

# SCHOOLS SUSTAINABILITY GUIDE



WWF®

FOR YOUR WORLD



How to  
take action  
for climate,  
nature and  
sustainability in  
your school.



# Introduction

Climate change and nature loss are two sides of the same coin – we can't tackle one without the other and we need to do so in a sustainable way, by meeting the needs of the present without compromising the needs of future generations.

Our UK schools have the power to take action on both of these environmental issues today; whether it's making physical changes around school grounds, transforming school values and championing sustainable behaviours or by putting pressure on local businesses and governments to deliver on climate promises. Students, teachers, families and local communities, from nursery schools right through to sixth form colleges, can all work together to be a positive force for change. Together we can encourage nature to thrive in and around our UK schools and help to safeguard our climate for future generations.

Combined, school grounds in the UK cover a huge area of land and each school has its own environmental footprint – a measure of the impact it has on the natural world. Environmental footprints take into account not just energy and carbon, but how much farmland, forest area, soil and freshwater it takes to provide everything that people use. By making some quick and some longer-term changes around the school, senior leadership, teachers and students can help to drastically lower their school's environmental footprint. This means less carbon being pumped into the atmosphere, less waste going to landfill, fewer single-use plastics making their way into ocean ecosystems, lower building running costs and more nature thriving around the school grounds!

Each individual school has a huge potential for mobilising society-wide change. It might seem like your one school or class can't make that much of a difference to climate change or nature loss as a whole, but individual students and teachers taking small actions can be the seeds of change. Taking small steps, one at a time, can end up transforming your whole school culture so that sustainability is always at the heart of all choices made. Whole school culture change can inspire students' families, other local schools and businesses in your local community to change their ways to make sure they are operating sustainably and improving their own environmental footprints. Community-wide changes can then influence big organisations, policymakers and governments across the UK and the rest of the world. It all starts with schools and your students, you have the power to be a force for good in the fight against nature loss and climate change.

By letting your students lead environmental projects and including them in decisions about how the school is run, you can empower and motivate your students to drive change and improve environmental awareness for everyone in your school, local community and beyond. Students who are enabled to take action on climate change and nature loss are much less likely to feel helpless or overwhelmed by the environmental issues we face, while gaining the vital skills and knowledge they need to face the challenges of the 21st century.

# How to use this guide

This guide is designed to be used by those in senior leadership roles as well as classroom teachers and school support staff. It provides an overview of seven key areas for action to improve your school's environmental footprint: biodiversity; energy; waste and recycling; paper and printing; water; travel; and food and food waste. Links and resources are included throughout the guide as well as a list of helpful organisations and initiatives in the final section. Using the key below, you'll see how each action links to curriculum, time and cost.

We encourage a student-led approach and recommend using these tips to help you achieve your [Let's Go Zero](#) pledge or in reaching any other environmental goals or awards.

To give your school a framework for implementing the following suggestions, consider using [Eco-Schools](#). Eco-Schools is a pupil-led education programme that schools can deliver to cover climate change in the classroom and improve the sustainability of school grounds. The actions all count towards an Eco-Schools Green Flag, an internationally recognised accreditation.

**KEY**

- LINKS WITH COMPUTING
- LINKS WITH ART AND DESIGN
- SAVES COST
- LARGE COST
- LINKS WITH FOOD TECHNOLOGY
- LINKS WITH LITERACY AND PUBLIC SPEAKING
- USEFUL INFORMATION
- LONGER-TERM WIN
- LINKS WITH MATHEMATICS
- STUDENT INVOLVEMENT
- LINKS WITH SCIENCE
- QUICK WIN
- LINKS WITH GEOGRAPHY / SOCIAL STUDIES
- MINIMAL COST
- FAMILY OR COMMUNITY INVOLVEMENT
- FREE

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# Biodiversity

The Earth's atmosphere is warming, our ice sheets are melting, sea levels are rising and many natural environments are changing quicker than wildlife or people can adapt. This climate change is harming our planet's rich variety of life – its biodiversity – which is essential for us to survive. It provides the air we breathe, the water we drink and the all food we eat.

Biodiversity and climate change are two sides of the same coin, we can't tackle one without the other! But by making our school grounds planet-friendly we can create more space for local nature, release less carbon into the atmosphere and produce less waste, benefiting our biodiversity and the climate. Just in England, school grounds cover an area twice the size of Birmingham. So no matter whether your school has a small tarmac playground or lots of grassy fields, if we all work together, we can turn our school grounds into one of the UK's largest nature parks!

## PLANTS AND FLOWERS

The UK has lost 97% of its flower-rich meadows since 1937, causing a huge decline in important pollinators. Plant wildflowers in patches or pots with your students, using seed bombs to help restore native habitat. Trees provide food for bees, butterflies and other pollinators. They're vital in helping plants reproduce but are also a source of food for other animals. If you have space, the [Woodland Trust](#) and [The Tree Council](#) give free saplings to schools and communities.



You don't need to dig up plants you already have but it's a good idea to try to plant trees, plants and seeds that are native to the UK and native to the area you're planting them. This avoids introducing invasive or alien species to an area which may cause environmental harm.

Try to use a range of plants that provide nectar in all the seasons. Be aware of when they flower, so you do not prune at a point that stops the plant from providing nectar.



Get creative with [upcycling old items](#) into planters. Ask students to bring in items they think could be upcycled, like old pallets, buckets and even [wellington boots!](#) If you have limited space, explore [vertical planters](#), living walls, or wall planters. Ask students to save up large yogurt pots, then pierce holes in the bottom for drainage, and rope together with string. Then simply hang from the wall for an instant planter – just make sure to water your plants regularly or the soil will dry out!



If you have a small roof area (such as on top of a shed), turn it into a green roof. There are [useful guides](#) available online, just make sure that you create a waterproof barrier between the roof and the soil.

Tap water has chemicals added to it to make it safe for us to drink but this can make it harmful to wildlife. Try using recycled rainwater to water your plants instead by installing a water butt. Many water companies offer substantial discounts on water butts to encourage customers to reduce water consumption, but you can also find free second-hand water butts on local freecycle sites. Why not start a class rota for watering plants as well?



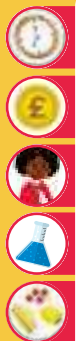
The Woodland Trust and The Tree Council give away free trees for schools and communities. If you've got space to plant some saplings, you can apply online and check out their educational resources.

## PLANTS AND FLOWERS CONTINUED...



Try to provide a range of habitats to cover a variety of species – think high and low, from bushes, trees and long grasses to ponds, log piles and flowers.

The [RSPB](#) offers advice on how to develop habitats for different species.



Use wooden mulch or stones to cover areas of bare soil such as veg patches or flower beds, to protect them from the sun. This stops water evaporating from the soil, meaning less water is needed and the plant roots are protected from hot weather.

Being out in nature has mental health and wellbeing benefits, reducing feelings of stress and anxiety. Planting a sensory garden with fragrant plants like lavender and sage can provide a calming environment while benefiting pollinators. You could even run a competition for students to design the area. Our [Thriving with Nature guide](#) can advise on how to make the most of natural spaces for wellbeing.

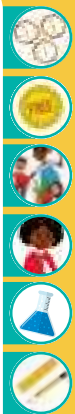


## BUGS



Restoring biodiversity is not just about birds and bees, all insects are important to creating healthy ecosystems. One of the simplest ways to encourage bugs includes letting a patch grow wild – leaving grass to grow long, random weeds to pop up, and leaves to collect.

