







# **Environmental Strategy**

2020 - 2030

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Avon Fire & Rescue Service is committed to ensuring our documents are accessible to all members of the community. If you have difficulty reading this document because English is not your first language and you would like a translation, please contact:

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### Our values

#### **Our Vision**

To provide the highest standard and best value service to the community.



We will work closely with and help make our diverse communities safer and healthier; while ensuring our Service is a great place to work, where everyone feels valued and can achieve their full potential.

#### **Our mission**

To improve public safety through prevention, protection, response and resilience.



Making our communities safer, by being there when we are needed, identifying and reducing risks and improving the quality of life for local people; our staff working together as one to ensure a high-quality, value for money Service which meets the needs of the people we serve.

#### Our values

Respectful,

Honest

Courageous

**Ambitious** 

Inclusive

Transparent.



Guided by the standards of behaviour captured in our values, we will support our staff to embrace challenges, recognise achievements and live out our values in making our communities safer and exceeding expectations. The public expect their emergency services to be there when they need us, but also role model the very best standards of behaviour. When we make decisions and work together, our values are the things we keep in mind every time. They are important to us, and nonnegotiable.



### **Foreword**



**Angela Feeney**Director of Corporate
Services

In December 2020 Avon Fire and Rescue Authority made a Climate Emergency Declaration, publicly acknowledging the climate crisis now facing the world and making a commitment to take action. The strategic priorities of Avon Fire and Rescue Service are Making Our Communities Safer and Making Our Service Stronger and, in doing both, I believe we have a responsibility to improve the quality of life for our staff and communities and make our area a better place to live, work and visit now and in the future. Our environmental and ecological ambitions are a critical part of this vision.

As a Fire & Rescue Service, we are on the frontline in responding to the increasing impacts of climate change and have a responsibility to reduce our own carbon emissions which contribute to climate change. We have publicly committed to achieving Net Zero carbon by 2030, in alignment with the commitments of our four local authorities.

We also have a responsibility to protect the environment throughout our activities and operations, whether mitigating pollution whilst responding to incidents or using energy and fuel in a sustainable and efficient way.

Embedding environmental best practice and being climate-responsible also presents us with many opportunities, and enables us to build resilience to climate change risks and rising energy costs, and demonstrate innovation in adopting new technologies and approaches. We aspire to be a positive example and catalyst for change too as we work with our colleagues throughout the Fire and Rescue sector, our contractors and our partners.

I am therefore delighted to be introducing our ten year Environmental Strategy which sets out our ambitious vision for how we will protect the environment, manage our impacts and help address the climate crisis. Underpinning this strategy is an implementation plan which details the actions we are prioritising over the coming years, with much of this work already underway. The commitments in this strategy also link with our Estates, Fleet and Procurement plans in recognition that sustainable building design, cleaner transport and travel, and green procurement principles are integral to the achievement of our responsibilities and ambitions.

Finally I would like to thank everyone taking part in the development and implementation of this ambitious and important strategy – each and every one of you will be contributing to a safer and healthier future for our staff and communities. This is, without doubt, time for change and I am proud of Avon Fire and Rescue's commitments and ambitions to protect our environment now, and for the future.

**Angela Feeney** 

**Director of Corporate Services** 

## Introduction

#### 1. Introduction

Our Environmental Strategy outlines how we will protect the environment, manage our impacts and address the climate crisis, with the ambitious goal to be Net Zero Carbon by 2030. We will demonstrate leadership by embedding environmental best practice, by making climate-responsible decisions, and by responding to our communities' concerns such as poor air quality issues in urban areas. This presents many opportunities including:

- Investing to save money and maximising resource-efficiency, so that more can be put into frontline service delivery and community protection
- Demonstrating innovation through new technologies and approaches
- Ensuring resilience to climate change risks and rising energy and fuel costs
- Being ahead of changes such as Clean Air Zones, more stringent environmental legislation and public sector reporting requirements
- Being an employer of choice for a more environmentally-responsible and aware workforce
- Being a catalyst for action more widely, such as improving the resilience of our communities to deal with climate change impacts and working with suppliers to make carbon reductions

Achieving our goal will require a radical and transformative approach across the value chain of our organisation, including how we buy goods and services, how we manage our estate and fleet, to how we deliver our services. It will require embedding environmental improvement as part of our ethos, dovetailing with other key AF&RS programmes, such as National Operational Guidance (NatOG) integration, Culture Change 'Ways of Working' and Transformation 'Digital by Default', and working with partners to reduce our carbon emissions and become climate-resilient.



