

Gwasanaeth Tân ac Achub Canolbarth a Gorllewin Cymru

> Mid and West Wales Fire and Rescue Service



A Sustainability and Environmental Annual Report

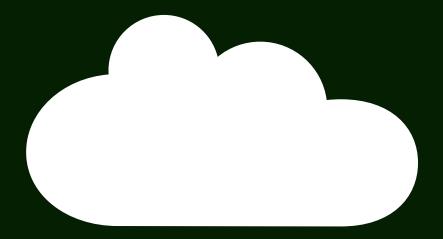
2022 / 2023



Contents



Foreword - the Chief Fire Officer	1
Section 1	
Our Environmental Commitments	2
Welsh Government Net Zero Targets	3
Green Dragon 2016 EMS Standard	4
Environmental Management Review	4
Environmental Sustainability in the Service	5
Section 2	
Environmental Performance – Statistics and Projects	6
Measuring and Monitoring: Environmental Data	17
Environmental Training and Compliance Obligations	17
Section 3	
Environmental Objectives and Targets for 2022/23	18
Environmental Objectives – 2023/24	19



Chief Fire Officer Statement



Mid and West Wales Fire and Rescue Service work hard to provide an efficient and effective Service to our local community.

The Service is committed to providing Service excellence and endeavour to continually improve the way we operate while reducing our impact on the environment. The Service is working hard to tackle issues on climate change, resource depletion and pollution. We recognise that our operations have an effect on the global and local environment and are committed to minimising adverse environmental impact.

Mid and West Wales Fire and Rescue Service have aligned our net zero target to Welsh Government's vision for Public Sector organisations. Recognising this tight deadline, we are developing a decarbonisation route map to work towards this target within our fleet, estate, and operations. We strive to achieve our environmental corporate objectives by reducing energy demand, working towards zero waste sent to landfill and reducing our Service wide carbon footprint year on year.

Our vision remains to be a Fire and Rescue Service where the sustainable use of resources and associated environmental issues are embedded in all our decision-making processes and enhancing the economic, social and environmental well-being of our communities.

We have made great progress in areas of ultra-low emission vehicles and expanding the electric infrastructure, working towards encouraging and enhancing biodiversity to our sites, raising awareness of environmental and carbon emissions to our staff and decarbonising our Estates.

I believe we are a leading Welsh Fire and Rescue Service in environmental issues, and I would like to take this opportunity to thank all employees and stakeholders for their continued support and valued contributions to achieving our sustainability goals.

Roger Thomas
Chief Fire Officer



Section 1 - Our Environmental Commitments



This Annual Environmental Report outlines the performance and achievements which Mid and West Wales Fire and Rescue Service have accomplished towards our environmental objectives in the 2022/23 financial year. It takes into consideration Welsh Government and National targets as well as statutory obligations placed on Public Sector organisations from the Well-being of Future Generations (Wales) Act 2015 and The Environment (Wales) Act 2016.

The Report outlines the Service's key areas of performance in areas where we may have the biggest impact on the environment, such as energy consumption, carbon emissions, fleet, waste production and supply chain.

As the largest Fire and Rescue Service in Wales by area, Mid and West Wales Fire and Rescue run 58 fire stations in an area that covers 4,500 square miles of mainly rural landscape, three quarters of Wales. The types and number of incidents that we respond to are out of our control, what we can control is how to tackle an incident to have the minimum detrimental impact on the environment where is reasonably practicable. We try and ensure that our operations and activities reduce the impact fires have on the environment through training, collaborating with organisations such as Natural Resources Wales (NRW) and through community engagement.

Corporate Commitments and Environmental Sustainability in the Service

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

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 activities.

In line with discussions at COP26, there is a need to continue to decrease the emissions resulting from fire service fleet and activities. Adaption and mitigation in relation to Climate Change needs to be considered in all Service activities and plans. We are aware that our operations influence the global and local environment and we are committed to minimising the adverse impacts from our activities.

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 our Strategic aims and commitments within the Service Improvement and Wellbeing Objectives Annual Assessment. This Report identifies how we have 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 authorities have a duty to maintain and enhance biodiversity and promote the resilience of ecosystems.

