

DCC Carbon Footprint and Environmental Policy Review

Report of the Director of Climate Change, Environment and Transport

Please note that the following recommendations are subject to consideration and determination by the Cabinet (and confirmation under the provisions of the Council's Constitution) before taking effect.

Recommendation: that the Cabinet be asked

- (a) to note the 53% reduction in corporate carbon emissions since 2012/13, approve the carbon footprint for publication and its submission to Defra;
- (b) to approve the authority's revised Environmental Policy;
- (c) to delegate authority to the Director of Climate Change, Environment and Transport in consultation with the Cabinet Member for Climate Change, Environment and Transport to make minor changes to the Environmental Policy.

1. Summary

This paper presents:

- The authority's annual carbon footprint for the financial year 2020/21 (Appendix 1)
- An update to the authority's Environmental Policy (Appendix 2).

2. Introduction

This annual carbon footprint monitors the effectiveness of implementing the authority's Carbon Reduction Plan.

The Environmental Policy summarises how DCC will continue to lead by example to minimise the impact of its own operations and its supply chain on the environment and encourage others to do the same. Beneath the Environmental Policy sits a series of more detailed strategies and action plans against which progress can be measured and demonstrated. The currently-adopted version was prepared in 2011. It has stood the test of time but is now silent on various contemporary environmental issues, including marine plastics, the climate and ecological emergency and DCC's new strategic focus on green issues. Therefore, the Environmental Performance Board (EPB) requested for it to be reviewed.

3. Proposal

3.1 Carbon Footprint

The first proposal is for the carbon footprint to be noted, published on the authority's website and submitted to DEFRA. An infographic will be prepared to communicate its key points to staff and the public.

The effect of home working on the carbon footprint has had to be incorporated into the report for the first time as a result of the COVID-19 pandemic. A study commissioned by DCC from the University of Exeter has been used to estimate these emissions. Home working emissions are small in comparison to the scope of the corporate emissions – just 5%. These are more than balanced by reductions elsewhere in the carbon footprint attributable to COVID – compared to the previous year, corporate property emissions are down 16%, business travel emissions are down 60% and the vehicle fleet emissions are down 33%.

Aspects to note are:

- Corporate emissions continue to decline ahead of target (target is a 70% absolute reduction by 2030, with the remainder offset).
- Corporate emissions are 53% below the base year.
- Corporate property emissions reductions will probably continue into subsequent years if flexible working becomes the embedded culture – even more so if DCC disposes of some buildings due to the reduced need for office space.
- Vehicle fleet reductions will probably return to pre-COVID levels as this reduction will have been attributable to lock downs when the fleet vehicles were not being used significantly.
- Business travel reductions will likely remain now that staff are comfortable using video conferencing rather than travelling for meetings.
- As described in the Carbon Reduction Plan, the authority has recruited new resource into the Procurement service, which is speaking with the most carbon intensive parts of the authority's supply chain. Real data is being collected and pilots are underway to inform the work required with suppliers over the next 7.5 years to achieve net-zero.
- DCC has not been able to claim carbon offsets for this reporting year because it has been unable to purchase Woodland Carbon Units, despite an open-market procurement exercise. Instead, we have purchased Pending Issuance Units that will mature into Woodland Carbon Units later in this decade and the 2030s at which point we will be able to use them to net-off our emissions.

3.2 Environmental Policy Review

The cross-authority Environmental Performance Management Group and colleagues from the Environment Group have fed-in to the review. It was agreed that an update of the existing policy was sufficient rather than starting from scratch. It was also decided that a short, focused Environmental Policy was favoured, leaving the detail in the topic-specific strategies and action plans that sit beneath it. This keeps the Policy easy to communicate and will give it a longer life.