Whilst we do not have all the answers or solutions yet, these will be developed and assessed as part of the strategic process, outlined in our **6 Key Principles**:

- 1. An efficient & effective estate
- 2. Renewable energy generation
- 3. Cleaner transport & travel
- 4. Best practice in environmental protection
- 5. Sustainable procurement in practice
- 6. Ambitious environmental management

#### **Sustainable Development Goals (SDGs)**

In 2015, the United Nations set 17 global goals (SDGs) for 2030, adopted by 193 member states including the UK Government. The goals aim to end poverty, protect the planet and ensure prosperity for all. Tackling climate change is key to this. In light of how interlinked the issues are, engagement is required from all countries, organisations and communities. All UK fire authorities have been called on by the Local Government Association (LGA) to help achieve the UK government's commitment. So, we have mapped our Strategy against the relevant SDGs and will monitor progress towards them. These are indicated in Appendix 1.



#### The Climate Crisis

The average global temperature is rising, with the world now 1°C hotter than pre-industrial times. There were record high temperatures in 2019 and extreme weather events linked to climate change have become more common throughout the world, such as wide-scale flooding, blizzards, heat waves, droughts and wildfires.

A rapid escalation in the scale and pace of change is required to limit further warming and change will need to involve everyone, including energy demand reductions, cleaner energy and transport, lower demand for wasteful consumer goods and some form of carbon capture and storage.

#### Context

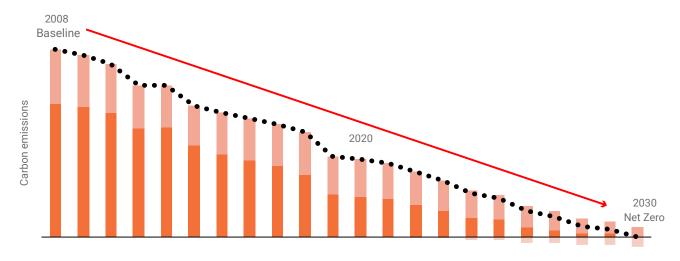
Damaging climate impacts are already being felt today as a 1° of warming
Keeping below 1.5° would help to protect ecosystems limiting impacts on vulnerable groups
Below 2° will limit the most damaging effects of climate change
We are currently on track for 3° of warming - the tipping point
Unchecked emissions growth could lead to severe and widespread climate change by 2100



### Our commitments

#### 2. Our commitments

- To be Net Zero Carbon by 2030
- To demonstrate environmental leadership in the Fire & Rescue sector



Our Net Zero goal aligns with Intergovernmental Panel on Climate Change (IPCC) guidance to limit warming to 1.5°C by 2030 in order to avert a global climate change crisis. This is caused by increased levels of greenhouse gas emissions, largely from fossil fuel use. As a responsible front-line service that directly responds to the increased extreme weather effects of climate change, it is clear that Fire & Rescue Services (FRS) will need to adapt and be resilient to the challenges posed by climate change, as well as mitigating our impact by reducing our greenhouse gas emissions.

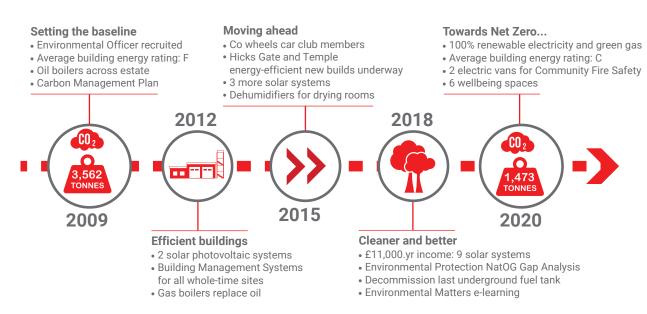
Our goal also shares the 'Net Zero by 2030' commitments made by all 4 of our unitary authorities, who have declared climate emergencies over the past year, as well as by the Environment Agency, West of England Combined Authority (WECA), Fire Brigades Union and Unison. This strategy forms part of a wider collaborative commitment for change.

Net zero carbon means that after reducing our carbon emissions as far as possible, any remaining emissions are balanced by 'netting off' an equivalent amount of greenhouse gases. Net Zero is used interchangeably with the term Carbon Neutral.