As a requirement of the Duty, the Service published our first Section 6 Duty Report in 2020 to align with our financial year reporting. The Report outlined what we as a Service can do to protect and enhance biodiversity on our land and through our activities. In Spring 2023, the Monitoring Report was published to highlight our 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. To help the Service work towards the objectives within the Section 6 Report, a Biodiversity Working Group will be established to report on the work towards the objectives.

Welsh Government Net Zero targets

In 2021, Welsh Government published guidance for achieving neutral carbon emissions in the Welsh Public Sector Organisations by 2030. 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. This reporting template will be used annually to monitor emissions and we will be able to align our 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.

In March 2021, the Welsh Government set new targets for a 63% carbon reduction by 2030, an 89% reduction by 2040, and a 100% reduction by 2050. In addition, the Welsh Government set out a more challenging collective ambition for the Welsh Public Sector organisation to achieve net zero carbon by 2030 (the 2030 collective ambition).

As a Public Sector Body, we are required by Welsh Government to report annually on our net zero emissions. These include emissions resulting from building, waste, fleet and supply chain.

Nationally, we are already seeing progress. In December 2022, Welsh Government published the Statement of Progress (2016-2020) which detailed progress towards emission reductions in the journey to net zero over Carbon Budget (BC) 1. It highlighted that within this period greenhouse gas emissions have reduced, and Wales achieved an 18% reduction in emissions.



Green Dragon 2016 Environmental Management Standard

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

The Green Dragon EMS 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 2023, the Service successfully maintained Level 5 accreditation in a 2-day external audit which reviewed compliance of legislation, environmental procedures and documents as well as site audits.

The successful accreditation shows that we are committed to managing the impact our activities have on the environment and shows we are aware and actively work towards reducing this impact. We understand and work within our environmental responsibilities and are committed to continually improving our footprint on the environment.



It provides externally verified assurance to our stakeholders and interested parties that our 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 our 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 avoid as much waste to landfill as possible and re-use and recycle furniture and materials where we can. The Service use D&G Office interiors to collect our 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 to 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 annual net zero reporting requirements to Welsh Government.

Aspects and Impacts

The Service have a number of environmental aspects and impacts related to our everyday operations. To monitor these, a register was developed from considerations of the Servie'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 and
- Determining if the aspect effect the carbon emissions of the organisation.

The Register is reviewed annually to ensure all 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 - Our Environmental Performance

Environmental Performance - Statistics and Projects

As a Service we aim to continually improve our environmental performance and impact year on year in line with our commitment to the Environmental Management System and Service Objectives. This includes reduction of emissions from both the Service fleet and estate, increasing use of renewable energy, reducing waste and in turn the amount which ends up in landfill, reducing the use of single use plastics and improving and enhancing biodiversity where possible.

The Service have established a hybrid work ethos and use video conferencing software to reduce unnecessary travel to meetings and reduce emissions which result from commuting. Regular monitoring of documents and activities help to scrutinise progress in performance and towards environmental targets on a monthly basis and highlights anomalies for further consideration.

Energy Consumption

A significant amount of energy is needed to run all the buildings within the Mid and West Wales Fire and Rescue Service estate, which includes fire stations, offices, transport workshops and training locations. The generation and consumption of energy has a significant impact on the environment through the use of resources and carbon emissions. As such, it is important to ensure it is supplied by a renewable energy provider.

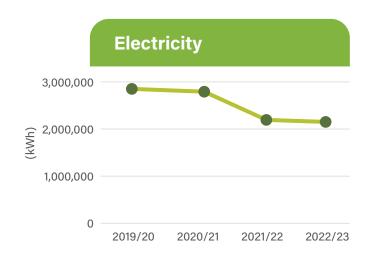
The supply of electricity to keep the Mid and West Wales Fire and Rescue estate running comes from a 100% renewable provider and is split out in the following way:

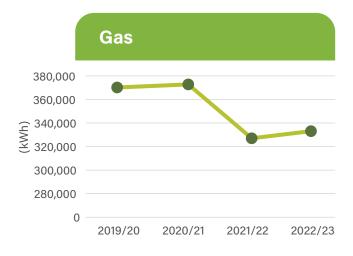
	% SPLIT
Biomass	1.25%
Off-shore Wind	58.70%
Photovoltaic	7.65%
Wind	32.40%
Grand Total	100.00%

Gas and electricity consumption is monitored monthly through Automatic Meter Readers (AMRs) at all sites. This highlights significant increase or decrease in usage within each Division.

