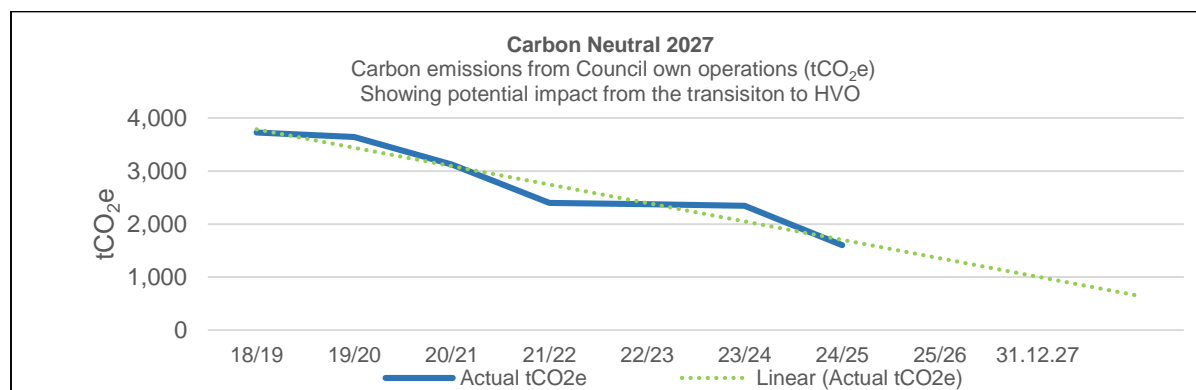


Figure 5: Council own operation emissions highlighting the potential impact from the transition to HVO.

Summary

The transition to HVO across more than the initially anticipated 48% of the Council's fleet presents significant environmental benefits, with a projected reduction in the Council's overall carbon footprint of 31.5% or 738 tCO₂e compared to the previous year.

Whilst HVO remains in use budget implications will be closely monitored, ensuring that the transition remains financially viable and within the allocated revenue budget.