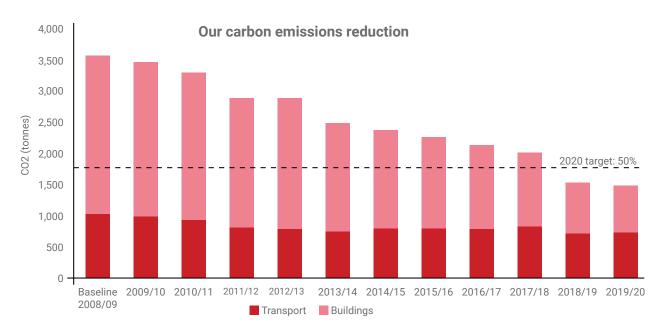
## Our journey

### 3. Our journey

Over the past 10 years, AF&RS has made significant reductions in our use of energy, fuel and water resources. We have effectively prevented pollution at incidents and on our estate, and started to embed environmental considerations across all functions. Our carbon emissions have been cut by 59% since a 2008/09 baseline, due to efficiencies in our estate operation, cleaner energy sources and fleet improvements. These include upgrading vehicles, improved call-challenging, changes in our automatic fire alarm response based on better risk analysis, and the adoption of low and zero emission vehicles. Our emissions have also been reduced as energy and fuel at a national level becomes less carbon intensive.

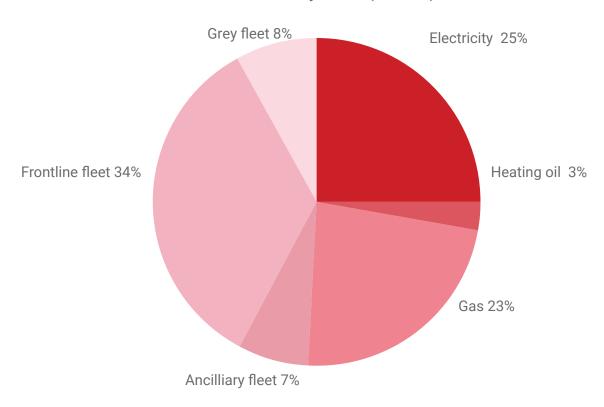


Our 59% reduction exceeds both our challenging target of 50% and the government's voluntary target for the public sector of 30% reduction by 2020. Whilst carbon is not the only indicator of environmental improvement, it provides a useful proxy for many aspects as well as being an indicator of best practice.

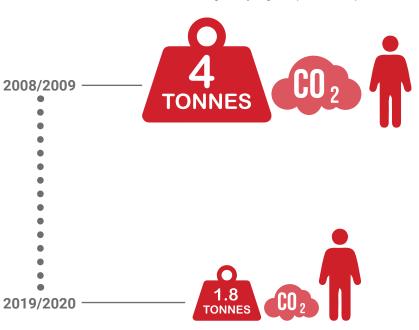


Our carbon emissions from gas, electricity, oil and fuel consumption are currently 1,473 tonnes (2019/20), equivalent to the annual emissions of over 1,000 average cars.

#### Our carbon emissions - by source (2019/20)



#### Our carbon emissions - by employee (2019/20)

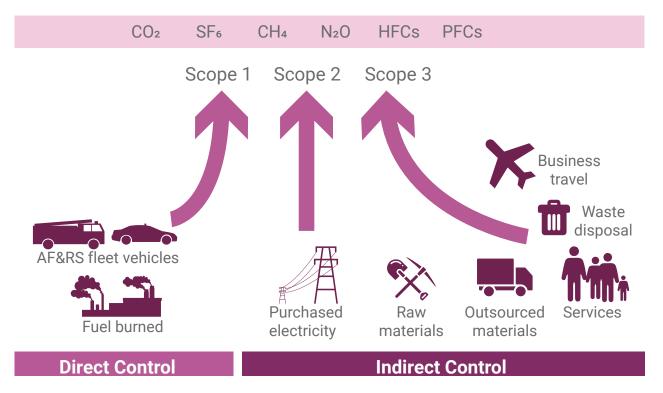


## Scope of our strategy

### 4. Scope of our strategy

This Strategy relates to all activities, operations and sites over which we have direct control. In carbon terms, this is described as our Scope 1 & 2 emissions i.e. electricity, gas, heating oil and fleet fuel. Reducing these emissions will form the focus of our work to become Net Zero.

The strategy also includes the activities and operations of other stakeholders who we can support and influence, such as employee commuting, how our pensions are invested and the environmental impacts of our supply chain. The associated carbon emissions of these indirect activities, described as Scope 3 emissions, are important to consider as these represent the largest proportion of our carbon footprint. They are also more difficult to calculate although we will start to quantify and track these in 2020/21, so that we can identify ways of reducing them.