Energy consumption posters are circulated to Divisions on a quarterly basis to raise awareness of individual Station consumption and for discussion in Divisional meetings, they are also discussed at the quarterly Sustainability and Environment Group meetings.

Gas and electricity consumption for the last 4 years are included in the table below. There has been a steady decrease in the electricity consumption since the 2019/20 baseline year, whereas gas consumption has fluctuated slightly year on year. This could be due to warmer seasons.





ENERGY	2019/20	2020/21	2021/22	2022/23
Electricity (KWH)	2,844,900	2,819,053	2,159,216	2,120,036
Gas (KWH)	371,476	374,488	324,478	333,358

Renewable Energy

The Service has 9 locations with Solar Photovoltaic panels installed

- Llanelli Fire Station
- Morriston Fire Station
- Amman Valley Fire Station
- Aberystwyth Fire Station
- Pontardawe Fire Station

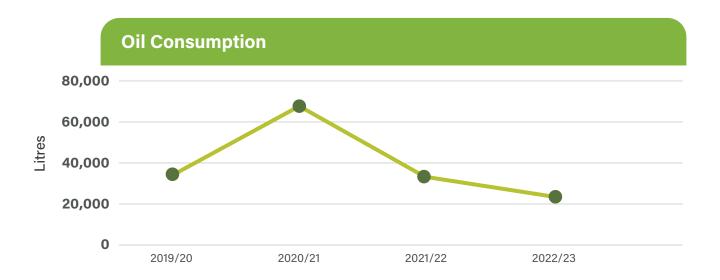
- Whitland Fire Station
- Fire Service Headquarters, Carmarthen
- Earlswood Training Facility
- Dafen Workshop.

Units generated depends on strengths of solar rays and cloud cover throughout the year. Payments generated are calculated based on our current electricity providers unit rates that month. To date, the Solar PVs have generated the following figures.

	2019/20	2020/21	2021/22	2022/23
Payment generated	£2,920.28	£2,330.34	£3,347.07	£2,948.56
Units generated	13,902.31 kWh	20,419 kWh	28,953 kWh	25,665 kWh

The Service have 7 heating oil tanks over 5 locations where there hasn't been a connection established to a main gas supply. All oil tanks are double skinned and serviced annually for any signs of damage or deterioration, which could result in leaks and significant environmental impact.

	2019/20	2020/21	2021/22	2022/23
Oil Consumption (Litres)	36,574	67,656	35,563	22,742
Number of orders	31	40	25	11



By early 2023, the majority of the heating oil tanks across the Service had been decommissioned, and the sites converted to gas where possible. Three locations remain heated by oil, with 1 due to be converted to gas by the end of 2023.

Carbon Emissions

In line with requirements for carbon emission reporting by Welsh Government, DEFRA conversion factors are used for all fuel types to report on emissions. This assists when reporting on Scope 1, 2, and 3 emissions to prevent double counting.

As a Service there is an aim to reduce the carbon emissions resulting from our activities year on year. This is done through raising awareness on energy consumption, running environmental campaigns throughout the year, improving renewable energy generation on Service locations and implementation of improved and sustainable technology where applicable.

