



**DORSET & WILTSHIRE**  
**FIRE AND RESCUE**



# Environmental Sustainability Strategy

2021-24

PASSIONATE ABOUT  
**CHANGING & SAVING LIVES**

# ABOUT THIS STRATEGY

To help make Dorset and Wiltshire a safer place to live, work or visit, we need to ensure that all our efforts and resources are focused on having the right people, in the right place, at the right time, with the right skills and equipment to prevent and to respond to emergencies when they happen.

To help guide our thinking, and to keep ahead of an everchanging world, we regularly review both our external operating environment, as well as carrying out an internal analysis of where our Service needs to be.

Our Strategic Assessment of Risk supports the development and review of our Community Safety Plan and organisational strategies. This is then translated into on the ground action at department, station and team level through our Service Delivery Plan, which is underpinned by a comprehensive performance framework.

This strategy therefore sets out how our Service will improve over the next three to five years to further strengthen our approach to environmental sustainability.

## PURPOSE

The purpose of this strategy is to set out a long-term pathway to deliver against the ambition set out in the Community Safety Plan and the policies agreed by the Authority.

In developing this document, we have considered:

- The problems and critical issues we need to respond to.
- The policy objectives set out by the Authority.
- The priorities and our capacity to achieve them.

This plan is structured to provide a picture of where we are now and the context for the journey we intend to go on. It outlines what we want to achieve and provides a picture of our intentions over the next three to five years.

This Environmental Sustainability Strategy will be dynamic and will be overseen by the Director of Service Support, managed by the Head of Assets, and monitored through the Strategic Leadership Team and Members through our performance management arrangements.

## STRATEGIC FOCUS

- Being efficient in our waste management.
- Reducing our Co2 emissions.
- Becoming more sustainable in our energy management.
- Improving our estate.

## HMICFRS

This strategy aligns to and informs the following Key Line of Enquiry:

- KLOE 6: How well do we use resources to manage risk?
- KLOE 6.10: To what extent do we understand and manage our impact upon the environment?

## Strategic position

### Strengths:

- Positive educational channels through our Green Champions network.
- Collaboration with other emergency service and local authority partners.
- Inclusive, engaged, and empowered cross directorate teams.
- Leadership commitment to achieve environmental targets.
- Capital funding available.
- Increasing use of energy efficient technologies.
- Routine monitoring of number and types of fires.
- Arson reduction initiatives, strong risk inspection plans to ensure commercial buildings comply with fire safety legislation.
- Membership of the Emergency Services Environment and Sustainability Group (EESG), with sign up to the EESG Sustainability Charter 2022

### Weaknesses:

- Lack of baseline data of energy consumption and the effective monitoring of operational utility consumption and waste production.
- Back-up power strategy at stations is not fit for purpose in case of a Black Start.
- Lack of internal technology such as building management systems to improve energy performance in our estate.

### Opportunities:

- Developing access to government funding and subsidies.
- Development of solar panel use at our locations to potentially support a positive Black Start response.
- Working with partners to develop joint infrastructure in line with government policy.
- Eco-sustainable procurement and the introduction of eco-friendly products and services, using sustainable practices and promotion of social responsibility in the workplace.
- Creation of an organisational focus on reducing single use plastics.

### Threats:








- Commodity pricing volatility reducing financial flexibilities.
- Cost and infrastructure requirements for new vehicle technology.
- New and potentially onerous legal, regulatory and accreditation that might be required.

## Strategic challenges

- Embedding a positive focus on our environmental approach to effect organisational behavioural change.
- Restricted availability of recyclable and biomaterials for operational use.
- Development of a circular economy on the route to becoming 'greener'.
- Seizing opportunities to reduce the consumption of utilities through improved project works and education.
- Reducing the size of our white fleet.
- Ensuring any vehicle replacement programme is in line with the Environmental and Sustainability strategy, Government environmental legislation, and manufacturers future positioning with alternative fuel vehicles.
- Reacting to a Black Start situation with environmentally friendly solutions.










