North Yorkshire County Council

The Carbon Reduction Commitment and Emissions in Schools

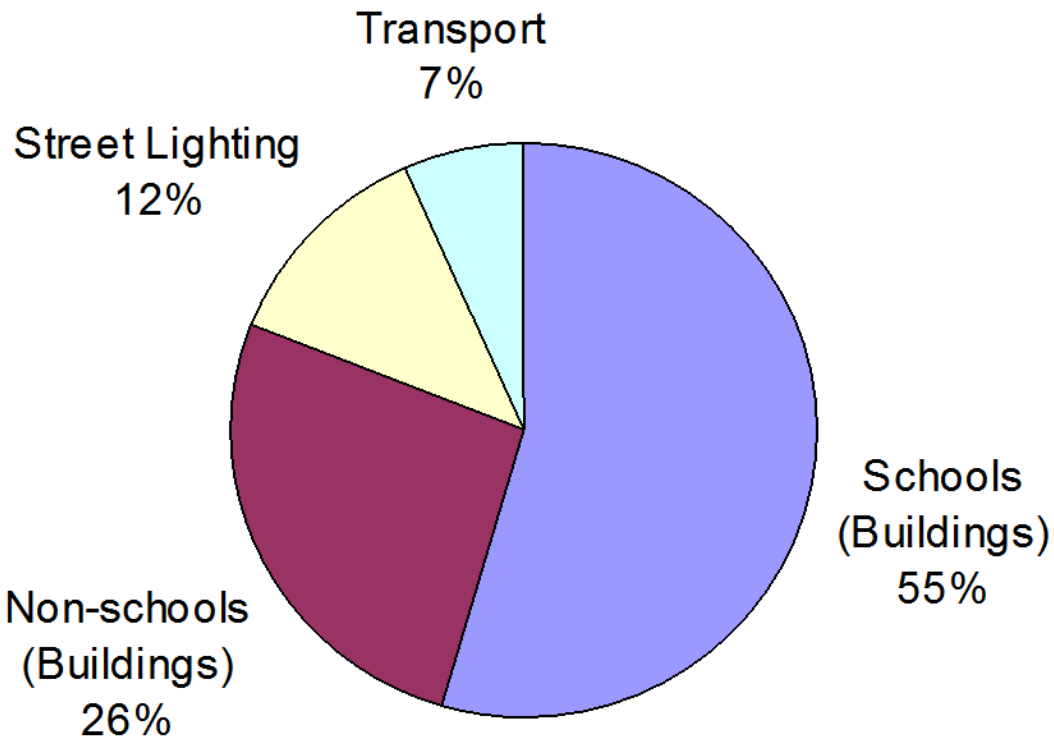
March 2009

Kawun Williams
Carbon Reduction Manager

North Yorkshire County Council

NYCC CO_2 emissions by activity

(excluding waste)



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Services for Schools

- School Carbon Reduction Officer
- Display Energy Certificate Service
- Corporate Landlord Service

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School Carbon Reduction Officer Roles

- Raising awareness by delivering assemblies, conducting energy and water audits with pupils, organising events etc.

- Provide advice and liaise with schools to implement energy efficiency projects.

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Work in Schools

Assembly

Eco team meeting

Pupils doing energy audit

Solar car races

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Summary of Works Over the Past 2 Years

- No. of schools work/working with: 84
- No. of schools wanting to be ‘worked’ with: 50
- No. of assemblies delivered: 35
- No. of follow up sessions delivered: 60
- No. of Eco Teams established: 20
- No. of schools where students have organised ‘switch it off’ campaigns: 20
- Eco Schools Green Flag awarded: 1

