

## Guidance notes for calculating your school's carbon footprint

The Climate Action Topic Environmental Review asks if your school has calculated its carbon footprint. If your answer is 'No' and you want to do the Climate Action topic, you could add it to your Action Plan as one of your first actions. There are different online calculators you can use. This guidance will support you to use this free online calculator: <https://www.carbonfootprint.com/calculator.aspx> It is intended for individuals to use. This guide suggests how you can adapt it to calculate your school's carbon footprint. We encourage you to reduce your carbon footprint rather than offset it.

Please note that the online calculator is not a children's version. It is possible however for you to work with pupils to gather the information needed and for them to input the figures from your fact finding. Have a look at the site before discussing it with a group. You can click ahead on the tabs to see what the questions are.

### Welcome tab

We suggest that you calculate your emissions for a whole year as you are likely to use more light and heat in winter for example. You can set the date range as a calendar year (1st January to 31<sup>st</sup> December) or by academic year, but this may miss out any community use during the summer holidays. Check with your head teacher/janitor for the most appropriate date range for data you have in your school.

### House tab

Think of this as your school building and grounds. It asks how many people are in your household. Set this number to 1. This will mean that the footprint will be calculated for the whole school as one person.

When you have the school's carbon footprint, you can divide it by the number of staff and pupils. This will give you another figure - the *per capita* carbon footprint of the school. Large schools will have a larger carbon footprint than a very small school, but the *per capita* footprint may be similar.

### Flights tab

Include any school trips, staff work trips, and visitors that used flights. Use the 'Trips' box to insert the total number of pupils and staff that travelled.

### Car tab

You can use this to calculate (roughly) the carbon cost of the daily commute to school. Estimate the total distance travelled to get to and from school in private cars by pupils and staff over the year e.g. Average distance travelled 5 miles/day x 194 school days x 400 pupils and staff = 388,000 miles. Enter the mileage and choose an average vehicle.

### Motorbike tab

Use if any pupils or staff travel by motorbike. You can also use this tab to compare with other modes of transport.

### Public Transport tab

Focus on the commute to school, then add in school trips. Remember to multiply by the number of pupils travelling to get the total mileage.

### Secondary tab

Include the cost of the items listed e.g. school meals school uniform and sports kit. Your office staff / head teacher may have figures for money spent on listed items. Don't worry if some of these figures are not available. You can calculate a carbon footprint without them – just make a note that they're not included.

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You can use it for notes.  
Help sheets are below.

## Carbon footprint calculator – sheets for you to use

The Climate Action Topic Environmental Review asks if *your school* has calculated its carbon footprint. There are different online calculators you can use. Use these sheets to organise your data gathering in relation to this free online calculator: <https://www.carbonfootprint.com/calculator.aspx> It is intended for individuals to use but you can use our guidance sheet to adapt it to calculate *your school's footprint*. Some data boxes are already filled in for you.

These sheets will help you gather and manage the data before input into this online calculator. Use the **RESULTS tab** below to write down the results calculated by the online calculator.

This will look like a lot of data to collect; however, you will only need to find answers to some of the options, not all of them e.g. in the House tab, your school is unlikely to use all 7 types of fuel listed. Remember to agree the date range first and record it in the Welcome tab. The date range will guide your data collection.

### RESULTS tab – ENTER THE DATA FROM THE CALCULATOR RESULTS HERE

Tab	tonnes of CO <sub>2</sub> e (from calculator)	Who makes the decisions about this e.g. pupils, head teacher, local authority?	IDEAS FOR CARBON REDUCTION
HOUSE			
FLIGHTS			
CAR			
MOTORBIKE			
BUS & RAIL			
SECONDARY			
<b>SCHOOL TOTAL</b>			

### Welcome tab – data for the carbon footprint calculator

Data required	Sources of information?	Notes – add your own if you wish	Data to input online
Your country	Options in drop-down box in the calculator.	<b>Select UK</b>	<b>United Kingdom</b>
Date range for footprint. Start date and end date.	By calendar year or academic year perhaps.	Footprints are usually calculated for a year to include all the seasons.	