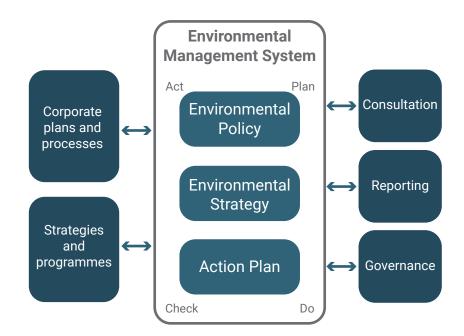


As an emergency response service, AF&RS will be on the front line in responding to the impacts of climate change in our service area. This will require better resilience of our service functions, buildings and capabilities to respond to climate-change related events - including our response tactics, equipment, training and local resilience partnerships. It will also require a strengthening of our prevention role to mitigate the release of greenhouse gases as a result of fire. A number of these operationally-focused actions are already covered in AF&RS' Service Delivery Strategy. However the environmental function will provide on-going input and will report on AF&RS' wider progress on climate-change related resilience..

## Governance and management

### 5. Governance and management

This Strategy delivers our Environmental Policy and is supported by the Action Plan that will be reviewed annually to measure progress and to reflect changes in available technologies or Service developments. We will manage all aspects of our environmental work through our Environmental Management System (EMS), aiming for certification to the ISO14001 standard by 2022. This is an internationally recognised standard based on the Plan-Do-Check-Act cycle to build continuous improvement into environmental performance.



Mandated by a cross-departmental Environmental and Carbon Working Group and championed by the Service Leadership Board, it will link into the AF&RS Service Plan, other key strategies (e.g. Fleet, Procurement, Estates, Culture Change, Transformation) and will inform corporate processes such as the Risk Register and HMICFRS inspections. We will work and consult across the organisation, and with local partners and representative bodies to ensure the success of the Strategy. On a day-to-day basis the Strategy and Action Plan will be co-ordinated by the Environmental Manager.

We will track and report on progress against targets quarterly, including overall progress towards our Net Zero Carbon target which is a corporate Key Performance Indicator, as well as reporting annually to the Service Leadership Team and Avon Fire Authority via the Performance Scrutiny & Review Committee.

## Key principles

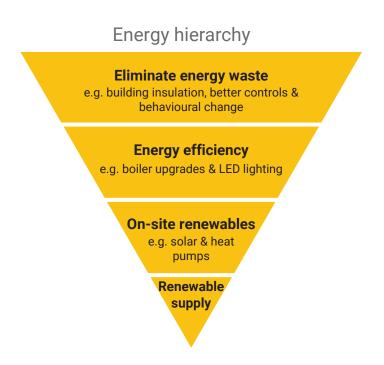
### 6. Key principles

#### Key principle 1: An efficient & effective estate

We want to develop an estate that embeds sustainability best practice and acts as an exemplar to others. We will follow the energy, waste & water hierarchies to ensure our estate is developed and run efficiently, effectively and with the well-being of our staff a priority.

### **Energy**:

• Aim: Average Display Energy Certificate rating of our estate to be B by 2030 (from C in 2020)

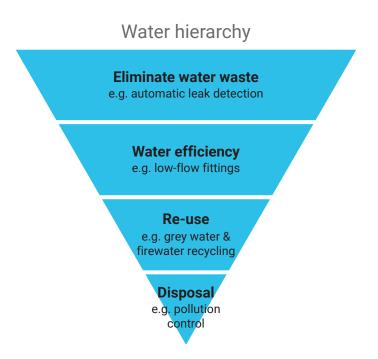


The use of gas, heating oil and electricity in our buildings currently accounts for 51% of our carbon emissions and is approximately £300k/yr expenditure. Following the energy management hierarchy, we will prioritise energy use reduction by undertaking further energy audits of our energy-intensive sites and continue to roll-out energy improvements, recognising that most 'low-hanging fruits' have already been implemented.

We will also minimise energy requirements in our new builds and refurbishments, closely monitor consumption, keep abreast of new technologies and ensure effective maintenance of our plant and equipment. Related to this, we will consider removing or replacing airconditioning units due to the high global warming potential (GWP) of fluorinated gases that they contain. The next step is to meet the remaining energy demand from sustainable energy sources, addressed in Key Principle 2. This makes sense in terms of financial return on investment and carbon emission reductions.

#### Water:

• Aim: Meet industry best practice benchmarks at all sites by 2025



AF&RS currently uses approximately 7,000m3 of water in our buildings and estate, 55% less than the 2008/09 baseline. Similar to energy, we will follow a water management hierarchy, prioritising the reduction of water used in our buildings. We will do this by effective monitoring and maintenance, undertaking water use audits to high consumption and leaks and continuing to roll-out water efficiency improvements.