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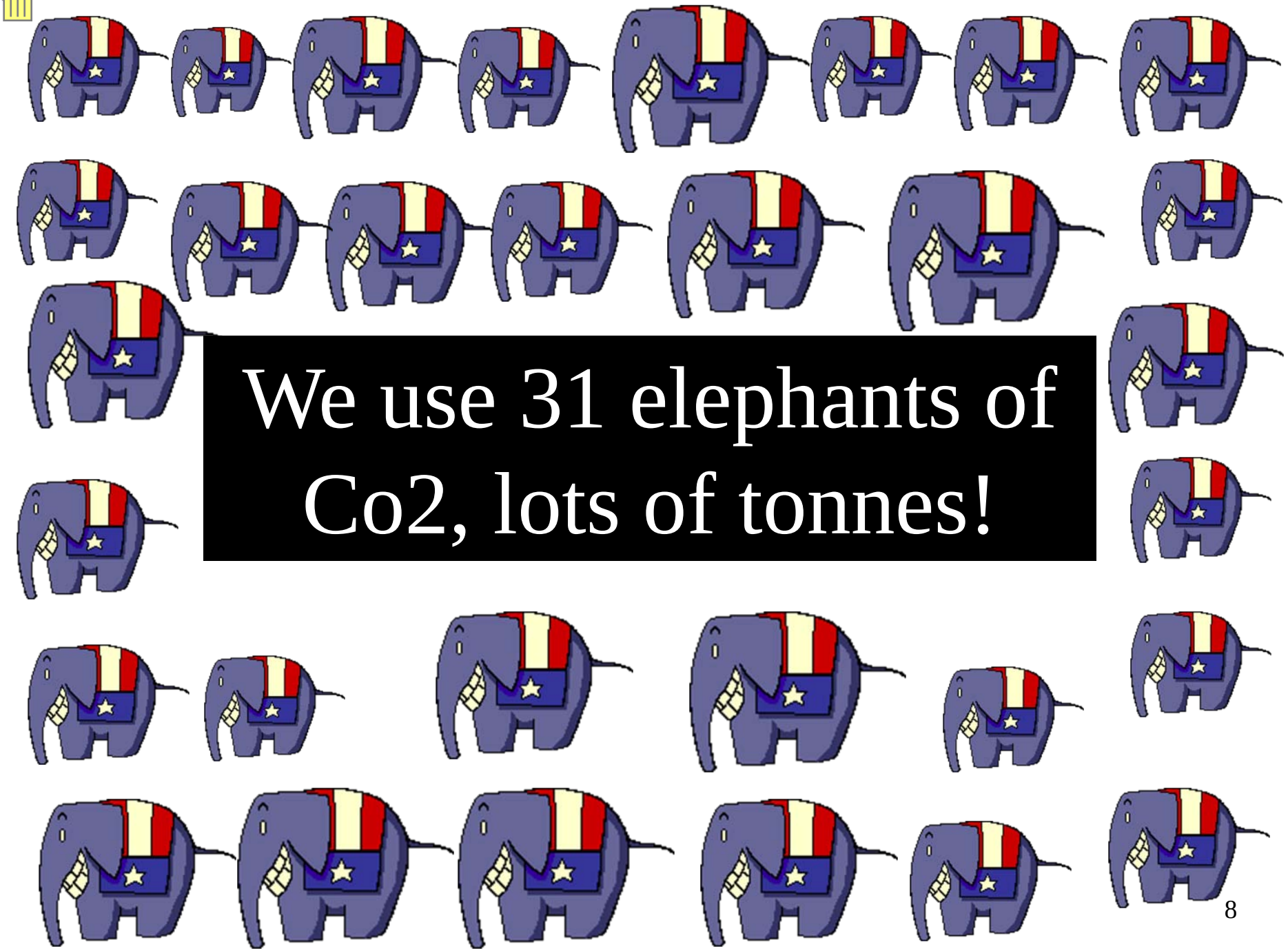
Samples of Pupils Work



We use 31 elephants of Co2, lots of tonnes!

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ECO RAP!

turn off the tap
come-on and say the rap
do ya wanna be cool?
then walk to school.
don't waste heat
join in the beat.
be a busy bee
and save electricity.
get a water butt
soon your bills will be cut.

So remember, reduce, reuse, recycle!

