

Awdurdod Tân ac Achub Gogledd Cymru
North Wales Fire and Rescue Authority

Environmental Strategy 2023–2030

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Gwasanaeth Tân ac Achub
Fire and Rescue Service

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1.0 INTRODUCTION

- 1.0.1 As a Fire and Rescue Service, we recognise the importance of protecting and preserving our natural environment for future generations. We understand that our actions have a direct impact on the environment and we are committed to reducing our environmental footprint and promoting sustainability in all areas of our operations.
- 1.0.2 This Environmental Strategy outlines our commitment to reducing our environmental impact. This includes implementing sustainable practices in our daily operations, reducing our carbon emissions, and promoting environmental awareness amongst our staff and members of the community.
- 1.0.3 We are dedicated to being a responsible and sustainable organisation, and we pledge to continuously review and improve our environmental performance. This strategy has been prepared in order to provide a clear path for the Service to meet its environmental and sustainability obligations for the period to calendar year 2030, setting out clear policies and benchmarks against which progress may be measured.
- 1.0.4 North Wales Fire and Rescue Service provide fire protection and prevention services to around 687,000 people over a geographical area of 2,400 square miles, as well as hundreds of thousands of tourists and visitors who come to North Wales every year. There are around 328,742 domestic properties and 33,820 non-domestic properties under NWFRS' protection and the Service employs almost 1,000 staff in operational and support roles.
- 1.0.5 The Service covers three geographical areas, Gwynedd and Anglesey (West), Conwy and Denbighshire (Central) and Wrexham and Flintshire (East), with an estate of 47 buildings, ranging from whole-time, day-crewed, retained and community fire stations, administration offices, a garage workshop to sharing premises with North Wales Police and the Welsh Ambulance Service Trust. NWFRS attend around 1,879 fires, 958 Special Service Incidents, and around 2,517 false alarms of various kinds every year.

2.0 POLICY CONTEXT

2.1 Legislation

- 2.1.1 The Well-being of Future Generations (Wales) Act 2015 requires public bodies to consider the long-term impacts of decisions in a number of ways. The relevant duties to the preparation of an environmental strategy for the Service fall under the heading 'A Resilient Wales':
- 1. Biodiversity and Soil** Maintain and enhance the natural environment through managing land appropriately to create healthy functioning ecosystems
 - 2. Natural Green Space** Support social resilience and community well-being
 - 3. Knowledge of Nature** Increase awareness of the importance of a biodiverse natural environment with healthy functioning ecosystems
 - 4. Water and Air Quality** Support ecological resilience, making the environment healthier for wildlife and people
- 2.1.2 The Environment (Wales) Act 2016 sets out an ambition for the Welsh Government to reduce emissions of greenhouse gases in Wales to net zero by the year 2050.
- 2.1.3 In accordance with this duty, the Welsh Government has prepared a series of interim carbon budgets, including under Carbon Budget 3 (CB3) an ambition for the Welsh public sector to be net zero carbon by 2030. This is binding on the Welsh Government as a whole, and not specific public bodies.
- 2.1.4 Section 6 of the Environment (Wales) Act 2016 places a duty upon the Service to report on biodiversity and resilience of ecosystems within its estate every three years from the end of 2019.
- 2.1.5 The Service is a signatory to the Emergency Services Environment and Sustainability Group (ESESG) Sustainability Charter, which sets out the following relevant commitments:
1. Work towards net zero carbon emissions through improving the energy efficiency of our estate and sustainable business and personal travel.
 2. Improve resource efficiency and adopt circular economy approaches to reducing waste and save money.
 3. Restore and enhance local biodiversity through considered management of our estates.
 4. Adapt to inevitable climate change through proactively managing our ability to respond to extreme weather events and changes to service demand.
 5. Take action to avoid or mitigate pollution of water courses.
 6. Minimise our reliance on fossil fuels by actively seeking to generate renewable energy at our sites, and through the adoption of greener technologies and fuels for our fleet.

2.2 National Targets

- 2.2.1 As a Public Sector Organisation, it is important to be aware of and consider both local and national environmental improvement targets.
- 2.2.2 Environmental targets have been set by Welsh Government within key strategies including 'One Wales : One Planet' and 'Towards Net Zero Waste'. These outline targets for the reduction in greenhouse gases and waste to landfill which puts a requirement on both Public and Private sector organisations to measure and reduce these emissions year-on-year.
- 2.2.3 The Welsh Government aspire to be the first Refill Nation with the aim of reducing single-use plastic bottles.
- 2.2.4 In 2018, DEFRA published its 25-year Environmental Plan which outlines targets in relation to clean air, water, biodiversity, sustainable resource consumption, minimising waste, biosecurity and enhancing the natural environment.

