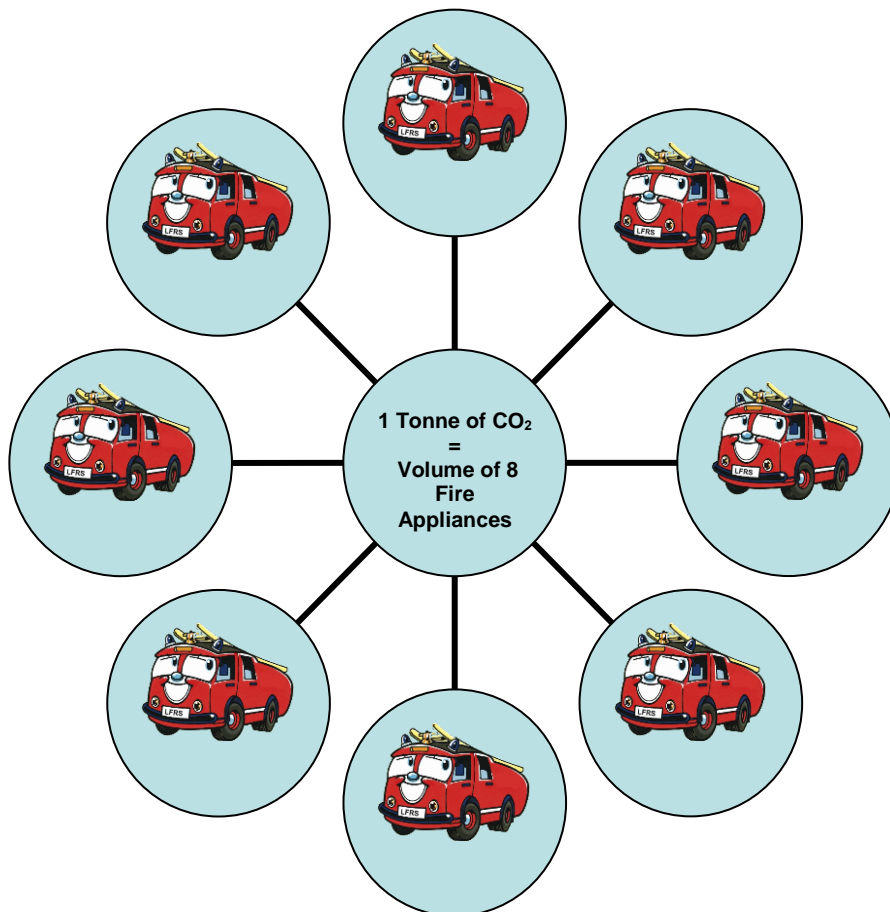


Lancashire Fire and Rescue Service

Carbon Management Plan (CMP)



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Foreword

Lancashire Fire and Rescue Service's Carbon Management Plan shows a clear commitment to embedding reductions in environmental impact into our core business. Recognising the reality of climate change and the importance of cutting carbon emissions is an essential component of the sustainability agenda.

The work undertaken by the Carbon Management Team has produced a detailed understanding of the carbon footprint of the Service. The Carbon Management Plan has already delivered cost savings associated with energy use and reduced our carbon emissions. We aim to continue our success and achieve year on year reductions in carbon emissions to achieve our target of 40% by 2030. This provides a clear demonstration that we are prepared to lead by example and will continue to deliver cost-savings and carbon emission reductions in the future.

Over the next few years, we will report our progress on a regular basis and demonstrate our commitment by turning the plan into reality. The Carbon Management Plan is a key component and integral part of how the Service responds to mitigating climate change and is a key part of the Service's Environmental Management System which is certified to ISO 14001:2015.

Justin Johnston, Chief Fire Officer

**County Councillor Hasina Khan, Combined Fire
Authority Climate Change Champion**

Management Summary

The original Carbon Management Plan (CMP) was agreed by the Lancashire Combined Fire Authority (LCFA) Resources Committee in March 2009. The aim was to reduce costs associated with energy prices as they continue to rise together with reducing carbon emissions from use in buildings and transport. An initial target of 20% reduction of CO₂ by March 2013 was set with a visionary target of 40% by March 2020 which included the closure of SHQ and a move to new premises. A simplified version was created in April 2013 and agreed by the Lancashire Combined Fire Authority Resources Committee in June 2013. Progress against the targets is detailed within this updated version.