The conversion factors used to calculate the carbon emission figures in the below table are:

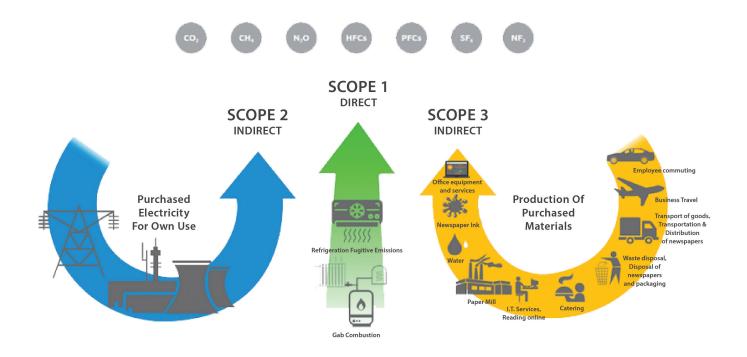
Electricity factor for 2021/22 is 0.21233 and 2022/23 is 0.19121

Gas factor for 2021/22 is 0.18316 and 2022/23 is 0.18219

Oil factor for 2021/22 is 0.24677 and 2022/23 is 0.24557

ENERGY	2019/20	2020/21	2021/22	2022/23
Electricity	663.15	657.23	458.47	405.4
Gas	73.4	68.8	59.43	61.29
Oil	17.4	16.6	8.7	5.5

*Shown in tonnes of CO² equivalent



Scope 3 figures usually make up to 80% of an organisations emissions, and are always the hardest figures to calculate. They are associated with activites such as procurement, life cycle of products and supply chain.

	SCOPE 1	SCOPE 2	SCOPE 3
2022/23	1,229.19	405.4	4,476.8
2021/22	945.6	458.47	5,369.8
2020/21	952.6	657.23	1,239.4

*Shown in tonnes of CO² equivalent

The table above outlines the Service's scope 1, 2 and 3 figures over the last three years. The direct scope 1 emissions have increased over the years, this could be due to increased fuel consumption. Scope 2 indirect emissions have decreased over the years, this could be due to electricity being sourced from renewable suppliers. Scope 3 indirect emissions have significantly increased due to improved recording and monitoring, which has aligned with Welsh Government Net Zero reporting.

Service Fleet

We have approximately 350 vehicles in our fleet as a mixture of diesel, hybrid and fully electric for both operational and non-operational use. Due to the vast rural landscape of the area of Wales in which we operate, and the nature of the Service as an emergency responder, this can limit our options when it comes to transport for operational requirements. Even so, there are areas where we can improve our fleet, by changing diesel pool vehicles to electric vehicles.

The table below shows 4 years of diesel consumption, mileage and carbon emissions:

	2019/20	2020/21	2021/22	2022/23
Diesel (Litres)	481,310	340,622	349,300	461,159
Mileage	Unknown	1,360,288	1,453,578	1,957,211
tCO2e*	1,248.5	867.2	877.5	1,162.4

*Shown in tonnes of CO² equivalent

The DEFRA conversion factor used to calculate the carbon emissions for diesel is 2021/22 is 2.51233 and 2022/23 is 2.52058.

There has been an increase in litres of diesel used over the last financial year compared to 2020/21 and 2021/22. This could be due to the lockdown years with more restrictions in place in terms of travelling, attending face to face meetings and community liaison. 2022 was the first normal year where full duties were resumed so this could be the explanation for the increase in consumption.

Service ULEV Programme

Five new Hybrid Kia Sportage PHEV 'GT-line' vehicles were introduced to the Service fleet in March 2023.

4 of the 5 vehicles will be used within the Training Department to assist with ongoing emergency response driver training, and the remaining vehicle will be used for emergency response to attend some of the varied incidents the Service is called to.

There are a range of vehicles within the fleet and year on year the Service are increasing the number of low emissions vehicles to reduce our direct emissions to the atmosphere.



TYPE OF VEHICLE	NUMBER IN THE SERVICE
Fully Electric	35
Hybrid	10
Diesel / Petrol	307

As of the end of March 2023, the breakdown of diesel and ULEV within our fleet, both pool, response and lease vehicles, is highlighted here.

To ensure the electric vehicles are able to function as expected, electric charging points have been installed at 22 locations across the Service area.

