



CYP and ESC Overview and Scrutiny

Support for Schools for Energy Management and Carbon Reduction 20th September 2024

Rich Hurst, Education Advisor -
Sustainability



Overview

- Overview of the support for school energy management
- Energy saving technology support
- Department for Education Sustainability and Climate Strategy overview
- CERP 3



Background

- The ECO2 Smart Schools programme is the schools facing brand for the support given through the Schools Energy Management Service Level Agreement
- We have over 90% take up from schools across the County
- We regularly review the offer to schools and academies to try to ensure that we meet their needs and if issues from the energy data suggest that there are issues that a wide range of schools may have. E.g. out of hours heating/ base load of electricity etc
- Schools have faced significant increases in cost of utilities over the past few years. They are unlikely to return to pre-Ukraine war prices



Example Energy Manager Live Access Page



Low Carbon Economy Team
Utilities Web Portal

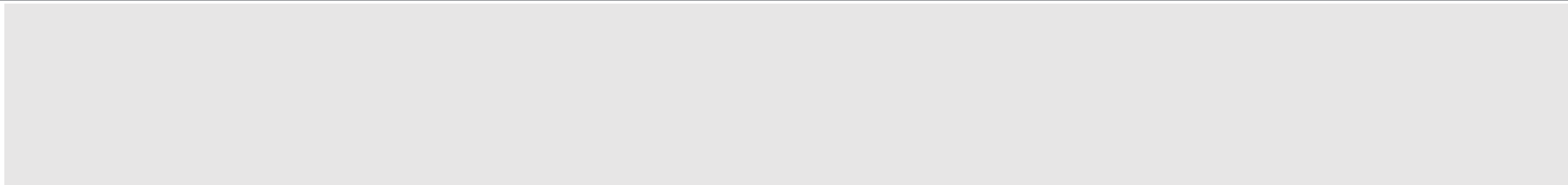
energy@durham.gov.uk

Sites / Burnopfield Primary School

Rich Hurst



Site Summary



Data Sets Dashboards Reports Add Readings Exceptions

Dashboard: All site Reference Date: 08/02/2024

Welcome

If you want to discuss reducing your building's carbon impact, contact us on: energy@durham.gov.uk

If you would like help with using this web portal we can arrange some training with a member of DCC's carbon team. Contact energy@durham.gov.uk to request it.

Use the tabs at the top to navigate the site:
Data Sets - view your site's individual supplies
Dashboards - overview of site - choose a topic from the menu above - there's more information about

Covid-19

The way we have been using our buildings in 2020 and 2021 has changed significantly compared with previous years. Many buildings have been closed or at minimal occupancy for many months. This means that our two year comparison graphs are going to look a bit strange for a while.

For most sites we should expect electricity consumption to be lower in 2020 than in previous

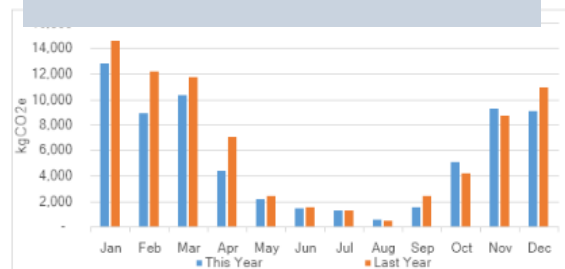
Display Energy Certificates

All public buildings over 250m² must have a Display Energy Certificate, DEC. It must be displayed in the main entrance of the building, in colour, and no smaller than size A3.

DECs for most of our buildings are provided by **Compliance 365**. When your existing certificate is due to expire, you may be contacted by **Compliance 365** to arrange a new one.

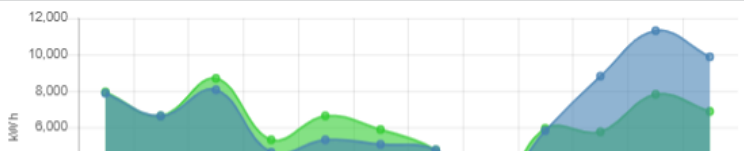
In September 2020 some changes were made to DEC's. They look different, but have all the same information, and must follow the same rules as the old style certificates. Old certificates are still valid

