



Overview and Scrutiny

Climate Change – Schools & Young People

Rich Hurst, Education Advisor, Education Durham

Durham Johnston School

2nd March 2020



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Sci Science & Environment

Climate change: UN panel signals red alert on 'Blue Planet'

By H BBC

Climate change

Extreme sea level events 'will hit once a year by 2050'

25

Clime

Damian Carrington
Environment editor
@dpcarrington
Wed 25 Sep 2019 10:00 BST

2,3

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Science & Environment

Climate change: Last decade UK's 'second hottest in 100 years'

1 hour ago

Australia fi

3 January 2020 2291

Climate change



GETTY IMAGES

Top Stories

- Iran targets US troops with missile strikes**
The strikes on two bases in Iraq were retaliation for the US killing of General Qasem Soleimani.
33 minutes ago
- Johnson condemns Iran missile attack**
9 minutes ago
- Ukrainian plane crashes in Iran killing 176**
8 minutes ago

Features



Climate
major new United Nations report

Fire crews

Climate Emergency – Durham 2020

Targets

Ensuring that County Durham plays its part in limiting global warming and adapting to the 'locked in' unavoidable impacts of climate change requires urgent collective action.

Cabinet agreed on 12th February 2020 to:

- Adopt a new **Durham County Council** target rising from **60% [carbon reduction] by 2030 to 80%** making significant progress towards making Durham County Council and County Durham carbon neutral taking into account both production and consumption emissions. (Maintained schools)
- Investigate what further actions are necessary to make **County Durham carbon neutral by 2050** and pledge to achieve this. Interim target of **60% by 2020** (will be known in August 2022 if achieved) (Academies)
- **This a significant moral and ethical issue to be debated and discussed**

DECLARE A
CLIMATE
EMERGENCY 

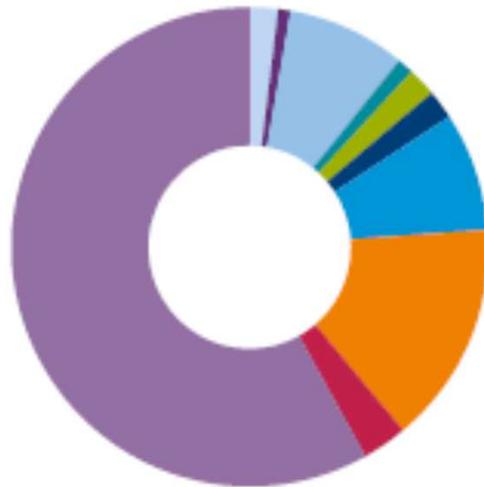
Climate Emergency Response- Engagement

Sessions held:

- **Tuesday 17th September 2019** – Children and Families Partnership – Parkside Academy (workshop session led by Oliver Sherratt (Head of Environment) and Rich Hurst – Education Advisor)
- **Friday 20th September** (Global Climate Strike Day) – Two sessions for small groups of pupils held at County Hall, Durham – led by Rich Hurst, Education Advisor and Joanne Appleby, CEO OASES
- 4 primary schools attended, 15 pupils from (Woodham Burn, Finchale Primary, Crook Primary, St Mary's RC Primary) -
- 7 Secondary schools attended, 24 pupils from (Wellfield School, Durham Federation, Belmont Community School, Sedgfield Community College, Tanfield School, Durham Johnston School, Seaham High School)
- **In-School Sessions** led by the OASES Team to work with eco-groups, school councils or classes to gather their views during September and October through an informal process of discussion and using mind maps to collect their suggestions (27 schools and 394 pupils contributed)

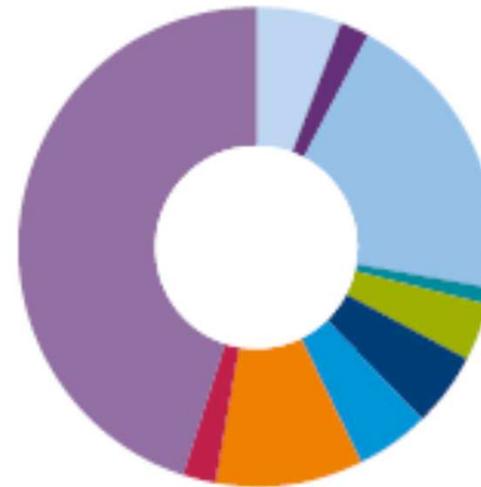
Carbon Trust 2012 – Schools Guidance

Figure 1a Schools – percentage of energy use



- Space heating (fossil fuel) 58%
- Catering (elec) 4%
- Hot water (elec) 1%
- Lighting (elec) 8%
- Office equipment 1%
- Other (elec) 2%
- Space heating (elec) 2%
- Catering (fossil fuel) 8%
- Hot water (fossil fuel) 15%
- Other (fossil fuel) 3%

