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| Report to       | <b>North Wales Fire and Rescue Authority</b>                      |
| Date            | <b>20 January 2025</b>  |
| Lead Officer    | <b>Stuart Millington, Assistant Chief Fire Officer</b>            |
| Contact Officer | <b>Tim Christensen<br/>Environment and Climate Change Manager</b> |
| Subject         | <b>Residual Carbon Emissions Plan</b>                             |



## PURPOSE OF REPORT

- 1 This report sets out the details of North Wales Fire and Rescue Service's (the Service) Residual Carbon Emissions Plan (the Plan), which provides detailed measures and timescales to mitigate those carbon emissions which have not been mitigated by the Decarbonisation Plans in place for Fleet, Heating and Power for the period up to 2030.

## EXECUTIVE SUMMARY

- 2 Under Welsh law, the Service is required to mitigate its operational carbon footprint by 2030. The Plan addresses the emissions remaining beyond the mitigation measures already adopted for Scopes 1 and 2, with a detailed plan to eliminate these emissions as required under the Service's Environmental Strategy.
- 3 The Plan proposes detailed measures to offset all residual carbon emissions from Scopes 1, 2 and 3 which cannot be directly mitigated. These residual emissions make up just over half of our total carbon footprint.
- 4 The most cost-effective means to achieve this is to sequester atmospheric carbon dioxide in trees. However, there are notable environmental risks from such schemes as well as concerns over land use, and 'additionality' – whether or not a carbon reducing activity would otherwise have taken place.
- 5 For these reasons, and the estimated capital costs of establishing a sequestration scheme, we recommend that no offsetting activity is considered until all Scope 1 and 2 emissions have been fully mitigated.

## RECOMMENDATION

- 6 **It is recommended that Members:**
- i) **Approve the Residual Carbon Emissions Plan; and**
  - ii) **direct the Environment and Climate Change Manager to begin implementing the Plan only once all carbon emissions arising under Scopes 1 and 2 have been fully mitigated.**

## OBSERVATIONS FROM THE EXECUTIVE PANEL/AUDIT COMMITTEE

- 7 This paper has not previously been considered.

## BACKGROUND

- 8 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.
- 9 To comply with this ambition, the 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 Residual Carbon Emissions Plan, setting out how we would offset emissions from all three Scopes which could not be directly mitigated.
- 10 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 strategy set out in this report.

## INFORMATION

- 11 Carbon emissions can be dealt with in two ways, 'mitigation' – preventing emissions from occurring in the first place, and 'offsetting', removing an equivalent amount of atmospheric carbon dioxide (or other greenhouse gas) through an activity which would not otherwise have taken place. Mitigation is strongly preferred, which is why we have detailed plans in place to mitigate the carbon emitted by our buildings, fleet and power consumption.
- 12 To offset the remaining carbon emissions, one of the technical measures set out in the Plan would need to be enacted. The costs of many of these measures are likely to be prohibitive, which is why many other organisations have turned to tree planting (biogenic sequestration) to offset this part of their carbon footprints.

- 13 Initial discussions took place with the Woodland Trust in 2023, about the possibility of the Service funding an accredited tree planting scheme on their land, and taking ownership of the carbon sequestration rights. Due to the fact that trees do not reach peak absorption capacity (in kilograms of CO<sub>2</sub> per tree per year) for many years after planting, the number of trees required to be planted today to mitigate all our expected residual emissions by 2030 would cost in excess of one million pounds.
- 14 Although we are legally required to have a plan addressing our residual carbon emissions, Members are advised against enacting it until such time as all Scope 1 and 2 carbon emissions have been addressed, as to do so would represent a poor use of money and arguably create worse environmental outcomes.

## IMPLICATIONS

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| Well-being Objectives                   | The proposed Plan aligns with the Authority's stated Well-being Objectives.  |
| Budget                                  | The capital cost to fully mitigate our residual carbon emissions is likely to exceed £1m. Therefore, a direction from the Authority is requested for the Plan not to be enacted until all Scope 1 and 2 emissions have been mitigated in full. |
| 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                                   | Poorly-chosen offsetting measures can have detrimental environmental impacts, as well as being poor value for money - exposing the FRA and the Service to audit issues and reputational damage.  |