You can also install special habitats such as insect hotels, [bee houses](#), butterfly barns and ladybird houses – a great activity for eco-clubs! If you want a free alternative, drilling holes into a log and leaving it in a sunny location works just as well for encouraging solitary bees.



## BIRDS AND MAMMALS



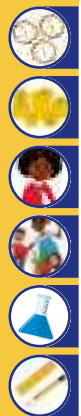
Similar to insects, you can encourage birds and other mammals such as hedgehogs by: creating habitats (long grass, leaf piles), buying or building houses (bird houses, bat boxes, hedgehog houses) and providing food (feeders).



Making bird feeders can be a fun activity to engage students, as well as encouraging nature. You can use empty yogurt pots or coconut shells, [apples](#) and even [toilet roll tubes](#) covered in coconut oil, or sunflower butter and rolled in seeds.



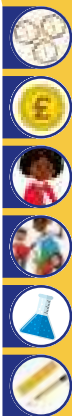
## PONDS



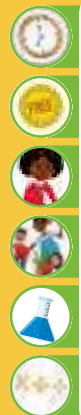
Ponds can be a useful tool for educating and engaging students on aquatic life, as well as providing an important source of water and habitat for insects, amphibians, birds and mammals, including pollinators. You can install a small fence around the pond to prevent students accessing it without permission but choose a picket fence (or similar design) so that animals can access the water.



If space is limited you can create a container pond using an old barrel, bucket or tin bath. Make sure you install plants to clean the water, and steps to help wildlife get in and out. There are lots of useful tips on the [RSPB website](#).



## OBSERVING NATURE



To see if your green spaces are successful, you can carry out formal or informal surveys, counting the number of different species seen in that area. Many of these counts can help support UK charities too, for example:

- [The Big Butterfly Count](#) (for the Butterfly Conservation)
- [Big Schools Birdwatch](#) (for the RSPB)
- [UK Pollinator Monitoring Scheme](#)
- [Worm Hunt](#) (for the Soil Association)

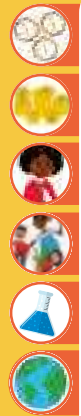
Find more in the schools calendar on p48

### Other tools available include:

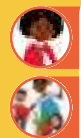
- [Seek app](#)
- [Our Planet Lab School Bioblitz](#)
- [WWF Big Winter Wander](#)
- [A water survey guide for freshwater ponds](#)



## REWILDING AND MAINTENANCE



If your school has an area of unused land, such as an overgrown part of a field, an old section of a car park, or unused building, consider a rewilding project. Remove tarmac or break up concrete and restore the soil, sow some wildflowers and let the grass grow. Soon nature will take over and this could be used as an educational tool to engage students on rewilding and restoring nature.



It's important to think about maintenance when starting any rewilding projects, creating new planting areas or installing wildlife homes and feeders. Flowering plants, fruits and vegetables all need watering and caring for, wildlife homes, boxes and feeding stations need to be cleaned regularly to avoid the spread of disease, and bird feeders need to be topped up with food. It might be helpful to set up a rota for local families who can help maintain some of these areas during school holidays. Learning through Landscapes have lots of helpful tips on maintaining school grounds in their [Polli:Nation Maintenance Booklet](#).



Organisations like [Groundwork](#) and [Trees for Cities](#) have lots of resources for rewilding projects.

# Importance of outdoor learning

Schools have the potential for engaging their pupils, and also staff, with the environment every day. School grounds are the outdoor places children have access to daily so it is vitally important that these spaces provide them with access to nature. And if your school doesn't have good grounds, or any grounds at all, then consider your local, walk-to spaces as a resource and place for your pupils to learn and play in too.

While many young people are passionate about environmental issues, some find the topic stressful, others feel that this is something they can do nothing about, and some are just not interested. So how do we engage children and young people and show them that they can make a difference and continue to make a difference in whatever job or role they play as adults?

The first step is to just let them enjoy nature! This is where play is key. Evidence suggests that children and young people who spend time in nature, just enjoying it and engaging with it, will be the ones who continue to care for it in adult life. So consider your play provision – are your play spaces full of nature? Do you let the grass grow long in places, are the weeds allowed to grow up around play spaces, do you provide natural materials to climb up or sit upon, or sticks, stones and leaves to play with? These will all help your pupils engage with nature every day.

The next step is to give them the skills and knowledge to make a difference. This might lead onto a 'green' career, it might be that they apply their environmental understanding to what might appear to be an unrelated sector, or it might just be decisions and the actions they take in everyday life. Incorporating outdoor learning across the curriculum means that, whatever their enthusiasms and abilities, pupils can learn how their actions can

impact on the natural world and the communities that are affected by environmental change wherever they are in the world. After all, we don't just need ecologists to care for wildlife – we also need documentary makers to tell us about it, we need statisticians to work out the impact of our actions, and we need poets to make us stop and think.

**Mary Jackson**  
Head of Education and Communities,  
Learning through Landscapes



I very much see the embedding of sustainability as an enriching and cohesive tool that unites many aspects of school life, with a focus on student mental health and wellbeing, such as by identifying crisis situations, giving pupils the tools to cope, plus empowering pupils with the knowledge and skills to instigate change. As an adult, I know how overwhelming it can feel to worry about climate breakdown, and it distresses me to know that children feel this burden. I'm incredibly proud that The Chase Eco Committee empowers pupils to actively, practically know they are making a difference. I'm continually humbled by students' beautiful artwork and videos; their passionate speeches; by them embracing the planning, creating and delivering of assemblies to years 7-10; by pupils across year groups giving up time to attend meetings, write letters to MPs, make and sell cakes, don high-vis vests and go litter picking. It makes me feel better knowing that our school's solidarity may help to ease their anxiety.



**Sarah Dukes**  
Eco Co-ordinator and  
English teacher at  
The Chase School, Malvern

Charles Dickens Primary School in inner London is a designated Eco School with Green Flag status. The school has its own garden, greenhouse and chickens! It also has a thriving Forest School. Each class has an eco-councillor with responsibility for caring for the school environment. Their role includes planting and nurturing plants across the school and collecting food waste for composting.

Every year group has environmental science embedded in the curriculum. This ranges from learning about recycling plastics in Year 2 to exploring green energy in Year 6. The children are encouraged to pursue their environmental passions and campaigns. In fact, some children even questioned the Prime Minister about climate change, and presented their own ideas for solutions, during the COP26 Summit in October 2021.



**Nicola Jacobs**  
Year 6 teacher at Charles Dickens  
Primary School, Inner London



# Energy

Burning fossil fuels to make electricity is the biggest source of carbon emissions in the UK. When fossil fuels are burnt for energy they release greenhouse gases directly causing climate change and pollution. Switching to a renewable energy supplier and reducing the amount of energy staff and students use at school can help limit our impact on the planet.

## LIGHTING



Ask your students to design and put up labels for switches around school. One label for switches that should be turned off after use and another for switches that need to stay on permanently.



Switch to LED lightbulbs as old bulbs break – LED lightbulbs use around 60% less energy than standard bulbs, saving energy, carbon and money. For more information on the benefits of LEDs, visit the [Energy Saving Trust](http://www.energysavingtrust.org.uk).



Use natural lighting as much as possible in your school building. Use windows to create light and if repainting consider white surfaces and walls to reflect the light around the room.



Install automatic lighting controls which turn lights off when no one is using the room. School bathrooms are a great place to install these and will save a lot of energy.



## HEATING AND INSULATION



Use natural ventilation as much as possible to reduce the need for heating and air conditioning. Close the blinds on hot days, open the windows in the morning to let in cold air and close them when it's hot, keep doors and windows closed when it's cold.