# Being efficient in our Waste Management

With a focus on  Equality, Diversity & Inclusion and  Environmental Sustainability

Where we are now	Where we will be in three years	What we will do
<ul style="list-style-type: none"> <li>• Single waste contractor in place to manage all waste services.</li> <li>• Working with 'Green Champions' to identify areas of opportunity to improve services.</li> <li>• Working with partners to identify best practices and efficiencies via the Emergency Services Environmental and Sustainability Group.</li> <li>• We are reducing our use of paper through digital by default practices.</li> <li>• Complying with all appropriate environmental legislation particularly in the handling, reporting and management of waste.</li> </ul>	<p data-bbox="734 730 1458 785"><b>Where we will be in five years</b></p> <ul style="list-style-type: none"> <li>• Reduced amount of waste generated year on year and the associated costs.</li> <li>• Reduced amount of indirect Co2 emissions year on year from reduced collections.</li> <li>• Maximise 'smarter project works' in waste generated from refurbishment projects and large supply orders.</li> <li>• Reduce single-use plastic (SUP) year on year.</li> <li>• Zero waste to landfill.</li> <li>• Constant year on year reduction in waste generated.</li> <li>• Sustained reduction in Co2 emissions.</li> <li>• Removal of SUP from DWFRS operations.</li> </ul>	<ul style="list-style-type: none"> <li> Further strengthen our Green Champion engagement to promote behavioural change.</li> <li> Provide recycling facilities at all sites.</li> <li> Review direct and indirect waste produced and implement improvements for reduction by reviewing waste generated from suppliers and project works.</li> <li> Review sustainable alternatives on all single use plastic products to align with the single-use plastic (SUP) EU Directive to reduce the organisational volume and impact of plastic products on the environment.</li> <li> Review the type of waste streams generated per location to ensure efficiencies to reduce our waste and costs.</li> <li> Undertake a review of assets disposed of explore alternative opportunities to reuse.</li> <li> Ensure that staff are informed of waste services available and that waste targets are met through engagement via 'Green Champions'.</li> </ul>

# Reducing our CO2 Emissions










With a focus on  Equality, Diversity & Inclusion and  Environmental Sustainability

Where we are now	Where we will be in three years	What we will do
<ul style="list-style-type: none"> <li>• Raised awareness and good take up of the cycle to work scheme.</li> <li>• Gathering key data to identify areas for improvement and investing in projects to reduce Co2 emissions - creating a baseline for set targets.</li> <li>• Supporting working from home and smarter working initiatives to assist in reducing Co2 emissions.</li> <li>• Relocating staff to Poundbury and Hamworthy thus reducing building and travel emissions.</li> <li>• Researching solar, PV and battery storage schemes to support the organisational business continuity plans.</li> </ul>	<ul style="list-style-type: none"> <li>• An assured data base, a carbon reduction trajectory with key factors driving our reductions showing sustainable improvements in energy efficiency and decarbonisation.</li> <li>• Reduction of white fleet usage that accurately reflects organisational needs, embedded smarter working practices and the installation of electric vehicle (EV) charging points at key sites.</li> <li>• Procure our energy via a green tariff that comes from 100% renewable sources to reduce our emissions.</li> <li>• Completion of the IER under scope 1 and 2 of the GHG Protocol (see appendices) and identifying direct emissions from sites and indirect emissions from energy.</li> <li>• Reduce emissions in our direct control.</li> </ul>	<ul style="list-style-type: none"> <li> Review scope 1 and 2 of the GHG Protocol evaluate our direct and indirect emissions and identify areas for reduction of emissions.</li> <li>  Review all facilities to support and encourage cycle to work scheme.</li> <li>  Encourage the use of car sharing schemes and continue to promote working from home and smarter working.</li> <li> Consider the trial of EV vehicles for white fleet and identify locations for EV vehicle charging points.</li> <li> Undertake Initial Environmental Reviews (IER) to understand the scope of inclusion that have been identified in our carbon footprint analysis.</li> <li> Reduce energy consumption by installing insulation and photovoltaics (PV) and plan any residual emission that will need to be offset.</li> <li> Create a campaign via Green Champions that highlights small changes can make a difference.</li> </ul>
	<h3 data-bbox="719 1005 1503 1058">Where we will be in five years</h3> <ul style="list-style-type: none"> <li>• A sustained reduction of emissions through the green energy tariff.</li> <li>• A sustained reduction of travel mileage and therefore of Co2 emissions.</li> </ul>	

	<ul style="list-style-type: none"><li>• Scope 3 of the Greenhouse Gas Protocol in place to understand all the other indirect emissions.</li></ul>	<ul style="list-style-type: none"><li>🌍 Explore opportunities for Public Sector Decarbonisation Schemes grant funding.</li><li>🌍 Research and implement Solar, PV, and battery storage schemes.</li><li>🌍 Explore opportunities to reduce environmental impact further through supply chains for goods and services procured.</li></ul>
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# Becoming more sustainable in our Energy Management