Whole Site Carbon Emissions Comparison

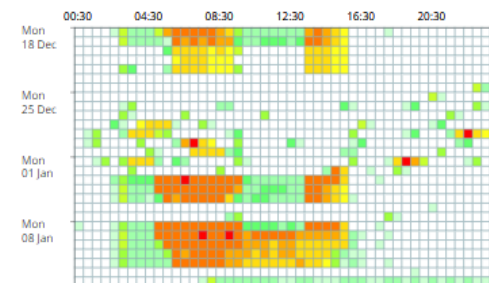


This Year		Last Year	
Month	kgCO2e	Month	kgCO2e
Jan-23	12,829	Jan-22	14,622
Feb-23	8,852	Feb-22	12,148

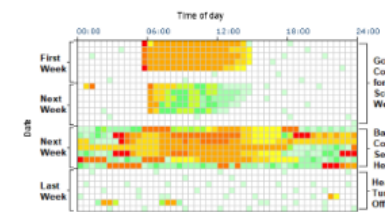
2 Year Electricity Comparison



Gas Use over the half term holidays - half hourly - mouse over for details



Example School - Not Actual Data.



The colours in the graph show how much gas was being used in each half hour. The colours are relative to that month at that site only, so the values can change each month. Red squares indicate the highest gas through-out that month, because of the current need for the



Log In

- Smart Schools ▾
- Smart Homes
- Climate Conference ▾
- Resources ▾
- Case Studies
- Contact

The simple way to become an eco-friendly school and save money in the process.

We'll help your school to become environmentally smart, reduce energy bills and support your teaching, all within a curriculum based learning programme.

Find out more

<https://eco2smartschools.org.uk/>
eco2smartschools@oases.org.uk



ECO2 Smart Schools Menu

As part of your energy management SLA with Durham County Council, help your school save energy, and select from a range of sessions catered for both students and staff.

Primary Schools get 4 credits

Special Schools get 5 credits

Secondary Schools get 8 credits

Nursery Schools get 3 credits

Split site schools get an additional 3 credits.

Session	Credits
1 hour eco group/ class session	1
Assembly	1
Energy meeting with SLT/ Caretaker	1
Walk around energy assessment	1
Borrowing equipment e.g. lux meters/ power monitors	1
Energy Manager Live training	1
Retrofitting sustainable technology advice	1

Session	Credits
Award (ECO2 Smart Schools Award, Climate Friendly Schools, eco-schools) advice	1
Staff meeting/ training	2
Governor meeting/ training	2
Full school energy audit	2
1/2 day class/eco group session	2
Full day session	3
Switch off day support	3



[EXTERNAL]:FW: ECO2 Smart Schools Free Training Sessions



Eco2SmartSchools | OASES <ECO2SmartSchools@oases.org.uk>
To Richard Hurst - CYP5



Tue 09/01/2024 12:11

Business Manager, Senior Leadership and Caretakers - Monday 15th January (1:30 - 2:30pm)

Governor Training - Monday 15th January (5 - 6pm)

These training sessions will inform you on the DFE Climate and Sustainability Strategy and what support you receive as part of the SLA, with energy saving tips for your school. We will also provide information on local and national energy campaigns your school can get involved in and look at if any funding is available to make your school more energy efficient.



[Book Your Place Now](#)

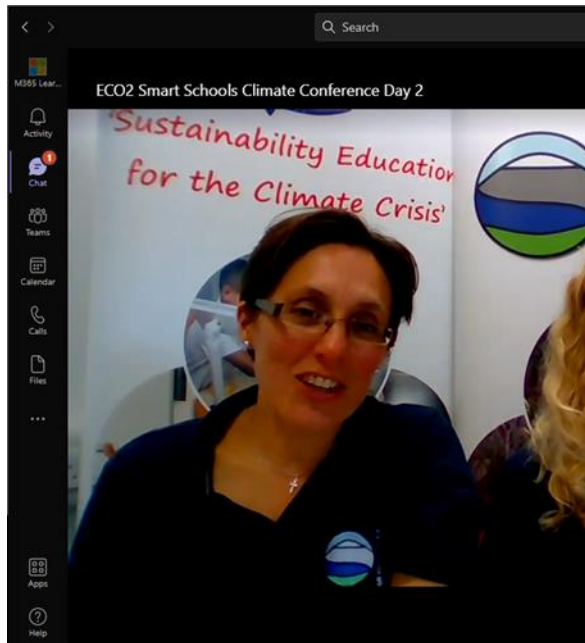
An example of the online training offered to targeted school staff

During the Spring Term targeted training sessions were undertaken with caretakers/ business managers, teachers and school governors.