Figure 1b Schools – percentage of energy cost



- Space heating (fossil fuel) 45%
- Catering (elec) 6%
- Hot water (elec) 2%
- Lighting (elec) 20%
- Office equipment 1%
- Other (elec) 4%
- Space heating (elec) 5%
- Catering (fossil fuel) 5%
- Hot water (fossil fuel) 10%
- Other (fossil fuel) 2%

Existing Projects and Opportunities for Schools

Altogether better





ECO₂ Smart Schools

(formerly School Carbon Reduction Programme)

- Schools that have signed up to the DCC Energy Management Service Level Agreement access this programme to receive in school support from the Outdoor and Sustainability Education Specialists (OASES) plus the support of the Energy Team at County Hall (and RH)
- Over 90% (240 schools) buy into the SLA.



Energy Portal

- <https://durham.energymanagerlive.com/>

The screenshot shows the Durham Energy Portal interface. At the top, it displays the Durham County Council logo, the text "Low Carbon Economy Team Utilities Web Portal", and the email address "energy@durham.gov.uk". A notification banner states: "No email address registered. Please add an email address to your profile to help with correspondence and account reset features." Below this, the user is logged in as "stephen beresford". The main content area is titled "Site Summary" for the "Durham Leadership Centre". It lists the following details: Name: Durham Leadership Centre, Code: 3366501, and Address: Enterprise Way, Green Lane Industrial Estate, Spennymoor, Co Durham, DL16 6YP. A map shows the location of the site, with a red pin and labels for "Service supply" and "Dunelm Optical". The interface includes a navigation sidebar on the left with icons for Groups, Sites, Data Sets, and Administration. At the bottom of the main content area, there are tabs for "Meters", "Dashboards", "Reports", "Add Readings", and "Exceptions". The "Dashboards" tab is active, showing a "Dashboard: All site" dropdown and a "Reference Date: 23/09/2019" field. Below the dashboard are three panels: "Messages" with a "Welcome to the new Web Portal" message, "Definitions" with "Data Types" (Profile and Direct) and "Display Energy Certificates" (DEC) information.

All schools have their own dedicated login to monitor their own use



Key Aspects with Energy Management – Behaviour and Settings

Heating

- Ensure that heating timers are set correctly
- If controllers are old it may make financial and carbon sense to upgrade (Salix loans are available for this)
- Often possible to switch off heating earlier in the day as heat from people inside the building helps to keep it warm enough
- Check holiday settings are set correctly