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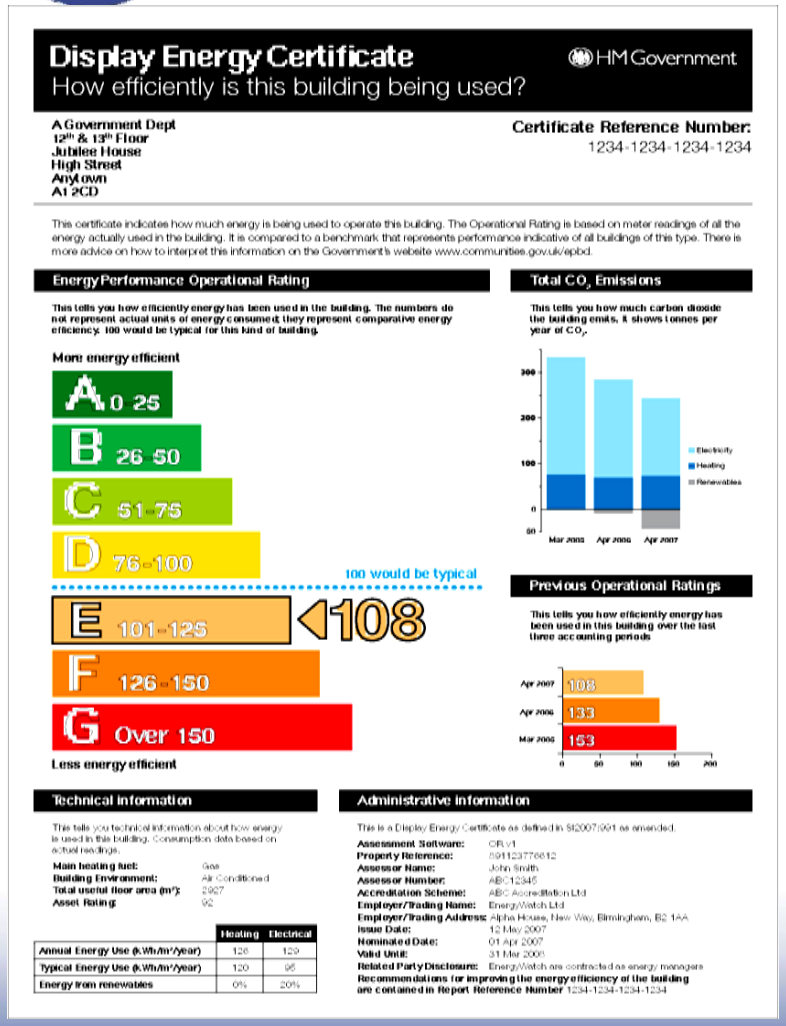
Display Energy Certificates (DEC's)



Display Energy Certificate

How efficiently is this building being used?

HM Government

A Government Dept
12th & 13th Floor
Jubilee House
High Street
Anytown
A1 2CD

Certificate Reference Number:
1234-1234-1234-1234

This certificate indicates how much energy is being used to operate this building. The Operational Rating is based on meter readings of all the energy actually used in the building. It is compared to a benchmark that represents performance indicative of all buildings of this type. There is more advice on how to interpret this information on the Government's website www.communities.gov.uk/epbd.

Energy Performance Operational Rating

This tells you how efficiently energy has been used in the building. The numbers do not represent actual units of energy consumed; they represent comparative energy efficiency. 100 would be typical for this kind of building.

More energy efficient

- A 0-25
- B 26-50
- C 51-75
- D 76-100
- 100 would be typical
- E 101-125 ◀ 108
- F 126-150
- G Over 150

Less energy efficient

Total CO_2 Emissions

This tells you how much carbon dioxide the building emits. It shows tonnes per year of CO_2.

300
200
100
0
-50

Mar 2005 Apr 2006 Apr 2007

Electricity
Heating
Renewables

Previous Operational Ratings

This tells you how efficiently energy has been used in this building over the last three accounting periods

Apr 2007 108
Apr 2006 133
Mar 2005 153

0 50 100 150 200

Technical Information

This tells you technical information about how energy is used in this building. Consumption data based on actual readings.

Main heating fuel: Gas
Building Environment: Air Conditioned
Total useful floor area (m²): 2927
Asset Rating: 92

	Heating	Electrical
Annual Energy Use (kWh/m²/year)	126	129
Typical Energy Use (kWh/m²/year)	120	96
Energy from renewables	0%	20%

Administrative Information

This is a Display Energy Certificate as defined in SI2007/991 as amended.

Assessment Software: OR v1
Property Reference: 59112377 6612
Assessor Name: John Smith
Assessor Number: ABC12345
Accreditation Scheme: ABC Accreditation Ltd
Employer/Trading Name: EnergyWatch Ltd
Employer/Trading Address: Alpha House, New Way, Birmingham, B2 1AA
Issue Date: 12 May 2007
Nominated Date: 01 Apr 2007
Valid Until: 31 Mar 2008
Related Party Disclosure: EnergyWatch are contracted as energy managers
Recommendations for improving the energy efficiency of the building are contained in Report Reference Number 1234-1234-1234-1234

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Display Energy Certificate (DEC) Services

- 179 schools require a DEC based on current 1000 m2 floor area threshold
- 3 qualified DEC Officers
- Offer free DEC survey and advisory report to schools

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DEC Officers Support for Schools

- DEC resource pack
- Thermal imaging camera to increase school awareness of heat loss
- Provide technical advice to implement actions that have been identified in the advisory report