With a focus on  Equality, Diversity & Inclusion and  Environmental Sustainability

Where we are now	Where we will be in three years	What we will do
<ul style="list-style-type: none"> <li>Gathering energy consumption data for periods 2019 onwards to understand areas for development through investment.</li> <li>Appointing a supplier via a framework to analyse historical billing and recover any overspend.</li> <li>Developing options appraisals on the provisions of standby power, including utilising solar PV panels with battery storages with sufficient power to maintain essential services during a mains power outage.</li> <li>Single suppliers on utilities, water market deregulated providing a wider market choice of supplier.</li> <li>Investigating back up power solutions at our locations to mitigate Black Start impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Waste and water will have targets aligned with the Governments Green Commitment (2016) through innovative procurement and reviewing efficiency of consumption.</li> <li>Have detailed and accurate utility running cost per site to be in a better position for tendering and understanding scope for tendering future contracts.</li> <li>Report year on year reductions and progress.</li> </ul> <p><b>Where we will be in five years</b></p> <ul style="list-style-type: none"> <li>Continue to review the effectiveness, efficiency, installation costs and data on all reductions in consumptions and cost.</li> <li>Maximised our opportunity for partnership working and joint procurement to reduce costs.</li> </ul>	<ul style="list-style-type: none"> <li> Encourage innovation and efficiency through utility suppliers due to the increase in need for retailers to provide value added sustainable services.</li> <li> Only select and procure energy suppliers that can reduce our carbon footprint.</li> <li> Review the effectiveness, efficiency, installation costs and data on all reductions in consumption.</li> <li> Ensure that waste and water will have targets aligned with the Government's Green Commitment (2016).</li> <li>  Further strengthen our Green Champion engagement to continually promote behavioural change and creating campaigns that highlights small changes which make a difference.</li> <li> Continue to monitor cost and consumption, measure and analyse areas for reductions and develop areas for reductions.</li> <li> Ensure all utility suppliers provide the most sustainable and environmental option.</li> <li> Explore opportunities to reduce environmental impact further, potentially through supply chains for goods and services procured.</li> </ul>



# Improving our Estate

With a focus on  Equality, Diversity & Inclusion and  Environmental Sustainability

Where we are now	Where we will be in three years	What we will do
<ul style="list-style-type: none"> <li>• Replacing existing lighting by upgrading all light fittings to LED at each site during cyclical works.</li> <li>• Replacing drying cabinets through our cyclical maintenance projects with dehumidifiers to reduce energy consumption.</li> <li>• Where not currently in place, installing automatic front doors on stations, combined with improved heating controls in appliance bays.</li> <li>• Creating muster bay separation to heat the appliance bay to a lower temperature, seal off and manage exhaust particulars and reduce heat loss transfer from occupied areas to appliance bay thereby reducing consumption.</li> <li>• Assessing the rate of heat loss/gain through combined elements of building components (U-values) according to use of site.</li> <li>• Evaluating the facilities management procedures in life cycle maintenance and disposals.</li> </ul>	<ul style="list-style-type: none"> <li>• BMS evaluation completed and programmed developed for Estate wide rollout.</li> <li>• Reviewed the mechanical Heating, Ventilation and air conditioning (HVAC) database to ensure we maintain the best possible solution in line with new technologies.</li> <li>• U-values survey completed, and sites identified for improvements works in line with refurbishment programme.</li> <li>• The success of the standby provision power and the use of solar panels evaluated.</li> </ul> <p><b>Where we will be in five years</b></p> <ul style="list-style-type: none"> <li>• Continue to maximise the environmental benefits and impacts of all maintenance works and all projects.</li> <li>• BMS advantages identified and installed at all sites.</li> <li>• Ongoing review and maintenance of the mechanical Estates Management System (EMS).</li> </ul>	<ul style="list-style-type: none"> <li> Create a campaign via Green Champions that highlights small changes can make a difference and promote behavioural change.</li> <li> Identify and complete works that achieve a wide range of sustainability improvements across the Estate.</li> <li> Identify and secure external grants to implement sustainable procurement projects.</li> <li> Develop options appraisal and business case for the provision of stand-by power at fire stations. This will include the possibility of utilising solar PV panels with battery storage backup. We will focus on the effectiveness, efficiency, installation costs and all data around the reduction in consumption achieved.</li> <li> Adopt a holistic approach to combine utilities, consumption data along with the waste disposal and installation of improved technologies to achieve the best possible sustainable outcome.</li> </ul>