ECO2COP Conferences

- These conferences have been really successful and a good example of partnership working between DCC, Durham University and OASES. In 2023 we involved 120 teachers, from 100 schools (50 from County Durham), with 6000 pupils engaged from 16 countries around the world.
- New ECO2COP29 sessions will coincide with COP29 in Azerbaijan this year on 13th & 14th November



Ecosystems - Egypt

ECO₂ Smart Schools Climate Conference 2023

ECO₂ Smart Schools Climate Conference Education Materials:
In the run up to COP28 in Dubai, use our lessons to engage your students in the climate crisis:

- Lesson 1: Climate Change and Energy
- Lesson 2: Climate Change and Energy Today
- Lesson 3: Climate Change and Energy in the Future

The lessons are available for the following age ranges:

- Ages 7-9
- Ages 9-11
- Ages 11+

Then, use our online platform to share your class' learning with schools from around the world. All the resources are FREE to download, by registering at the link at the bottom of the page.

Live Virtual Climate Conferences

- Your students will interact live with a panel of climate experts.
- Opportunity to share questions and work with international network.
- Different sessions for primary and secondary classes. The two primary sessions are identical, and so only one need be attended.

Classes aged 7-11: Wednesday 6th December – Two sessions: 9.30-10.30am and 1-2pm GMT
Classes aged 11+ : Thursday 7th December – One session: 9.30-10.30am GMT
(These dates and timings may change)

Register your school: <https://forms.office.com/e/gsgFfNjgqc>

Or email: ECO2SmartSchools@oases.org.uk with any questions.

All the sessions have been recorded and can be watched on [YouTube](#)

Enlighten – LED Lighting Retrofit Programme

- LED lights provide a better quality of light, use less energy and usually last longer than other types
- The structure has changed over time. It now uses Thorn Lighting to survey and provide the lighting specification, with B&FM to install. We know some schools/ academies are using other providers
- Most maintained schools fund these projects through the DCC School Loan Scheme from CYPS
- Cost and technical challenges are making currently installations difficult



Solar PV Generation

- This is an option that many schools would like to progress
- There are some challenges such as the roof structural integrity; asbestos, planning for ground mounted systems and capital investment availability
- We'd like more schools to be able to have their own solar generation



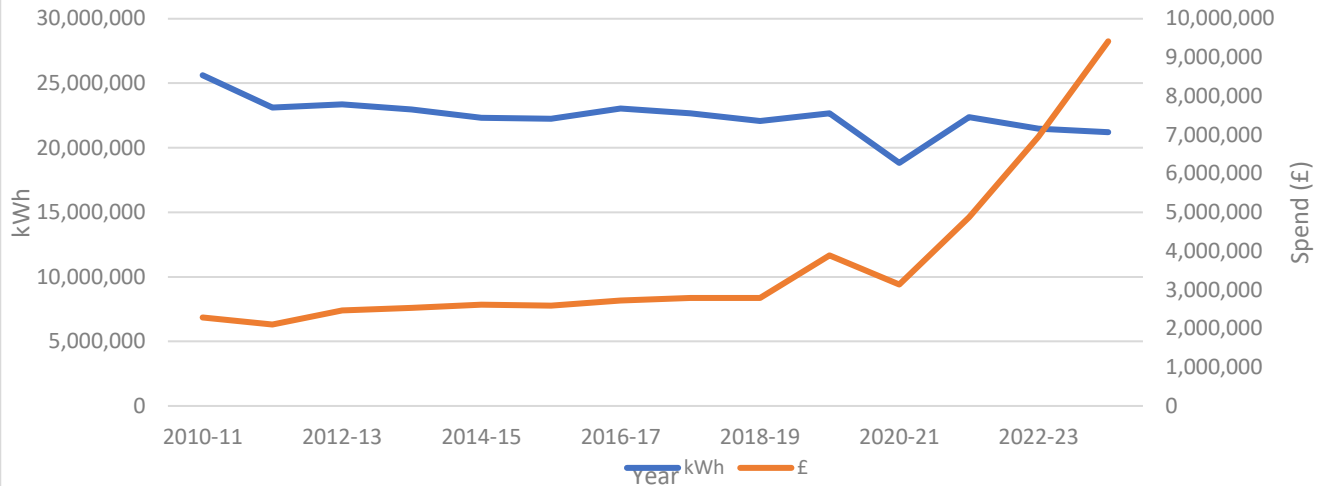
Whole School Retrofit

- Made possible by additional funds from the Public Sector Decarbonisation Scheme
- The scheme replaced an old inefficient oil boiler with 4 air source heat pumps; improved thermal insulation; installed a ground mounted solar array to offset the additional electricity usage of the heat pump and a novel way to retrofit LED's when asbestos is a problem