Check your insulation and look for sources of heat loss such as broken window or door seals, or holes in the flooring.

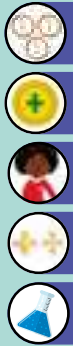
Install roof insulation and install double or triple-glazing where possible.



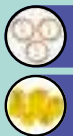
Keep temperatures steady and cool – set the ambient temperature at 18-20°C throughout the year.



# ENERGY EFFICIENCY



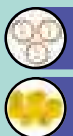
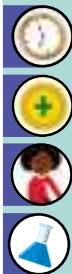
Create a whole school culture of energy conservation – every unit of energy consumed uses up natural resources on our planet, energy saved means resources saved for our planet! Link with maths topics to work out how much energy you currently use at school and see what happens after you've made some changes.



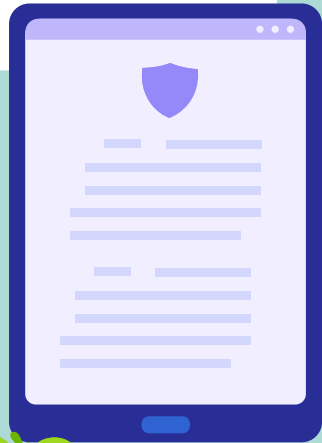
Ensure equipment is regularly serviced or inspected, and functioning efficiently.



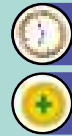
Don't leave devices on standby or charging unnecessarily and turn lights off when not in use. Make sure everything is switched off at the wall at the end of the day, before weekends and holidays. Elect a student light or electrical device monitor for each class and link with science topics about electricity and circuits.



Try to make sure devices such as tablets, laptops and smartboards are as energy-efficient as possible (look for A-rated), and certified by the Energy Star rating.



Use a power strip that allows multiple devices to be switched off at once. It saves time and is easier to remember!



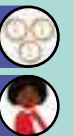
Set the same default standby settings for all staff and student computers – instead of using screensavers, have them enter sleep mode after 5 minutes of inactivity.



Laptops are flexible, quick and easy, and use less energy than desktop PCs. For example, a small desktop PC can use over 260W of power (excluding the screen), compared to 65W for a same-brand laptop. If possible, switch to laptops over PCs.



Don't cool server rooms excessively – most manufacturers have a set temperature the kit can operate at (around 24°C), but ensure temperatures are stable.



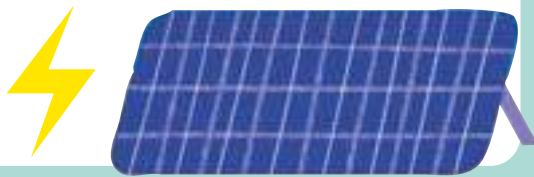
Take part in the [Energy Sparks](#) programme, which can help your school understand its energy use and work to reduce it.



## ENERGY SUPPLY



Monitoring energy consumption is a very effective tool for reducing your school energy bills – if you don't know how much you're using you can't set targets to reduce it! Set up monthly monitoring and reduction targets and get students to take recordings and help achieve these targets.



If possible, switch your energy provider to 100% renewable – if you want to use a price comparison website we recommend [Big Clean Switch](#).



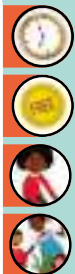
If your school is in London you can sign up to the [RE:FIT](#) programme which provides free advice and support for retrofitting schools to increase energy savings.

Install renewable energy sources like solar panels, ground source heat pumps or even a wind turbine if you have the space. Many businesses, charities and other organisations are offering deals and grants to schools to help install solar panels. Check to find what's available in your area.



Ask your energy provider to install a smart meter to allow easier monitoring of your energy usage.

Take part in [Earth Hour](#) or create a school challenge to use no-electricity for a few hours. You could incorporate this as part of a 'footprint week' with activities, challenges and information about reducing the impact from energy consumption. This is a great way to engage students on the topic.



Work with your facilities team to install sub-meters throughout the building which allow you to monitor energy use for different rooms or zones. These can be paired with monthly monitoring to identify areas for improvement.



Move from gas appliances, such as cookers or boilers, to electric where possible to reduce dependence on fossil fuels.

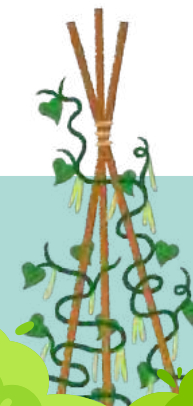


## EMISSIONS



Join UK schools taking on climate change. [Let's Go Zero](#) is the national campaign uniting teachers, pupils, parents and their schools as they all work together to be zero carbon by 2030. The campaign is also working with national government to ensure the right support is in place to help all schools reach this goal. Sign your schools up to the campaign to show your ambition to be climate leaders in your community.

Schools can also join the [Carbon Trusts Public Sector Network](#), a free public sector-only forum that allows schools to share best practice as relates to sustainability in schools.



It's magical to walk into Tiverton garden because you see so many different plants and bugs and blue tits and other birds. They're living their lives and they look like they're having the best time they ever had.

When I'm walking along the road, I'll be singing one of the Meadowsong songs in my head and I remember the plants and the animals and how they look and how beautiful they are.

It feels so calming when you're walking into nature. If you have any problems or stress and you walk into nature it just takes that all away.

**Iqra, Amber and Diren**  
**Tiverton Primary School, North London**



Over the years, Sunnyside has created and run many successful campaigns aimed at saving species, protecting our oceans and slowing down climate change. For example our #NaeStrawAtAw aimed at reducing the use of plastic straws, our #PrettyDeadly campaign to get rid of mass releases of balloons and our most recent #DrainCampaign reminding people that litter in the cities reaches our oceans. From engaging with local businesses, to multi-nationals; corresponding with local councils and First and Prime Ministers; taking their campaigns on the road to local schools and running workshops as far away as Tírē, the young people have developed skills and knowledge which will empower them for the years to come.

But our biggest success has been that in finding our voice we have encouraged other young people to speak out too. All our campaigns are aimed at getting children to take up the baton and do the same in their school or community. From the Highlands to London, our Ocean Defenders have delivered talks and presentations and workshops to head teachers, teachers, MPs, MSPs and councillors, but most importantly to other young people. Sunnyside has certainly found its voice but the real joy is in hearing it echo and resonate in other young hearts.

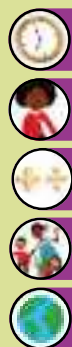
**Lisa Perrie**  
**Principal Teacher at Sunnyside**  
**Primary School, Glasgow**



# Waste and recycling

WRAP estimates that on average each UK secondary school produces 22kg of waste per pupil each year, rising to 45kg per primary school pupil! With over 10 million pupils in UK schools this is more than 250,000 tonnes of waste annually. To tackle this, schools can try to reduce the use of single-use plastics, switch to reusable items and demand change from their suppliers.

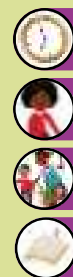
## REFUSE AND REDUCE



Know your waste – don a pair of rubber gloves and conduct waste audits with your students to find out what the most common items being thrown away are. Get some eco-helpers to sort through the waste, record the types of items and how many you find. Multiply your sample to get a whole school estimate of the amount of waste you throw away. Once you've got your results, group them together – are there common items being thrown away which could be recycled? Are there any items that you could stop using as a school completely?



Consider the waste hierarchy in all aspects of your organisation. Refuse, Reduce, Reuse, Recycle and Rot all come before Rubbish, and preventing waste (refusing and reducing) come before recycling.