<ul style="list-style-type: none"> <li>• Trialling Building Management System (BMS) to evaluate the benefits and address maintenance issues control heating temperatures remotely.</li> </ul>	<ul style="list-style-type: none"> <li>• All U-value survey improvements implemented in the refurbishment programmes.</li> <li>• All PV advantages identified and rolled out to all sites.</li> </ul>	<ul style="list-style-type: none"> <li>🌍 Develop a database of environmentally efficient mechanical alternatives such as ground/air source heat pumps, boilers, solar panels, and EMS to identify the best equipment to install specific to the site.</li> <li>🌍 Continue to trial the effectiveness of BMS across the estate and incorporate monitoring strategies to consolidate and manage gas, water, and electricity consumption data against our suppliers' invoice data.</li> </ul>
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# Appendices

[GHG Protocol Scope 3](#)

[Greening Government Commitments](#)

[ESESG Sustainability Charter 2022](#)

# Glossary

<b>Black Start</b>	<b>Black Start</b> is the occurrence of a National Grid power outage for an extended period.
<b>CSP</b>	<b>Community Safety Plan.</b> Fire and rescue authorities are required to assess risk, determine appropriate strategies, policies and standards of performance, and resource allocation to address it. Together our strategic assessment or risk; the Community Safety Plan (CSP) and our Service Delivery Plan and associated strategies, set out our approach to integrated risk management.
<b>HMICFRS</b>	<b>Her Majesty’s Inspectorate of Constabulary and Fire &amp; Rescue Services.</b> Independently assesses the effectiveness and efficiency of police forces and fire and rescue services – in the public interest.
<b>Greening Government Commitments (2016)</b>	<p>The <b>Greening Government Commitments</b> set out the actions UK government departments and their agencies will take to reduce their impacts on the environment in the period 2016 to 2020.</p> <p>They set out targets for UK government departments and their agencies to:</p> <ul style="list-style-type: none"> <li>• reduce their greenhouse gas emissions.</li> <li>• send less waste to landfill and reduce the overall amount of waste they produce.</li> <li>• reduce water consumption.</li> </ul> <p>They also set out commitments for departments to:</p> <ul style="list-style-type: none"> <li>• improve sustainable procurement.</li> <li>• report transparently on key sustainability issues.</li> </ul>
<b>Green Champions</b>	<b>Green Champions.</b> Individuals at each station who are responsible for implement elements of this strategy or bespoke actions that relation to environmental sustainability.
<b>GHG</b>	<b>Greenhouse Gas Protocol:</b> establishes comprehensive global standardised frameworks to measure and manage greenhouse gas emissions from private and public sector operations, value chains and mitigation actions.
<b>KLOE</b>	<b>Key Lines of Enquiry.</b> Identify where we are, where we need to go and the things, we need to deliver.

<b>PV</b>	<b>Photovoltaic</b> systems convert sunlight directly into electricity and are commonly used in solar panel systems in the UK.
<b>Service Delivery Plan</b>	The Strategic Assessment of Risk (see below) is delivered and monitored internally through this <b>Service Delivery Plan (SDP)</b> and is a lot more comprehensive in nature. Our SDP is structured against the five priorities set within the CSP. Each priority is supported by a set of Key Lines of Enquiry (KLOE). Each KLOE is reviewed annually to produce a baseline assessment against a range of sub-diagnostic questions, describing how the KLOE is currently being delivered, and how it aligns to Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS) criteria. The KLOE assessment will indicate if the Service's performance within this area is 'Inadequate', 'Requires Improvement', 'Good', or 'Outstanding'.
<b>Strategic Assessment of Risk</b>	To ensure the CSP remains current and reflective of the landscape within which the Service operates, a <b>Strategic Assessment of Risk (SAR)</b> is undertaken. The SAR directs the focus of the Service and is the starting point of the corporate planning cycle. It draws on a broad range of information, data, intelligence, risks, and threats to set out the high-level factors that will impact on the Service's operating environment. The SAR is then used to ensure that the priorities within the CSP remain focussed, maximising the impact the organisation has on improving public safety and health and wellbeing.
<b>SUP</b>	<b>Single use plastics (SUP)</b> . Any plastic items which are either designed to be used once, or for a short period of time before being thrown away or recycled.