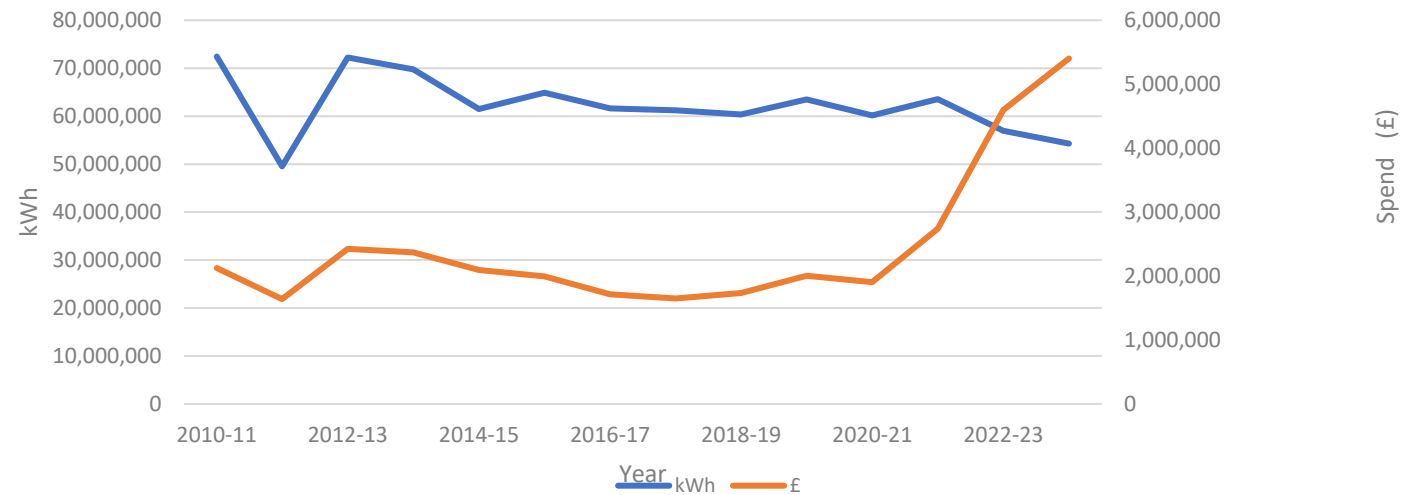


SLA Schools Energy Data

Electricity changes since 2010



Gas changes since 2010



DFE Sustainability and Climate Strategy

Building upon a long history of schools and education settings engaging in environmental/ sustainability issues (e.g. Eco-Schools/ Sustainable Schools, Forest Schools etc). Launched in 2022, at time of writing it is unclear if this will be changed by the new Government.

Vision: the United Kingdom is the world-leading education sector in sustainability and climate change by 2030.

In England, DFE will achieve this through the following strategic aims:

1. Excellence in education and skills for a changing world: preparing all young people for a world impacted by climate change through learning and practical experience.
2. Net zero: reducing direct and indirect emissions from education and care buildings, driving innovation to meet legislative targets and providing opportunities for children and young people to engage practically in the transition to net zero.
3. Resilience to climate change: adapting our education and care buildings and system to prepare for the effects of climate change.
4. A better environment for future generations: enhancing biodiversity, improving air quality and increasing access to, and connection with, nature in and around education and care settings.



Action Areas

- 1. Climate Education** – Learning About the Natural Environment; Support for Teaching & Learning in the natural environment
- 2. Green Skills and Careers** – Net Zero Skills Pathways and Support & Guidance for Green Careers
- 3. Education Estate and Digital Infrastructure** – New build schools/ blocks to be net zero in operation (designed for 2°C rise and future proofed for 4°C); Existing Estate – data gathering and retrofit, new operational guidance, new technology pilots inc. Gen Zero platform; Resilience & Adaptation; Heating Solutions; Water Strategy – SUDS, resilience, drought
- 4. Operations and Supply Chains** – support to embed sustainability in decision making; promote circular economy; waste prevention; resource efficiency. All settings to have a Sustainability Lead by 2025
- 5. International** – The UK Foreign Policy Integrated Review positions climate change as the UK’s number one international priority.