Once students know their waste they can investigate sustainable alternatives – talking with school chefs, writing to school catering companies (for example to ask them to send large bottles of milk that can be decanted and sent for recycling rather than individual bottles) and raising awareness with students and families by holding assemblies and writing letters home.



Remove single-use plastic and other disposables and replace with reusables – such as crockery and cutlery (washable, reusable mugs rather than paper cups), stationery (reuse items such as folders and document wallets rather than throwing them away), using tap water or water fountains over bottled water etc.



Create a “sharing is caring” school culture – provide a cupboard with reusable takeaway coffee cups and Tupperware containers for staff, and reusable water bottles for students to borrow if they don't have their own.



You probably won't be able to remove all disposable items at once but don't get disheartened! If you can record the changes you make you will know how many items you have saved from going into landfill or into the ocean. You can monitor your progress as a whole school and make sure you keep improving each term.



## REFUSE AND REDUCE CONTINUED...



Students can ask your suppliers to cut their plastic use to reduce plastics in your supply chain, particularly with packaging products for delivery. If every school in the UK does this, suppliers will have to change their ways!

Try to avoid laminating! Laminating a piece of paper may make it last longer but it means that it's covered in plastic. Because of this, it can no longer be recycled as either paper or plastic, so can only go to landfill. The same goes for wrapping student textbooks and exercise books in plastic. Reward points for good book care and try reusable book covers or wrapping in brown paper.

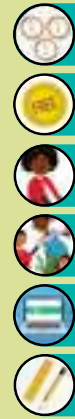


Engage students through a class topic or support them to lead a whole school assembly on where our waste goes and the impact this has on our planet's nature and people.

Create a reusable 'party kit' for school events and parties. Invest in a set of durable plates, cups and tablecloths for school events so that you don't have to use disposable items each time.



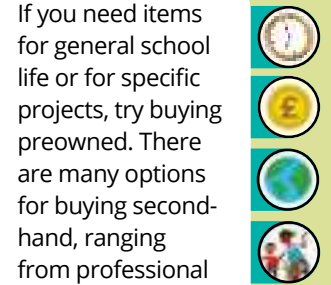
## REUSE



Create a 'free stuff' area in your school (or a community page on your school intranet) where staff, students, parents and carers can give away items to others for free. This could include:

- Uniform swaps
- Christmas jumper swaps
- Book swaps
- Toy swaps

These pages could be managed by eager students to help with their ICT skills. It can even be used as a fundraising idea with a minimum donation to raise funds for the school or for charity.



If you need items for general school life or for specific projects, try buying preowned. There are many options for buying second-hand, ranging from professional wholesalers to high-street charity shops. This saves money and it's better for the planet by saving natural resources.



# RECYCLE



Once you've prevented and reused, recycle as much of your waste as possible. Switch your waste contractor to someone who can process more waste items for you if possible. [Recycle Now](#) has lots of information on what different local authorities can recycle.



Have recycling bins around school so that staff and students can recycle their waste properly. Check how your waste provider collects recycling so that you can decide on the appropriate bins (for instance, do they collect paper/cardboard, plastics and metals separately or all in the same collection). Students can design labels for the bins with information on what can and cannot go in each bin to prevent contamination.



Not all plastics can be recycled by your waste contractor so it's good to get to know your [plastic symbols](#). Waste providers will usually recycle PET (#1) and HDPE (#2), but other plastic items may not be recycled. Putting the wrong plastics in your recycling bin will cause contamination (which may risk all your recycling being incinerated or sent to landfill rather than recycled). Always check what can be recycled in your school with your waste contractor. If you're in doubt about whether an item can be recycled, it's best to put it in the general waste bin instead. Advising students and staff to only recycle specific items is more effective than allowing them to put incorrect items in the recycling 'hoping for the best'.

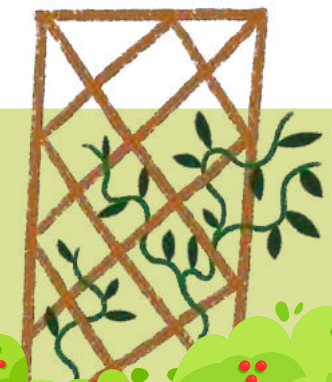


Be cautious about biodegradable and compostable solutions – ensure they are truly degradable (suitable for home composting) and made from a natural material, rather than a synthetic plastic containing an additive. The term 'compostable' means industrially compostable so that item wouldn't degrade in traditional garden or school composters and often can't be put in your food waste collection either.

[Terracycle](#) and other companies offer recycling solutions for difficult to recycle items. Consider purchasing a recycling box for things like soft plastics, crisp packets or stationery to reduce the volume of rubbish going to landfill.



Find community initiatives around you that might accept other forms of waste – for example, wood workshops that may want leftover timber, homeless shelters that may need clothing or excess food, or office shops that may sell second-hand furniture or electrical items.



## RECYCLE



Lots of materials used at school, especially in arts and crafts, are made from non-recyclable plastic. These include sticky tape, sequins, glitter and pipe cleaners. These materials degrade into dangerous microplastics which are an environmental hazard. Try to find alternatives made from natural materials such as paper or card, and for glitter consider using fallen leaves and a hole punch! You can also choose recycled options where possible, paper tape instead of sticky tape, or refillable glue sticks.



Try to avoid laying any new impermeable surfaces like plastic grass and rubber crumb. These surfaces get very hot in direct sunlight, they are bad for drainage and have negative impacts on wildlife and biodiversity.



Bioplastics look like plastic and claim to be 'biodegradable' however, many cannot be recycled or composted at home or school and must go in the general waste. If these items found their way into the ocean as litter they would have the same impact on wildlife and take a significant length of time to degrade so they are not always a good option.



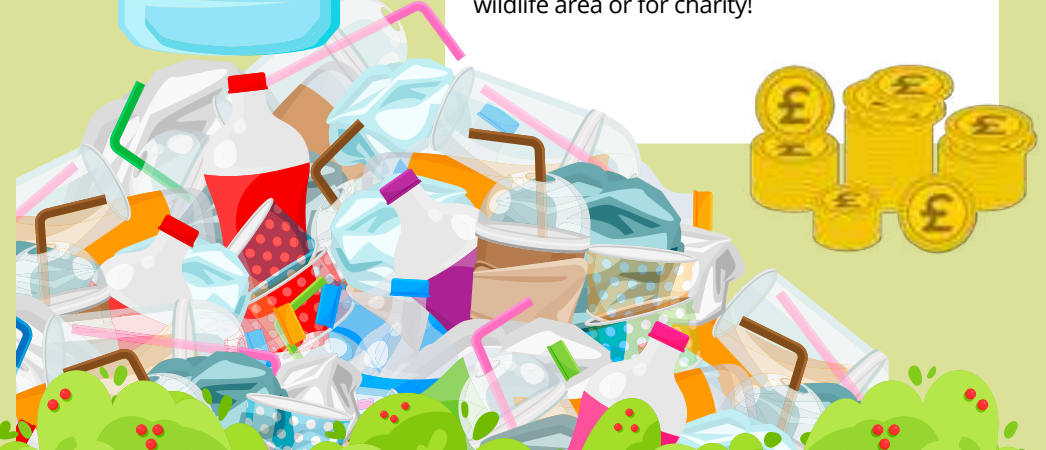
Make [ecobricks](#), reusable building blocks, from your plastic waste. Ecobricks are created by packing clean and dry used plastic into a larger plastic bottle and can be used to build block modules for plant beds, seating or walls. You could even make a greenhouse for your school using ecobricks collected by the students.



Take part in events like [Plastic Free July](#), the [Big Plastic Count](#) and the [Great Big School Clean](#) or run your own school plastic-free week or month.