The next step will be to assess opportunities to re-use and recycle water, and ensure that we meet the highest standards in the disposal of fire- and waste-water to avoid pollution. This makes financial sense, demonstrates responsible management of a natural resource, and will reduce the associated emissions from the energy required to pump, filter and heat water.

#### Waste:

• Aim: Zero waste to landfill by 2025 (across all waste streams)



Currently 74% of our main waste stream is recycled with just 6% going to landfill. All waste contributes to our Scope 3 emissions. Our priority is to move up the waste hierarchy and shift to a circular economy approach where waste is regarded as a resource that can be reused or repurposed. Steps will include undertaking audits and working with contractors and suppliers to identify opportunities to

eliminate and reduce waste, particularly singleuse plastics, food & hazardous materials.

To be a catalyst for action more widely, we will also continue to site Fire Fighter Charity textile banks at fire stations and introduce other measures such as the potential provision of water refill stations for the public, helping to reduce the need for single-use plastic bottles

#### **Biodiversity & wellbeing**

Aim: To develop an organisational Biodiversity Strategy & action plan by 2023



The wellbeing spaces developed to date on stations have had a tangible positive impact on staff. Over the next few years, we will establish a Biodiversity Strategy to enhance the green space and biodiversity on our sites, whilst also contributing further to the well-being of our staff. Alongside ecological and health benefits,

measures such as tree planting and green roofs could also play an important part in offsetting our carbon emissions and improving local air quality. The Biodiversity Strategy will also address Operational considerations, particularly the protection of ecologically sensitive areas in or close to incidents (see Key Principle 4).

#### Major estates projects

• Aim: All AF&RS new build projects started from 2020 to be Net Zero carbon in operation

Sustainability will be integral to the design and construction of all our new build and refurbishment projects using standards such as BREEAM¹ and Passivhaus². In some aspects, this will require going beyond statutory and local planning policy requirements, and considering innovation through new (but proven) technologies and approaches such as circular economy and whole life carbon (WLC) assessment. These principles have already been integrated into the new build Project Briefs for Bath and Weston Fire Stations, which aim to

- 1 BREEAM (Building Research Establishment Environmental Assessment Method) is an internationally recognised approach to assess the sustainability of buildings.
- 2 Passivhaus is a leading international low energy, design standard for buildings.

achieve net zero carbon for operational energy, reduced embodied impacts from construction, BREEAM 'Outstanding' certification and Display Energy Certificate A rating. They will also address issues related to health and wellbeing, biodiversity net gain and ensuring climate adaptation.

We will use similar standards to guide for major refurbishments of our buildings. Also, we will review all our sites for climate resilience and ensure that all relevant environmental aspects are addressed, such as pollution prevention, adjacent watercourses, ecologically sensitive areas and those at risk of flooding.



#### **Key Principle 2: Renewable energy generation**

- Aim: 20% AF&RS' energy demand to be met from on-site generation by 2025
- Aim: Continued mains supply of 100% renewable electricity and 100% green gas

Clean energy from on and off-site generation forms a significant element of the Net Zero Carbon target. By the end of 2019/20, 87% of AF&RS' total energy demand was met by renewables, well above our 20% by 2020 target. Of the 87%, 4% is supplied from the solar PV systems on 9 of our sites, and 83% from mains supplied renewable electricity and green gas. In line with the energy hierarchy, we want to maximise renewables from on-site generation, which will provide cost savings, a source of income and ensure greater resilience against the rising energy costs.

In the first year of the Strategy, we will undertake an estate-wide feasibility study for additional renewable generation capacity on our sites, revisiting this as new technologies are developed and incentive schemes introduced. A priority will be decarbonising Lansdown (our only site still using heating oil, a carbon-intensive fuel) and integration with possible district heat networks,

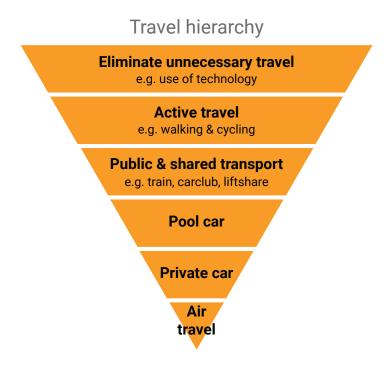
with work already started to connect Temple into Bristol City Council's district heating scheme (biomass-fuelled). Alternatives to gas-fired heating and hot water will also be investigated and trialled.