The first step to manage carbon emissions is to quantify baseline emissions. Buildings use (gas and electricity), Transport use (fuel) and Water have been calculated to create CO₂ emissions and cost savings from a 2007/08 baseline.

Carbon Management and Waste management performance including the total amount of waste produced and of this waste the percentage recycled from a baseline year of 2015/16 is reported in the Annual Safety, Health and Environment Report presented to the LCFA each year.

The CMP requires strategic governance, ownership and management within Lancashire Fire and Rescue Service. This CMP sets out key roles and responsibilities supported by the Carbon Management Team who will be responsible for implementing, directing, reviewing and reporting on progress.

1 Introduction

It is now widely accepted that changes to the global climate are taking place. The UK in June 2019 became the first major economy in the world to pass laws to end its contribution to global warming by 2050.

The target will require the UK to bring all greenhouse gas emissions to net zero by 2050, compared with the previous target of at least 80% reduction from 1990 levels.

The UK has already reduced emissions by 42% while growing the economy by 72% and has put clean growth at the heart of its modern Industrial Strategy. It is against this background and that of increasing regulation that Lancashire Fire and Rescue Service's Carbon Management Plan has been developed.

This document details the sources of the Service's emissions (consumption from energy, fuel and water) and establishes a baseline target derived from year 2007/08 against which progress will be measured. It sets out the Service's approach towards carbon management and climate change mitigation and forms a key part of the Service's Environmental Management System and identifies key actions for the Service to take in order to meet its carbon emission target.

The CMP will deliver cost savings associated with energy use together with reductions in CO₂.

2 Carbon Management Strategy

2.1 Context and Drivers

The most crucial step to limit climate change is to make big and rapid reductions in global greenhouse gas emissions. There are many different ways this can be done and governments, businesses, organisations and individuals around the world can all contribute.

In June 2019, the UK became the world's first major economy to pass a law committing the country to a target of 'net zero' emissions by 2050.

Delivery against the longer term 2050 UK target will be challenging. It is expected to require considerably more funding, which needs to be included within the services 30 year capital ambition, investment and funding plan as part of the ongoing Capital Strategy. At present there is insufficient information to identify the funding requirements to include in the capital strategy for 2020 onwards. Furthermore it is recognised that developments in technology and changes to government policy over this period will impact the sums required.

The Service is facing unavoidably high increases in energy costs, because of rising energy prices. With the drive to control council tax, achieve efficiency savings and with increasing service costs, there is an urgent need to control the Service's exposure to rising energy prices by controlling its use of energy.

The Service's Carbon Management Plan is central to the Service's approach to Climate Change Mitigation, demonstrating leadership by putting our 'own house in order'.

The key drivers for the Service are:

- Value for Money.
- Community Leadership
- Local Enterprise Partnerships/Local Resilience Forums.
- CO₂ reduction from our operations.
- Per capita CO₂ emissions in the Local Authority area.
- Mitigating and Adapting to Climate Change.
- Reputation / Leadership of other Local Authorities and Fire and Rescue Services.
- Sustainable business, being a 'low carbon authority'.
- Reduction in fires, other emergency incidents and their consequences.

2.2 Our low carbon vision

'Lancashire Fire and Rescue Service recognise the need to tackle climate change at a local level. We will reduce our carbon emissions and our impact on the environment from the services we deliver and work with partners to reduce Lancashire's carbon emissions which in turn will contribute to carbon reduction in the widest possible sense.'

2.3 Targets and objectives

Lancashire Fire and Rescue Service objective is to reduce its impact on the environment by reducing carbon emissions from our activities which includes energy, fuel and water use from a baseline year of 2007/08. The target has been set at 40% carbon emission reduction by 2030.

3 Emissions Baseline and Projections

This section introduces the baseline figures for Lancashire Fire and Rescue Service carbon emissions and explains how these figures were determined.

3.1 Scope

The scope of emissions sources considered in measuring the carbon emissions baseline is all the buildings that are owned by the service plus PFI stations and all fleet vehicles that are owned by the Service.

Vehicles used for work that are privately owned and officers cars are excluded from the baseline.

CO₂ emissions are estimated by using standard assumptions supplied by the Carbon Trust.

