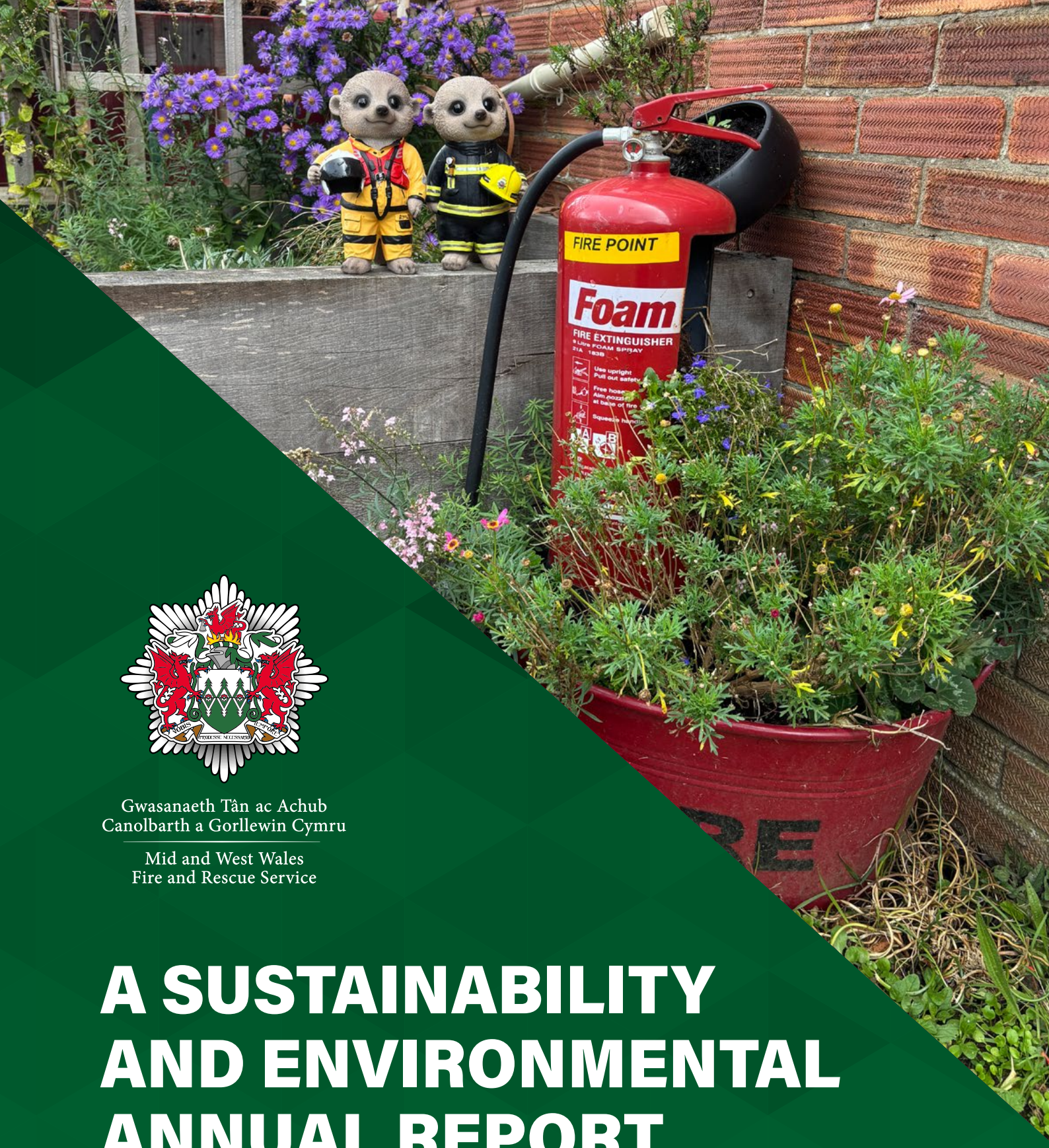


Gwasanaeth Tân ac Achub
Canolbarth a Gorllewin Cymru

Mid and West Wales
Fire and Rescue Service

A SUSTAINABILITY AND ENVIRONMENTAL ANNUAL REPORT 2024 / 2025

Mae'r ddogfen hon ar gael yn Gymraeg

www.mawwfrs.gov.uk

Chief Fire Officer Statement

Mid and West Wales Fire and Rescue Service continually endeavour to have a positive impact on the landscape in which it serves and consider short, medium and long term actions to tackle the climate and nature issues.

The Service are committed to operate in a way where Fire Service activities have no detrimental effect on the environment and issues relating to climate change, nature recovery, resource depletion and pollution are of utmost importance.

Mid and West Wales Fire and Rescue Service have concentrated its corporate commitments to net zero in line with the Welsh Government targets for public sector organisations. Recognising the tight deadline to achieve this, the Service have developed a Carbon Reduction Road Map to work alongside the environmental objectives in the Service Community Risk Management Plan 2040 to continually improve on commitments and reduction targets year on year.

I believe Mid and West Wales Fire and Rescue Service are a leading Welsh Fire and Rescue Service in environmental issues, and I would like to thank all of the Service employees and stakeholders for their continued support and valued contribution to achieve our environmental sustainability goals.

Craig Flannery

Chief Fire Officer

Section 1
Introduction

The Environmental Annual Report outlines the performance and achievements which Mid and West Wales Fire and Rescue Service (MAWWFRS) have accomplished as well as progress towards environmental objectives from the 2024/25 financial year in areas such as fleet, estate, biodiversity, waste and scope 1,2 and 3 emissions. The Report is published in line with Green Dragon Environmental Management Standard (2016) requirements.

MAWWFRS covers almost two-thirds of Wales, covering 4,500 square miles of predominantly rural land. As such, the Service recognises how important the direct and indirect impacts that Service activities have on the environment, with cognisance given to the carbon emissions from running a large fleet and estate and the direct impact on nature and climate. There are some key challenges facing the Fire and Rescue Service and all Welsh public sector organisations while striving to achieve the objectives outlined by the Welsh Government Road Map on the path to reaching net zero by 2030. These challenges include funding, resource constraints, infrastructure and estate complexity and behavioural change.

The Service has outlined its commitments to reducing emissions in the Community Risk Management Plan 2040. Within the eight commitments in the Plan, Objective 7 highlights the Service's environmental ambition to work in an 'environmentally friendly and sustainable way.' The full Community Risk Management Plan (CRMP) can be found here.

The Service Carbon Reduction Road Map was published in Summer 2024 which outlined what the Service endeavours to do to reach the Welsh Government Net Zero target by 2030. The main areas within the plan to work towards decarbonising the Service are around Transport and sustainable travel, building management and grounds maintenance, procurement process and supply chain, waste and recycling and Operational process, training and behaviour change.

Sustainability is about improving the quality of life in a way that does not cause irreversible damage to the environment or prevent future generations from being able to benefit from the good things we have become accustomed to.