Strategic Initiatives

- co-ordinating and leading a whole-setting approach to climate change and sustainability
 - National Education Nature Park (virtual) (<https://www.educationnaturepark.org.uk/>)
 - [National Climate Education Action Plan](#)
 - By 2025 all education settings to have a Climate Action Plan and Climate Lead
 - New Natural History GCSE by 2025 (may be delayed)
- Carbon Literacy training for at least one person in each education setting
- a published risk assessment of flood, overheating and water scarcity of the education estate, reviewed on an annual basis from 2023
- biodiversity of the education estate, baselined by 2023 to allow annual progress reporting
- on-site emissions from the education estate, baselined by 2024, and progress against national targets published from 2025 onwards.
- A new roadmap to net zero was announced from the DFE to be published this Autumn



Pupil Voice and CERP 3



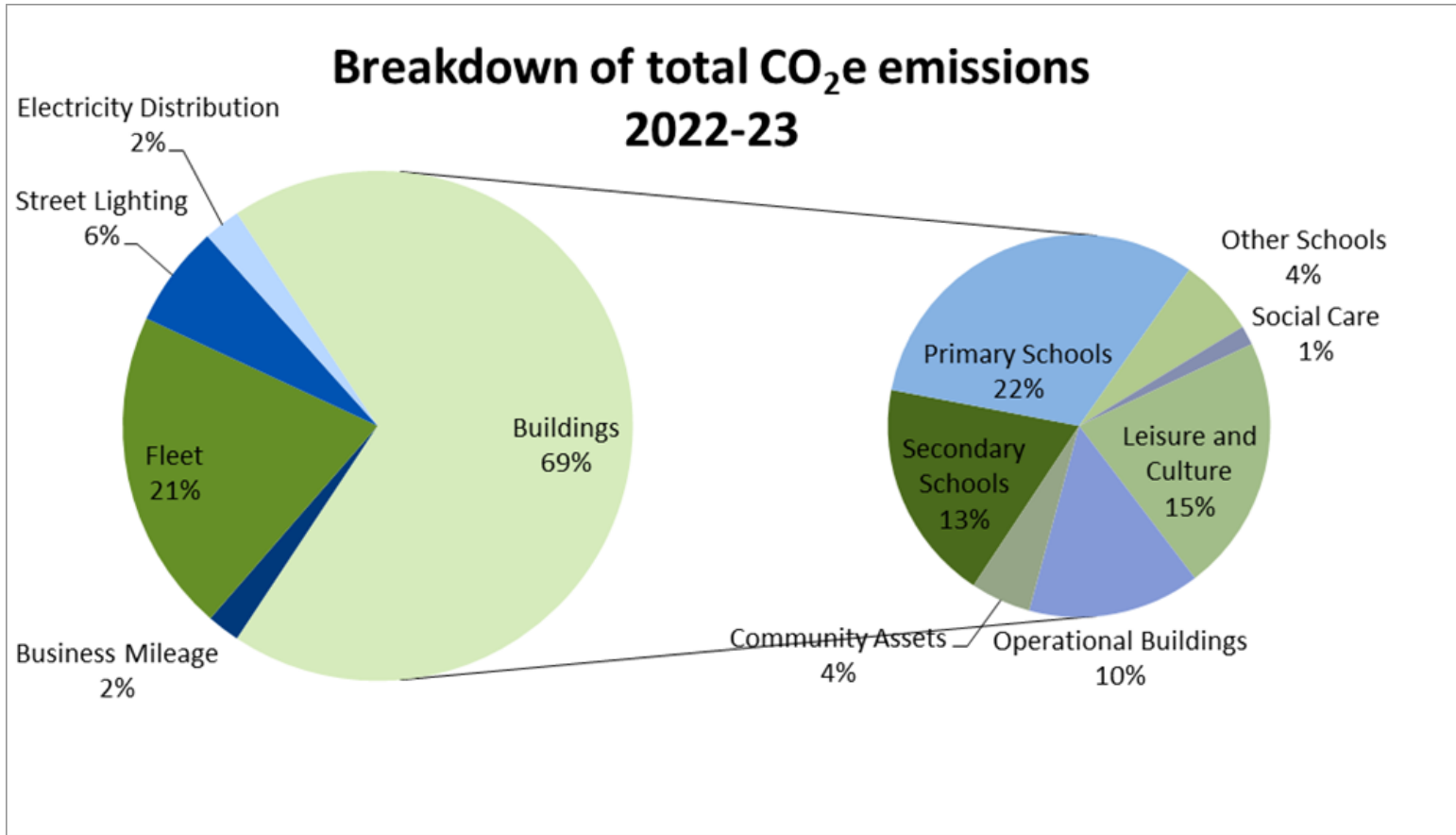
- As part of the planning for the latest CERP3 we worked with the Durham Youth Council to develop a simple survey for young people to complete.
- This was also shared by the Youth Council and through ECO2 Smart Schools and we received over 550 responses which influenced the development of the latest Climate Emergency Response Plan.