	2020/21	2021/22	2022/23
EV Mileage	802	113,676	163,721
kW used to charge cars	Unknown	Unknown	56,314.3
Kilograms of CO ² offset from diesel vehicles	1,900	247,021	384,600

Business Mileage

Business miles are calculated separately to our overall fleet and can be found in the table below, this includes mileage of private vehicle for business use as well as claims for passenger mileage. The decrease in casual mileage could be due to conferences and meetings held virtually.

	2019/20	2020/21	2021/22	2022/23
Lease	191,394	87,757	125,019	138,124
Casual / Essential	191,539	129,650	147,380	130,352
Passenger mileage	26,415	Unknown	3,961	14,537



Workshop Waste

Mid and West Wales Fire and Rescue Service have a main transport workshop located at Dafen where vehicle repairs and servicing is undertaken. The main types of workshop waste from these sites are captured below. Figures in relation to waste from workshops can fluctuate depending on the annual Servicing schedule.

	2019/20	2020/21	2021/22	2022/23
Scrap Metal (Tonnes)	5.3	6.83	16.6	11.4
Absorbent Waste (Kgs)	321	200	312	330
Oil Filters (Kgs)	1,335	384	576	480
Engine Oil (Litres)	5,390	2,041	1,701	2,120

General Waste and Recycling

Between November 2022 and February 2023, Welsh Government consulted on requirements for all businesses, public and third sector organisations, to separate key recyclable materials in the way the majority of Welsh householders already do. The reform is expected to come into force in 2024 and will improve the quality and quantity of recycling and provide consistency in the way we collect recyclable materials to realise significant carbon savings and positive benefits for the economy.

Service waste is currently accurately monitored by external waste contractors at the time of collection which allows for detailed statistics for general, dry mixed and food waste collected from all of the Service locations.

	2020/21	2021/22	2022/23
General Waste (not including skips) (Kg)	64,038	82,549	68,482
Dry Mixed Recycling (Kg)	31,032	47,060	52,076
Food Waste (Kg)	26,257	31,078	35,967

There has been a steady increase in recycled waste and a decrease on the previous year in general waste, which can be clearly seen in the graph below. The Service waste contractor recovers 99% of our waste for recycling, composting and recovery which leaves only 1% going to landfill.



Single Use Plastic

In 2020, the Service took the decision to remove single use plastic bottles from everyday use for Service staff with the aim to target and drastically reduce plastic waste. The single use bottles were replaced with individual reusable bottles with the Service logo. Since the baseline year of 2019/20, as expected the Service almost halved the number of plastic bottles purchased instantly.

Unfortunately, this figure is beginning to increase year on year which will be taken into consideration and scrutinised throughout the year ahead.

The increase could be due to the water quality on certain Stations requiring bottled water, or lack of awareness and knowledge of the issues of single use plastic on the environment.

	2019/20	2020/21	2021/22	2022/23
Number of SUP bottles purchased per year	62,632	31,560	37,728	46,416
Number of Reusable bottles issued	0	1,408	175	114

Service Projects

As a Service, we are continually trying to improve our environmental impact and performance in relation to community engagement for arson reduction, reducing carbon emissions from our fleet and ensuring our buildings are as efficient as possible, while also reducing energy consumption.

Nature Recovery Action Plan

In March 2023, the Service published its first Section 6 Duty Monitoring Report 2020-23 in relation to the objectives outlined in the Biodiversity Action Plan 2020-2023 in line with the Environment (Wales) Act 2016 requirement. This Report highlights what the Service has done over the last 3 years to encourage biodiversity to Service locations and reverse the decline of biodiversity through Service activities. There are a number of areas in which we are improving staff awareness and our impact on the environment, these are outlined below.

Alongside the Biodiversity Action Plan 2020-2023 Monitoring Report, a new plan was published, the Nature Recovery Action Plan 2023-26 to replace and outline new objectives for next 3 years.



Young Biodiversity Project

Newtown Fire Station celebrated the Queens Platinum Jubilee with a group of fire cadets from the Station who organised a commemorative garden, where local schools were invited to design and paint the wooden planters. Newtown Station has been involved in a collaboration project with Young Firefighters and a local community group to establish a vegetable patch at the front of the Station.





