



Buckinghamshire & Milton Keynes Fire Authority

Meeting and date: Executive Committee, 12 July 2023

Report title: Environment and Climate Action Plan Update

Lead Member: Councillor David Hopkins

Report sponsor: Mark Hemming, Director of Finance and Assets

Author and contact: Mark Hemming

Action: Noting

Recommendations: That the Committee note the report.

Executive summary:

The Environment and Climate Action Plan was approved by the Fire Authority at its meeting on 8 December 2021. The Plan contained several actions designed to improve the Service's response to extreme weather events, as well as taking action to reduce its own carbon emissions.

This paper provides an update on progress against the Plan since it was approved. Some of the key points to note are:

- Following the record high temperatures during the Summer of 2022, a number of improvements have been implemented to assist the response to future extreme weather events.
- The Procurement, Fleet and Property strategies have all been updated to further consider environmental and climate implications.
- Scope 1 and 2 carbon emissions from our fleet and property have now been baselined, allowing future improvement to be quantified.
- The Service entered a contract for 100% renewable electricity, sourced solely from solar, wind and hydro power. Based on forecast usage this will reduce the Service's emissions by an estimated 283 tonnes of CO₂ in 2023-24.

Financial implications: There are no direct financial implications associated with the Climate Action Plan, although measures taken to reduce energy consumption will (all other things being equal) also bring a financial benefit to the Authority over the longer-term. Any implications of future actions that have a financial impact will be subject to approval in accordance with Financial Regulations and Instructions.

Risk management: The Authority's 2020-25 Public Safety Plan (PSP) identifies climate change as a risk to the communities it serves. In addition to ensuring that Buckinghamshire Fire and Rescue Service (BFRS) is properly prepared to deal with the effects of climate change on its risk and demand profile, the PSP

also commits to reducing the impact on the environment from BFRS's own operations and infrastructure.

Legal implications: No direct impact.

Privacy and security implications: No direct impact.

Duty to collaborate: No direct impact.

Health and safety implications: No direct impact.

Environmental implications: The Climate Action Plan demonstrates the Authority's commitment to addressing the issue of climate change. Detailed environmental implications are detailed within Appendix 1.

Equality, diversity, and inclusion implications: No direct impact.

Consultation and communication: No direct impact.

Background papers:

Environment and Climate Action Plan. Fire Authority. 8 December 2021. Available at: <https://bucksfire.gov.uk/documents/2021/11/fire-authority-agenda-and-reports-8-december-2021.pdf/> (pp. 29-37)

Summer Pressures. Fire Authority. 12 October 2022. Available at: <https://bucksfire.gov.uk/documents/2022/09/fa-item-10-121022.pdf/>

Summer Pressures Recommendations. Fire Authority. 14 June 2023. Available at: <https://bucksfire.gov.uk/documents/2023/06/fire-authority-annual-meeting-14-june-2023-item-18.pdf/>

Appendix	Title	Protective Marking
1	Environment and Climate Action Plan Update	None

Appendix 1 – Environment and Climate Action Plan Update

The Environment and Climate Action Plan (henceforth the Plan) sets out how the Service would respond to climate change through:

- Adaptation – optimising our response to extreme weather events such as flooding and wildfires.
- Mitigation - taking action to reduce our own carbon emissions, while encouraging our staff and communities to do the same.

Mitigation measures were then further subcategorised into Buildings and Energy, Transportation, Waste Reduction and Supply Chain.

Adaptation

The months of July (16 - 19) and August (9 - 15) 2022, brought record high temperatures and dry weather that presented many challenges for Fire and Rescue Services (FRSs) and other emergency responders across the country. On the 19 July 2022 the UK recorded its highest ever temperature of 40.3°C (104.5°F).

The Service attended an unprecedented number of calls, including many fires in the open / wildfires and declared a service wide major incident.

The Fire Authority has received two reports analysing the response to those incidents and making recommendations for the future. The latest report focussed on six areas to consider for future improvement:

- Preparedness
- Response
- Information available and Training provided
- Equipment and Procedures
- Communications (internal / external)
- Health Safety and Welfare

The report concluded that “Summer pressures has the potential to form part of BFRS core business, and due to the nature of these pressures they will provide several challenges moving forward. BFRS staff were able to service the needs of these summer pressure incidents whilst maintaining operational fire cover, and this has been recognised, however there are multiple areas for improvement as can be viewed in the themes.”