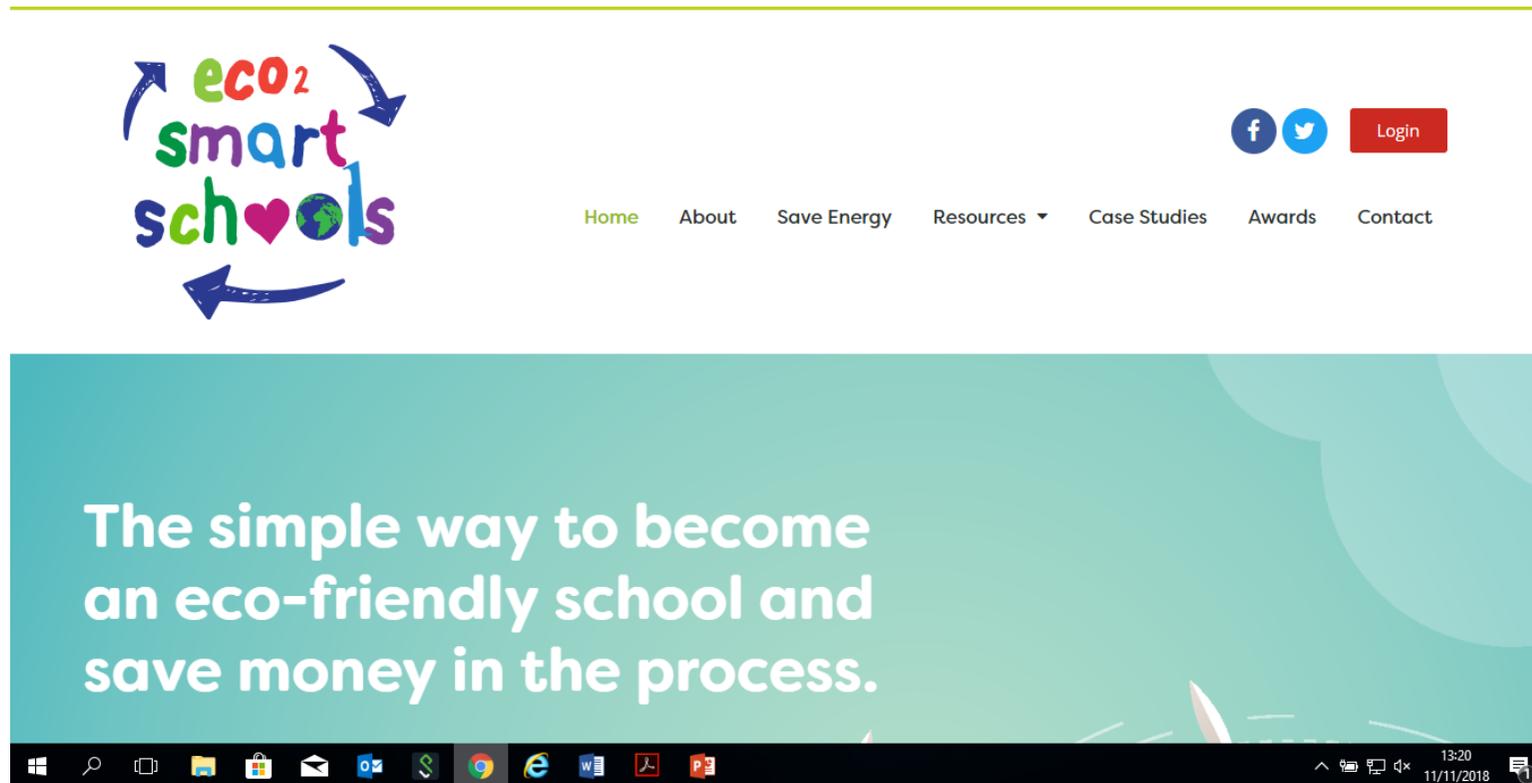
ICT/ Lighting

- Ensure equipment is only on when being used
- Ensure effective evening shutdowns are in place for ICT
- Check on outside lighting – if on timers ensure appropriate settings

Engagement

- Maximise the goodwill and interest of staff and pupils to monitor and campaign for greater energy efficiency at school and home

New Website <https://eco2smartschools.org.uk>



Durham SLA schools, same login as Energy Portal



Enlighten Project

- Whole school retrofit of LED lighting
- Package involving Education; Low Carbon Team; Construction PPM Unit, Service Direct
- Funding provided by Salix 0% interest loan (up to 8 year payback)
- Provides Improved learning environment compared to fluorescent or incandescent lighting; enhanced light for reading/concentration; better potential sleep for pupils as full spectrum light provided by LEDs triggers 24-hour hormonal response cycle
- Saves money on electricity bills

Benefits of LEDs (cont.)



Earth Hour 2020

- Durham has run for many years its own hours for schools and staff
- Friday 27th March 2020
 - 2-3pm for schools
 - 3-4pm for DCC staff
- The aim is to switch off all unnecessary electrical equipment for the hour and minimize energy use. In schools we encourage them to use the hour to investigate energy/ climate change issues