Get creative and collect plastics from everyday products like bottle caps and use them to create a school mural to promote awareness of recycling and using less single-use plastics. You can also make wax covers for food instead of using clingfilm by dipping cotton material in wax. Students could even design some eco-friendly packaging and a logo to sell their products to raise money for a school wildlife area or for charity!





The Big Bocs Bwyd is a shipping container that's been converted into a shop. It's filled with food from FareShare and donations from local supermarkets and shops. The local community is then invited to come along to the shop and buy food at 'pay as you feel' prices. The project is designed to teach the children at school about sustainable practice, health and wellbeing, and food literacy. The children learn to grow fruit and vegetables, how to look after them, prepare and cook them. It provides an authentic context to learn lifelong skills that can be passed on to family members and in turn the local community. It provides first-hand context for children to learn how to reduce food waste, the difference between best before and use by dates, the importance of locally sourced food and what makes a healthy meal.

The Big Bocs Bwyd has enhanced our curriculum at Penybont Primary School, it has demonstrated to the children at school that there are real-life solutions that help to tackle real-life problems and that every one of them can play a part in that solution.

**Robbie Owen and Frances Haley**  
Head teacher and teacher at  
Penybont Primary School, Bridgend,  
and Hannah Cogbill Senior Leadership  
at Cadoxton Primary School, Barry



Learning for Sustainability (Lfs) and climate action is embedded in all areas of Holyrood Secondary School including the curriculum, extra-curricular activities, and everyday practices in our school building. Young people are at the heart of all developments and we ensure they experience a wide range of learning opportunities in classes and beyond.

In 2021/2022 our young people have taken climate change action by launching our zero single-use plastics pollution campaign 'The Plastic Pollution Revolution' which aims to make Holyrood free of single-use plastic. Every young person will receive a reusable Holyrood plastic bottle that can be refilled. These bottles are made from sustainable, recycled materials which can reduce the use of single-use plastic bottles, tackle litter and promote a healthy lifestyle. We have also launched a whole school recycling rota to raise awareness and ensure recycling becomes part of day-to-day school life. We've been working with local organisations to enhance the outdoor spaces in our school by planting and growing in these spaces – giving our young people more outdoor learning experiences and supporting biodiversity through growing plants and food in our school grounds. We've also been working with the local community including residents and shopkeepers to improve the wider school community by doing litter picks to make our school and the wider community cleaner and safer.

**Laura O'Donnell**  
Geography teacher at Holyrood  
Secondary School, Glasgow



# Paper and printing

Did you know that paper and card are two of the biggest sources of waste in UK schools? It's estimated that at least a quarter of all school waste is paper! Paper and printing are necessities in most schools but it's still good to reduce their use. There are simple changes to tackle paper waste and to ensure the printer inks you use aren't harmful to the environment.

## PAPER AND PRINTING



Try to ensure all paper, card, wood or bamboo products are deforestation-free by purchasing only 100% recycled or [FSC-certified](#) materials.



Try to use chlorine-free paper as much as possible – look for TCF (totally chlorine free) or PCF (processed chlorine free). Where this is not available, use ECF bleached paper (elemental chlorine free).

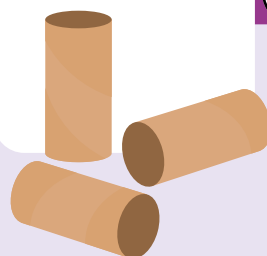


Try to source paper and timber from the UK and Europe to reduce the carbon miles from shipping.

Use vegetable-based inks where possible.



Use recycled toilet paper in school bathrooms.



In the classroom favour scrap paper over new sheets and encourage students to use every page and space in their exercise books before they can have a new one.



If you have a printer which tells you how many sheets have been printed each month, students can start a project to monitor printing. To calculate this, take your total sheets printed, divide by the number of staff in your school, and then divide by the number of working days in that month (or year). You can then collectively set targets to reduce this – or to print more black and white, or double-sided.



Reduce your printing by encouraging staff, parents and guardians to read documents digitally as much as possible. You can use digital tools such as ParentPay or Adobe DocuSign to reduce printing costs and paper waste.



Install an access code system for your printer so that the number of print jobs can be monitored – signing in can reduce volumes printed, can cancel unwanted jobs without printing them unnecessarily, and allows greater monitoring of print.



Set printing to double-sided and black and white as default on staff computers and printers. Encourage staff to print and photocopy efficiently to get as much as they can on one page to limit excess paper waste.



If you're getting external printing carried out, look for printers who have an environmental management system (certified to ISO 14001 or other standard where possible).



If you haven't already, install a paper recycling bin next to printer and in classrooms so that more paper gets recycled.



# Food and food waste

What we eat not only affects our own health, but also the environment. Food is at the heart of many environmental issues – it's a significant contributor to climate change and responsible for almost 60% of global biodiversity loss. Our food system relies on nature but the rise of our Western diet – high in meat, dairy and ultra-processed food – is inefficient and resource intensive. Farming animals for meat and dairy requires space and huge amounts of water and feed. Today, one of the biggest causes of forest loss is the expansion of agricultural land for animal feed production. Producing meat also creates vastly more carbon dioxide than plants such as vegetables, grains and legumes so cutting down on meat and dairy in schools can have a huge positive impact on the environment.

Another problem we have with food is waste. An incredible one third of all food is wasted. In the UK, this adds up to 6.7m tonnes every year. Discarded food is one of the biggest creators of the greenhouse gas methane when it rots in landfill. And when we waste food, we're also wasting the energy used to grow, harvest, transport and package it.

## SCHOOL MEALS



If you're in control of your school menus try serving more plant-rich food over meat options. Plant-based menus mean meals can be enjoyed by most people so they promote inclusivity, sustainability and nutrition.



[Meat-free Mondays](#) is a great place to start – an easy way of introducing new meals to the menu and lowering your environmental footprint.



Get your students or eco-team to run an assembly to show how plant-based diets use less water, take up less space and produce fewer carbon emissions. They could write letters to parents and carers as well explaining the benefits.

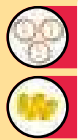


Students could also work with catering staff to plan a nutritionally balanced menu, organising food ordering to minimise food waste, even helping to prepare and cook the food, serve it to the whole school and help clear away afterwards.

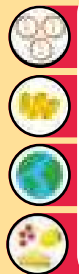


If your school meals are determined by your local authority, students might want to campaign for more environmentally friendly meals by writing letters or making videos. If enough schools ask for change, then meal providers will have to meet this demand!





If your school does serve meat or dairy, try to ensure it is high-welfare and organic if possible. Get to know your suppliers and ask them how they look after their animals and the planet.



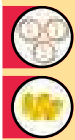
Serve food with sustainable palm oil. Look for the RSPO certification on products to make sure that palm oil is responsibly sourced, and use our [Palm Oil Scorecard](#) to check if suppliers are using sustainably sourced palm oil.



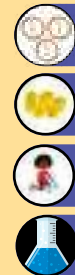
Look for sustainably sourced fish and seafood. Ideally, diversify from the most-consumed seafood: cod, haddock, salmon, prawns and tuna. Use MSC-certified wild seafood or ASC-certified farmed seafood. These certifications help to ensure fish stocks remain healthy around the globe.



In the staff room choose sustainable tea, coffee, sugar and chocolate – look for Fairtrade, Soil Association Organic or Rainforest Alliance-certified products.