Links to the full reports have been provided within the background papers.

Mitigation

The planned actions to reduce our own carbon emissions while encouraging our staff and communities to do the same were set out in the Plan. Updates on each area are summarised in the table below and referenced to more detailed updates for those actions already commenced on subsequent pages.

Year	Action	Objective	Update	RAG
2020-21	Update Procurement Strategy	Address the future aims in the Supply Chain area	Incorporated into new Strategy approved by the Fire Authority in December 2022.	Done
	Update Fleet Strategy	Address the future aims in the Transportation area	An interim update is being presented to the Executive Committee in July 2023. Environmental considerations have been reflected in this.	G
	Investigate the use of renewable energy in our buildings	Reduce CO2 emissions from current levels of energy usage	New electricity contract is zero carbon, 100% renewable electricity.	Done
2022-23	Complete the Carbon Accounting Tool	Baseline current emissions and highlight other areas for further improvement	Completed for Scope 1 and 2 emissions – further work required to complete Scope 3 details	G
	Review engagement and communications plan for climate change issues	Increase public awareness of climate change through existing media channels	Ongoing and specific focus in relation to Summer 2022	G
	Review potential use of sustainable investments	Reduce the environmental impact of our investment portfolio	Sustainable deposits now form part of our Treasury portfolio	Done
2023-24	Update Property Strategy	Review the energy efficiency of our buildings and include actions to improve this, a key element of the Buildings and Energy area	An interim update is being presented to the Executive Committee in July 2023. Environmental considerations have been updated as part of this.	G
	Produce training for staff on climate change and the Environment and Climate Action Plan	Look to establish a group like the Green Action initiative to encourage energy saving among our own staff	Scheduled for 2023-24	G
	Look at ways to further reduce waste	Address the future aims in the Waste Reduction area	Scheduled for 2023-24	G
	Unit 7 Exit – specific part of both updated Property Strategy and Financial Strategy, which has associated environmental benefits	Reduce carbon emissions	In progress. Business case for exiting Unit 7 to be presented to the Executive Committee during Q3 of 2023-24.	A

2024-25	Review of the Prevent, Protect, Respond area in readiness for the Public Safety Plan 2025+	Investigate ways to improve targeting of individuals and business most at risk	Scheduled for 2024-25	G
		Identify potential partners to support our work in relation to climate change	Scheduled for 2024-25	G
	Revised Fleet and Property Strategies	Consider number of vehicles and premises to be held, their purpose, and anticipated level of use	Scheduled for 2024-25 to align with development of the Community Risk Management Plan (CRMP) 2025-2030	G

Update Procurement Strategy

The new Procurement Strategy covering the years 2022-2026 was approved by the Fire Authority at its meeting on 7 December 2022. The Strategy was developed with reference to the National Fire Chiefs Council (NFCC) National Procurement Strategy (which is based on the Local Government National Procurement Strategy) and practices were assessed using the accompanying toolkit to identify strategic targets.

The key area of the Procurement Strategy in relation to this Plan is social value, which is about improving economic, social and environmental wellbeing from public sector contracts over and above the delivery of the services directly required. It was noted that the Service is already including social value requirements in all relevant tenders (despite not being legally required to do so) and this forms 5-10% of the total quality score that is assessed. An improvement that was identified and will be addressed as part of the Procurement Strategy is to improve the monitoring and reporting of social value across all the Service's contracts. Environmental and climate considerations will form a key part of this reporting.

Update Fleet Strategy

The Fleet Strategy will (subject to approval) be extended until 2025 in line with the current Public Safety Plan (PSP) and it has been updated to ensure it remains relevant for the current and subsequent financial year. Following the development of the 2025-2030 Community Risk Management Plan (the timeline for which was approved by the Fire Authority at its meeting on 7 December 2022) a new Fleet Strategy will be developed to ensure the fleet requirements can be delivered as effectively and efficiently as possible. The update covers several environmental and climate related issues including:

- Electrification of our fleet – the Service continues to monitor the latest developments in electric frontline pumping appliances, including a demonstration of the capabilities of the latest model from Rosenbauer UK, Emergency One and upcoming visit to JCB to view developing hydrogen technology. However, these are currently thought to be impracticable prohibitive given the Service's current requirements and the additional cost, but this position may change in the future. The Service has replaced a number of white fleet diesel vehicles with electric or hybrid equivalents and has installed charging points at West Ashland, Aylesbury and Marlow.