Corporate Commitments and Environmental Sustainability in the Service

The environment has been one of the Service's Corporate Commitments for the past number of years and continues to be regarded as an important area to work towards improving, in all aspects of the Service's activities. Adaption and mitigation, in relation to Climate Change, needs to be considered in all Service activities and plans and work towards this is captured within the objectives in the Service's

CRMP. Alongside the CRMP, there are also a number of Plans which concentrate on specific areas, such as the Nature Recovery Action Plan and the Carbon Reduction Road Map.

The Service is aware that its operations influence the global and local environment and is committed to minimising the adverse impacts from activities and transition away from a reliance on fossil fuel.

The Well-being of Future Generation (Wales) Act 2015

The Service has aligned itself with the Well-Being of Future Generations (Wales) Act 2015, which places a legal responsibility on statutory organisations to actively consider the effect of their activities and how they could impact on future residents of the planet. The Service reports annually on its Strategic aims and commitments within the Service Improvement and Wellbeing Objectives Annual Assessment. This Report identifies how the Fire Service has contributed to the Well-being goals for the previous year as set out within the Well-being of Future Generations (Wales) Act 2015.

Environment (Wales) Act 2016 and Section 6 Duty Report

Under the Section 6 Duty of the Environment (Wales) Act 2016, public sector organisations have a duty to maintain and enhance biodiversity and promote the resilience of ecosystems.

As a requirement of the Duty, the Service published its first Section 6 Duty Report in 2020 to align with the financial year reporting. The Report outlined what the Service can do to protect and enhance biodiversity on Service land and through Fire and Rescue Service activities. In Spring 2023, a Monitoring Report was published to highlight Service achievements towards the objectives within the Action Plan as well as the Nature Recovery Action Plan Wales objectives.

The Service's second 3-year report, Nature Recovery Action Plan 2023-2026 was published alongside the monitoring Report in Spring 2023 which highlights Service commitments to nature recovery and the climate emergency. The Service's second monitoring Report will be published in April 2026.

Welsh Government Net Zero targets

In 2021, Welsh Government set targets in Wales for a 63% carbon reduction by 2030, an 89% reduction by 2040, and a 100% reduction by 2050. In addition, Welsh Government set a more challenging collective ambition for the Welsh public sector to achieve net zero carbon by 2030 (the 2030 collective ambition). This encompassed a detailed net zero carbon emissions reporting approach for all Welsh public sector organisations to complete, to provide a baseline to work with moving forward. These include emissions resulting from building, waste, fleet and supply chain.

This reporting template will be used annually to monitor emissions and will be used to align data gathering for the Service's Annual Environmental Report.

The term net zero carbon means achieving a balance between the carbon emitted into the atmosphere and the carbon removed from it. Net zero is used interchangeable with the term Carbon Neutral.

Green Dragon 2016 Environmental Management Standard

To help achieve its environmental commitments, the Service work towards the Green Dragon Environmental Standard (2016). The Standard aids and compliments decision making and ensures continual environmental improvements year on year. The Standard ensures the Service incorporate and consider interested parties in the context of the organisation in terms of internal, external and social pressures.

The Green Dragon Environmental Management Standard is a voluntary obligation which awards accreditation to Organisations that are taking action to understand, monitor and control their impacts on the environment. In February 2025, the Service successfully maintained Level 5 accreditation through a 3-day external audit which reviewed compliance of legislation, environmental procedures and documents, as well as site visits to Fire Stations and offices.

The successful accreditation shows that the Service is committed to managing the impact its activities have on the environment and shows all staff are aware and actively work towards reducing this impact. The Service understands and works within the environmental responsibilities outlined and is committed to continually improving its footprint on the environment.

It provides externally verified assurance to stakeholders and interested parties that Fire and Rescue Service environmental practices, process and procedures are effective and compliant with all relevant legislation. Further information on the Green Dragon accreditation can be found on their website.

Environmental Management Review

A review of the Service Environmental Management System (EMS) is undertaken annually to ensure its continuing suitability, adequacy and effectiveness. Performance against objectives and targets or any problems associated with the EMS are discussed during the review, as well as the following issues:

- Actions outstanding from previous meetings.
- A review of performance.
- Non-conformity reports and Audit finding reports.
- A review of the achievements against current objectives and targets.

- Setting of objectives and targets.
- A review of the Environmental Policy, procedures and guidance.
- A review of environmental training needs.
- A review of the effectiveness of the environmental projects undertaken by the Service.

The management review addresses the possible need for changes to the environmental documents and ensures continued commitment and progress towards environmental improvement.

The waste hierarchy and sustainable procurement

It is important to the Service to re-use and recycle furniture and materials where possible and avoid sending waste to landfill. The Service uses an external contractor to collect old furniture, who repair or upcycle if needed and re-distribute these to schools and community hubs. If the furniture cannot be re-used, all parts are recycled. Any project that is undertaken within the Service will recover and repurpose materials as standard.

The Service has a legal obligation to consider the waste hierarchy when handling waste. This hierarchy sets out, in order of priority, the waste management options to consider. It ranks the waste management options according to what is best for the environment and places emphasis on waste prevention before reuse and recycling and only after these options are considered should waste be disposed through landfill.

It is important for the Service to ensure that the whole life implications of each purchased item are considered (from cradle to grave). Sustainable procurement and environmental considerations are taken into account when specifying and purchasing all goods and services. Scope 3 emissions are captured, in part, within this Report as well as within the annual net zero reporting requirements to Welsh Government.

Aspects and Impacts

The Service have a number of environmental aspects and impacts related to everyday operations. To monitor these, a register was developed from considerations of the Service's activities and operations with the most significant impacts highlighted and addressed.

Environmental aspects are the elements of Fire and Rescue Service activities that could cause an impact on the environment.

The high-risk aspects include.

- Water pollution and site drainage.
- Energy consumption and CO2 production.
- Fleet vehicles and business travel.
- Potential pollution during Firefighting.

The criteria for the significant environmental aspects and impacts are determined by the following:

- Assessing the scale of the aspect and impact.
- Determining if the aspects are controlled by any legislation.
- Determining if the aspect poses a threat to corporate reputation.
- Determining if the aspect effect the carbon emissions of the organisation.

The Register is reviewed annually to ensure all aspects are still relevant and to include any new significant aspects and impacts if needed. The document is also included within the remit of the annual external Green Dragon verification audit to ensure compliance.

Section 2
Performance, Projects and Monitoring

Environmental Performance

As a Service, there is an aim to continually improve environmental performance and impact year on year in line with Service commitments and the Environmental Management System obligations. Monitoring is undertaken in areas of carbon emissions from Service fleet, estate, renewables, waste and nature recovery.

As a Service we work closely with Natural Resources Wales (NRW) to enhance collaboration and encourage ongoing joint exercises and information sharing to strengthen environmental response capabilities.