## GROWING FOOD



Growing and cooking food at school is a great activity for students of all ages, enabling them to build their understanding of where some of their food comes from and the impacts of food production, and to develop important life skills that are also rewarding and fun. There are lots of foods that are relatively easy to grow at school including potatoes, courgettes, green beans, carrots, tomatoes, leafy greens, strawberries and lots of different herbs. Check out WWF's [growing calendar](#), the [Royal Horticultural Society](#) and [Learning through Landscapes](#) for tips on growing food at school.

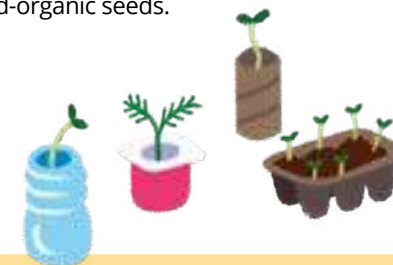


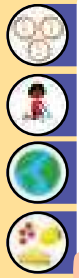
When planting vegetables remember to plant two for yourself and one for the wildlife. Insects rely on nectar from the flowers and the larval stages of many pollinators need to eat plants or bury themselves in the ground.



Did you know you don't need to buy seeds? Some seeds are easy to save from the veg you're eating at home. Ask students to pick their favourite vegetable or fruit and wash and dry the seeds next time they eat it at home. Store the seeds in a glass jar or paper envelope and look up growing instructions online.

If running a veg patch with students or staff, try organic gardening. This means avoiding pesticides and chemicals like weedkiller, and instead encouraging native predators by providing a good ecosystem balance. You can also explore things like 'no dig' and buying certified-organic seeds.





Don't let produce go to waste – use food grown on the grounds of your school for your school kitchen! From plant to plate is a great way to educate students (and staff) on where our food comes from. You could even run a poll to ask students to vote on what should be grown at school.



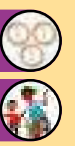
Encourage family members to come and help with tending to plants, especially over school holidays, or to suggest plants they would like to have grown. Parents could even donate unwanted pots, seeds or seedlings to help get your veg patch started!



Create a 'free for all' for fruits and vegetable snacks that aren't consumed by the end of the day – create an area where these can be picked up by parents, students and staff to avoid waste.

## FOOD DONATION

Consider donating surplus food to local food banks or working with organisations like [Food Cycle](#). You might be able to set up your own school food bank with support from families and the local community.

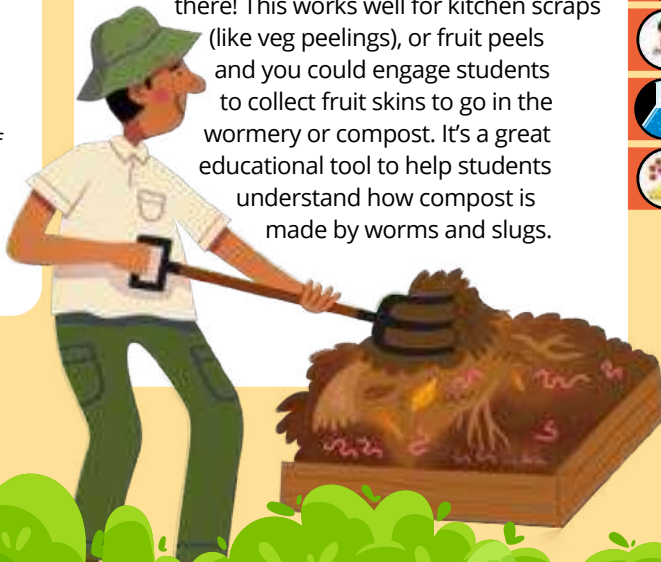


## FOOD WASTE



Weigh food waste scraped from plates in the canteen to raise student awareness about not taking more food than you will eat. Challenge students and staff to reduce overall food waste by a certain amount each term.

Depending on the type of food being wasted, you could install a compost bin/heap or wormery to help produce compost from food scraps. However, don't put cooked food in there! This works well for kitchen scraps (like veg peelings), or fruit peels and you could engage students to collect fruit skins to go in the wormery or compost. It's a great educational tool to help students understand how compost is made by worms and slugs.

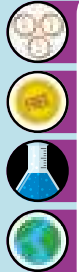


# Water

Did you know that only 2.5% of the water on the planet is freshwater? And because most of this is locked up in ice and snow, less than 1% of the world's freshwater is actually available for people to use. As well as providing essential drinking water, rivers, lakes and freshwater wetlands are home to almost a quarter of the world's vertebrate species, but they are becoming increasingly more polluted, threatening many species with extinction.

Global demand for water is increasing and it's thought that parts of the UK may run out of water by the year 2040. It's really important that we make sure we are carefully considering how water is used, recycling water if possible and making sure we aren't wasting any unnecessary water. Luckily, we have a few tips to help you reduce water waste in your school.

## WATER



Collect rainwater by installing water butts or rainwater recycling systems, this can then be used to water plants or flush toilets, saving money on mains water and helping climate change.



If possible, install a grey water recycling system for water from sinks and showers to be filtered and used for flushing toilets.



Replacing areas of impermeable surface with permeable surfaces (made from natural materials where possible) will help to improve drainage, reduce surface water run-off and reduce the likelihood of flooding.



Install flow regulators on taps and showers to reduce water wastage.



Install infrared sensors on taps and showers which stop the flow when not being used, or timers in showers which can stop the water flow every 2 minutes.



If you have gardens or green spaces outside, use mulch or natural shading to protect plants during the summer, preventing the soil from drying out.



When purchasing new equipment make sure it is water efficient as well as energy efficient.

Install dual flush toilets and place water saving devices (such as hippo bags) in toilet cisterns to help reduce the volume of water needed to flush the toilet.

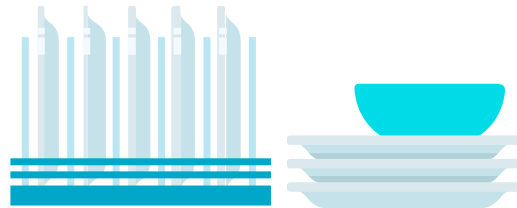


## WATER CONTINUED...



Make sure water pipes are checked regularly and leaks are reported and fixed urgently – you could even ask students to become leaky tap monitors!

Reduce the number of dishwasher loads each day – make sure it's completely full before use and use the 'eco' mode. Can you also encourage staff to reuse their glasses or mugs rather than taking a new one each time?



Encourage the use of reusable water bottles for staff and students. Have a set of water bottles in each classroom that students can borrow for the week if they don't have their own bottle – you could even get them branded with your school or eco-team logo and hold a design competition.



When you provide children with opportunities to go outside and experience the natural world as an integral part of school life, these experiences are brought back into the classroom and they enrich and deepen the children's learning and understanding of their place in the world. At Tiverton, children are encouraged to pay attention to and understand the importance of nature in their local surroundings. The songs at the heart of the Meadowsong programme (music and nature project by composer Kate Stilitz in partnership with RSPB and WWF) capture the sense of wonder that children experience when connecting with nature. All these experiences allow them to develop a sensitivity and empathy for the natural world, and a desire to help wildlife to thrive at school and beyond.

Over the past 15 years we have created green spaces at school by growing herbs, flowering plants and vegetables. This has provided opportunities for our pupils to grow, nurture and maintain gardens – increasing biodiversity, creating more space for wildlife and fostering a love of plants and wildlife within the school. We encourage our broader community to get involved in this process at Tiverton and this develops their confidence and supports them in creating their own green spaces on windowsills, balconies and gardens.