General additions include:

- A brief explanation of what the policy is for
- A link to the 2021 – 2025 Strategic Plan
- A commitment to addressing the climate and ecological emergency and incorporation of the net-zero target
- The need for innovation and testing new approaches
- A mention of the single-use plastic issue and the need for a circular economy
- DCC's existing approach to using pesticides only when necessary

- Firmed-up the Countryside, Coast & Heritage section and the Community Leadership section, reflecting the greater focus of the Strategic Plan on these categories.

4. Options/Alternatives

4.1 Carbon Footprint

Having committed to becoming a net-zero carbon organisation by 2030, there is no option other than to report the carbon footprint on an annual basis; if it is not measured, it can't be managed.

4.2 Environmental Policy Review

There are two alternative options. The first is not to review the Environmental Policy, but this would leave the organisation with a Policy that is not fit for purpose and so is not recommended. The second is to develop a more detailed Environmental Policy, incorporating the specific aims and objectives that are currently detailed in the strategies and action plans that sit beneath the Policy. This is not recommended because the Policy would be more difficult to communicate, making it less effective, and will have a shorter life.

5. Consultation

The carbon footprint and the review of the Environmental Policy have been informed by officers of the Environmental Performance Management Group, colleagues in the Environment Group and the Climate Change Standing Overview Group of the Corporate, Infrastructure and Regulatory Services Scrutiny Committee.

6. Strategic Plan

This report's recommendations contribute to delivering three of the six priorities of the Strategic Plan. These are:

1. Respond to the climate emergency by reducing the authority's environmental impact
2. Support sustainable economic recovery by using the authority's spending power to reduce the environmental impact of its supply chain and by doing so encourage local businesses to improve their sustainability
3. 'Improve health and wellbeing' – see Section 12 of this report.

7. Financial Considerations

There are no immediate financial implications of the proposals in this report. The carbon footprint is being managed by the Carbon Reduction Plan. The necessary capital (£2 million) and revenue funding (£0.3 million) has been approved previously by Cabinet, and has been made available to implement the first two years of the Corporate Carbon Reduction Plan (2021/22 and 2022/23).

8. Legal Considerations

There are no specific legal considerations. The Climate Change Act 2008 (2050 Target Amendment) Order 2019 requires the UK to become carbon neutral by 2050. DCC has a moral obligation to demonstrate local leadership towards achieving this requirement.

9. Environmental Impact Considerations (Including Climate Change)

The new Environmental Policy will ensure the authority continues to improve its environmental performance.

10. Equality Considerations

Where relevant to the decision, the Equality Act 2010 Public Sector Equality Duty requires decision makers to give due regard to the need to:

- eliminate discrimination, harassment, victimisation and any other prohibited conduct;
- advance equality by encouraging participation, removing disadvantage, taking account of disabilities and meeting people's needs; and
- foster good relations between people by tackling prejudice and promoting understanding.

taking account of age, disability, race/ethnicity (includes Gypsies and Travellers), gender and gender identity, religion and belief, sexual orientation, pregnant women/new and breastfeeding mothers, marriage/civil partnership status in coming to a decision, a decision maker may also consider other relevant factors such as caring responsibilities, rural isolation or socio-economic disadvantage.

This may be achieved, for example, through completing a full Equality Impact Needs Assessment / Impact Assessment or other form of options/project management appraisal that achieves the same objective.

In progressing the Environmental Policy Review, an Impact Assessment has been prepared which has been circulated separately to Cabinet Councillors and is also available alongside this Report on the Council's website at: [Environmental Policy - Impact Assessment \(devon.gov.uk\)](https://www.devon.gov.uk/Environmental-Policy-Impact-Assessment), which Councillors will need to consider for the purposes of this item.

Climate change and environmental decline will affect everybody in the county, and it will affect people less able to adapt the most. These include less affluent people, those living with physical and mental health conditions, those living in coastal communities or other areas prone to flooding and young people who will live with the effects becoming worse over their lifetimes. Implementing the recommendation will ensure the authority's efforts remain relevant and will minimise these impacts on everyone.