3.2 Baseline

The Carbon Trust has produced a Carbon Assessment Tool, for calculation of CO₂ emissions from organisations. This has been completed and has converted consumption figures into carbon emissions. The financial year 2007/08 is the baseline year used. Lancashire Fire and Rescue Service's carbon emissions baseline and costs for the financial year 2007/08 are tabled below:

	Total	Buildings	Transport	Water
Baseline CO₂ emissions (tonnes)	4,352	3,194	1,158	9.1
Baseline Cost (£)	£838,718	£318,697	£520,021	£156,720

The total carbon emissions produced by the Service's operations for energy are estimated to be 4,352 tonnes per annum with the financial costs estimated as £838,718. Carbon emissions from water are estimated to be 9.1 tonnes per annum with the financial costs estimated at £156,720.

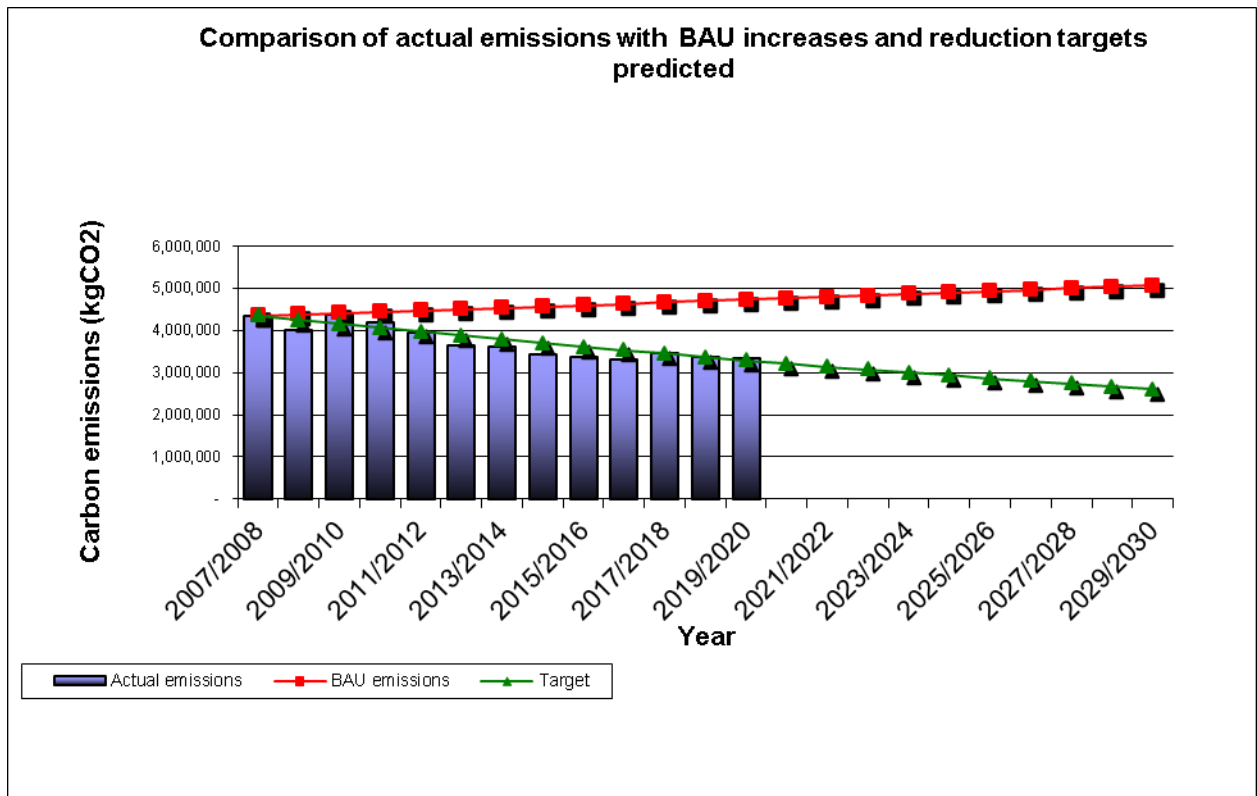
3.3 Projections and Value at Stake

The Service's carbon footprint and associated costs will rise over time if no action is taken to control emissions. A projection of the future costs and carbon emissions has been calculated using the Local Authority Carbon Management Programme baseline spreadsheet methodology provided by the Carbon Trust.

The **business as usual** (BAU) scenario is the projection of the future carbon emissions and costs if no action is taken to control emissions. This has been calculated in line with DEFRA forecasts at the start of the programme for energy prices and energy consumption.