To improve commuting emissions and reduce unnecessary travel, the Service have established a flexible working policy and encourage the use of hybrid meetings and agile working. Regular monitoring of documents and activities help to scrutinise progress in performance and towards environmental targets on a monthly basis which highlights anomalies for consideration.

Estate and Scope emissions

The estate within MAWWFRS is made up of Fire Stations, workshops, offices and training locations. The generation and consumption of energy to run these buildings has a significant impact on the environment through the use of resources and carbon emissions. The electricity from the Service provider is produced from a range of renewable sources including biomass, biodegradable, landfill gas, hydro, offshore wind, photovoltaic and wind sources.

The Service gas and electricity consumption from the estate is monitored monthly through Automatic Meter Readers (AMRs) at all sites. The total figure shown below in Table 1 includes the total electricity used, including when charging the fleet of electric vehicles on Service premises.

The kW for charging EVs is broken out in Table 7, within the Service Fleet Section of this Report. As well as gas and electricity, the Service has 1 remaining Station using kerosene heating oil, a location with 2 tanks using HVO to heat buildings and Solar PV at a small number of locations. These figures are captured in Table 1.

Table 1 - Utility Consumption

	2020/21 (KWH)	2021/22 (KWH)	2022/23 (KWH)	2023/24 (KWH)	2024/25 (KWH)
Electricity	2,819,053	2,159,216	2,121,824	2,077,102	2,129,625
Gas	374,488	324,478	333,358	343,706	299,278
Oil (Litres)	67,656	35,563	22,742	13,217	3,001
HVO (Litres)	Not available	Not available	Not available	0	16,825
Solar PV (kW)	20,419	28,953	25,665	Not available	Not available

The DEFRA conversion factors in Table 2 below are used to calculate Service emissions into CO^2e figures.

Table 2 - DEFRA Conversion Factors

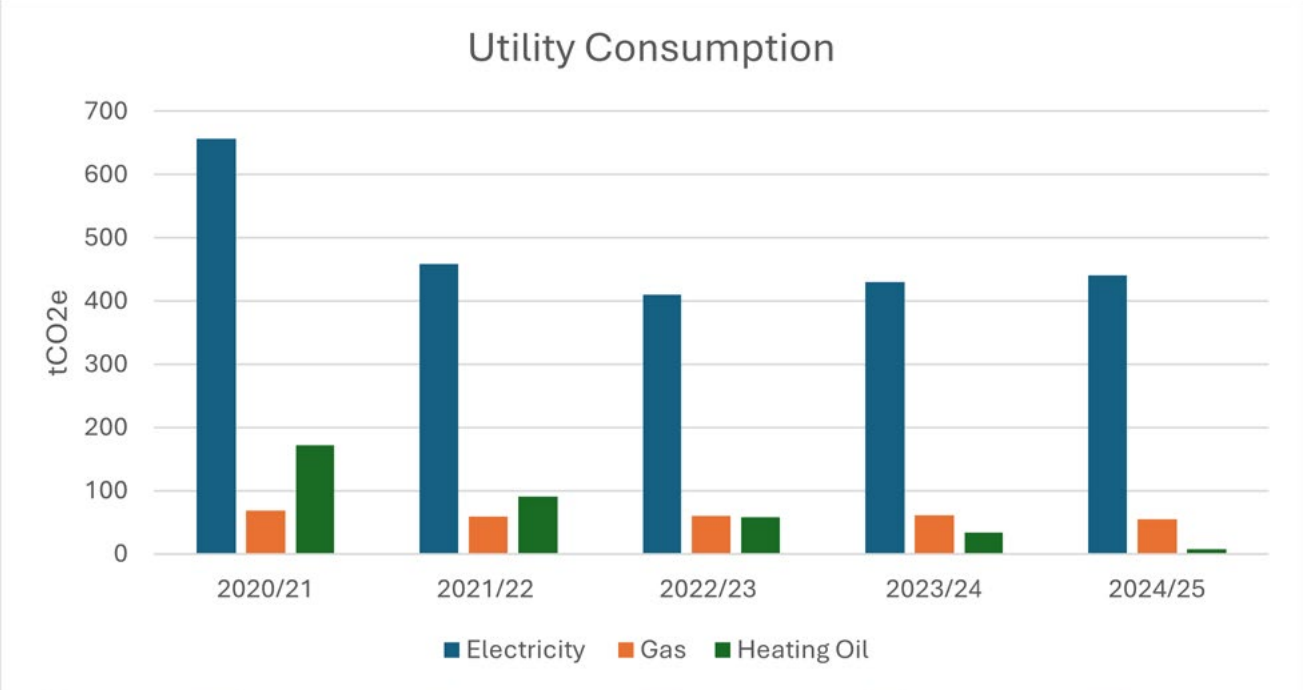
	2020/21	2021/22	2022/23	2023/24	2024/25
Electricity	0.23314	0.21233	0.19338	0.207074	0.20705
Gas	0.18387	0.18316	0.18	0.18	0.18290
Oil	2.54039	2.54014	2.54	2.54	2.54015

These emission figures can then be used to compare like for like on all fuel and report in a standardized way. The conversion factors from DEFRA change each year which can result in CO^2e figures showing an increase, even though the actual consumption may have decreased as indicated below in Table 3.

Table 3 - Tonnes CO^2e

	2020/21	2021/22	2022/23	2023/24	2024/25
Electricity	657.2	458.4	410.3	430.1	440.9
Gas	68.8	59.4	60.0	61.8	54.7
Oil	171.8	90.3	57.7	33.5	7.6

*Shown in tCO^2e



Oil consumption has significantly reduced due to the decommission of a number of the heating oil tanks on Fire Station's. Only 3 heating oil tanks remain, at 2 Service locations.

As part of the Corporate Risk Station Audits, Energy monitoring is included as standard to work towards reducing consumption from Station level but also to highlight simple yet effective measures to be more efficient and reduce utilities. This could be something as simple as removing furniture and boxes from in front of radiators to closing doors when the heating is on. Rasing awareness to staff is key to encouraging a change to attitudes to energy conservation and management.

One way the Service is doing this is through circulating energy consumption posters Service wide to raise awareness of consumption and emissions from each Division.

To report an organisations emissions through scope 1, 2 and 3 helps to streamline figures to a more manageable level. Once figures have been captured, areas can be identified to where the Service can control impact (Scope 1 and 2) and areas that can be influenced (Scope 3).

