

Net Zero Webinar for CofE Schools June 2021

**"The costs of adapting are less than
the cost of doing business as usual.
And the benefits many times larger,"
- Ban Ki-moon, 8th Secretary-General
of the United Nations.**

The climate is changing, and the UK needs to act

- General climate change trends projected over UK land for the 21st century show an increased chance of warmer, wetter winters and hotter, drier summers along with an increase in the frequency and intensity of extremes . We need to prepare our school buildings for this.
- We believe that responding to climate change is an essential part of our responsibility to safeguard God's creation.
- Research tells us that 9/10 young people are concerned about the climate crisis.



Net Zero



THE CHURCH OF ENGLAND

Environment Programme

The final motion approved was a call upon all parts of the Church of England, including **education institutions**, dioceses, cathedrals, etc, to work to achieve year-on-year reductions in emissions and urgently examine what would be required to reach net zero emissions by 2030 in order that a plan of action can be drawn up to achieve that target (*emphasis added*)



THE CHURCH
OF ENGLAND
EDUCATION OFFICE

Net Zero

- The term net zero means achieving a balance between the carbon emitted into the atmosphere, and the carbon removed from it. This balance – or net zero – will happen when the amount of carbon we add to the atmosphere is no more than the amount removed.
- Carbon dioxide is emitted when fossil fuels are burned to meet our demand for energy. Although it isn't the only greenhouse gas, carbon dioxide is the most significant. As such, the term 'carbon emissions' is often used to talk about all greenhouse gas emissions.



What is in scope for 2030?

- Energy use of our buildings; schools are encouraged to seek low cost solutions such as insulation, draught proofing, glazing, LED lighting
- Work-related transport including schools trips
- Schools and responsible bodies (those that hold capital funding) are being asked to think strategically about replacing systems with more energy efficient solutions
- Another consideration could be to look at installing EV charging points for staff and pool cars
- Schools could actively be looking at installing renewable energy systems as part of their strategic plan
- [Phase 2 Public Sector Decarbonisation Scheme | Salix Finance](#)

www.churchofengland.org/education



Additional considerations not in scope for 2030

- Emissions from buildings projects
- Procurement of items
- Waste disposal
- Carbon generated from the use of emails and the internet in work-based contexts.
- Air conditioning gases



Diocesan Environment Officers

- [Diocesan Environmental Officers map | The Church of England](#)
- Diocesan Environment Working Group
- National Environment Working Group
- Peers for the Planet
- Encourage young people to participate in your diocesan Environment Working Group



ACTIVITIES

- [Get your voice heard: write a letter for creation | The Church of England](#)
- <https://www.christianaid.org.uk/schools/global-neighbours/about-accreditation-scheme>
- <https://www.eco-schools.org.uk/get-involved/>
- [Climate Change Educational Partnership | STEM](#)
- [Learning | Kew](#)
- <https://www.caringforgodsacre.org.uk/resources/education-pack/>
- <https://www.dioceseofnorwich.org/app/uploads/2021/05/Eco-School-Booklet-2021-v5.pdf>
- <https://twitter.com/DioceseNorwich/status/1402966372859121667>
- [The Queen's Green Canopy \(coolearth.org\)](#)
- [Free Trees for Schools and Communities - Woodland Trust](#)

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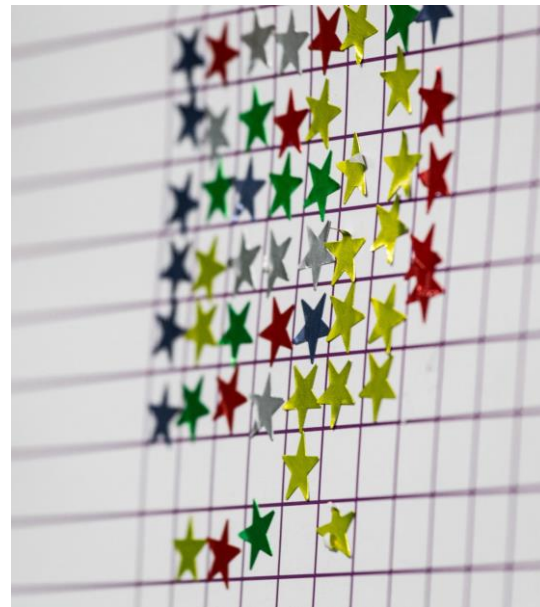
COP 26 & G7