**Resham Mirza and Liza Storm**  
Head teacher and Deputy Head at  
Tiverton Primary School, North London



# Travel

Transport is a huge source of carbon emissions because most of the modes of transport in the UK are powered by fossil fuels like petrol and diesel. When fossil fuels are burnt they release greenhouse gases into the atmosphere and directly contribute to climate change. Finding ways of reducing our reliance on fossil fuel cars by walking, cycling, scooting or taking public transport can help lower our carbon emissions and help the planet.



Encourage staff to commute using the lowest carbon option possible, such as walking, cycling, using public transport or carpooling to school. WWF has a travel calculator (based on Google Maps), which shows the distance, journey time, emissions, calories burned and exposure to air pollution for each mode of travel. Try promoting this [Travel Better](#) tool to staff and students.



Set up a walk-, scoot- or cycle-to-school zone around your school to encourage physical activity, ease congestion, increase road safety and improve air quality around the school grounds. There are lots of resources to help you do this including [Sustrans](#) and [Living Streets](#).

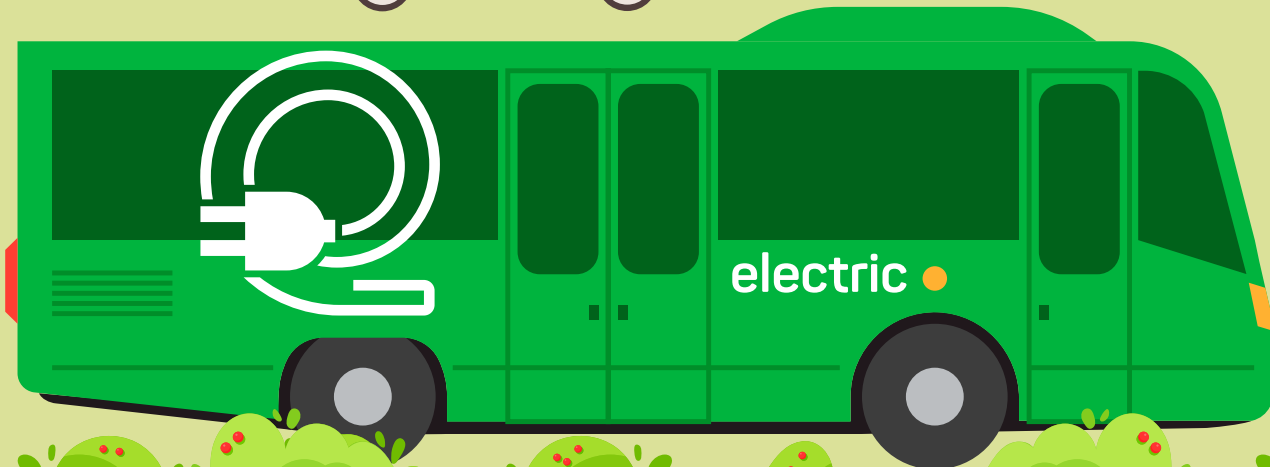
Some organisations like [Bikeability](#) offer cycling training and resources for students to improve their cycling confidence.



For school trips choose walking if in the local area, or public transport like buses, trains, tube, coaches and ferries, over flights as much as possible.



For parents and carers who have to drive, encourage carpooling by setting up a parent carpool group to help share the lifts. If you have many students from further afield, you could also investigate the option of a school bus which can reduce several car journeys into one bus trip. Modern buses are more energy efficient than old versions and you can even hire electric minibuses.





# SCHOOLS CALENDAR

August	September	October
<ul style="list-style-type: none"> <li>● Harvest plants like tomatoes, lettuce and spinach.</li> </ul> 	<ul style="list-style-type: none"> <li>● <a href="#">Great Big Green Week</a></li> <li>● <a href="#">Climate Fringe Week</a></li> <li>● <a href="#">Recycle Week</a></li> <li>● Good time to plant flowers like marigolds, lavender and thyme for pollinators.</li> </ul>	<ul style="list-style-type: none"> <li>● <a href="#">Forest School Day</a></li> <li>● <a href="#">Seed Gathering Season</a></li> <li>● Build bug hotels and bee hotels for wildlife over the autumn and winter.</li> <li>● Put out bird boxes.</li> </ul>
November	December	January
<ul style="list-style-type: none"> <li>● <a href="#">Outdoor Classroom Day</a></li> <li>● <a href="#">Wear It Wild</a> (all year round)</li> <li>● Good time to plant trees while they're dormant as their roots are less likely to be damaged.</li> <li>● Create nature table of fallen leaves, conkers, acorns etc.</li> </ul>	<ul style="list-style-type: none"> <li>● Good time to plant trees while they're dormant as their roots are less likely to be damaged.</li> <li>● Make and put out bird feeders to feed birds over winter months.</li> </ul>	<ul style="list-style-type: none"> <li>● <a href="#">RSPB Big Schools Birdwatch</a></li> <li>● Continue to feed birds over winter months.</li> <li>● <a href="#">WWF Big Winter Wander</a></li> </ul>

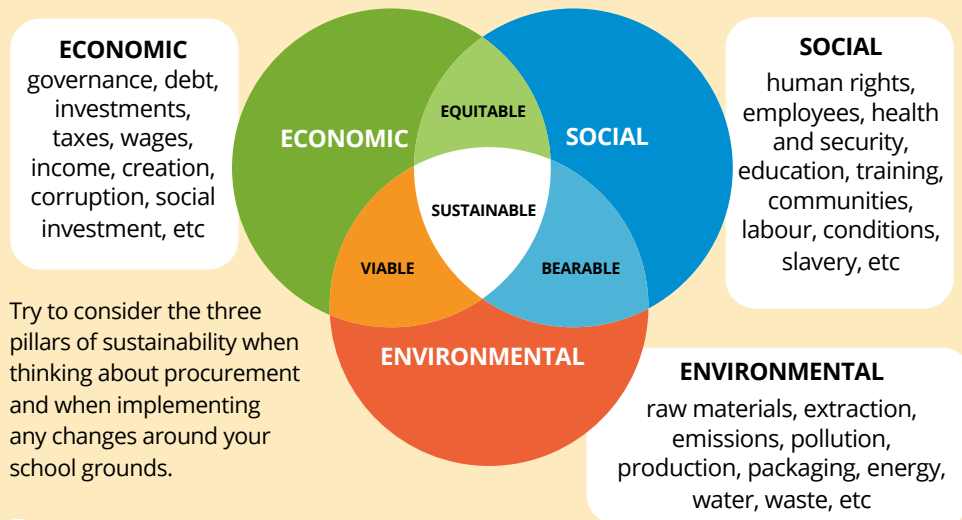
February	March	April
<ul style="list-style-type: none"> <li>● <a href="#">RSPB Big Schools Birdwatch</a></li> <li>● <a href="#">World Nest Box Week</a></li> <li>● <a href="#">Fairtrade Fortnight</a></li> <li>● Great time to sow herbs like rosemary, thyme, sage and chives.</li> <li>● Good time to put up bat boxes before bats come out of hibernation.</li> </ul>	<ul style="list-style-type: none"> <li>● <a href="#">Earth Hour</a></li> <li>● <a href="#">Great Big Schools Clean</a></li> <li>● <a href="#">Sustrans Big Walk and Wheel</a></li> <li>● Sow/plant vegetables like carrots, courgettes and potatoes.</li> <li>● Keep an eye out for spring flowers in bloom.</li> </ul>	<ul style="list-style-type: none"> <li>● <a href="#">Soil Association Worm Hunt</a></li> <li>● Good time to sow wildflower seeds.</li> <li>● Bird nesting season.</li> <li>● <a href="#">Big Battery Hunt</a> (all year round)</li> </ul> 
May	June	July
<ul style="list-style-type: none"> <li>● <a href="#">Big Plastic Count</a></li> <li>● <a href="#">No Mow May</a></li> <li>● <a href="#">Outdoor Classroom Day</a></li> <li>● <a href="#">The Great Bug Hunt</a></li> <li>● <a href="#">Walk to School Week</a></li> <li>● Plant summer crops such as lettuce, tomatoes and strawberries.</li> <li>● Good time to identify tree leaves.</li> </ul>	<ul style="list-style-type: none"> <li>● <a href="#">Wildlife Trust 30 Days Wild</a></li> <li>● <a href="#">The Great Bug Hunt</a></li> <li>● <a href="#">Grounds for Nature School BioBlitz</a></li> <li>● Harvest strawberries, peas, carrots, beetroot and courgettes.</li> </ul> 	<ul style="list-style-type: none"> <li>● <a href="#">Butterfly Conservation Big Butterfly Count</a></li> <li>● <a href="#">Plastic Free July</a></li> <li>● Look out for migrant birds such as swifts and swallows.</li> <li>● Bats most active at this time of year.</li> </ul>

# What does sustainability mean?

The word sustainability is defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report, 1987).