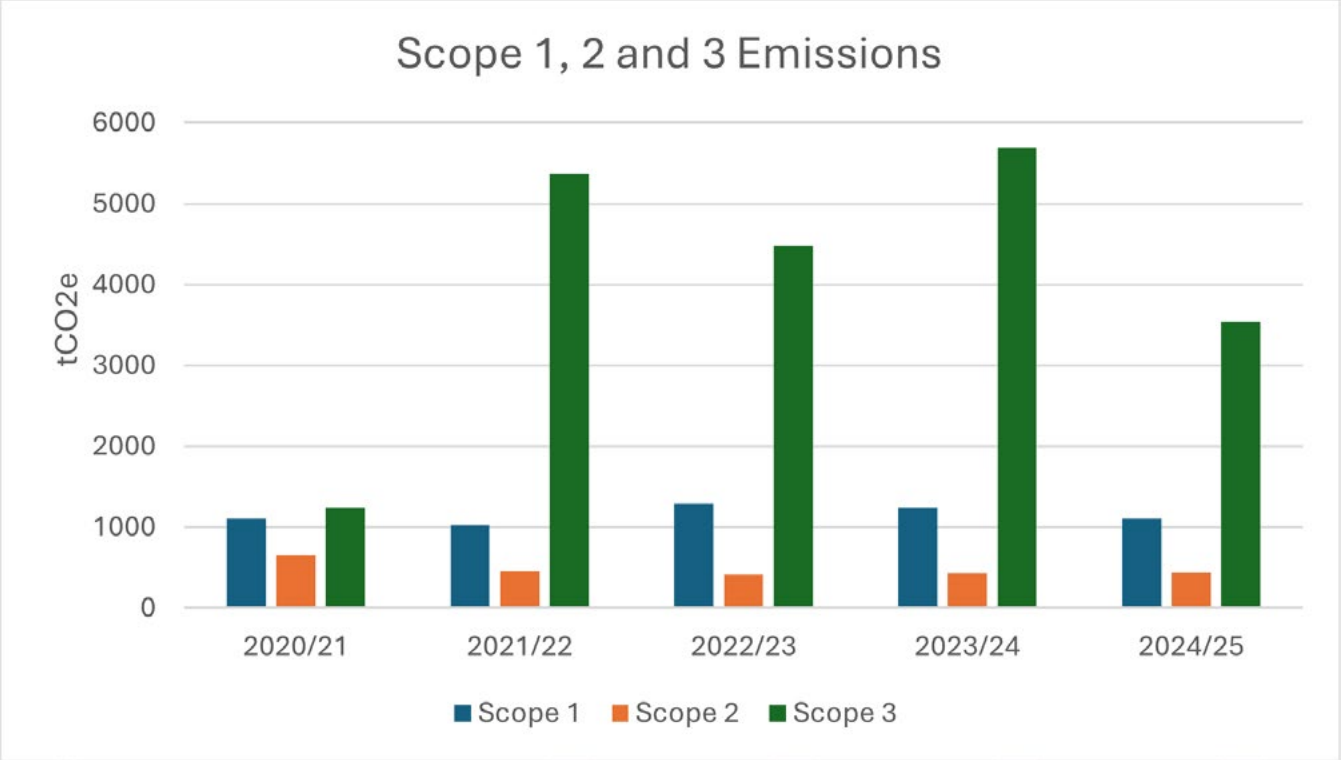
DIRECT EMISSIONS	ENERGY INDIRECT EMISSIONS	OTHER INDIRECT EMISSIONS
SCOPE 1	**SCOPE 2**	**SCOPE 3**
Emissions from activities owned or controlled by your organisation. Including emissions from combustion in boilers, furnaces and vehicles.	Emissions released which are associated with consumption of purchased electricity, heat, steam and cooling. As a consequence of energy use, but occur at sources you do not own or control.	Emissions from actions that occur at sources you do not own or control and are not captured within Scope 2emissions. Such as business travel, waste disposal, materials or fuels your organisation purchase.

Table 4 - Scope 1, 2 & 3

	2020/21	2021/22	2022/23	2023/24	2024/25
Scope 1	1107.8	1027.2	1,298.20	1,240.30	1,107.9
Scope 2	657.2	458.4	410.3	430.1	440.9
Scope 3	1,239.40	5,369.80	4,476.80	5,694.60	3,541.57

*Shown in tCO^2e

Scope 3 emissions usually equate to approximately 80% of any organisation's emissions. As a Service, these have only been monitored for the last couple of years. The figure is expected to increase, due to more advanced, thorough and accurate monitoring techniques being utilised.