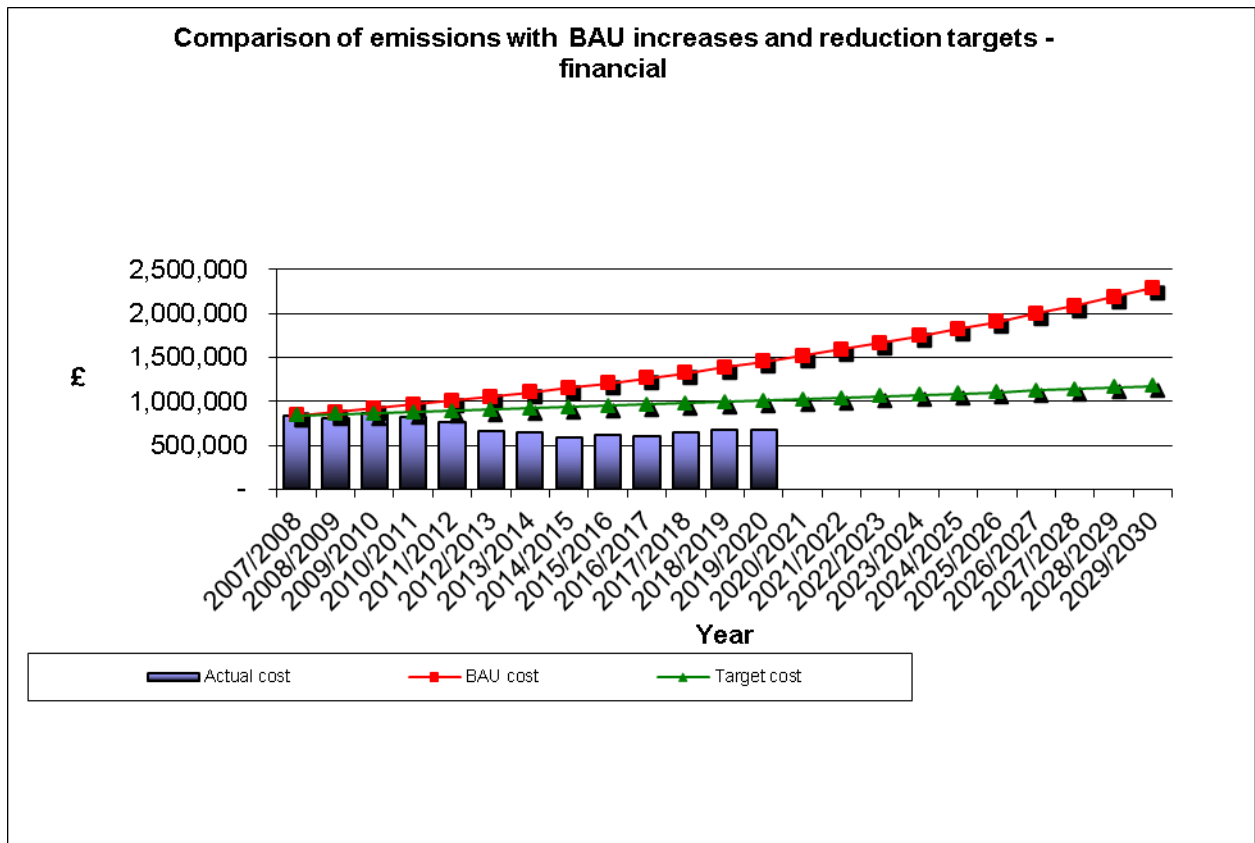
The following charts show the comparison of actual emissions with business as usual increases and reduction targets predicted for carbon emissions for buildings and transport (excluding water) and financial costs.

The **value at stake** is the cumulative difference between the business as usual scenario and the reduced emissions scenario.



The chart predicts that carbon emissions from energy and fuel would increase from 4,352 to 5,074 tonnes of CO₂ by March 2030 if no action is taken and business continues as usual. The predicted reduction target is 2,608 tonnes. The value at stake is therefore 2,466 tonnes of carbon emissions up to March 2030. At March 2013 the period where the first target of 20% reduction was set 17% has been achieved equating to a saving of 720 tonnes of CO₂ and showing carbon emissions within the Service at 3632 tonnes. At March 2020 23% reduction equating to 1005 tonnes of CO₂ and showing carbon emissions within the Service at 3347 tonnes.

At March 2020 there has been a reduction in water use of 30% equating to a saving of 2.7 tonnes of CO₂.



The financial cost at baseline year 2007/08 is £838,718 rising to £2,287,294 by March 2030 if business continues as usual. The predicted reduced emissions scenario shows the cost at £1,175,855. The total value at stake is therefore £1,111,439 over the period of the CMP. At March 2020 19% cost savings have been achieved equating to £679,009.