- An opportunity to build on the national momentum and inspire change in your own context and community
- schools should feel connected and involved with the national moment presented by the COP & G7 being hosted by the UK, and maximise educational and activation potential for children and young people, and leave a legacy of local climate action
- Truro Diocese hosted Sing2G7 with the cathedral choir
- The Young Christian Climate Network are holding a relay for COP 26 see [RELAY | YCCN](#)
- **Make a declaration with Let's Go Zero**



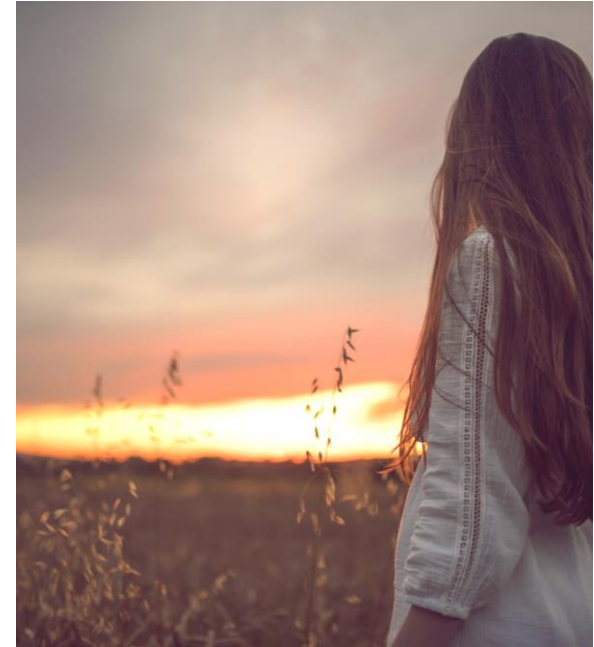
Good Estate Management

- Good estate management for schools - Guidance - GOV.UK (www.gov.uk)
 - Create a strategy and vision
 - Utilise the energy toolkits
 - Install and use the data from smart meters
 - School Switch & <https://www.2buy2.com/> offer schools the choice to request a 100% renewable energy contract from suppliers.



National Young Leader Group

- Engaging young people in every diocese at Primary/Secondary/FE
- It is about creating the right opportunities for young people to actively contribute to the discussion
- To create meaningful participation for young people
- To establish equitable spaces to develop leadership in young people



"Reducing the causes of climate change is essential to the life of faith. It is a way to love our neighbour and to steward the gift of creation." Archbishop Justin Welby

Schools Energy Footprint Tool

Tom Wood – Statistical Researcher



Church Energy Footprint Tool (EFT)

- Allows churches to calculate their CO₂ emissions from their energy bills
- Gives results as gross and net CO₂ emissions, as well as a weather adjusted figure that allows for comparison between different years
- Produces energy efficiency ratings for both the size and the number of people using the building

THE CHURCH OF ENGLAND
Online Parish Return System

Enter Your Data View Data Select Church Users Menu Log out

Energy Footprint Tool 2019 - Parish: Test Parish 2 - Church: Test Church 4

A: Fuels Used
3 of 3 complete 100%

B: Church Energy Usage
8 of 8 complete 0%

C: Church Building Size & Person Hours
5 of 8 complete 62%

D: Other Buildings Energy Usage
3 of 8 complete 0%

E: Other Buildings Size & Person Hours
3 of 4 complete 0%

Total:
8 of 31 complete (26%)

Primary heating fuel
☐ Electricity
☐ Mains gas

Electricity supplier
☐ Parish Buying
☐ Bulb
☐ Electricity
☐ Good Energy
☐ Green Energy
☐ Other

Renewable tariff?
☐ Yes
☐ No
☐ Partial
☐ Don't know

Electricity purchased (kWh)
Cost of electricity (£)

Gas purchased
Unit of gas purchased
☐ kWh
☐ cu metres
☐ 100s cu feet
☐ N/A

Cost of gas (£)

Back Next Save and Return to Menu Report Problem / Give Feedback

Parish Return Online

Energy Footprint Results

Carbon Footprint

Gross CO ₂ emissions (Tonnes)	42.3
Net CO ₂ emissions (Tonnes)	31.4
Weather-Adjusted CO ₂ emissions (Tonnes)	31.3

Energy Efficiency

Emissions/m² rating

A++
A+
A
B
C
D
E
F
G

G

Emissions/person hour rating

A++
A+
A
B
C
D
E
F
G

A++

CO ₂ emissions per m ²	44.8
Emissions/m ² rating	G
Person hours/year	70044
CO ₂ emissions per person hour	0.4
Emissions/person hour rating	A++

The above two figures are important, because churches which have larger space and/or more activity and people tend to use more energy and produce more carbon emissions.