3.0 MEASURING PROGRESS

3.1 Overview

- 3.1.1 Measuring progress is at the core of our environmental strategy. It allows the Service to track progress towards our specified targets and identify areas where we can improve.
- 3.1.2 In Section 3.2.1 (below) we outline how we will develop the key indicators that the Service will use to measure its progress in reducing its environmental impact. These indicators will focus on areas such as energy consumption, waste reduction and carbon emissions, and will be used to set targets and track progress over time.
- 3.1.3 By regularly monitoring and reporting on these indicators, the Service will be able to ensure that it is on course to environmental objectives and make any necessary adjustments.

3.2 Targets

- 3.2.1 We will measure our progress by:
- Establishing a carbon emissions baseline, against which we can measure progress in reducing our carbon footprint
 - Following the Targets set out in this Strategy – with progress being reported in departmental / corporate improvement plans and reviewed regularly by the Environment and Sustainability Working Group
 - Adopting an Environmental Management System to a recognised standard (such as ISO:14001 or Green Dragon)
 - Preparing a monthly Environmental KPI dashboard
 - Submitting a quarterly environmental update to the Land and Property Committee
 - Submitting annual carbon emissions audits to Welsh Government
 - Preparing a Biodiversity Report and Action Plan every three years

4.0 SUSTAINABILITY IN THE COMMUNITY

4.1 Overview

- 4.1.1 As a public body, we endeavour to have a positive presence in the community we serve and give opportunity for the involvement of the public where possible. Throughout the year, fire stations hold their own Open Days for their local community, hold school visits and open their doors to community project groups.
- 4.1.2 The Service carries out extensive work with schools, businesses and local communities to promote fire safety and prevention. The potential for serious damage to our environment, often in sensitive areas, by the impact of countryside fires is a serious concern, the impact of deliberate fire setting undermines social and economic confidence and draws on resources which could be utilised more effectively elsewhere.
- 4.1.3 Reducing arson helps to protect and maintain the quality and on-going viability of the environment and places where we live, work, learn and spend our leisure time.
- 4.1.4 It is important to educate and raise awareness about the impact of arson on the environment. We should encourage sustainability and environmental education when visiting schools in an attempt to highlight the amount of deliberate fires in the community.

4.2 Targets

- 4.2.1 Over the period of this strategy we will:
- Promote community safety to prevent fires and other incidents from occurring
 - Deliver the Wales Arson Reduction Strategy objectives
 - Deliver the objectives set out in our three-yearly Biodiversity Report and Action Plans
 - Seek and develop inter-agency partnerships in accordance with the Future Generation Well-being Goals and the Environment (Wales) Act 2016
 - Engage with schools and colleges within the Service area to raise awareness of the dangers of fire



5.0 SUSTAINABLE PROCUREMENT

5.1 Overview

- 5.1.1 Sustainable procurement is the process of acquiring goods and services that meet the needs of the present without compromising the ability of future generations to meet their own needs. It is a key component in social responsibility and environmental stewardship.
- 5.1.2 As a responsible public service, we recognise the importance of sustainable procurement and are committed to implementing a comprehensive policy that promotes environmental, social and economic sustainability. We aim to minimise the environmental impact of our operations, support the local communities we serve, and promote fair labour practices.
- 5.1.3 By collaborating with other Fire and Rescue Services and public sector organisations within Wales we aim to improve our performance in areas of sustainable procurement, with the aim of implementing best practice standards for the Welsh public sector.
- 5.1.4 We endeavour to collaborate and benchmark against other emergency services and public sector organisations in order to measure our performance and ensure continuous improvement. All procurement activity over agreed levels is undertaken by North Wales Police on behalf of the Service.
- 5.1.5 As a service, we ensure supplies, services and works are not only procured in accordance with public sector regulations, but also in a way that allows Small to Medium Enterprises (SMEs) to develop. This is a key element of our Social Value obligation under the Well-being of Future Generations Act (2015). As a public body, we seek to make our procurement process more sustainable and therefore commit to the Value Wales Public Sector Sustainable Procurement Programme.

5.2 Targets

- 5.2.1 Over the period of this strategy we will:
- Work with WRAP Cymru and/or similar schemes, to gain expert insight into ways in which the sustainability of our procurement process can be achieved.
 - Prepare and implement a Social Value and Sustainable Procurement Strategy reflecting best practice within Wales. This will ensure procurement frameworks and contracts measure social value and sustainability during the tendering process, and will outline our approach to sourcing goods and services which are environmentally friendly, socially responsible and economically viable.
 - Explore options for local procurement to be delivered via national/regional collaboration both within the fire and rescue sector and across other blue light agencies.
 - Continue to work with Fire Aid to ensure that equipment is recycled where possible.
 - Develop a procurement awareness training package, embedding core principles of social value and sustainability at all levels of the Service.