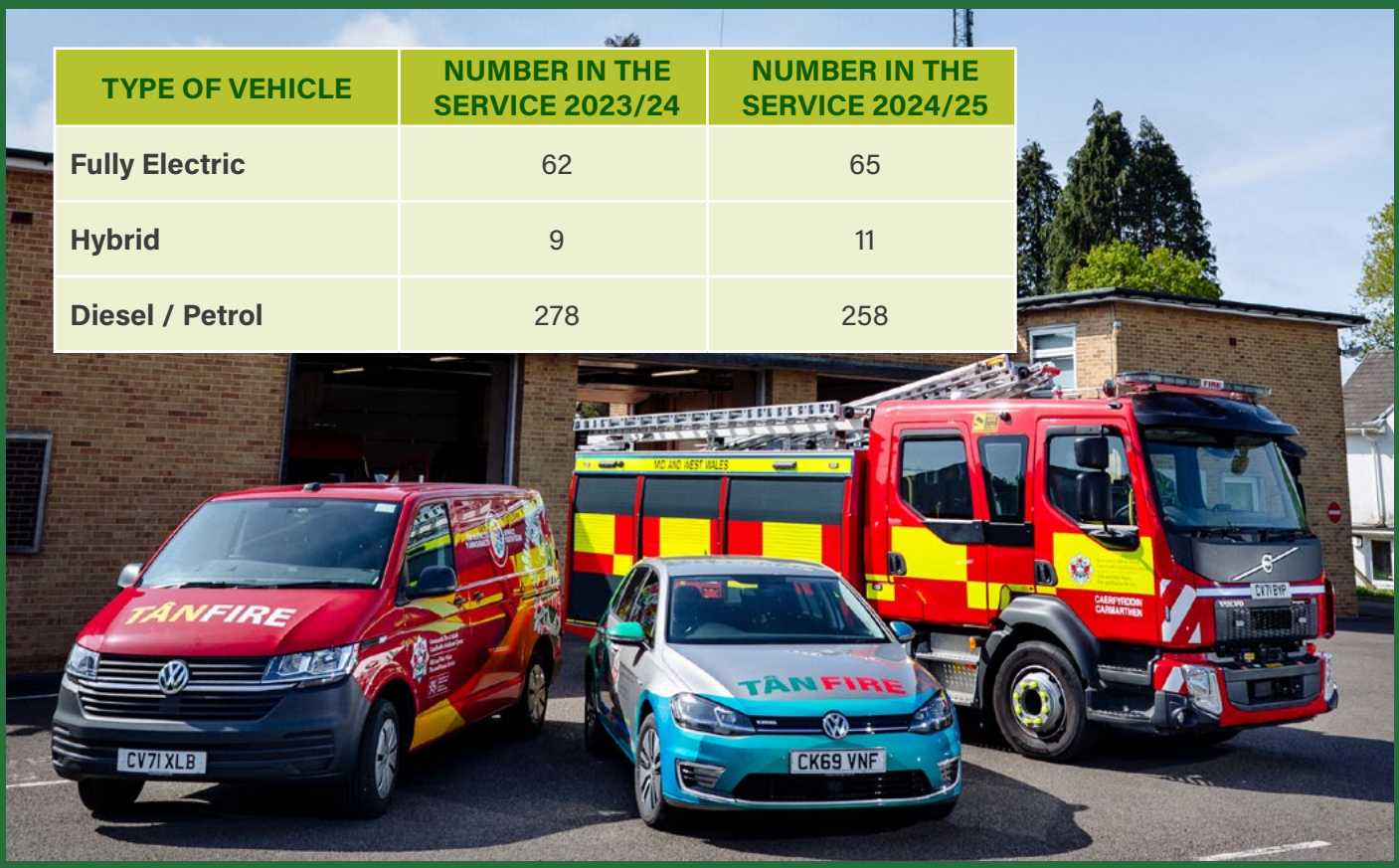


Service Fleet

There are approximately 350 vehicles within the Fire Service fleet which ranges from pool cars, specialist vehicles to co-responder and fire engines. They are fuelled by various means, including electric, diesel, petrol and hydrotreated vegetable oil (HVO).

As a Service, it is recognised that, along with the Service estate, emissions from fleet are one of the biggest emitters of carbon. It is important to transition away from fossil fuel to run the fleet of vehicles to reduce Service direct carbon emissions and align with Welsh Government target of becoming net zero by 2030. This has been captured in both the Services Community Risk Management Plan and Carbon Reduction Road Map.

TYPE OF VEHICLE	NUMBER IN THE SERVICE 2023/24	NUMBER IN THE SERVICE 2024/25
Fully Electric	62	65
Hybrid	9	11
Diesel / Petrol	278	258



To enable the Services growing fleet of Ultra Low Emission Vehicles (ULEV), there has been a steady increase in the installation of electric charging points at Service locations over the last 3 years. There are currently 30 locations, with a total of 55 charging points across the Service area, which includes a mixture of 7kW twin chargers to rapid chargers.

The tables below show statistics from the both the ULEV and fossil fuelled vehicles. Table 6 highlights mileage covered by electric and fossil fuelled vehicles.

Table 6 - Fleet Mileage

	2020/21	2021/22	2022/23	2023/24	2024/25
Electric vehicles	1,360,288	1,453,578	1,957,211	1,911,481	1,240,539
Fossil fuel vehicles	802	113,676	163,721	148,413	225,399

Table 7 and 8 below highlight fuel used and CO2e emissions from Service vehicles. Table 7 does not include statistics for kW for EVs in the initial 2 years. During the early stages of installation of chargers, there was no back-office monitoring available throughout this time until usage of chargers were fully established. Electricity consumption was captured under the building consumption.

Table 7 - Fleet Consumption

	2020/21	2021/22	2022/23	2023/24	2024/25
Diesel (litres)	340,622	349,300	461,159	456,204	416,146
HVO (litres)	N/A	N/A	N/A	18,300	16,500
kW from EVs	N/A	N/A	56,314	46,203	128,172

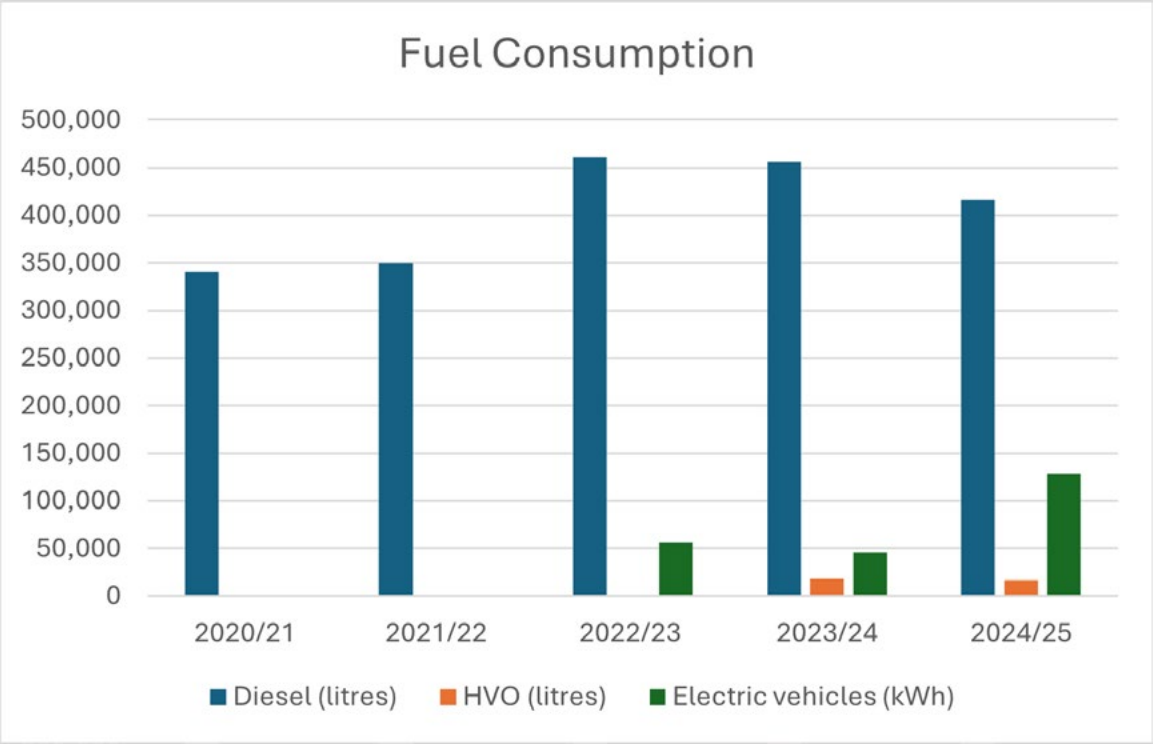


Table 8 - Carbon Emissions

	2020/21	2021/22	2022/23	2023/24	2024/25
Diesel	867.2	877.5	1,180.5	1,145.0	1,045.6
HVO	N/A	N/A	N/A	0.65	0.58
kW from EVs	N/A	8.82	11.77	11.57	15.41

*Shown in Tonnes of CO^2 equivalent

The DEFRA conversion factors below are used to calculate Service emissions from fuel into CO^2 equivalent figures. These figures can then be used to compare like for like on all fuel.

Table 9 - Annual DEFRA Conversion Factors

	2020/21	2021/22	2022/23	2023/24	2024/25
Diesel	2.54603	2.51233	2.56	2.51	2.51279
HVO	N/A	N/A	N/A	0.03558	0.03558
kW from EVs	N/A	0.07767	0.07192	0.07799	0.06837

The Service has offset 113,700kgs of CO^2 by using electric vehicles compared to diesel vehicles in the last financial year.