Minimum 4 A++ rating required to access Building and grounds. (For churches in priority areas see notes on Priority Areas: Funding for public buildings)



Schools EFT

Will accept data from

- The School's Display Energy Certificate (DEC) – retrieved from <https://find-energy-certificate.digital.communities.gov.uk/find-a-non-domestic-certificate/search-by-postcode>
- The School's energy bills

09060021 Display energy certificate (DEC) - Find an energy certificate - GOV.UK

Display energy certificate (DEC)

HM Government

Enfield Town Schools Partnership
Sudbury Primary School
Brick Lane
ENFIELD
EN1 3PU

Operational rating: **D**

Certificate number: 0710-0019-0142-3024-6402
Valid until: 27 May 2022
Total useful floor area: 3368 square metres

Energy performance operational rating
The building's energy performance operational rating is based on its carbon dioxide (CO₂) emissions for the last year.
It is given a score and an operational rating on a scale from A (lowest emissions) to G (highest emissions).
The typical score for a public building is 100. This typical score gives an operational rating of D.

Score	Operational rating	This building	Typical
9-25	A		
26-50	B		
51-75	C		
76-100	D	99 D	
101-125	E		
126-150	F		
150+	G		

Total carbon dioxide (CO₂) emissions
This tells you how much carbon dioxide the building emits. It shows tonnes per year of CO₂.

Date	Electricity	Heating	Renewables
May 2021	62	101	4
May 2020	65	88	4
May 2019	62	88	3

Assessment details
Assessor's name: Martin Hughes
Employer/Trading name: CMR Ltd
Employer/Trading address: 01489788991
Assessor's declaration: Contractor to the occupier for EPBD services only
Accreditation scheme: Stroma Certification Ltd
Issue date: 23 April 2021
Nomination date: 26 May 2021

This building's energy use

Energy use	Electricity	Other fuels
Annual energy use (kWh/year)	33.60	155.01
Typical energy use (kWh/year)	40	139.02
Energy from renewables	6.4%	0%

<https://find-energy-certificate.digital.communities.gov.uk/energy-certificate/0710-0019-0142-3024-6402/printview>

Date 22 August 2019
This is not a tax invoice

e-on

Any questions?
Go to e-onenergy.com/FAQ
Call our UK call centres: 0333 202 4856
More to E.ON than to E.ON and Gas to E.ON.
For more information, see our website at e-onenergy.com
Your account number 0109 3556 5300

Final electricity and gas bill - estimated

If your actual readings are different to our estimates, please call your new supplier.

For electricity and gas at Manor Works Manor Road London

Each day at a glance

Electricity
You used: 34.2 kWh on this bill
30 kWh this time last year

Gas
You used: 227.7 kWh on this bill
151.3 kWh this time last year

Electricity payments for business (based on standard meter readings for last year's business at that meter)

Want to switch your tariff?
Go to e-onenergy.com/bestdeal
Or call us on 0333 202 4856

Could you pay less?

Your personal projections	Electricity	Gas
Electricity £264.81 for the next 12 months Based on your current tariff. Includes your discounts and VAT 9%.	You could save £26.48 by switching to: E.ON Energy Flex 1 Year v6 - paperless billing - best monthly Direct Deal	You could save £23.21 by switching to: E.ON Energy Flex 1 Year v6 - paperless billing - best monthly Direct Deal

We'll tell you if you can save money again on every bill. E.ON tariffs can be withdrawn from sale at any time. Electricity calculations based on your use over the past 12 months. Gas calculations based on your use over the past 12 months. Includes VAT at 9%. Remember, if you switch tariffs, your terms and conditions may change significantly. E.ON EnergyFlex prices may change at any time. More information of your tariff can be found on page 2. Remember, it might be worth thinking about switching your tariff or supplier.

Schools EFT - inputs

The data you will need to enter:

- Electricity/gas/oil/other fuel used
- The school building's total useable floor area
- Details of any on-site electricity generation or alternative heating technologies (e.g. heat pumps, solar panels)
- Other information about the school (e.g. pupil numbers) pre-populated from Government records



Schools EFT - outputs

- Gross and net CO₂ emissions
- Weather adjusted emissions
- Emissions per a square meter
- Emissions per pupil



Travel

- Additional tools that will help quantify emissions from schools' travel
- Will cover a range of forms of travel including:
 - Coaches
 - Ferries
 - Aviation
 - Work related car travel



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KEY CONTACTS

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Please share any good news, good practice and helpful tips at the end of the presentation or kindly email via the addresses provided above. Thank you for listening.