6.0 ENERGY CONSUMPTION

6.1 Overview

- 6.1.1 As a Fire and Rescue Service we recognise the importance of reducing our energy consumption across our estate. We are continually improving our system for monitoring consumption and are installing energy saving initiatives where possible to reduce our carbon footprint.
- 6.1.2 The heating of our buildings is undertaken using a variety of hydrocarbon fuel sources, which are inherently unsustainable and which we will seek to eliminate.
- 6.1.3 We continually seek the most efficient and green energy tariffs and currently have a small number of sites which have solar photovoltaic (PV) panels installed, with the intention to increase this over the plan period and increase the amount of renewable energy generated across our estate wherever possible.

6.2 Targets

- 6.2.1 Over the period of this strategy we will:
- Work with Re:fit Cymru and/or similar schemes, to enable energy efficiency retrofits to our estate in a fiscally neutral manner where possible.
 - Engage with the Welsh Government Energy Service regularly to remain informed on development in policy, technology and potential funding opportunities.
 - Continuously monitor the energy consumption and comparative energy efficiency of our buildings to identify any areas of concern.
 - Prepare and implement a Heating Decarbonisation Plan, setting out the manner in which we propose to address our Scope 1 emissions arising from heating our estate within the period of this strategy.
 - Prepare and implement a Power Decarbonisation Plan, setting out the manner in which we propose to minimise the carbon emissions arising from our electricity consumption.
 - Engage proactively with our staff and other building users to educate and encourage efficient energy use and other environmentally-positive behaviours.
 - Consider wider efficiency in use of public resources by making our estate available for community purposes where possible



7.0 WATER CONSUMPTION

7.1 Overview

- 7.1.1 As an organisation that relies heavily on water for a number of our activities, it is essential to use it in a sustainable way. Not only water consumption at incidents but also water that is used throughout our estate.
- 7.1.2 Over the years, we have installed a number of water saving devices in our buildings but more can be done in terms of rainwater harvesting and grey water reuse.
- 7.1.3 It is important to raise awareness to all employees to understand the true cost and scale of our water usage by the service to ensure water is used sustainably.

7.2 Targets

- 7.2.1 Over the period of this strategy we will:
- Quantify corporate water consumption throughout our estate
 - Consider rainwater harvesting, grey water use and similar water conservation measures whenever refurbishment or rebuilding works are undertaken
 - Educate and encourage staff and other users of our premises on water conservation and efficiency
 - Engage with Welsh Water to make use of treated wastewater for firefighting purposes where possible

8.0 OPERATIONAL ACTIVITIES

8.1 Overview

- 8.1.1 The Service regularly assists the public in dealing with the outcomes that arise from climate change such as flooding and wildfires.
- 8.1.2 We are committed to ensuring that we operate our Service in an effective manner that give appropriate cognisance to the effect of our activities, whether that is due to our usage of natural resources, our use of firefighting media such as foam, or whether it is our efforts to minimise the impact of the waste products e.g. water run-off or smoke into the environment.
- 8.1.3 As a Service, we continually review our operational procedures and equipment and fully embed the principle of environmental impact assessment into all our activities in order to fully consider the wider environment.

8.2 Targets

- 8.2.1 Over the period of this strategy we will:
- Ensure that procurement processes for the acquisition of new operational equipment includes consideration of all environmental factors, including 'total end of life' disposal impacts / costs
 - Work closely with partners including Natural Resources Wales to ensure best practice and minimise our impact on the environment and local biodiversity
 - Engage with local authority environmental staff and local nature partnerships to explore adding biodiversity and environmental sensitivity layers on our Mobile Data Terminal (MDT) systems