Remaining demand will be met from procured renewable electricity and green gas, however the limited supply of green gas on the market may make this challenging. As such, we will assess the opportunity for sleeved Power Purchase Agreements (PPAs), whereby AF&RS' electricity and/or gas supplier is required to buy or 'sleeve' renewable electricity/gas generated by a third party that AF&RS contracts with. PPAs would enable us to publicly report our energy as 100% zero carbon, which we cannot do currently, despite having 100% renewable electricity and green gas. This is due to government guidelines for carbon reporting to avoid 'double-counting' by energy generators and users.



#### **Key Principle 3: Cleaner transport & travel**

- Aim: Estate-wide electric vehicle infrastructure network by 2023
- Aim: Over 30% of fleet vehicles to be low/ultra-low emissions by 2026



Currently fleet transport and business travel account for almost 50% of AF&RS' carbon footprint, with 70% of this from our frontline appliances and specialised vehicles, 14% from ancillary fleet vans and cars, and 16% from grey fleet (lease, essential and casual car users). The shift towards more sustainable travel options and low carbon transport will play a significant role towards meeting our Net Zero Carbon ambition, our support and commitment to Clean Air Zone requirements, providing cost savings and greater resilience against fuel price increases. It will also ensure we are ready for the government's proposed phase out of petrol and diesel vehicles by 2035 or possibly earlier and our commitment to Bristol City Council's request that all public sector organisations in Bristol commit to 30%+ of their fleet uses non-fossil fuel by 2026.

Key actions during 2020/21 will be to undertake detailed calculations for carbon emission reductions, financial estimates, ease of delivery and specific targets for each year to 2030 including all the proposed fleet measures summarised below, as well as the development of a comprehensive travel and transport policy.

#### **Business travel**

We will embed a sustainable business travel hierarchy as part of the policy, to reinforce our on-going support for sustainable travel measures. (The hierarchy does not include emergency response travel.) This will prioritise eliminating travel where possible, through flexible working and use of technology, building on the measures put in place during the Covid-19 period and the work of the Transformation team. Support for walking, cycling and public and shared transport will be promoted to take precedence before private car use, with air travel as the last option.

Carbon emissions from business travel on prebooked transport e.g. trains, buses and flights will be added to our carbon reporting from 2020 through data captured from our corporate travel contractor.

#### **Fleet**

In line with the Fleet Strategy to reduce the environmental impact of the fleet, we will make efficiencies and improvements through measures such as the installation of telematics. Other measures will include changes in operational practices (e.g. alarm attendance), additional driver training, retrofit exhaust emissions-abatement technology and establishing emission standards for fleet vehicles. We will make appropriate vehicle and fuel choices, maximising opportunities to build on government incentive schemes and available lower-emission fuels (such as E10 petrol and B10+ blended diesel). It is likely that AF&RS will have an increasingly multi-fuel fleet. Recommendations from the in-depth Green Fleet review undertaken by the Energy Savings Trust (2018/19) will also be considered.

and will be very dependent on the development and uptake of zero emissions-capable frontline vehicles. AF&RS will continue to keep abreast of these developments, including involvement in the London Fire Brigade-led Zero Emissions Fire Appliance project.

Another consideration in fleet replacement will be the embodied carbon associated with the raw materials and manufacturing of vehicles. These are Scope 3 emissions and important to consider to ensure carbon reductions in fleet operation are not the result of a transfer of emissions elsewhere. For example, electric



The replacement of fleet vehicles with lower and zero emission vehicles will be guided by the Fleet Strategy. This is based primarily on operational requirements to make our communities safer and stronger. We will also review our vehicle replacement policy, embed whole life costing, and assess market and technology developments. Fleet transformation will go hand in hand with the development of the associated refuelling infrastructure (e.g. electric, LPG, hydrogen).

AF&RS's fleet replacement policy aims to replace a standard appliance after 15 years and ancillary fleet between 5-10 years. All new vehicles will achieve or exceed Clean Air Zone standards during replacement. However, due to the length of vehicle life, many of the frontline fleet actions will not deliver carbon reductions until after 2025 vehicles emit much lower carbon emissions than a diesel combustion vehicle, including emissions related to electricity for vehicle charging and the embodied emissions related to the batteries and manufacture of the vehicle. This difference will improve further with grid decarbonisation and as battery recycling develops in the future.

#### **Key Principle 4: Best practice in environmental protection**

• Aim: 100% alignment with Environmental Protection NatOG by 2022/23

AF&RS has a legal duty to protect the environment and prevent pollution at operational incidents, in training and on our sites, such as managing fire-fighting foam run-off, preventing damage to ecologically vulnerable habitats and correct storage of hazardous materials. Best practice guidance for FRS on appropriate strategic actions and control measures is issued by the Environment Agency and embedded in the National Operational Guidance (NatOG). This forms the basis for a working partnership and agreement between the Environment Agency and AF&RS, which requires review and updating to capture the latest developments in guidance during 2020/21.

