

Report to	<b>North Wales Fire and Rescue Authority</b>
Date	<b>15 July 2024</b>
Lead Officer	<b>Justin Evans, Assistant Chief Fire Officer</b>
Contact Officer	<b>Tim Christensen, Environment and Climate Change Manager</b>
Subject	<b>Fleet Decarbonisation Plan</b>



## **PURPOSE OF REPORT**

- 1 This report sets out the details of our Fleet Decarbonisation Plan (the Plan), which provides detailed measures and timescales to mitigate the carbon emissions arising from our vehicle fleet for the period up to 2030.

## **RECOMMENDATION**

- 2 It is recommended that Members:
  - i) approve the Fleet Decarbonisation Plan.

## **EXECUTIVE SUMMARY**

- 3 Under Welsh law, we are required to mitigate our operational carbon footprint by 2030. This Plan addresses the emissions from our vehicle fleet, with a detailed plan to eliminate these emissions as required under our Environmental Strategy.
- 4 The most notable measure within the Plan is a proposal to substitute diesel with a sustainable biofuel, Hydrotreated Vegetable Oil (HVO). Following a successful trial, we are now deploying a pilot storage tank and dispenser at Deeside Fire Station, with a further eighteen identified sites to follow.
- 5 The plan also proposes changes to the procurement of cars and vans, as well as staff travel patterns.

## **BACKGROUND**

- 6 The Environment (Wales) Act 2016 requires Welsh Government to enact a series of carbon budgets, setting out a path for Wales as a nation to be carbon neutral by 2050. Under Carbon Budget 2, the Welsh public sector is required to have reached this goal by 2030.

- 7 To comply with this ambition, North Wales Fire and Rescue Authority (the Authority) adopted an Environmental Strategy on 17 July 2023 covering the period 2023-2030. Among other targets, this strategy mandated the development of a Fleet Decarbonisation Plan, setting out how we would mitigate the Scope 1 (direct) carbon emissions arising from our fleet. In the 2022/23 Financial Year, these amounted to 706 tonnes of CO<sub>2</sub>.
- 8 A Members Working Group was convened between April and July 2023 to provide Members with relevant information and to obtain strategic direction for the development of detailed decarbonisation plans. This group endorsed the fleet decarbonisation strategy set out in this report.

## **INFORMATION**

- 9 Given the longevity of a typical fire appliance, and the lack of a commercially viable low-carbon alternative, we propose transitioning all diesel vehicles operated by the Service to run on HVO. HVO is a drop-in substitute for diesel, which requires no mechanical adaptations to our vehicles and which can be mixed with diesel in any proportion, allowing for exceptional supply chain resilience.
- 10 We have set out criteria within the Plan to ensure that all HVO sourced will be derived from genuinely sustainable sources to minimise wider environmental impacts.
- 11 An operational trial of HVO was carried out between June and July 2023 by the Training and Fleet departments. No concerns were raised and HVO was found to be indistinguishable from diesel in performance.
- 12 19 stations have been chosen to host HVO tanks and dispensing equipment. These have been specified to store approximately three months supply for these stations and those surrounding them. Deeside has been chosen as the pilot location, with a tank planned for installation there in the coming weeks. The cost of this project and the remaining installations has been included within the 2024/25 capital budget.
- 13 Other measures within the Fleet Decarbonisation Plan include:
  - A. Compliance with a Welsh Government deadline to only procure (or commence an ordering process for the supply of a lease vehicle) only zero-emission (and where duty cycle does not allow for a zero-emission vehicle, an ultra-low emission) vehicles from the beginning of calendar year 2025. This may include the use of diesel engines where run entirely on HVO;

- B. Some residual plant or equipment may require the use of petrol beyond 2030, for example boat engines and Holmatro cutting equipment. Where possible, these will be substituted with zero-carbon alternatives within the period of the Environmental Strategy; and
- C. A range of measures to promote sustainable and active travel.

## IMPLICATIONS

Well-being Objectives	The proposed Plan aligns with the Authority's stated Well-being Objectives.
Budget	<ul style="list-style-type: none"> <li>• Capital costs of HVO storage tanks and dispensing equipment already included in 2024/25 budget;</li> <li>• Revenue cost of HVO is approximately 20% higher than diesel, although it can be fixed up to one year ahead; and</li> <li>• Increased capital cost of cars and vans as we transition away from internal combustion engines</li> </ul>
Legal	Risk of non-compliance with Well-being of Future Generations (Wales) Act 2015 and Environment (Wales) Act 2016.
Staffing	No changes to staffing levels are anticipated as a result of this Plan
Equalities/Human Rights/ Welsh Language	EDI Manager consulted through the development of this Plan, no issues raised.
Risks	<ul style="list-style-type: none"> <li>• Budgetary risks from future HVO price volatility; and</li> <li>• Planning permission required for installation of tanks, risk of refusal.</li> </ul>