9.0 WASTE AND RECYCLING

9.1 Overview

- 9.1.1 Waste is a considerable issue for an organisation which covers a large geographic area. Reducing the amount of refuse we produce in the first instance is one of the best chances we have to avoid sending waste to landfill. As a public body, we need to be accountable for the amount of waste we produce and reducing at source will be one of our main objectives going forward.
- 9.1.2 In 2010, Welsh Government produced a Waste Strategy for Wales to give targets for waste minimisation for different sectors. 'Towards Zero Waste' provides the details to inform organisations how to be a zero-waste nation by 2050. As outlined within this strategy, we aim to maximise recycling, minimise the amount of residual waste produced and send as little waste as possible to landfill.
- 9.1.3 As a Service, we work towards annual reduction targets in relation to our waste and regularly review our waste contracts to ensure we have the best fit possible to help us with the targets. Due to the geography of the Service area, this can provide a number of logistical challenges on a day to day basis.
- 9.1.4 As a Service which produces its fair share of waste, we must continue to take measures, as far as is reasonably practicable, to prevent waste and use recyclable / biodegradable products where available. By considering and applying the waste hierarchy, it gives priority to preventing the creation of waste in the first instance. It is also important to educate our staff to be aware that waste minimisation at source is much more sustainable than the recycling of waste materials. This can avoid or reduce the production of waste water in the first place.

9.2 Targets

- 9.2.1 Over the period of this strategy we will:
- Prepare and implement a Waste Reduction Strategy, which will encourage the re-use of materials, reduce the volume of waste to landfill, promote recycling and sustainable purchasing, and reduce the use of single-use plastics.





10.0 FLEET

10.1 Overview

- 10.1.1 Our fleet plays a crucial role in responding to emergencies and keeping our communities safe. However, it is also important that we consider the environmental impact of our fleet operations. We are committed to reducing the emissions and environmental footprint of our fleet, as well as to promoting sustainable transportation within our Service. We aim to lead by example and demonstrate that it is possible to balance safety and environmental responsibility in our operations.
- 10.1.2 There is a large transport fleet including 54 fire appliances, one incident command unit and 31 'special' vehicles – such as all-terrain vehicles and foam carriers; there are also three aerial ladder platforms, portable power tools, lifting and winching and other specialist equipment to enable us to respond to many different types of incidents.
- 10.1.3 Our fleet can be described within three distinct categories. The red fleet consists of operational and response vehicles. The white fleet is entirely Service-provided, and the grey fleet consists of employee-owned vehicles used on official business.
- 10.1.4 The principal fuel used within the fleet is diesel, however a small number of vehicles and portable appliances are fuelled by unleaded petrol. The Scope 1 carbon emissions arising from our fleet operations in FY 2021/22 were nearly 614 tonnes of CO2 equivalent.
- 10.1.5 The typical lifecycle of an operational fire appliance is in excess of fifteen years, with a rolling programme of replacement.

10.2 Targets

- 10.2.1 Over the period of this strategy we will:
- Prepare and implement a Fleet Decarbonisation Plan, setting out how we propose to eliminate our Scope 1 emissions arising from transportation
 - Continue to provide a salary sacrifice employee car leasing scheme where viable to do so, to incentivise switching to Electric Vehicles
 - Continue to participate in approved Cycle to Work schemes where viable to do so
 - Seek opportunities to expand EV charging capacity throughout our estate
 - Promote car pooling and sustainable transportation to staff and partners
 - Work in partnership with other public bodies when deploying any alternative fuels to promote best value, operational efficiency and supply resilience

11.0 BIODIVERSITY

11.1 Overview

- 11.1.1 It is widely recognised that biodiversity is under pressure from a range of influences and that habitats and species continue to decline, therefore, it is vital that we maintain and enhance our biodiversity to ensure it remains healthy, resilient and capable of adapting to change. The effect of climate change on biodiversity over the coming decades is likely to be significant, including a further loss of habitat and a potential increase in invasive species.
- 11.1.2 Much of our Service area is made up of rural land, with a significant area lying within the Snowdonia National Park. These areas are home to a great deal of wildlife, supporting a rich variety of flora and fauna which includes many species native to Britain and some unique to Wales.
- 11.1.3 We want to encourage and enhance biodiversity on our sites and surrounding areas where possible and protect the local environment in which we operate.
- 11.1.4 We aim to help protect and conserve the natural environment within our Service area by working closely with Natural Resources Wales, local environmental groups and specialists who can advise on the best approach when it comes to incidents involving these areas.
- 11.1.5 Section 6 of the Environment (Wales) Act 2016 ensures that all public bodies work towards conserving these important environments. In addition to legislation, the Welsh Government has produced a Nature Recovery Plan, which consists of the Strategy for Nature and the commitment to biodiversity in Wales, the issues needed to be addressed and the objectives for action; an Action Plan to meet the objectives to reverse the decline of biodiversity; and the governance structure, roles and responsibilities of everybody involved in the delivery of action for biodiversity in Wales.

11.2 Targets

- 11.2.1 Over the period of this strategy we will:
- Prepare a Biodiversity Report and Action Plan every three years, setting out work undertaken and plans for the coming period in relation to protection of ecosystems and enhancement of biodiversity.