Implementing the Environmental Policy will require changes to the way the Authority's services are provided, which has the potential to impact negatively and positively on service users depending on the specifics of the proposals. Future tactical-level changes to services will need their own impact assessment to consider their effect on equality characteristics.

11. Risk Management Considerations

The potential risks to Devon's communities from climate change and environmental decline are profound e.g. extreme sea level rise, health effects (heat stress, anxiety, vector-borne diseases etc.), increased flood risk, economic shocks and a breakdown of environmental services that provide food, fuel and pharmaceuticals to name just a few.

The effort to minimise these impacts must occur at all scales from the individual to the global. Whilst DCC is unlikely to influence carbon emissions and environmental quality elsewhere in the world by itself, it is vital that the authority demonstrates local leadership.

The corporate and community risk registers have been updated as appropriate.

12. Public Health Impact

The new Environmental Policy will continue efforts to reduce fossil fuel burning which in turn will reduce emissions of air pollutants such as nitrogen dioxide and particulate matter. It will also require the authority to play its part in improving water quality, avoiding land pollution, reducing flood risk and encouraging people to re-engage with green and blue spaces. These measures help improve public health and wellbeing.

13. Conclusion

The authority's corporate carbon emissions continue to decline and are on track to achieve the 70% absolute reduction by 2030.

The review of the authority's Environmental Policy brings it up to date to include contemporary environmental issues, including marine plastics, the climate and ecological emergency and DCC's new strategic focus on green issues.

Meg Booth
Director of Climate Change, Environment and Transport

Electoral Divisions: All

Cabinet Member for Climate Change, Environment and Transport: Councillor Andrea Davis

Local Government Act 1972: List of Background Papers

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Background Paper	Date	File Reference
Nil		
DCC Carbon Footprint and Environmental Policy Review - Final		

Appendix 1 to CET/22/3 - Devon County Council's Environmental Policy

We all rely on the environment for our health, wellbeing and economic prosperity. For example, it provides clean air and water, regulates global climate, ensures nutrients and pollinators are available to grow food, gives us energy resources and processes waste. Its heritage and cultural assets offer a sense of belonging and a connection to our past which, combined with access to beautiful landscapes and wild open spaces, provide opportunities for recreation and tourism.

Demonstrated by the priorities of its 2021 – 2025 Strategic Plan, Devon County Council (DCC) understands its responsibility to play its part in addressing the global climate and ecological emergency declared locally. The Authority aims to be net-zero carbon by 2030.

This Environmental Policy summarises how DCC will continue to lead by example to minimise the impact of its own operations and its supply chain on the environment and encourage others to do the same.

Devon County Council will through...

Our Culture

Operate impact assessment processes that require decision makers to consider the environmental implications and opportunities of policies, projects and working practices.

Encourage environmental best practice and innovation among staff and school communities.

Purchasing

Work with services, communities, external partners and supply markets to show leadership, improve standards & practices and enable investments which support environmental sustainability priorities. Promote local service delivery, reduce road miles and help the supply chain achieve net-zero carbon.

Travelling

Enable staff to minimise their need to commute and travel for business by working flexibly and embracing technology to meet business needs.

Help staff and school communities to minimise the environmental impact of necessary commuting and business travel by providing support to use active, shared and low-carbon, clean transport.

Transition its vehicle fleet to low-carbon and clean alternatives.

Using Water

Monitor and reduce its use of fresh water by cutting demand and improving efficiency in existing and new buildings.

Ensure waste water is disposed of appropriately.

Environmental Risk

Meet the requirements of relevant legislation and guidance, and develop a culture of reporting near-misses and incidents.

Suitably store, use and dispose of wastes and hazardous materials.

Only use pesticides if absolutely necessary where practical alternatives are not available.

Ensure its services are resilient to extreme weather and are adapting to the changing climate.