- Vehicle emissions and mileage were analysed and form part of our overall emissions analysis (see pages 5-6)
- The consideration of alternatives to diesel fuels, and why these have currently been discounted but will be kept under review



Investigate the Use of Renewable Energy in our Buildings

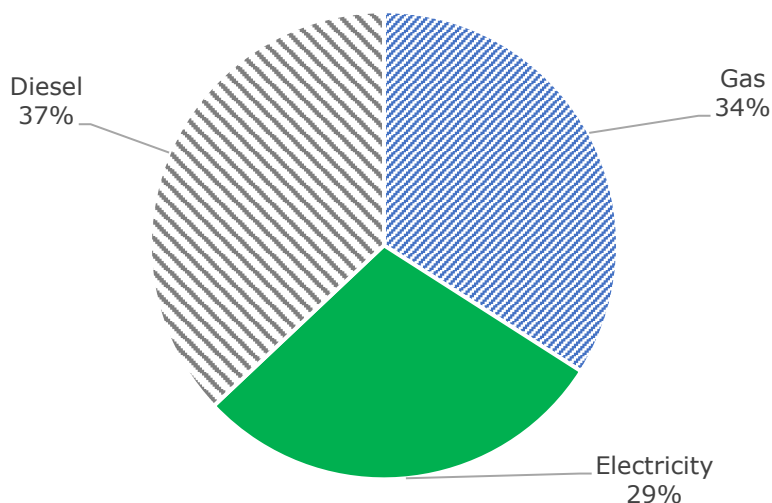
The Service’s previous contracts for electricity and gas expired on 31 March 2022. Due to the significant increases in energy prices at that time, those contracts were extended on a rolling basis until such time that energy prices, and the outlook for prices, started to fall. New 12-month fixed price contracts for both electricity and gas were awarded and started on 1 April 2023.

The contract for electricity was awarded to Bryt energy, who supply British businesses with zero carbon, 100% renewable electricity, sourced solely from solar, wind and hydro power. Based on forecast usage this will reduce the Service’s emissions by an estimated 283 tonnes of CO2 in 2023-24.

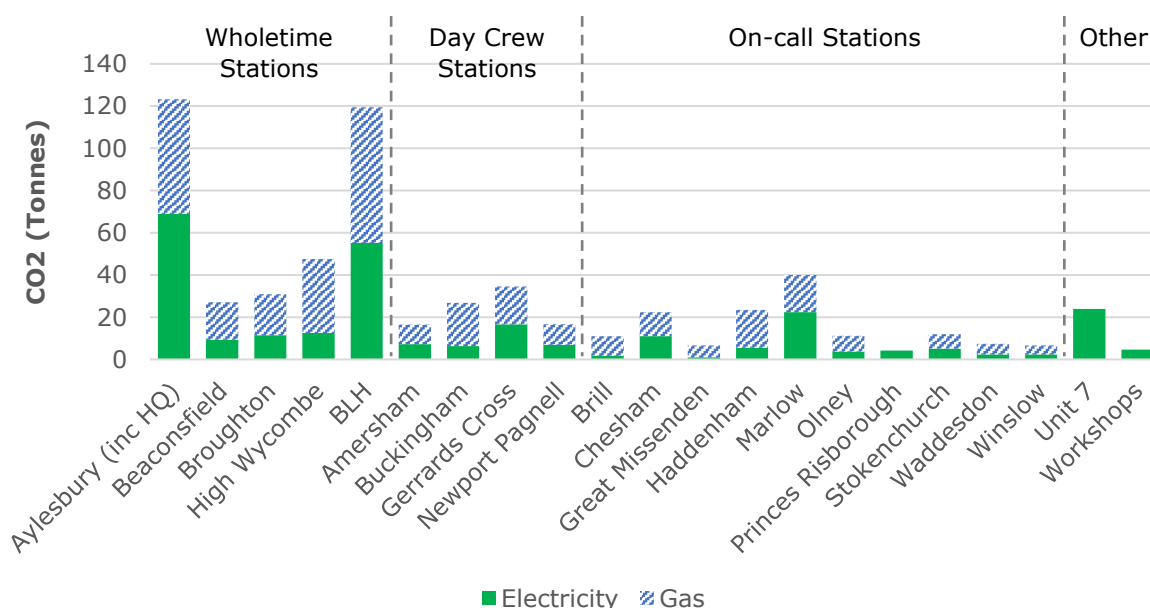


Complete the Carbon Accounting Tool

The tool has now been completed for scope 1 and scope 2 emissions. The total CO2 produced by the Service within these scopes for 2022-23 was 978 tonnes, with the split shown in the chart below:



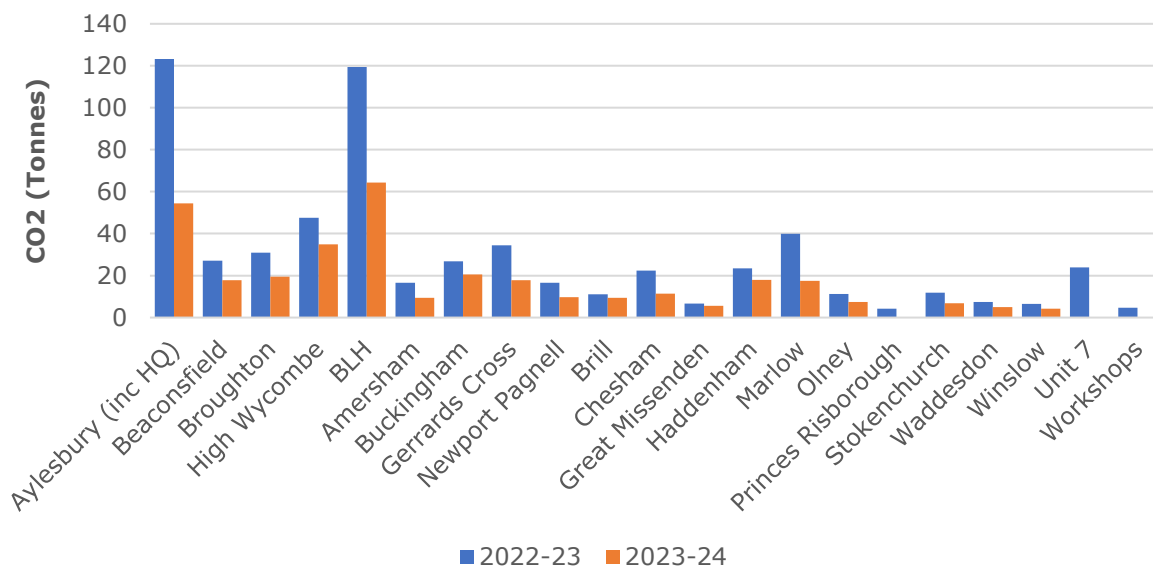
The main driver of diesel usage is responding to incidents, the demand for which is not directly in control of the Service. To reduce diesel usage significantly the Service would need to electrify or move to alternative fuels for its frontline pumping appliances. This is considered in more detail under the Fleet Strategy Update section on page 3. Gas and electricity usage are primarily driven by the usage of the Service’s premises. The chart below shows the CO2 emissions by station, further sub-divided by gas and electricity. Premises have been grouped according to their primary purpose, as one would expect an on-call station that is utilised only when required to consume much less gas and electricity than a wholetime station that is being utilised 24 hours a day, seven days a week.



Key points to note from the above chart are:

- Aylesbury Fire Station also includes the Service’s headquarters so will consume more energy than most other wholetime stations.
- The Blue Light Hub (BLH) also contains a significant amount of office accommodation that increases energy consumption.
- Marlow consumes significantly more energy than any other on-call station as it also incorporates a significant amount of office accommodation, and is utilised by multiple partners. Work has been commissioned to revisit the feasibility of solar panel installation at Marlow given the increasing usage of this site in recent years.
- Unit 7 is addressed in the section entitled “Unit 7 Exit” on page 8.

As noted on page 4, the Service entered a contract for zero carbon electricity for 2023-24. The chart below shows the CO2 saving per tonne by premises under this new contract, compared to 2022-23:



While this is a significant saving it should be noted that if a future contract was awarded to a supplier that supplies electricity using a lower percentage of renewable energy supplies, the CO2 emissions would increase towards the 2022-23 levels.

Other measures taken to reduce the energy consumed by our premises are covered in the Update Property Strategy section on page 8. There is still further work required to evaluate other sources of CO2 emissions from the Service’s operations, such as the impact of staff travel and working from home.