Monitoring of the amount of electricity specifically used to charge the fleet of electric vehicles on Service premises was not established until 2022. A back-office system has been set up to be able to extract this information to monitor EV usage as highlighted in Table 7. This figure is included within the Service total electricity consumption. Although there are means for Service EVs to be charged outside of Service locations, this does not happen regularly.

The use of HVO fuel as a replacement to diesel in Fire and Rescue Service appliances was on trial for 12 months from Spring 2023. A period of evaluation was undertaken over the Summer 2024 with a business case to be put forward on a phased approach to roll out the usage of HVO further across the Service. The use of this as an alternative to diesel can potentially save an estimated 2 tonnes of CO^2 per 1,000 litres of fuel consumed.

Waste and recycling

In April 2024, new legislation from Welsh Government was brought out which requires all public sector organisations to further separate out waste to include the additional waste streams below:

- Food, (only if over 5kg per week).
- Paper and card.
- Glass, (only if over 5kg per week).
- Metals, plastics and cartons.
- General.

Waste from Fire Stations is accurately recorded by external waste contractors at the time of collections, which allows for detailed statistics to be monitored monthly Service wide. The waste contractors recover 99% of Service waste through recycling, composting and recovery, which leaves just 1% remining to be sent to landfill, which comprises mostly of bottom ash.

Table 10 - Waste Figures

	2020/21	2021/22	2022/23	2023/24	2024/25
General	64,038	82,549	68,482	79,976	77,267
DMR	31,032	47,060	52,076	44,917	35,775
Food	26,257	31,078	35,967	31,864	39,415

*Shown in Kgs

Increase in general waste is generally due to skip hire on some Stations for disposal of additional waste from projects or large scale purchases.

Single use plastic bottles

Current figures on single use plastic bottles have decreased by 22% on the previous year and by almost 41% on the initial 2019/20.

This could be explained due to 2020/21, was during lockdown so you would expect figures to be low it has highlighted that although there was a change in culture initially, orders being placed by Divisions and Departments need to be monitored more closely at a local level. Further information on the increase in statistics and awareness needs to be circulated as well as scrutiny of orders placed, to see a decrease on these figures for the next financial year.

Table 11 - SUP Figures

	2020/21	2021/22	2022/23	2023/24	2024/25
Number of SUP bottles purchased per year	30,312	34,776	46,104	51,240	40,896
Number of reusable bottles issues	1,408	175	114	221	246

The Service have not removed the use of SUP bottle of water entirely as bottles are required for welfare purposes at incidents, but these are not used during training or on Station. The target is to remain below 50% on the baseline year of 2019/20. This is now monitored through the Sustainability and Environment Group and the Response Group meeting.

Workshop Waste

Workshop waste is collected and monitored separately to the main waste contract, as it can contain more hazardous items such as engine oil and vehicle batteries. Figures for this waste stream year on year can be seen in Table 12 below.

Table 12 - Workshop Waste

	2020/21	2021/22	2022/23	2023/24	2024/25
Scrap Metal (Tonnes)	6.83	16.6	11.4	7.06	9.4
Absorbent Waste (Kgs)	200	312	330	283	600
Oil Filters (Kgs)	384	576	480	384	288
Engine/Mixed Oil (Litres)	2,041	1,701	2,120	1,362	5,015

The fluctuation in figures over the years can be explained by the maintenance schedule not in line with financial years. Workshop waste will not align with mileage or fuel consumption figures.

Firefighters Charity

The Firefighters Charity exist to provide life-long care and support for the UK's fire family. They provide help with Mental and physical health, social wellbeing and provide residential programmes.

One-way MAWWFRS support the Charity is through Firefighter Charity clothes bins located at 40 Stations across the Service area. These bins help support the Firefighter Charity by collecting clothes from communities to help divert textile waste away from landfill by either re-selling, re-using or recycling items.

The amount donated has increased year on year which has helped generate income for the Charity as highlighted below. As the price per Kg fluctuates, this will have an impact on the income generated for the charity.

Table 13 - Firefighter Charity Figures

	KGS OF CLOTHING	INCOME GENERATED
2024/25	212,669	£27,307
2023/24	184,732	£39,295
2022/23	164,810	£35,097
2021/22	151,311	£28,437
2020/21	125,038	£14,945

Service Projects

Nature recovery on Stations

Over the last 18 months, the Service have successfully applied for Local Places for Nature funding in conjunction with Keep Wales Tidy.

The funding has helped to develop the unused area of grass at 5 Fire Stations to create a wildflower garden, to encourage pollinators and wildlife to site directly in line with Section 6 of the Environmental (Wales) Act 2016. With help from the Keep Wales Tidy Project co-ordinators, work was completed on the Fire Station gardens and in some garden projects, local groups of school children were giving a helping hand to create the areas.

Photos of garden projects completed below at Haverfordwest, Port Talbot, and Glynneath Fire Stations.

This funding was a big step towards encouraging wildlife to Fire Stations where previously there was none. Table below shows the limited green space on Service sites.

Table 14 - Percentage of Green Space

	NUMBER OF STATIONS
5% or less of green space	37
5-39%	16
40%	4

#DawnsGlaw

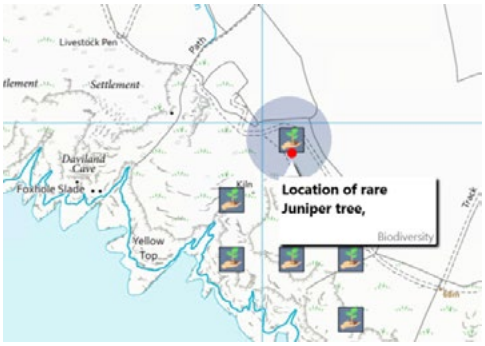
Operation Dawns Glaw is a multi-agency taskforce of specialists from key agencies across Wales who are committed to reduce and where possible, eliminate the impact of grass fires across Wales. Whilst the initial focus was on reducing incidents on antisocial behaviour and arson, more recent work has concentrated on assisting farmers and landowners in ensuring the safe execution of their land management plans, as well as raising awareness of the consequences of accidental fires within the countryside as a result of increased tourism.

The Arson Reduction Team and Farming Liaison Officer within MAWWFRS offer support and guidance, which is free, to farmers, graziers and landowners who wish to carry out controlled burning as part of the land management. The Liaison Officer can assist in creating a 'burn plan' and discuss burn techniques, fire breaks or bulk fuel delivery.

Biodiversity and SSSI awareness on MDT

There are approximately 1,000 Sites of Special Scientific Interest (SSSI) in Wales, covering 12% of the country's land area. The sites are designated for their biological or geological importance which range from a single Lesser Horseshoe bat roost to riverside meadows. To ensure crews are aware of these sensitive areas during response, the sites are clearly marked on Mobile Data Terminals (MDTs) of all frontline appliances.