Countryside, Coast and Heritage

Through its estate (including buildings, land assets and county farms), activities and its work with others:

- Conserve and enhance biodiversity, air quality, soils & minerals, freshwater resources and estuarine & coastal waters to achieve a net-gain for the environment and to restore natural processes to provide services such as carbon storage and flood mitigation.
- Conserve and enhance the natural beauty of landscapes and the quality and distinctiveness of built environment, cultural and historic interests.
- Plan positively to landscape changes arising from the climate & ecological emergency and socioeconomic pressures to help deliver sustainable development and land management.
- Reduce light pollution to reclaim dark skies by using new technology, dimming and removing lighting through public consultation.
- Demonstrate new management practices.

Energy

Reduce its demand for energy, improve its energy efficiency and source 30% of its energy needs from renewable technologies by 2030 whilst enhancing air quality.

Use its demand for energy to stimulate new, locally-owned energy generation and storage infrastructure.

Waste & Resources

Ensure its activities minimise waste and the consumption of single-use plastics by encouraging and enabling staff and suppliers to design-out waste and reuse resources.

Contribute to creating a circular economy by recycling & composting and where appropriate specifying second-hand goods or recycled materials.

Community Leadership

Set an example by continually improving the authority's environmental performance.

Use its powers, responsibility and influence to:

- Facilitate greater understanding and appreciation of the county's rich environment and improve access to it for recreation and learning.
- Help communities and individuals improve their awareness about how they can help Devon respond to the climate and ecological emergency and enable them to act.
- Help test emerging green finance and business models.
- Play its part in developing and delivering environment-related strategies and plans led by partner bodies.

Appendix 2 to CET/22/3 - 2021 Carbon Footprint

Purpose

This report describes the greenhouse gas emissions produced by our (Devon County Council's) activity (our 'carbon footprint') in the financial year from April 2020 to March 2021 (referred to as 2020/21). These emissions are compared to previous years' data and our baseline year of April 2012 to March 2013 (referred to as 2012/13).

The [Carbon Reduction Plan](#) explains the activities we are implementing over the next 8 years to achieve a net-zero operation.

Summary

Our gross emissions are 53% below our baseline year of 2012/13 and we are ahead of target to achieve a 70% reduction by 2030.

Part A – Summary Table and Graphics

The Greenhouse Gas (GHG) Protocol sets the global standard for how to measure, manage and report a carbon footprint. Within the standard, emissions are split into three scopes:

- Scope 1 GHG emissions are 'emissions from sources that are owned or controlled by the organisation'. In our case this is the burning of fossil fuel (e.g. gas and diesel) in buildings and our vehicle fleet.
- Scope 2 GHG emissions are defined as 'emissions from the consumption of purchased energy'. In our case this is electricity.
- Scope 3 GHG emissions are defined as 'emissions that are a consequence of the operations of an organisation but are not directly owned or controlled by the organisation'. Scope 3 is an optional reporting category which can include several different sources of GHG emissions. In this report we have included GHG emissions associated with providing 'home to school' transport, travelling for our work purposes, water consumption in our corporate buildings, home working and the GHGs emitted during the process of extracting, refining and delivering fossil fuels and electricity to our business locations - these are termed 'Well to Tank' emissions.

Table 1 shows our gross 2020/21 emissions in comparison to previous years and the baseline year of 2012/13. The data is displayed in tonnes of carbon dioxide equivalent. This is a measure of the effect of a basket of greenhouse gas emissions (such as methane and nitrous oxide) on the atmosphere, not just carbon dioxide. All the years are directly comparable as we have recalculated the data to remove the effect of significant changes to the organisation, such as a year where we may have closed a significant number of buildings. The 2020/21 gross emissions are 53% below 2012/13 levels.