## House tab – data for the carbon footprint calculator

Data required	Sources of information?	Notes – add your own if you wish	Data to input online
How many people are in your household?	Options are in a drop-down box in the calculator.  <b>Select 1.</b>  The footprint will be calculated for the whole school as one person.  School office or website for number of pupils and staff.	You can divide the school's carbon footprint by the number of staff and pupils to give you a carbon footprint per person in school.	1
Electricity kWh	Janitor or school office.	Try to roughly match fuel bill dates to your date range.	
Natural gas. --- Units can be kWh, therms or GBP £	Janitor or school office.	As above.	
Heating oil. --- Units can be kWh, litres or tonnes	Janitor or school office.	As above.	
Coal. Units can be tonnes, kWh, number of 10kg, 20kg, 25kg or 50kg bags	Janitor or school office.	As above.	
LPG (Liquefied petroleum gas): Units can be: litres, kWh, therms	Janitor or school office.	As above.	
Propane in litres	Janitor or school office.	As above.	
Wood in tonnes	Janitor or school office.	As above.	

### Flights tab for up to 3 flights – data for the carbon footprint calculator

Data required	Sources of information?	Notes – add your own if you wish	Data to input online
Flight #1 Return trip?	School management /School office.	Can be school pupils' trip or staff professional trip.	
One-way flight?	School management /School office.	As above.	
From?	School management /School office.	As above.	
To?	School management /School office.	As above.	
Via?	School management /School office.	As above.	
Class	Options are in a drop-down box in the calculator.	Options are: Economy, Premium economy Business, First, or select Average if not known.	
Number of trips. (Enter the number of people who travelled.)	School management /School office	Enter the number of people who travelled.	
Include radiative forcing?	Tick box in calculator.	Carbon emissions from planes at high altitude have an increased effect on global warming. Tick the box if you would like to multiply aviation emissions by DEFRA's recommended Radiative Forcing factor of 1.891.	Tick the box if you would like to multiply aviation emissions by 1.891.
Flight #2 Return trip?	School management /School office.	Can be school pupils' trip or staff professional trip.	
One-way flight?	School management /School office.	As above.	
From?	School management /School office.	As above.	

To?	School management /School office.	As above.	
Via?	School management /School office.	As above.	
Class?	Options are in a drop-down box in the calculator.	Options are: Economy, Premium economy Business, First, or select Average if not known.	
Number of trips. (Enter the number of people who travelled.)	School management /School office	Enter the number of people travelling.	
Include radiative forcing?	Tick box in calculator.	Carbon emissions from planes at high altitude have an increased effect on global warming.	Tick the box if you would like to multiply aviation emissions by 1.891.
Flight #3 Return trip?	School management /School office.	Can be school pupils' trip or staff professional trip.	
One-way flight?	School management /School office.	As above.	
From?	School management /School office.	As above.	
To?	School management /School office.	As above.	
Via?	School management /School office.	As above.	
Class?	Options are in a drop-down box in the calculator.	Options are: Economy, Premium economy Business, First, or select Average if not known.	
Number of trips. (Enter the number of people who travelled.)	School management /School office.	Enter the number of people travelling.	
Include radiative forcing?	Tick box in calculator.	Carbon emissions from planes at high altitude have an increased effect on global warming.	Tick the box if you would like to multiply aviation emissions by 1.891.

### Car tab for up to 2 cars – data for the carbon footprint calculator

Data required	Sources of information?	Notes – add your own if you wish	Data to input online
Car type #1  Mileage. Units can be in miles or km.	Estimate mileage driven by the most popular vehicle type.  <a href="#">School catchment area.</a>  Journey distance calculator online.	See guidance notes for how to estimate school run mileage.	
Vehicle.	Options are in a drop-down box in the calculator.	<b>Select</b> Average van, motorbike and car database.	<b>Average van, motorbike and car database.</b>
Select type	Options are in a drop-down box in the calculator.	<b>Select</b> car	<b>Car</b>
Select type: Choose the one you think is most driven by parents.	Options are in a drop-down box in the calculator: diesel car, petrol, petrol hybrid car, plug-in hybrid car.	Ignore CNG car, LPG car and unknown fuel. You might not know which is most used by fuel type, but you could do a survey or use the <a href="#">national average (Question 12)</a> .	
Select model. Choose one most driven by parents:	Options are in a drop-down box in the calculator.	Options are: Average, large, medium, or small. If you don't know, select average.	
Car type #2  Mileage. Units can be miles or km	Follow notes as above but for the second most driven vehicle type.	See guidance notes for how to estimate school run mileage.	
Vehicle.	Options are in a drop-down box in the calculator.	<b>Select</b> Average van, motorbike and car database.	<b>Average van, motorbike and car database.</b>
Select type	Options are in a drop-down box in the calculator.	<b>Select</b> car	<b>Car</b>