Our planet can replenish a finite number of resources – from food to water – and is only able to withstand a certain degree of global temperature rise before ecosystems are pushed beyond repair. We only have one Earth and are utterly dependent on it for our survival and wellbeing. But both people and nature are facing severe consequences if our consumption rate stays the same (that’s the energy we use, our demand for resources to feed, clothe and house us, as well as materials that we want for pure enjoyment).

Sustainability is often linked with being ‘environmentally friendly’, but this is only one factor. Sustainability is built on the three pillars of society, environment and economy, so to be truly sustainable something must achieve value for money on a whole life basis, generating benefits not only to the organisation, but also to society and the economy, while minimising damage to the environment. For example, even if something is considered good for the environment, if it’s economically inefficient (if it costs too much money or needs replacing every year) or isn’t ethical (if its factories have poor labour conditions, perhaps) then it isn’t a sustainable option.



Try to consider the three pillars of sustainability when thinking about procurement and when implementing any changes around your school grounds.

# Useful links and resources

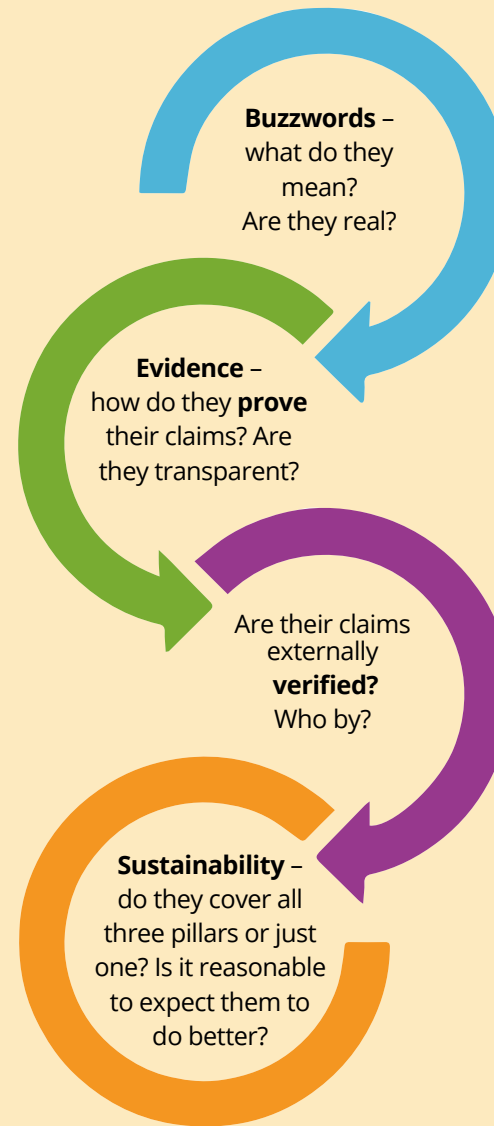
- Bikeability** <https://www.bikeability.org.uk/>
- Big Bocs Bwyd** <https://www.bigbocsbwyd.co.uk/>
- Eco Schools** <https://www.eco-schools.org.uk/>
- Energy Sparks** <https://energysparks.uk/>
- GAP Schools Climate Action Planner** : <https://www.transform-our-world.org/tools/climate-action-planner>
- Groundwork** <https://www.groundwork.org.uk/>
- LEAF** – Learning About Forests <https://www.leaf.global/>
- Learning through Landscapes** <https://www.ltl.org.uk/>
- Let’s Go Zero** <https://letsgozero.org/>
- Living Streets** – Walk to School <https://www.livingstreets.org.uk/walk-to-school>
- Meadowsong** <https://meadowsong.co.uk/>
- Meat-free Mondays** <https://meatfreemondays.com/>
- RSPB** <https://www.rspb.org.uk/fun-and-learning/for-teachers/>
- Royal Horticultural Society** <https://schoolgardening.rhs.org.uk/home>
- RSPB** <https://www.rspb.org.uk/fun-and-learning/for-teachers/>
- SEEd** – Sustainability and Environmental Education <https://se-ed.co.uk/>
- Size of Wales** <https://sizeofwales.org.uk/>
- Sustrans** <https://www.sustrans.org.uk/>
- Thriving with Nature Guide** <https://www.mentalhealth.org.uk/campaigns/thriving-with-nature/guide>
- Transform Our World** <https://www.transform-our-world.org/home>
- The Tree Council** <https://treecouncil.org.uk/what-we-do/schools-and-education/orchards-for-schools/>
- Trees for Cities** <https://www.treesforcities.org/our-work/schools-programme>
- Wildlife Trusts** <https://www.wildlifewatch.org.uk/activities>
- Wildfowl & Wetlands Trusts** <https://learningzone.wwt.org.uk/>
- Woodland Trust** <https://www.woodlandtrust.org.uk/plant-trees/schools-and-communities>
- WRAP** – Waste and Resources Action Programme <https://wrap.org.uk/>
- Zero Waste Scotland** – Food Waste <https://www.zerowastescotland.org.uk/food-waste/teaching-resources/>

# Greenwashing and how to avoid it

Greenwashing is where a company, brand or organisation uses advertising, branding and messaging to appear more environmentally sustainable than they actually are. This can often mislead consumers into choosing certain products or services because they think they are helping the planet.

Greenwashing can include things like brands making false claims or vague statements about being environmentally sustainable, changing their logos to be green in colour, or to include plants so that customers associate them with being environmentally friendly. Greenwashing can also be used by some companies to distract consumers from areas of business that might be doing a lot of environmental harm and damage.

There are certain things to look out for to see if a product or company is using greenwashing:



**Buzzwords** – brands and products can often use buzzwords such as 'eco', 'green', 'biodegradable', 'recyclable', 'environmentally friendly', 'natural' etc, which don't come with a legal definition and without explaining how that organisation defines that term. When you see buzzwords, try to see past these and look for more evidence.


**Evidence** – when a product or brand makes a claim such as 'carbon neutral' or 'recyclable', look for evidence that proves their claims. A responsible business should provide open and transparent information, including facts and figures, to support any claim they are making about their credentials. If they haven't provided evidence, be wary!

**Verification** – who has verified their claims? Have they been externally certified by an accreditation scheme, do they have external audits that check compliance, or are they signing-off their own work?

**Sustainability** – finally, do they account for just one of the three pillars of sustainability? For example, have they produced a very environmentally friendly product, but there are no details about how socially or economically sustainable they are, or are their actions as a business misaligned with the products they're producing?



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