Swift Boxes

There have been a number of instances where Fire Crews have assisted with installing structures on public buildings throughout the Service area. On this occasion, Fire Crews from Morriston Fire Station were able to assist in helping to install Swift bird boxes at a local community farm in Swansea to help increase species numbers in the local area.



Dawns Glaw



Every year fire is responsible for the destruction of thousands of hectares of countryside, open space and wildlife habitats.

In 2022, each Fire and Rescue Service across Wales attended 3,269 grassfire incidents, an increase of 62% on the previous year.

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 of 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 on our countryside as a result of increased tourism.

The Arson Reduction Team and Farming Liaison Officer within Mid and West Wales Fire and Rescue Service offer support and guidance, which is free of charge, to farmers, graziers and landowners who wish to carry out controlled burning as part of their land management. During a visit to a farm, the Farming Liaison Officer can help create a 'Burn plan', discuss burn techniques, fire breaks and the safe management of a controlled burn.

Drainage Plans

The Service have completed work on drainage plans, ensuring all locations have an up to date plan to highlight surface and foul water drains on site. This will ensure risk to the environment is kept to a minimum in the occurrence of accidental spills on Stations during standard drills or bulk fuel deliveries, where applicable.

Fire Breaks

A good example of collaboration with Natural Resources Wales and Local Biodiversity Partnerships, Service members have effectively assisted cutting firebreaks in areas of common land in certain Service areas to prevent grass fires from spreading in high-risk locations. This is a project that has been repeated year on year for a number of years to build resilience and encourage local biodiversity.

Environment Matters - E-learning

In early 2023, the Service launched it's first internal environmental e-learning training for all members of staff. The package has been endorsed by the National Fire Chiefs Council and Fire Brigades Union Lifelong Learning.

It offers staff awareness of a range of areas including biodiversity, waste, water, energy conservation and carbon emissions.



Wildflower areas on Service land

To enhance biodiversity to Service land, mowing regimes and wildflower areas have been encouraged where space allows. The Service's grounds maintenance contractor has sown wildflower seeds over a section of lawn in 2 areas of Service Headquarters in Carmarthen, a total of 150 square metres.





Firefighters Charity

Mid and West Wales Fire and Rescue Service hold 36 clothes banks at Stations across the Service areas which help to generate income from members of the public recycling their unwanted clothes.

In 2022/23 alone, 164,810 Kg of material was donated through the clothes banks which generated a huge amount for the Charity. By March 2024, the target is to have 40 Fire Stations with Clothes Banks located on them.

Across the whole of the UK, the Fire Fighters Charity clothes banks generated a total of £900,000 from recycled clothes. Clothes and materials which are donated through the banks are diverted away from landfill and are either re-sold, re-used or recycled.

YEAR	KG OF CLOTHING	INCOME GENERATED
2022/23	164,810	£35,097
2021/22	151,311	£28,437
2020/21	125,038	£14,945
2019/20	100,762	£22,168

Measuring and Monitoring: Environmental data

Reliable environmental data is essential when monitoring resource demand patterns and highlighting where improvements and cost savings can be made. Active monitoring is considered a basic and essential method in performance management.

There are a number of programmes in place to measure and report on the Service's resource demands either monthly or quarterly, which include:

- Green Dragon Environmental Management System
- Gas and electricity
- Single use plastic water bottles
- Heating fuel oil and diesel
- Waste general, dry mixed recycling and food waste
- Sustainable Procurement.

Environmental Training and Compliance Obligations

Environmental Training

Sustainability and environmental training within Mid and West Wales Fire Service includes raising awareness during all new Service employee inductions of key areas, issues and procedures undertaken by the Service to reduce its environmental impact.

E-learning training is available to all staff to raise awareness of environmental matters on Stations and in Departments.

There are a number of ways the Service maintain environmental awareness including:

- Internal communications, environmental campaigns and environmental updates
- Environmental awareness presentations
- Circulating environmental awareness posters, training fact sheets and attachments on issues such as energy data and updates on environmental performance.