<p>Select type: Choose one you think is the second most driven by parents.</p>	<p>Options are in a drop-down box in the calculator: diesel car, petrol, petrol hybrid car, plug-in hybrid car.</p>	<p>Ignore CNG car, LPG car and unknown fuel. You might not know which is most used by fuel type, but you could do a survey or use the <a href="#">national average (Question 12)</a>.</p>	
<p>Select model.</p>	<p>Options are in a drop-down box in the calculator.</p>	<p>Options are: Average, large, medium, or small. If you don't know, select average.</p>	



### Motorbike tab for up to 2 motorbikes – data for the carbon footprint calculator

Data required	Sources of information?	Notes – add your own if you wish	Data to input online
<p>Motorbike #1</p> <p>Mileage. Units can be miles or km</p>	<p><a href="#">School catchment area.</a> Journey distance calculator online.</p>	<p>Estimate mileage of the most driven motorbike type. See guidance notes for how to estimate school run mileage.</p>	
<p>Select type: Choose the motorbike most driven to school.</p>	<p>Options are in a drop-down box in the calculator:</p>	<p>Options are: Small up to 125cc Medium 125-500cc Large over 500cc</p>	
<p>Motorbike #2</p> <p>Mileage. Units can be miles or km</p>	<p><a href="#">School catchment area.</a> Journey distance calculator online.</p>	<p>Estimate mileage for the second most driven motorbike type. See guidance notes for how to estimate school run mileage.</p>	
<p>Select type: Choose the second most driven motorbike to school.</p>	<p>Options are in a drop-down box in the calculator.</p>	<p>Options are: Small up to 125cc Medium 125-500cc Large over 500cc</p>	

### Bus & Rail tab – data for the carbon footprint calculator

Data required	Sources of information?	Notes – add your own if you wish	Data to input online
Bus distance travelled in miles or kilometres	<a href="#">School catchment area.</a> Journey distance calculator online. School office for figures on pupil numbers.	Multiply by the number of people travelling by bus.	
Coach distance travelled in miles or kilometres	As above	Multiply by the number of people travelling by coach.	
National rail distance travelled in miles or km	As above	Multiply by the number of people travelling this way.	
International rail distance travelled in miles or km	As above	Multiply by the number of people travelling this way.	
Tram distance travelled in miles or km	As above	Multiply by the number of people travelling this way.	
Tube/subway distance travelled in miles or km	As above	Multiply by the number of people travelling this way.	
Taxi distance travelled in miles or km	As above	Multiply by the number of people travelling this way.	

## Secondary tab – data for the carbon footprint calculator

Data required	Sources of information?	Notes – add your own if you wish	Data to input online
Choose your currency.	Options are in a drop-down box in the calculator.	<b>Select £GBP</b>	<b>£GBP</b>
Food and drink products	Options are in a drop-down box in the calculator. <b>Select medium or heavy meat eater.</b>	Select per year, month or week as best fits with your available figures.	<b>Medium meat eater or heavy meat eater.</b>
Pharmaceuticals	Not Applicable	Not Applicable	Leave blank
Clothes, textiles and shoes / year. (Calculate the cost of the purchase of school uniform, shoes and gym kit for all pupils.)	Online shops or school uniform supplier, parents.	Calculate this if uniform is required by the school, although it is not a cost to the school. Multiply by the number of pupils.	
Purchase of paper based products (e.g.books, jotters)	School office	Select per year, per month or per week as best fits with the figures you have. You can do your carbon footprint even if you don't have figures for this item. Note that it isn't included.	
Purchase of computers and IT equipment	School office	As above.	
Purchase of television, radio and phone equipment	School office	As above.	
Purchase of motor vehicles (not including fuel costs)	Used vehicle valuation website/ School office	As above.	

Purchase of furniture and other manufactured goods	School office	As above.	
Purchase of hotel accommodation, restaurants etc. (e.g for school trips)	School office	As above.	
Telephone, mobile/cell phone call costs (for school, not pupils)	School office	As above.	
Banking and finance (mortgage and loan interest payments)	Not Applicable	Not Applicable	Leave blank
Insurance	Not Applicable	Not Applicable	Leave blank
Cost of education	Not Applicable	Not Applicable	Leave blank
Cost of recreational, cultural and sporting activities	School office	As above.	