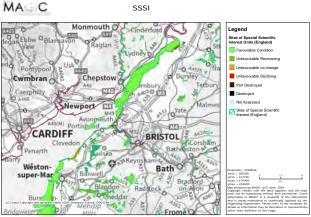
Our recent Gap Analysis of the National Operational Guidance (NatOG), relating to Environmental Protection and Hazardous Materials, identified several improvements that are required in our operational procedures, training and equipment to meet best practice standards. A programme to undertake the necessary work is now in place. This includes upgrading environmental protection training for all operational staff and the incorporation of ecologically sensitive areas (notably Sites of Special Scientific Interest) into our command control system with the identification of

appropriate response tactics. We will also integrate new guidance as it is issued and consider best practice techniques used by other FRS such as treating carbon emissions from hot fire training.

We will keep abreast of developments into less toxic and environmentally-damaging fire-fighting foams, establishing a working group to undertake research and consider the procurement of foam through the Essex FRS-established framework informed by Environment Agency guidance.

In addition, we will consider how we can link our operational activities more closely with the Sustainable Development Goals through the integration of relevant frameworks such as the Sendai Framework for Disaster Risk Reduction 2015-2030. This reflects our role in reducing the occurrence of incidents that are detrimental to the environment, as well as our role in protecting the environment at incidents.



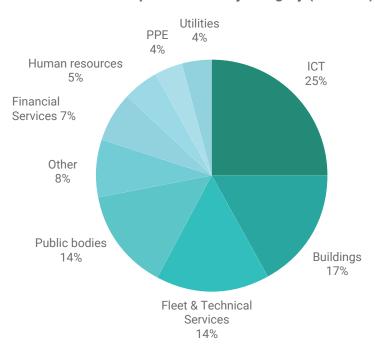


#### **Key Principle 5: Sustainable procurement in practice**

• Aim: Integrate sustainability risks and opportunities into all contracts by 2025

AF&RS procured goods, services and capital items of approximately £8.5 million in 2018/19, with the main categories shown below.

#### AF&RS procurement by category (2018/19)



Some of these procurements already consider environmental, social and economic factors, but on an ad hoc basis and often limited to the Social Value legal requirements. Further integration presents many opportunities for resource efficiencies, lower whole life cost of goods and improved performance. For example, although expenditure on PPE is only 4% of the procurement budget, it is likely to have a high environmental impact over the PPE life cycle: from manufacture, chemical treatment, packaging and distribution, storage, to cleaning and repair. Similarly, utilities expenditure is also only 4%, but is one of the biggest contributors to our carbon emissions.

Over the next few years, we will integrate sustainability into our procurement policies and practices by following leading guidance such as the Green Public Procurement principles whilst complying with Government Buying Standards. We will also take the opportunity to drive change

and reduce our indirect Scope 3 emissions through our supply chain, by taking life-cycle thinking and circular economy approaches to the procurement process.

Steps to achieving this will include establishing a self-assessment mechanism such as the public sector Flexible Framework which will allow AF&RS to measure, monitor and report our progress on sustainable procurement over time. We will introduce sustainable procurement training for procurement staff and budget holders. We will also map and prioritise procurement categories and suppliers for their sustainability risks, as the basis for supplier engagement to reduce emissions and waste in our supply chain.

#### **Key Principle 6: Ambitious environmental management**

Aim: Environmental Management System in place and certified to ISO14001 by 2022

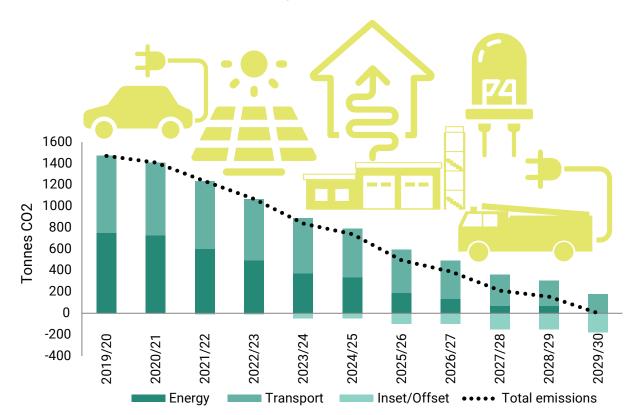
#### **Net Zero**

During 2020/21we will undertake a detailed strategic feasibility study to map out a clear route to achieving Net Zero by 2030, acknowledging that this may change over time as new technologies are developed and adopted. The study will specifically:

