Appendix 1.

Carbon Footprint Report April 2023 – March 2024

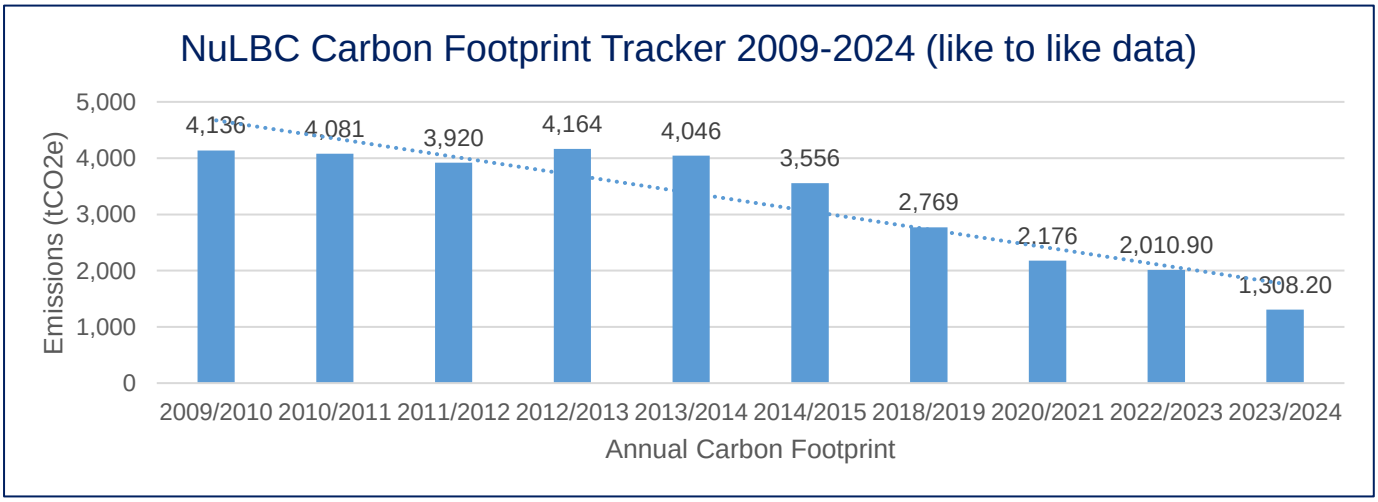
Introduction & Background

Newcastle-under-Lyme Borough Council plans to be a Net Zero organisation by 2030 and deliver a Net Zero Borough by 2050 which includes all schools, homes, businesses, and transport in Newcastle-under-Lyme Borough. The Council also has ambitions to promote the natural environment as well through multiple actions and engage with the borough such as local schools, residents, and businesses. The Council has a responsibility to report on their own annual carbon footprint to both stay accountable with their constituents and identify the least and most polluting areas to see where more action to decarbonise to reduce emissions is needed.

Comparing data like to like from the 2022/2023 carbon footprint of the Councils own operations the carbon footprint has been reduced by **35%** from 2,010.9 tCO2e, to 1,308.2 tCO2e for the year 2023/2024, mostly due to the increased use of HVO (Hydrotreated Vegetable Oil) for heavy vehicles in the Council's fleet.

Figure 1 below shows the Councils carbon footprint for its own operations since data started the be collected in 2009/10. Overall, the Council has reduced its carbon emissions by **68.37%.**