4 Carbon Management Projects

The Carbon Management Team generates opportunities/ideas to reduce the Service’s carbon emissions. Further investigation, prioritisation and quantification of these opportunities/ideas continue to identify the most cost effective actions to meet the carbon reduction target.

At March 2020 108 projects have been started and 97 having been completed. These projects range from boiler and heating controls upgrades, re-roofing projects, appliance bay door replacements, LED lighting upgrades, replacement of fire appliances and re-organisation of smaller fleet vehicles. Year on year further projects commence following analysis of the previous years data.

5 Carbon Management Plan Financing

Projects carried out are identified within departmental budgets. Requests for funding to deliver the projects will be made through the normal budget request process.

It is worth noting that a significant number of the projects will continue to realise financial saving years after the target date.

5.1 Assumptions

- The budget requirements for the planned/funded projects are available.

- Resources are available to deliver the projects.
- Investment is made at the Service Training Centre, Preston Fire Station and projects developed.

5.2 Benefits – Quantified and Unquantified

- Supporting our Integrated Risk Management Plan.
- Supporting the Environmental Management System by ensuring that we strive and plan for continual improvement in our environmental performance.
- Raising staff awareness and encouraging behavioural change on environmental and carbon issues.
- Creating further momentum for the Service to achieve its objectives.
- Projects are programmed where the need is the greatest based on data.

6 Management of the Carbon Management Plan

Ownership of the Carbon Management Plan is the key to its success. The key people and interested parties within the Service and external to the Service and their roles are set out below.

6.1 Strategic ownership and oversight

The Director of People and Development has responsibility for the strategic direction for Carbon Management; overseen by the Combined Fire Authority where progress against the objectives outlined in the plan are reported within the Annual Safety, Health and Environment Review.

6.2 The Carbon Management Team (CMT) – delivering the projects

The Carbon Management Team led by the Head of Safety, Health and Environment is responsible for evolving and implementing the Carbon Management Plan and for achieving the Carbon Management targets. The CMT will identify and deliver the projects and actions contained within the Plan in order to achieve the targets. The Head of Safety, Health and Environment will chair twice yearly meetings to review progress on activities and projects and identify blockages that need to be raised with the Director of People and Development.

Role	Name and position
Project Leader	Julie Lamb Head of Safety, Health and Environment
Carbon Management Team Members	John Hargreaves Head of Fleet & Engineering Services
	Andy Bibby Building Surveyor – Property Department
	Lynn Rigby Assistant Safety, Health and Environment Advisor

6.3 Succession planning for key roles

Listed in section 6.2 are employees that currently hold the position that are required to deliver this Carbon Management Plan. Should any employee move roles or leave the Service the person who replaces them will automatically fulfil the role within this team and will be responsible for the necessary actions included in the Plan.

6.4 Ongoing stakeholder/interested parties management

Detailed below are the stakeholders/interested parties for the Carbon Management Plan. It is recognised that effective communication with our key stakeholders is fundamental to gaining approval and endorsement for the carbon management plan, but also to ensure that carbon management become part of the Service's culture and day-to-day business.

Individual or Group	Influence	Impact	Their interest or issues	Means of Communication
Combined Fire Authority	H	L	Resources required carrying out the projects.	<ul style="list-style-type: none"> ○ Carbon Management Plan ○ Annual SHE Review reported to CFA ○ Regular updates from the CFA Climate Change Champion
Executive Board	H	M	Cost / budgets for projects.	<ul style="list-style-type: none"> ○ Carbon Management Plan ○ Director of People and Development ○ DFM Meetings with Heads of Departments / Finance
Senior Management Team	M	M	Prioritising and Implementation of Projects.	<ul style="list-style-type: none"> ○ Carbon Management Plan ○ Annual SHE Review reported to CFA
Employees	H	L	Can reduce their own impact on the environment by changing behaviour and taking actions that will reduce carbon emissions	<ul style="list-style-type: none"> ○ Carbon Management Plan ○ Service Orders / Standard Operating Procedures ○ Routine Bulletin ○ Intranet
Representative Bodies	M	L	Can influence behaviour in order to reduce the impact on the environment	Regular Meetings with Management

6.5 Reviews

Progress through the Health, Safety and Environment Advisory Group will be reported as required. Annually progress will be reported to the Health, Safety and Environment Advisory Group, Senior Management Team and Combined Fire Authority as part of the Annual Safety, Health and Environment Review.