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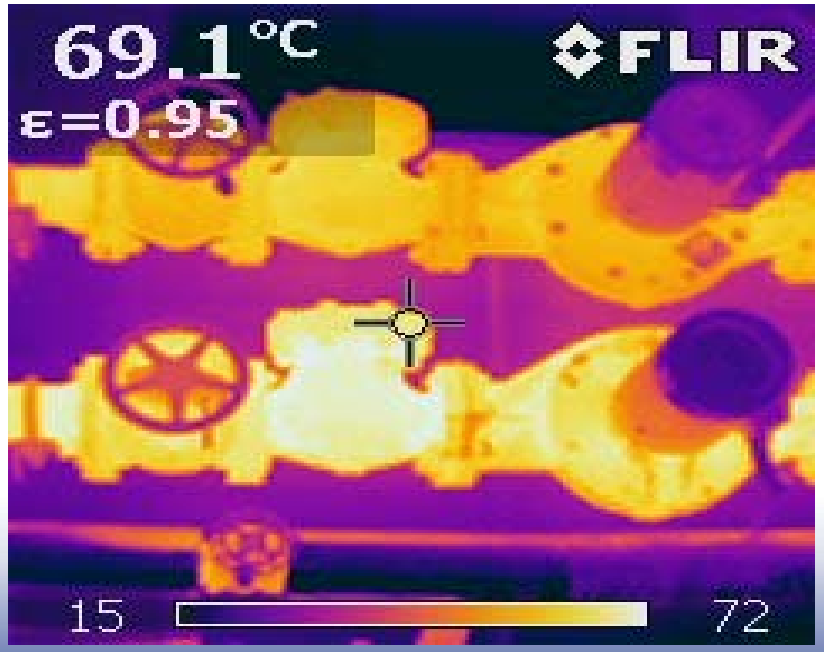
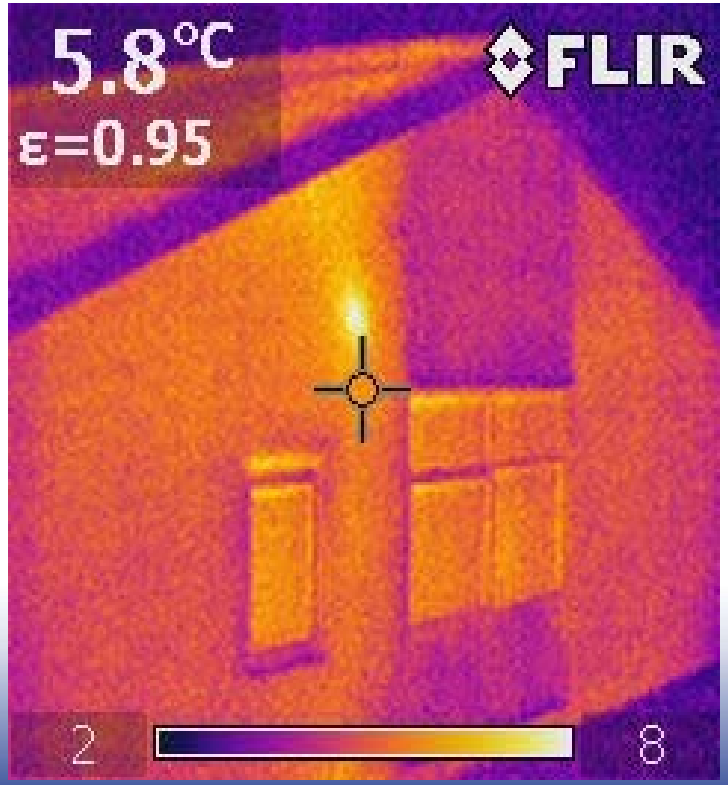
New technologies like thermal imaging helping us to detect heat loss and the presence of insulation, or lack of…..





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Corporate Landlord Service

- Provide guidance to schools wishing to undertake their own building projects
- Advice schools on Health and Safety legislation
- Ensure all building projects comply with council standards, including Contract procedure Rules, national legislation and guidance planning requirements, etc.

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Formal Site Visits

- At least one per year to meet with head teachers or site managers
- Discuss Sustainability and Environmental Issues
  - Carbon Reduction Commitment, DEC, WEEE etc
- Advise schools to contact the Energy Team if they require energy reduction advices

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Corporate Projects

- Lighting upgrade
- Automatic Meter Reading
- Insulation

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Dealing with School Emissions

3 options considered:

- NYCC responsible for costs of CRC performance
- Pass on costs to all sites equally
- Introduce Internal league table

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Discussion

- Does your authority face the same issues? How can we tackle these issues?
- Capital vs Revenue
- Any ideas or examples of good practice?

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Thank you

Kawun Williams

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