- Provide detailed calculations for carbon emission reductions, financial estimates, ease of delivery and specific targets for each year to 2030
- Establish a Scope 3 carbon footprint for indirect activities, such as employee commuting and procured goods, with a route map to reducing those emissions

- Identify opportunities to engage staff in the net zero journey
- Assess options for carbon 'inset' or 'offset' to deal with unavoidable emissions, for example from diesel-fuelled fleet vehicles or essential air travel, which are not zero emission-capable by 2030. Carbon insets involve supporting carbon reduction within our value chain, for example, an electric vehicle salary sacrifice scheme or partnering with a supplier to reduce their emissions. Insets are preferable to carbon offsets which involve support for certified carbon reduction projects such as tree planting and clean energy, and which should be considered a last resort to achieving net zero.

#### Our Journey to achieve Net Zero



#### Management & governance

The success of the strategy and delivery of the action plan will require environmental improvement to be embedded in the way we operate and to form part of our ethos. Steps we will take to achieve this include the development of an ISO14001-certified Environmental Management System which is championed by senior leadership. In addition, all future decision-making will need to be climate and environmentally responsible, including Avon Fire Authority papers, business cases, policies, business continuity plans and strategies. In partnership with other FRS and local authority partners we will support decision-makers, senior management and Avon Fire Authority members to better understand the challenge faced.

#### Training & behaviour change

Culture and behaviour change is another core component of delivering carbon reduction and environmental improvement, with the potential to deliver carbon and energy savings of 5% or more. The behaviour of individuals will influence the success of the strategy through the actions they take, from making strategic decisions through to building users behaviour and pollution control at incidents. We will deliver training on the environmental impact and mitigation activities of our work, so that staff are able to fulfill their roles with due consideration for the environment. This includes the continued roll-out of the Environment Matters e-learning developed with London Fire Brigade. We will also involve staff in environmental programmes such as well-being spaces and tree planting, and will consult staff through forums such as the Staff Engagement Network.

#### **Networking & collaboration**

We will also work in partnership with other FRS, local authorities and organisations to maximise opportunities for joint net zero initiatives and to share best practice. For example, with Bath University to assess the embodied carbon of the new Bath Fire Station and with Bristol City Council's district heating and electric vehicle charging networks.

We will continue our active involvement in the UK Emergency Services Environment and Sustainability Group, annual FRS Energy Saving competition and will represent the sector at the UN Climate Change Conference (COP 26) in Glasgow in 2021. We will also demonstrate our commitment publicly through pledges such as the UK government's Carbon Reduction Pledge for the public sector.

# Appendix 1 - Sustainable Development Goals

Global Goal	Alignment with Key Principles (KP)
Goal 1: No Poverty End poverty in all its forms everywhere	
Goal 2: Zero Hunger End hunger, achieve food security and improved nutrition and promote sustainable agriculture.	
Goal 3: Good Health & Wellbeing Ensure healthy lives and promote well-being for all at all ages.	KP 1: Wellbeing
<b>Goal 4: Quality Education</b> Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.	
Goal 5: Gender Equality Achieve gender equality and empower all women and girls.	
Goal 6: Clean Water & Sanitation Ensure availability and sustainable management of water and sanitation for all	KP 1: Water
Goal 7: Affordable & Clean Energy Energy is central to nearly every major challenge and opportunity	KP 1: Energy KP 2: Renewable Energy
Goal 8: Decent Work & Economic Growth Sustainable economic growth will require societies to create the conditions that allow people to have quality jobs	
Goal 9: Industry, Innovation & Infrastructure Investments in infrastructure are crucial to achieving sustainable development	KP 1: Major Estates Projects
Goal 10: Reduced Inequalities Reduce inequality within and among countries.	
Goal 11: Sustainable Cities & Communities  There needs to be a future in which cities provide opportunities for all, with access to basic services, energy, housing, transportation and more.	KP 3: Transport & travel
Goal 12: Responsible Consumption & Production Responsible production and consumption.	KP 1: Waste KP 5: Sustainable Procurement
Goal 13: Climate Action Climate change is a global challenge that affects everyone, everywhere	KP 6: Net Zero
Goal 14: Life Below Water  Careful Management of this essential global resource is a key feature of a sustainable future.	KP 4: Environmental Protection
Goal 15: Life on Land Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.	KP 1: Biodiversity KP 4: Environmental Protection
Goal 16: Peace, Justice & Strong Institutions  Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	
Goal 17: Partnerships for the Goals Strengthen the means of implementation and revitalise the global partnership for sustainable development.	KP 6: Networking & collaboration









### Produced by the Corporate Communication department

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