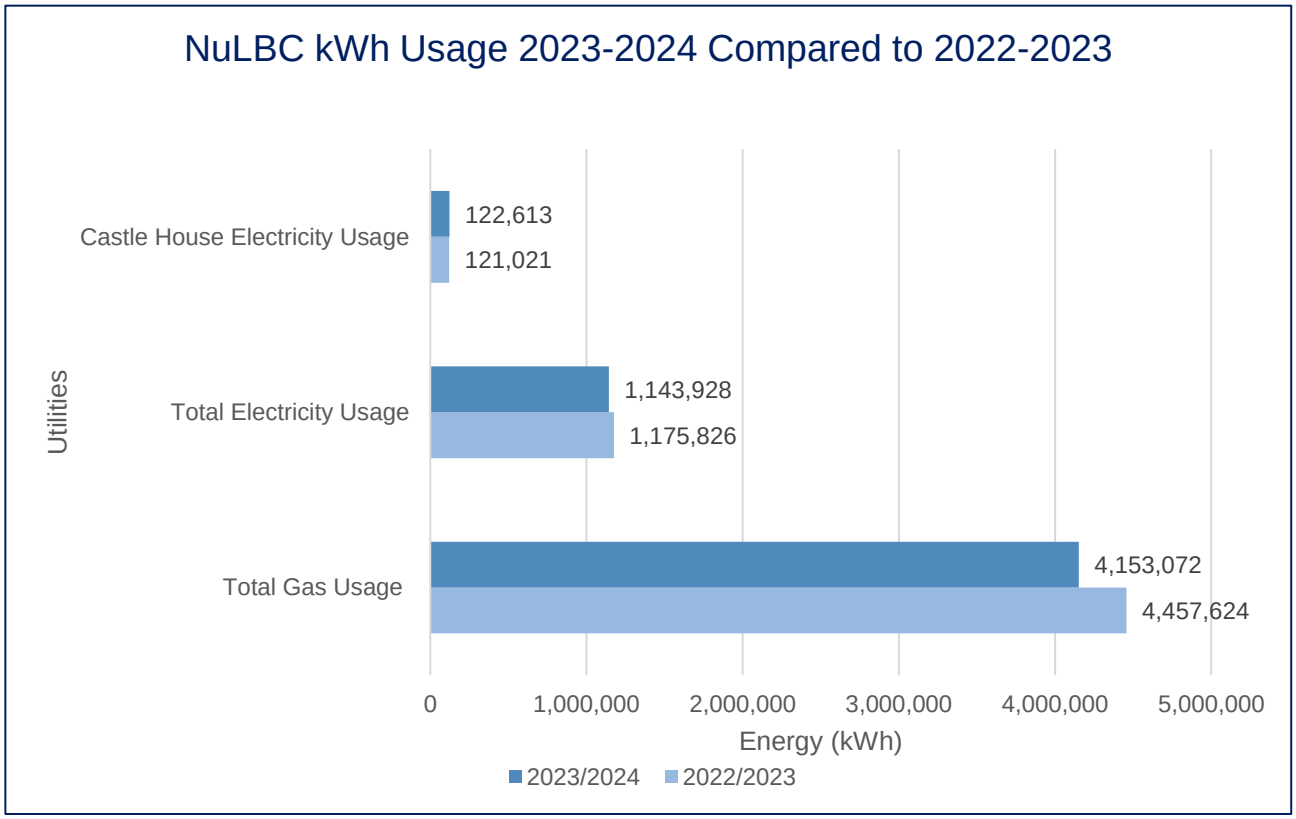
Figure 1. NuLBC Carbon Footprint Tracker 2009-2024 (like for like data)



Council Operational Building energy use kWh.

Figure 2 below depicts the kWh usage of the Council's electricity and gas compared to the 2022/2023 financial years usage data. It shows slight reductions in total gas usage and electricity usage except for a slight increase in electricity usage for NBC staff at Castle House. The reduction in kWh usage is most likely due to small energy efficient interventions in Council owned sites such as the installation of LED's, air source heat pumps, and solar.

Figure 2. NuLBC kWh Usage 2023-2024 Compared to 2022-2023



Fleet Fuel usage comparing use of diesel to HVO.

Figure 3 depicts the comparison of fuel use of the Council's fleet in 2023-2024 and 2022-2023. It also reports the litres used between Diesel and HVO (Hydrotreated vegetable Oil). Over the last year HVO has significantly increased in its use in the Council's heavy goods vehicle fleet which is shown through the figures below as HVO use has increased by 285,360.33 litres and diesel has decreased in use by 263,326 litres since last financial year. Diesel will currently still be used for smaller vehicles and assets such as small vans, mowers and other power tools and machines. However as seen due to this increase in HVO use in heavy vehicles like waste freighters the scope 1 emissions of the Council have significantly decreased which has shown the power of this transitional fuel until the Council can fully go to a renewable source of fuel for the fleet such as electric or hydrogen.