	2012/13 Base Year	2016/17	2020/21	% Change Base Year
Scope 1	4,667	3,456	2,207	-53%
Scope 2	18,701	14,173	4,969	-73%
Scope 3	18,367	12,994	12,562	-32%
Gross Emissions	41,735	30,623	19,738	-53%
Gross Emissions per £million of Gross Expenditure at 2020 prices	26	23	15	-44%
Emissions (excluding school transport and street lighting) per Full Time Equivalent staff	3.1	2.7	1.4	-55%

Table 1: Devon County Council's greenhouse gas emissions data for 2012/13, 2016/17 and 2020/21 displayed in tonnes of carbon dioxide equivalent (tCO₂e).

Figure 1 shows the gross corporate greenhouse gas emissions for each year on a bar chart. Included in Figure 1 is an orange line showing the level below which our emissions need to be to reach our target of reducing gross corporate emissions by 70% by 2030 from 2012/13 levels. The remaining 30% will be offset through certified carbon offsetting mechanisms in the United Kingdom to achieve 'net-zero emissions'.

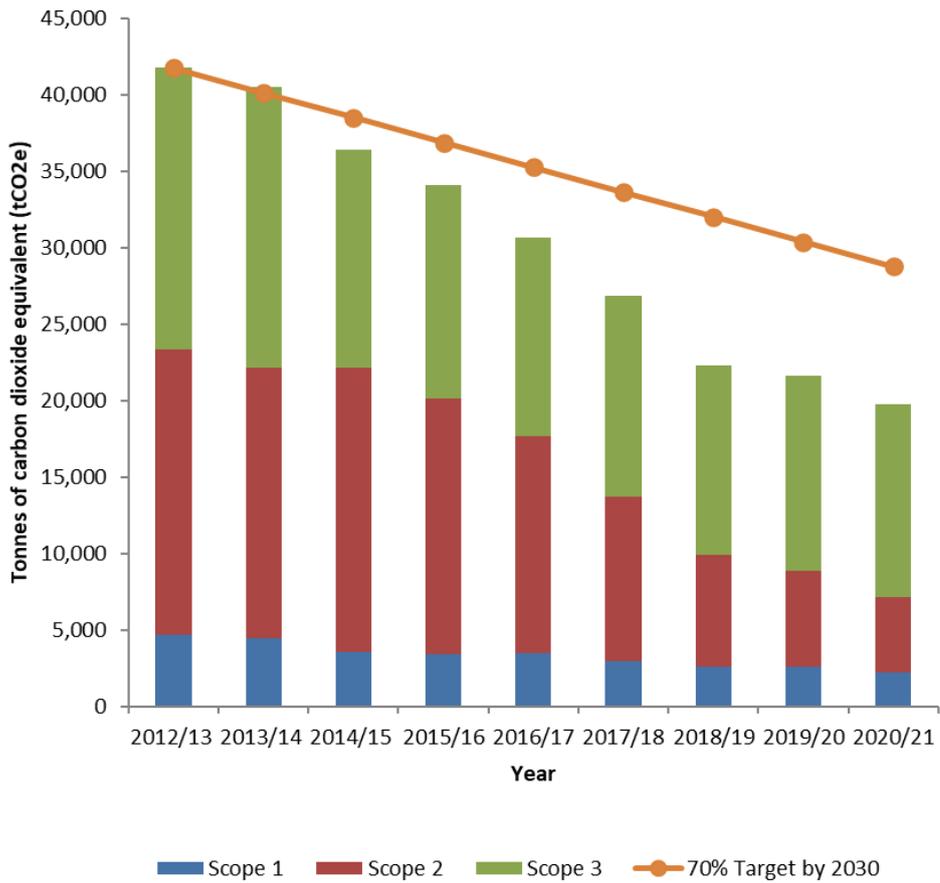


Figure 1: Devon County Council's gross corporate greenhouse gas emissions

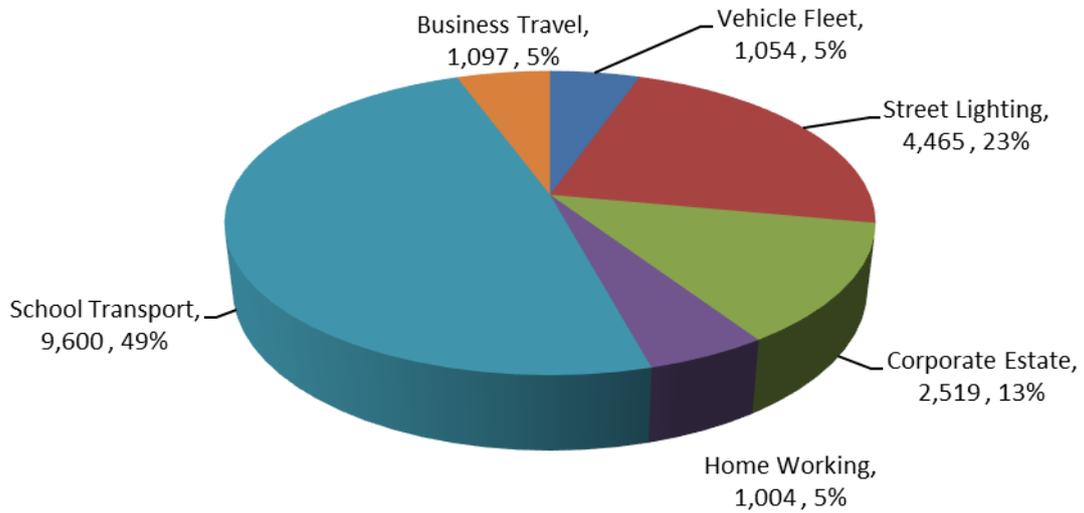


Figure 2: 2020/21 Gross Greenhouse Gas Emissions by Source

Part B – Supporting Explanations

Company Information

Devon County Council is the upper tier local authority in Devon, excluding the unitary areas of Torbay and Plymouth.

Quantification and Reporting Methodology