Conclusions:

- A good age and gender mix of young people responded
- Most respondents are aware of climate issues and are involved in activities in or out of school
- DCC needs to do better communicating to young people through channels that young people watch/ read/ engage with
- Lots of priority suggestions for actions by DCC – many of which it already does
- Climate anxiety is an issue that DCC needs to better address – but not add to
- The opportunities for ‘green jobs’ in the region are real and DCC needs to make sure we promote those effectively to young people



Schools/ Academies and CERP3



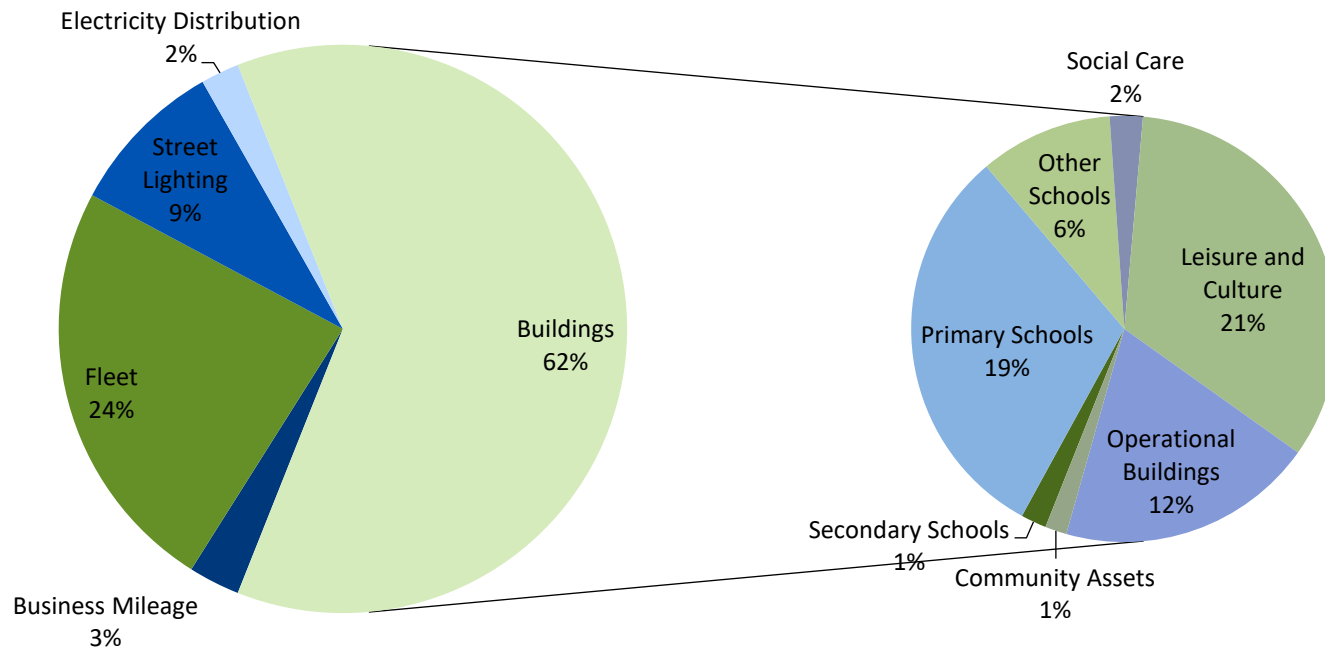
Data from all schools and academies

- Schools and academies are a significant part of the councils carbon footprint
- It is a really difficult challenge to meet the net zero targets with the current levels of funding being allocated to schools from central government
- CERP3 covers 2024-2027
- It was decided in CERP3 that only Maintained school emissions would be included in DCC footprint and targets
- Academy schools would be included in Countywide emissions and targets