As a requirement of our voluntary obligations under the Green Dragon Environmental Management System, the Service holds a register of all relevant legislation which is applicable to the activities and operations of the Service to ensure compliance. The register includes areas such as: air, noise, water, waste, land, flora and fauna.

To aid in ensuring this register is always up to date with all relevant environmental legislation and applicable voluntary obligations, the Service uses the Legal Compliance Manager System which is an environmental update service which enables us to identify and categorise applicable legislation easily and efficiently.

To ensure all legislation is covered, this is supplemented by regular cross-referencing with information via the Institute of Environmental Management and Assessment's (IEMA) website, as well as referencing information from environmental websites and periodicals.

Section 3 Environmental Objectives (EO) and outcomes for 2022/23

	OBJECTIVE	OUTCOMES
EO1	Raise awareness of carbon emissions across the Service and encourage proactive measures to reduce it.	Annual Environmental Report 2021/22 published on external website in Autumn 2022. Energy and Waste posters circulated quarterly to all Divisions to raise awareness of consumption by individual Stations. Winter conservation email and checklist circulated to all Staff. Environmental awareness e-learning training went live in January 2023.
EO2	Increase the number of Biodiversity Projects undertaken Service wide in relation to the Biodiversity Action Plan 2020-2023 both internally and externally.	Biodiversity Action Plan 2020-23 Monitoring Report published to Welsh Government in Spring 2023 highlighting our achievements in relation to our objectives. New NRAP 23-26 published at the same time. External collaborations with PSB Partners, National Botanic Gardens of Wales, Swansea Nature Partnership.
EO3	Monitor water consumption on Service Premises and install water saving devices where possible.	13 Service locations fitted with water meters to allow for monitoring of those sites. Discussion around water monitoring of water usage at incidents.
EO4	Raise awareness of carbon emissions through use of Smart technology to encourage behaviour change. To decrease electricity consumption by 2% on 2019/20 baseline year.	Carbon emissions figures reported through Welsh Government Net Zero Annual Reporting. September 2022. Service began to develop its first Decarbonisation Report in collaboration with external company. Trial of HVO within a small number of our operational vehicles across 3 Stations. Electricity figures decreased by 25% on baseline year and decreased by 1.5% on previous year.

	OBJECTIVE	OUTCOMES
EO5	Encourage and raise awareness on Stations to reduce and reuse waste in the first instance and highlight waste produced in each Division. To reduce General Waste by 2% on 2021/22, new baseline year.	Waste consumption posters distributed to all Divisions for discussion. Waste figures 10% increase in DMR on 2021/22 figures. 17% decrease on General waste figures on 2021/22 figures. Increase in requests for internal segregation bins.
E06	Increase the number of electric vehicles and Service charging locations in more rural areas of the Service from 2021/22 baseline by 10%.	Service electric vehicles have increased by 14%, not including the new Hybrid vehicles. Charging locations have increased from 9 to 16 locations by the end March 2023.

Environmental Objectives for the year ahead 2023/24

OBJECTIVE 1

Provide environmental awareness training to encourage proactive measures to reduce Service wide carbon emissions and support a change of culture.

OBJECTIVE 2

Through the use of automated meter reading technology, monitor, review and analyse emissions from our estate. Share data to educate and reduce emissions by 2% on 2021/22 baseline year.

OBJECTIVE 3

Nature Recovery Action Plan 2023-26 – encourage collaborative working with partner organisations and community groups and include within the NRAP.

OBJECTIVE 4

Decrease food waste on Stations by 2% on 2021/22 baseline year.

OBJECTIVE 5

Gather baseline data for water consumption on selected sites and review current ways of working to influence change.

OBJECTIVE 6

Develop and consult on a decarbonisation plan for the Service by 2025.

A report of performance against these targets will be incorporated in the 2023/24 Annual Environmental Report.





Social Media

We encourage you to keep an eye on our social media channels for updates





Gwasanaeth Tân ac Achub Canolbarth a Gorllewin Cymru

> Mid and West Wales Fire and Rescue Service

A Sustainability and Environmental Annual Report