Figure 3. NuLBC Litres of Fuel Used in 2023-2024 Compared to 2022-2023

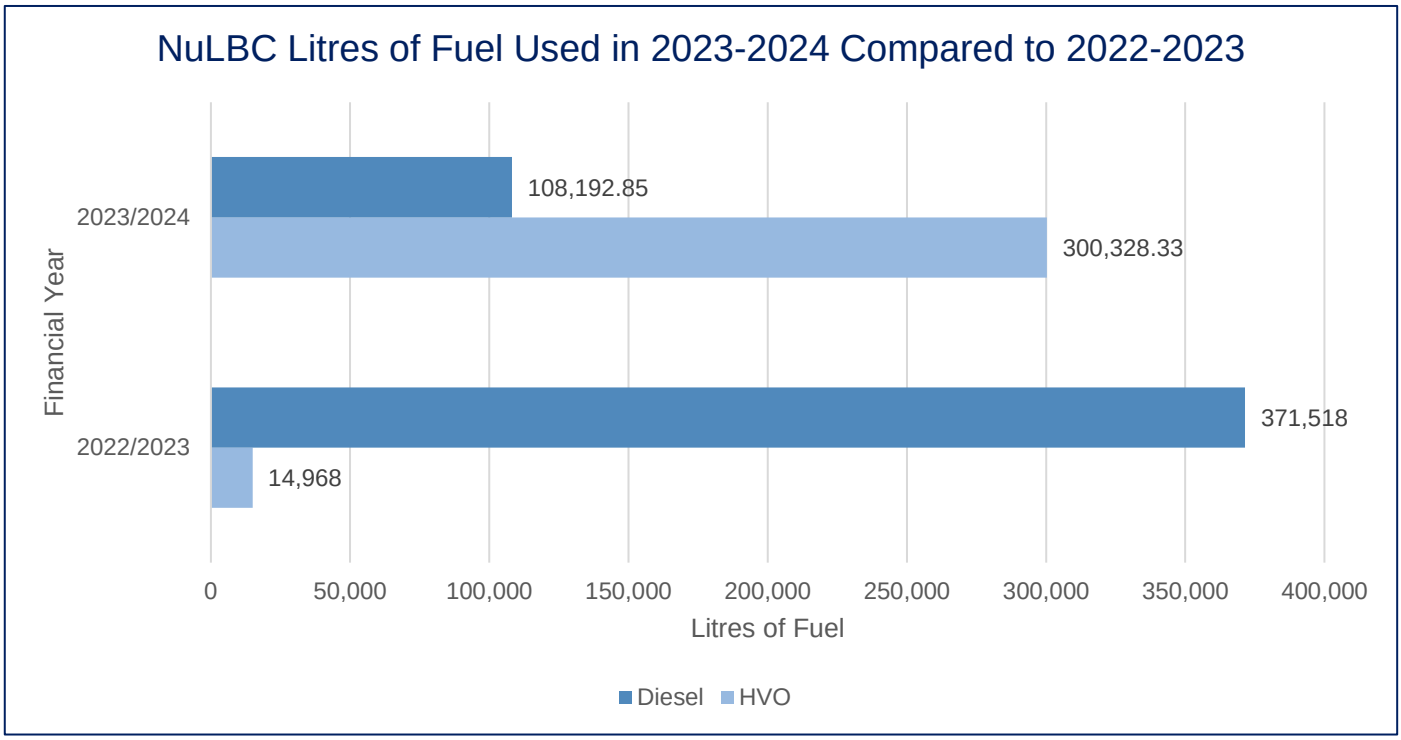


Figure 4 depicts the emissions from different sectors from this financial year compared to last financial year's emissions. It was found that even with the significant increase in HVO use by 285,360.33 litres that due to the low emission from the burning of HVO that scope 1 emissions only increased from around 1 tonne of CO2e to only around 11 tonnes of CO2e. This has seen a reduction in diesel emissions by 661.1 tonnes of CO2e. As stated, before the small decrease in usage and emissions of gas and electric is most likely due to small efficiencies being created in the Council's built estate.

Figure 4. NuLBC Emissions by Utility Sector 2023-2024 Compared to 2022-2023