We have followed the Defra Guidance on ‘*Environmental Reporting Guidelines: including mandatory greenhouse gas emissions reporting*’ dated October 2013. The scope of the carbon footprint is based on our activities that can either be measured from consumption data or reasonably estimated from finance data. We have used the 2020 emissions factors from the Department for Business, Energy and Industrial Strategy for this assessment. The estimation of upstream supply chain emissions covered under ‘Exclusions’ below have used the latest emissions factors available from the Department for Environment, Food and Rural Affairs dated 2009. No assessment is made for downstream end-of-life disposal emissions.

Organisational Boundary

DCC has used the financial control approach to identify operations from which to collect data. Therefore, schools and leased properties are excluded.

Operational Scopes

DCC has measured its scope 1, 2 and available scope 3 emissions. These are shown in Table 2 along with the change in the previous 12 months.

	2019/20 GHG (tCO ₂ e)	2020/21 GHG (tCO ₂ e)	% Change in last year	% of relevant scope in 2020/21
Scope 1				
Gas	1,368	1,327	-3%	60%
Oil	24	25	+3%	1%
LPG	9	10	+8%	0%
Fleet	1,198	846	-29%	38%
Fugitive	Emissions from refrigerants not assessed but thought to be low.			
Total Scope 1	2,598	2,207	-15%	
Scope 2				
Purchased electricity – street lighting	5,010	4,111	-18%	83%
Purchased electricity – corporate	1,239	855	-31%	17%
Total Scope 2	6,250	4,967	-15%	

Available Scope 3				
School transport	7,471	7,738	+4%	62%
Business travel	1,991	873	-56%	7%
Water	41	41	0%	0%
Home working	-	1,004	-	8%
Well to Tank	3,288	2,907	-12%	23%
Total Scope 3	12,791	12,562	-2%	

Table 2: Devon County Council's scope 1, 2 and 3 gross greenhouse gas emissions in tonnes of carbon dioxide equivalent (tCO_{2e}).