Maintained School Emissions Only in DCC Emissions Footprint

Breakdown of total CO₂e emissions
2022-23

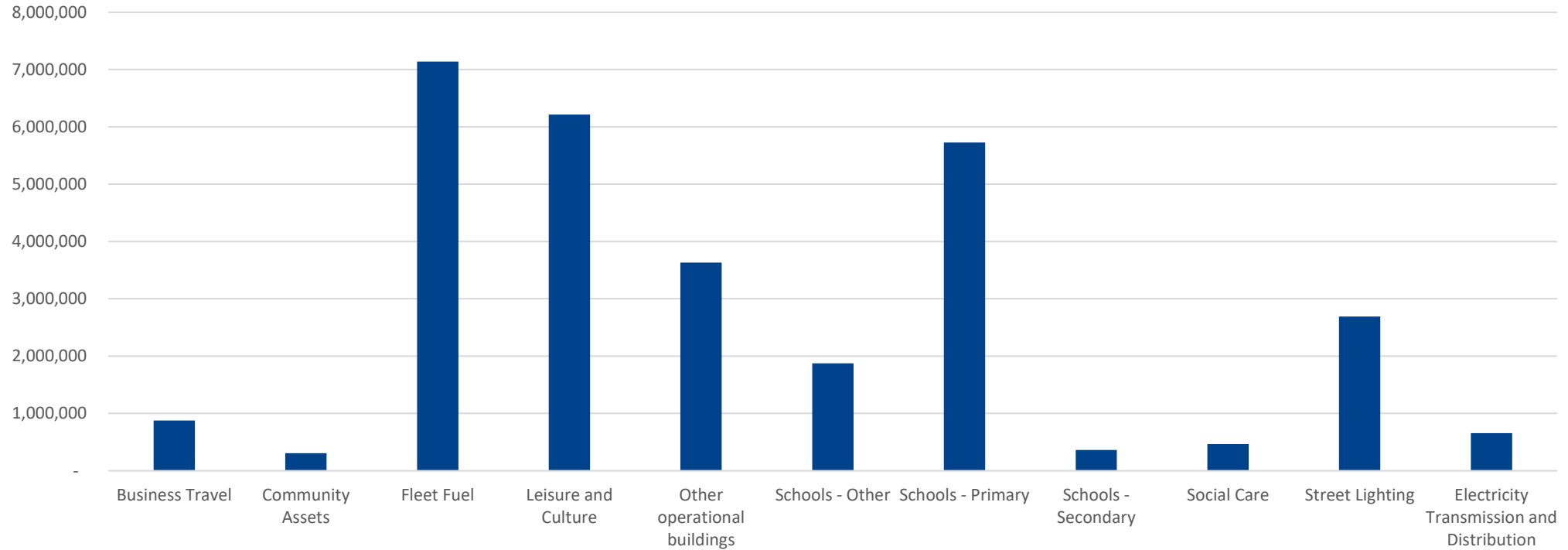


- Key differences:
- Small emissions % from only 2 secondary schools (at time of writing August 2024)
- Primary schools proportionately reduced but now most significant school sector
- Other schools includes Special schools – small in number but significant in terms of emissions



Carbon Emissions by department/area

Total kg Carbon 2022-23



Recalculated Schools Data:

Maintained Primary Schools: 5,727,149 Kg CO₂

Secondary Schools (2no.): 361,287 Kg CO₂

SEN Schools/ Other : 1,876, 273 Kg CO₂

DCC Planned Emissions Reduction:

2022/23: 29,940,000 kg CO₂e

2030 Target: 16,044,000 Kg CO₂e

Future Planning

- Support will continue to be offered to all schools on the Energy SLA contract
- We will continue to adapt to changing circumstances/ price rises/ new energy contracts/ funding opportunities etc
- Maintained school carbon emissions are now a standing agenda item on the Net Zero Monitoring and Investment Group
- A separate sub group of key Officers has been established and meets bi-monthly to prioritize capital investment opportunities
- A tender will be released later this Autumn for the in-school support through ECO2 Smart Schools – the successful contractor will start from April 2025
- A Durham Climate Youth Summit is in early planning for 2025 for secondary age students (likely Yrs 8-10 and Y12)



Questions?

Rich Hurst
Education Advisor - Sustainability
Richard.hurst@durham.gov.uk



*... It is not easy
being green...*