In collaboration with Swansea Local Nature Partnership, a biodiversity awareness layer has been developed for the Swansea area to capture significant points of interest for information to crews attending incidents. These location points include: rare plant locations, adder hibernation habitat locations, INNS in ponds and bat roost structures.



Wildflower areas

There are a number of areas across the Service where the Grounds Maintenance team have taken the opportunity to encourage pollinators to sites by sowing areas of wildflower seeds. This help to create bee lines between different areas and helps to bring biodiversity to Stations. 3 of the Service larger sites had approx. 200m square wildflower areas sown between end of April to early May which produce colourful displays between early August up to mid October.

Measuring and monitoring

Active monitoring of performance of environmental data is essential to ensure improvements and cost saving can be recognised.

There are a number of methods in place to measure and report on Service resource and activities either monthly or quarterly. These include:

- Green Dragon Environmental Management System
- Utilities – Gas, electricity, Heating oil
- Waste Management – General, DMR and Food
- Fuel to support fleet – diesel and HVO
- Supply Chain – Procurement
- Community Risk Management Plan 2040
- Carbon Reduction Road Map

Environmental Training and Compliance obligations

MAWWFRS have created a bespoke environmental e-learning package for the Fire and Rescue Service, to raise awareness of key environmental areas, issues and procedures and Plans. All members of staff are expected to undertake the learning package and record this on their individual training records.

Specific training for attending environmental incident for Operational members of staff is undertaken in the initial induction stages of employment, but dedicated training modules have been created to raise awareness and improve decision-making regarding environmental protection during operational incidents.

The Service maintain awareness of environmental issues through a variety of ways including awareness posters, internal communications on the Service intranet and awareness campaigns.

All relevant environmental legislation is monitored through an online legal register, which covers all activities and operations of the Service and ensures that the Service is legally compliant. This enables the Service to identify and categorise applicable legislation easily and efficiently. The register covers areas including noise, air, water, waste, land, biodiversity and climate.

Section 3

Overview of 5 Year Sustainability and Environmental Strategy 2020/2025

In 2020, the Service published its third, 5-year Sustainability and Environment Strategy 2020-2025, to outline long term environmental objectives for the Service to work towards.

Environmental issues and matters have since grown in national and local importance. In 2025, the 5-year Sustainability and Environment Strategy will be replaced by a number of Service specific plans, such as the Nature Recovery Action Plan, Community Risk Management Plan 2040 and Carbon Reduction Road Map 2030, which highlights that the intention to protect the environment remains as important as ever and the Service continue to improve our working practices and reduce the impact our activities have on the environment. Similar themes are now captured within the Service CRMP 2040. Objective 7 of the CRMP states: We will work in an environmentally friendly and sustainable way.

There were 6 Sections within the 5-year Strategy which were the main focus over the last 5 years. Outcomes of this work have been captured under each of the subtitles below.

Sustainability in our Community

The Services Community Risk Reduction, Community Safety and Business Fire Safety Teams play a huge part in raising awareness and protecting the community in relation to home fire safety, school engagement, road safety, arson reduction and business fire safety.

The Service Youth Team delivery structured youth engagement courses working with children and young people across the Mid and West Wales Service area. This is primarily done through education to prevent the type of behaviour which leads to a fire developing in the first instance, to two intervention programmes: The Phoenix Project and The Crimes and Consequences Programme, both of which focus on working with your people to address issues from low self-esteem to anti-social behaviour and fire related problems, such as deliberate fire setting and hoax calls.

Sustainable Procurement

Over the last 5 years, environmental sustainability has been embedded into the Service procurement processes with questions now included in the procurement tendering process in relation to engagement, carbon emissions and encouraging local SMEs to tender.

The canteen in Service HQ uses biodegradable food packaging and takeaway cups, all reems of paper used in Department and Station printers is from recycled paper, the Service waste contract ensure that all waste, where possible, is recycled with only 1% of Service waste ending in landfill.

As part of annual Welsh Government Net Zero Reporting and monitoring, supply chain expenditure is considered in more detail to endeavour to capture the carbon emissions from the life cycle of purchased items. Scope 3 emissions usually equate to approximately 80% of an organisation's overall emissions.

Energy Consumption and Management

There has been a large change in energy consumption over recent years, with the increase in electric vehicles and decommissioning of a number of heating oil tanks from Service locations have meant a knock-on effect to increase electricity and gas.

There has been an increase in the use of Automated Meter Reading (AMR) technology across the Service estate to help monitor energy consumption, carbon emissions and identify any issues early on. The Service have installed a number of Solar PV arrays onto larger buildings to encourage renewable energy generation on stations. Where HVO in vehicles and boilers have been trialled alongside funding applications for installation of Building Management Systems (BMS) and air source heat pumps, with the view to decrease carbon emissions from Service locations.

SMART objective – Reduce the Services Electricity and Gas consumption by 5% (1% per year) from 2019/20 baseline.

From the 2019/20 baseline, gas consumption has decreased by 19% which could largely be attributed to the decommission of a number of gas boilers in 2023/24. Electricity has decreased by 8% on the 2019/20 baseline year. As the Service continue to look at renewable alternatives to power the estate, this remains an important area of improvement.

Water Consumption

Water usage at incidents and training is a large part of what the Service are known for and is essential for responding to certain incidents. To try and ease the pressure on water infrastructure the Service consider alternative means to water in their approach to tackling. To monitor how much water is being

used at incidents, water monitoring technology has been retrofitted to Fire appliances. This allows for accurate statistics on water consumption at incidents.

In terms of Service estate, water saving techniques are used to reduce water consumption such as efficient taps and WCs variable flush controls, low volume shower heads.

Operational Activities

The way the Service responds to incidents and the various types of calls crews attend have changed over the years. The expectation to not only attend house fires and RTCs but a wider range of incidents has meant the way the Service operate has had to evolve.

Crews are trained and required to assess environmental impact at every incident, utilising available resources such as Environmental Grab Bags, absorbent granules and Environmental Protection Units (EPUs).

To limit any environmental impact from Service activities, specific external sites have been identified to be designated foam training locations. These locations are equipped with bunded fire pads to capture foam run-off, minimising environmental impact during essential training exercises.

The implementation of NERA (National Environmental Risk Assessment) was integrated into operational planning to assess and mitigate environmental risks at incidents. Based on this, new operational tactics allow certain materials to burn under controlled conditions, reducing contaminated fire water run-off, based on environmental risk assessments. Engagement with local Control of Major Accident Hazards (COMAH) Sites to understand their water and foam run-off control measures and identify opportunities for collaborative environmental protection.

New Air quality Monitoring equipment at certain Stations enables real-time monitoring of air quality at incidents, protecting both FRS personnel and the wider environment.