Exclusions

Scope 1

- Emissions and sequestration of greenhouse gases of our land assets.

Scope 3

- Emissions from the fossil fuel and electricity used to operate school buildings. These are not formally reported as we do not have financial control over these assets, but the emissions are monitored. In 2020/21 the emissions were 7,000 tonnes.
- Employee commuting due to difficulties in collecting relevant and timely data.
- Leased assets are excluded as the tenant has responsibility for paying the energy bills.
- Supply chain emissions are not part of the corporate carbon footprint. Indicative carbon emissions from our supply chain for 2020/21, estimated using carbon intensity factors for different types of public sector activity, are 346ktCO_{2e}. This remains unchanged from previous years because the calculation methodology relies on carbon intensity factors from 2009. This figure demonstrates that our impact on climate change is far more significant than just the calculated emissions reported through our corporate carbon footprint. We are working with suppliers to obtain actual emissions and work with them to reduce emissions. From 2030 our supply chain is expected to be net-zero.

Reasons for Changes in Emissions

Our gross GHG emissions are 53% below the 2012/13 base year. Reasons for this are:

- Improvement in the carbon intensity of grid electricity
- Replacement of older boilers with condensing models through the maintenance programme
- Installation of LED lighting in corporate property through the maintenance programme
- Installation of part-night and LED street lighting
- Installation of heat pumps in corporate buildings
- Installation of solar arrays on corporate buildings
- Gradual improvement in the carbon intensity of staff vehicles
- Technology enabling less travel, such as Windows 10 and Microsoft Teams, greatly accelerated by the COVID pandemic.

Base Year

We will recalculate the base year emissions whenever:

- Property disposals and terminated services represent 5% or more of base year emissions
- New properties, services or previously excluded emissions make the base year incomparable
- There is a significant change in reporting accuracy that makes the base year incomparable.

We recalculated Base Year emissions and subsequent years' emissions in 2017/18 to reflect the significant outsourcing of services and staff reductions that had occurred. The components that were recalculated were emissions from corporate property and business travel. Disposed buildings were removed from previous years' data. Business travel emissions were recalculated by multiplying the 'business travel emissions per employee' arising in each previous year by the number of employees in the organisation in 2017/18.

2012/13 has been retained as the base year, which remains relevant in the context of our new Carbon Reduction Plan.

Target

Our Carbon Reduction Plan has set targets to reduce the corporate carbon emissions by 70% over the 2012/13 baseline by 2030 and offset the remaining 30% to achieve 'net-zero emissions'.

Intensity Measurement

We have chosen to use Gross Operating Expenditure as the intensity measurement. This provides an indication of the extent of activity we deliver and is applicable to all components of the carbon footprint. Our gross emissions per million-pound spend, adjusted for inflation, has reduced by 44% since 2012/13.

External Assurance Statement

Our GHG emissions data is not covered by an External Assurance Statement.

Green Energy Tariffs

We have not purchased a green energy tariff.

Woodland Carbon Units

We have not retired any Woodland Carbon Units.

We have started building our experience in carbon offsetting by attempting to purchase Woodland Carbon Units to equal 5% of our 2019/20 gross emissions and 10% of the gross emissions in 2020/21. An open-market procurement exercise in February 2021 to address our 2019/20 gross emissions failed due to sellers wanting

to keep hold of the Woodland Carbon Units due to speculation about forthcoming rapid price rises. Instead we purchased Pending Issuance Units, issued under the Woodland Carbon Code, that will mature into Woodland Carbon Units later in the 2020s. This means we cannot use these to reduce the 2019/20 emissions. We anticipate purchasing a similar product to offset 10% of our 2020/21 emissions. Both purchases will be used to net-off future years' carbon emissions.

Renewable Electricity Generation

Our solar PV arrays on non-school properties have generated 198MWh of renewable electricity in 2020/21 saving 50 tCO_{2e}. We have not generated renewable heat.