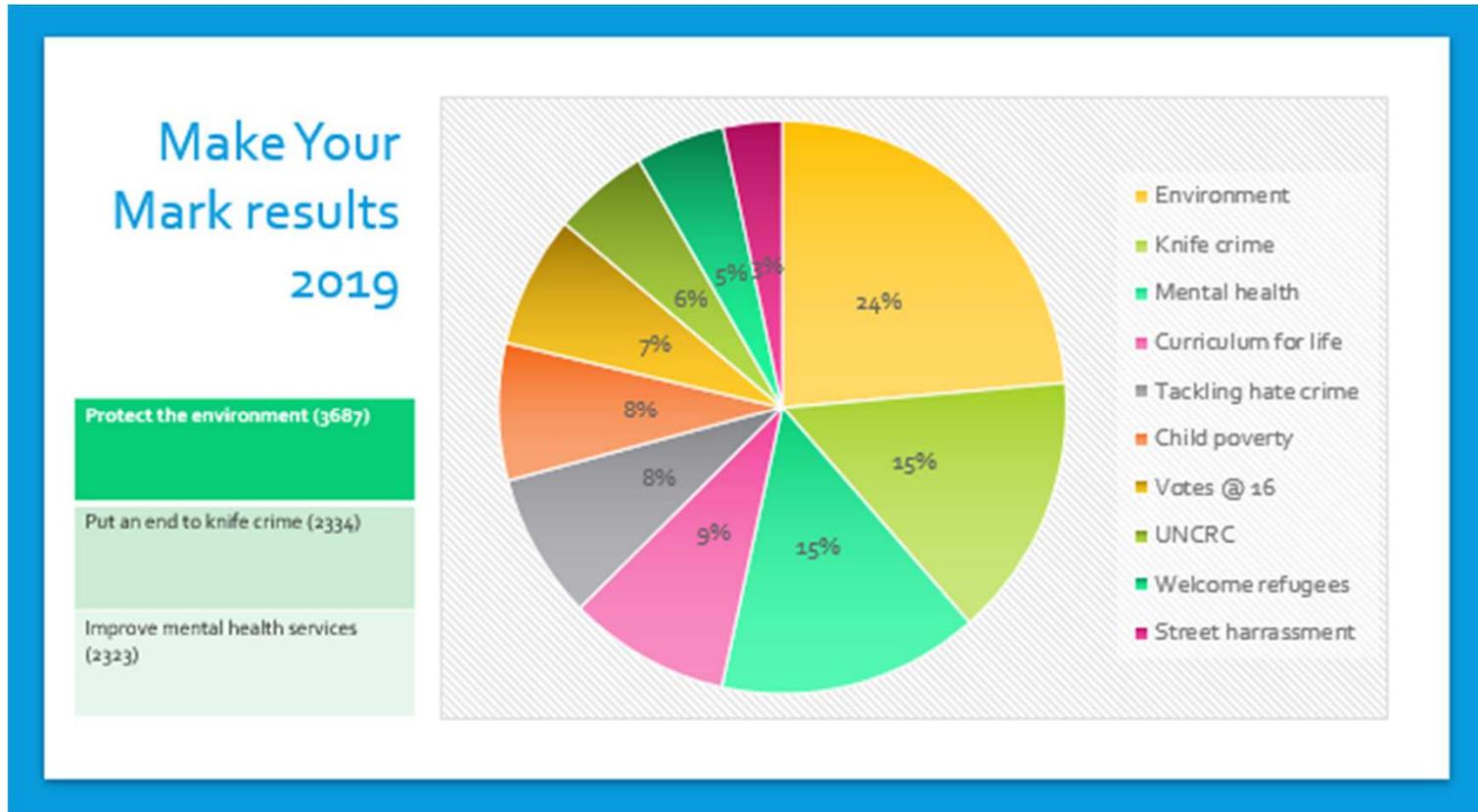
Children 4 Climate Change?

- This project led by OASES working with Durham University and with additional funding from Northumbrian Water will work with 25 schools over 3 years across the County to engage young people with climate issues and work with them to produce youth voice climate content to be uploaded onto a dedicated website.
- Participants also engage with the John Muir Award and can get the Discover individual accreditation
- Six primary schools involved to date (from Y5 upwards), secondary schools are welcome to take part

Single Use Plastics

- All schools are being encouraged to sign the Durham Single Use Plastic Pledge
<http://www.durham.gov.uk/singleuseplastics>
- Schools wanting to engage further can engage with the Plastic Free Schools Programme
<https://www.sas.org.uk/plastic-free-schools/>
- Plastic Fantastic? – East Durham Rural Corridor AAP funded programme led by OASES working with 5 schools this year (intergenerational project)
- Building a Waste Free Future – Chester le Street AAP funded – 6 schools involved led by OASES creating Eco-bricks from non recyclable SUP's

'Make Your Mark' YP Survey



- www.durham.gov.uk/youthvoice

New Opportunities/ Challenges

Treemendous Opportunities

- From Winter 2020 there will be lots of opportunities for schools/ young people to engage with tree planting/ biodiversity projects
- These will contribute to the pledge to plant a tree for every young person in County Durham
- More information will follow

Low Carbon Heat

- This is one of the biggest challenges all sectors face to retrofit buildings and transition to low or zero carbon emitting heating systems.
- The technology is available but expensive to retrofit. There are many issues in schools/ public buildings such as asbestos/ poor insulation/ poor fabric etc

Next Steps

- We are keen to engage with all schools/settings and partner organisations to investigate opportunities in the short/ medium and longer term to 2050.
- Please do get in touch

Contacts

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Strategic Waste Team

wasteaware@durham.gov.uk; 03000 26 1000

<https://www.facebook.com/recycleforcountydurham/>