Waste and Mixed Recycling

In 2020, the Service moved from 6 Local Authorities collecting waste to a single waste contractor to allow for ease of monitoring of collections and vastly reduce the amount of waste being sent to landfill.

April 2024, new regulations in Wales for waste meant that all businesses had to align the waste streams to further strict regulations.

SMART objective – Reduce the amount of waste sent to landfill by 3% by 2025 on the baseline year (2019/20)

From a revised baseline year of 2021/22, when the Services new waste contactor was able to provide a full year of statistics, the Service have ensured that only 1% of waste has been sent to landfill as standard, annually.

There has been a 0.25% reduction on the 1% of waste sent to landfill in 2024/25 compared to 2021/22.

The waste contractor ensure that each container is weighed as they are lifted, all recyclables are sent to an end processor for recycling and residual waste is used to produce energy, ensuring 100% is diverted from landfill. Food waste is collected from stations and recycled at anaerobic digestion facility.

SMART objective – Work towards a target of reducing avoidable SUP throughout the Service area. 40% reduction on plastic purchases on 2019/20 baseline.

In early 2020, the Service implemented a programme to reduce the number of single use plastic bottles of water across the Service. Reusable individual personal bottles were issued to all members of staff, both operational and support staff, to encourage a reduction in SUP bottle use.

There was a 57% reduction in the year following the implementation of the roll out in 2020, which was impacted considerable by lockdown. The figures fluctuated slightly in the following years but the target was achieved and there has been a 41% reduction on the 2019/20 baseline year. While this is target has been achieved, it remains an important area of continual improvement across the Service to maintain and improve further and reduce avoidable plastic in areas such as purchases and deliveries.

Transport and Fleet Managment

The Service has a fleet of 350 vehicles, including pool, response and support fleet. Since 2020, the Service have been replacing end of life pool vehicles with electric vehicles having a huge impact on carbon emissions. This has been helped with the installation of electric charging points on Service locations to help run the electric vehicles.

In 2024, 3 Service locations were used in a trial of HVO to reduce the fuel consumption and carbon emissions coming from Service operational fleet. The trial lasted 6 months and following an evaluation was decided to roll out to additional Service locations. Cost effectiveness of roll out of HVO to multiple sites, along side environmental considerations of tank locations.

Additional site checks were carried out and recorded to ensure integrity of fuel tanks. Tank inspection and condition are monitored as standard annually and housing and drip trays are cleaned and pump serviced.

Improved monitoring and processes have developed through the back-office system to provide more accurate statistics and reporting.

The Service has transitioned the majority of leased Response cars to either EV or ULEV with a view to fully transition in the next 2 years.

Decarbonisation

In 2024, the Service published its first Carbon Reduction Road Map, to outline a journey to becoming net zero by 2030 in line with the Welsh Government requirement for all public sector organisations. The Plan is available on the Service's external website and the objectives within the document are regularly monitored to ensure continual progress towards achieving them.

The Service ensure that all electricity purchased for the estate comes from 100% renewable source, including solar, hydro and wind power. Decarbonising the Estate is a highly important step to ensure we work towards the target of net zero by 2030.

Biodiversity and Wildlife

In 2023, the Service published its 2nd plan to work towards Section 6 of the Environment (Wales) Act 2016. The Nature Recovery Action Plan 2023-26 outlines objectives for the Service to work towards, to encourage and enhance biodiversity on to Service locations.

Where green space allows on larger Stations, a number of areas of wildflowers have been sown and developed to encourage pollinators to site.

A big step towards encouraging wildlife to Stations was throughout 2024, where a number of Stations successfully applied for funding to develop wildlife gardens on their Stations. This was made possible with funding from Local Places for Nature and the help of Project co-ordinators from Keep Wales Tidy. A number of the Stations also had help from local schools or community groups to develop the gardens and continue to maintain the new garden areas in the coming years.

Section 4
Environmental objectives and outcomes for the year 2024/25

	OBJECTIVE	OUTCOME
EO1	To increase the use of electric pool vehicles, evaluate and develop a culture of car sharing and sustainable travel.	ULEV (Electric and hybrid vehicles) have increased in use by 6.8% in the last financial year. Staff Travel Survey circulated to all staff to gather opinions on use of EVs was developed to circulate in March 2025
EO2	To scrutinise the ordering and use of Single Use Plastic bottles within Response and Training Departments, to figures to decrease by 10% on 2023/24 baseline.	SUP bottles have decreased by 41% on the 2019/20 baseline implementation year and by 20% on the previous financial year.
EO3	To encourage Stations to work towards NRAP objectives and feed into the Monitoring Report on progress.	There has been a large improvement in awareness of biodiversity on Station and encouraging improvements and awareness of biodiversity projects on Service land. 5 Stations have developed wildlife or fruit growing gardens on Stations in 2024/25. Haverfordwest Station garden development project won the More Than Just Fires award in 2025 for their wellbeing garden.
EO4	Raise awareness of the Carbon Reduction Road Map and encourage responsibility on Stations for carbon emissions.	Carbon Reduction Road Map 2030 was published in Autumn 2024 with short, medium and long term objectives included. This is captured, not only in the Sustainability and Environment Group meeting but also as an Objective within the Service CRMP 2040.

Environmental Objectives for the year ahead 2025/26

OBJECTIVE 1
Develop and enhance biodiversity on any available green spaces on Service land by increasing number of developed wildlife areas.

OBJECTIVE 2
Reduce the amount of General waste from Service locations with a focus on behavioural change.

OBJECTIVE 3
Improved reporting for fuel and milage analysis. Aim to reduce diesel fuel usage in light response vehicles by a minimum of 5% on 2023/24 figures.

JR2066

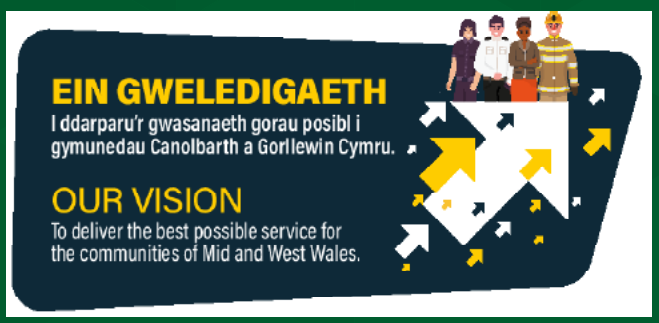
A SUSTAINABILITY AND ENVIRONMENTAL ANNUAL REPORT 2024 / 2025

Gwasanaeth Tân ac Achub
Canolbarth a Gorllewin Cymru

Mid and West Wales
Fire and Rescue Service

HOFFI DILYN RHANNU
LIKE FOLLOW SHARE

Ein Negeseuon Diogelwch
Our Safety Messages



Mae'r ddogfen hon ar gael yn Gymraeg

www.mawwfrs.gov.uk