Review Engagement and Communications Plan for Climate Change Issues

As noted earlier, the months of July and August 2022, brought record high temperatures and dry weather to the UK. Even before then, the Service was raising the importance of being aware of the weather and promoting fire and water safety, as well as personal wellness. The Service also used its media channels to update the public during major incidents, as well as using the increased interest to promote on-call recruitment.

A selection of environment and climate related tweets from the Service’s account:

Bucks and MK Fire @Bucksfire · Jun 1, 2022

Stay #WeatherReady this summer by downloading the @metoffice App, where you can access daily weather forecasts plus UV and pollen forecasts, enabling you to stay safe and be prepared for any summer weather ☀️

More seasonal tips here:
bit.ly/39R6y1F
 #BePrepared #TVLRF

1 2

Bucks and MK Fire @Bucksfire · Jun 15, 2022

☀️ If you're going to enjoy the weather with a BBQ check out our advice. 🍷
bit.ly/3N7H665 Keep #FireSafe. We have attended over 125 BBQ fires in the last 5 years*. Roughly half were in which 2 months? Data taken from BFRS incident reporting 2018 - 2022*

2

Bucks and MK Fire @Bucksfire · Jun 20, 2022

Keeping the kids cool in this heat is a tough one. While it's hot outside the water may not be! Before the kids enjoy the water have the #FloatToLive chat! Remind them to #RespectTheWater. For other top open #watersafety tips bit.ly/3mPakfc

1 1

Bucks and MK Fire Retweeted

Met Office @metoffice · Jul 15, 2022

⚠️⚠️⚠️ Red Extreme heat warning issued ⚠️⚠️⚠️

Parts of England on Monday and Tuesday

Latest info 📄 bit.ly/WxWarning

Stay #WeatherAware ⚠️

City	Temperature
Lerwick	17
Stornoway	19
Aberdeen	27
Glasgow	29
Belfast	26
Manchester	36
Birmingham	37
Cardiff	33
Plymouth	27
Southampton	34
Newcastle	32
Hull	38
Norwich	38
London	40

736 7,403 5,687

Bucks and MK Fire @Bucksfire · Jul 19, 2022

We have declared a major incident due to high demand across Buckinghamshire and Milton Keynes. We will not be attending Automatic Fire Alarms. Please only call us if it is an emergency.

1 50 73

Bucks and MK Fire @Bucksfire · Jul 20, 2022

If the events over the last couple of days have taught us anything it is how much we rely on our emergency services! Now we need you, last few spots left on our On-Call Firefighter awareness evening tomorrow night. Join us bit.ly/3oTtdDU

3 9 16

Review Potential Use of Sustainable Investments

Sustainable investments now form part of the Service’s Treasury Management Strategy. They are classified as deposits that allow customers to have their capital referenced against sustainable assets, whether existing now or in the

future, as verified through the green and sustainable product framework on a net positive basis.

During 2022-23 the Service had £2m invested in a sustainable investment, which is approximately 10% of the investment portfolio.

Update Property Strategy

The Property Strategy will (subject to approval) be extended until 2025 in line with the current Public Safety Plan (PSP) and it has been updated to ensure it remains relevant for the current and subsequent financial year. Following the development of the 2025-2030 Community Risk Management Plan a new Property Strategy will be developed to ensure the requirements of the Service can be delivered as effectively and efficiently as possible.

The update covers environment and climate related issues that have been, and are to be addressed, over the coming years including:

- All on-call stations have had additional heating controls installed to ensure they are not heated unnecessarily when no-one is present in the buildings.
- A number of sites have 1st generation LED lighting, which are being replaced with 6th generation LEDs when they fail, or where it can be done as an invest to save measure. For example, replacing the bay lighting at Aylesbury reduced energy consumption by 30%
- Combined heating, ventilation and air-conditioning (HVAC) units at HQ have been programmed with a double-shutdown to reduce the amount of energy used during non-core hours.
- Potential exit of Unit 7 (see below)

Unit 7 Exit

The exit of Unit 7 forms part of the current Financial and Property strategies and would also have environmental benefits relevant to this Plan. As noted on page 5, the building emits 24 tonnes of CO2 per year in relation to electricity (although this is reduced to zero on the current contract due to the use of 100% renewable electricity).

To assist with the planning of the exit, the Service recently signed a deed of variation to allow them to terminate the lease by giving nine months' notice at the end of any month (the previous termination clause only allowed this to be exercised at the end of March each year). A business case setting out the options for exiting the building will be presented to the Executive Committee for approval during Q3 of 2023-24.