Essex County Council Environment and Climate Action

SCHOOLS' ADVICE PACK

Taking Action on Climate Change

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Small changes undertaken together can have a lasting impact and often lead to new ways of thinking about how we live and work.

This is the second edition of the Climate Action Advice Pack for Schools. It is a collection of key guidance, tips and information about what action your school can take to tackle climate change, improve the environment and help Essex on its journey to becoming a more sustainable place for us all to live, work and learn.

The aim of this pack is to help point you in the direction of resources and information which can help your school to become more sustainable and – in the process – save money, through actions such as improving energy efficiency.



Reducing your school's impact on the climate and environment is not as challenging as it may seem. There are many practical and cost-effective (often free!) changes you can make to help reduce your carbon emissions and to ensure your school is operating sustainably.

Some of these changes can also produce positive benefits to your students and staff physical and mental health and wellbeing. We have aimed to signpost only to free or low-cost initiatives and resources throughout this pack, as well as to schemes which can help your school to secure additional funding!

The Essex Climate Action Commission has advised the county of Essex on the key steps to get to net zero emissions by 2050 and build resilience to climate risks. In its report: Net Zero, Making Essex Carbon Neutral, one of its recommendations was to signpost Essex schools to good advice and help in the transition to a lower carbon lifestyle. We all have a role to play in reaching net zero. Small changes undertaken together can have a lasting impact and often lead to new ways of thinking about how we live and work. Reaching net zero will require change and proactive action from all of us and will be achieved through both big and small changes.



Alongside this resource for schools on climate change, Essex County Council has developed a guidance pack for residents, early years settings and another one for businesses. If you would like to read these documents, please visit the Essex Climate Action Commission <u>website</u>.

1. What Can I Do?

The below table aims to provide you with an overview of some key actions you can take at your school. More information can be found later in the pack. Please note this is **not an extensive list of actions you can take**.

Issue	Opportunity	Support	Page
CPD & Carbon Literacy training	 Develop teachers' knowledge and skills Develop knowledge on environmental practices in order to embed sustainability across the curriculum 	 UCL offers free <u>Carbon Literacy</u> training for teachers 	10
Energy	 Reduce carbon footprint Save money (through reduced energy bills) Future-proof your school site/energy supply 	 ECC's free Energy Advice team can visit your school and advise on your net zero journey. Email: <u>schoolenergyteam@</u> <u>essex.gov.uk</u> Free advice and school visits from Let's Go Zero's <u>Advisors' Network</u> in relation to your carbon footprint The free <u>Count Your Carbon</u> <u>Calculator</u>, designed specifically for schools 	12

Issue	Opportunity	Support
Funding	 Receive additional support and funds for projects Reduce your school's climate impact Improve biodiversity and local environment 	 The Royal Society - <u>The Partnership</u> <u>Grants</u> scheme funds schools and colleges up to £3,000 to run investigative STEM projects <u>Tesco Stronger Starts</u> - provides grants of up to £1,500, with priority given to projects that provide food and support to young people. This includes, but is not limited to: breakfast clubs; buying equipment for outdoor or indoor activities; support for school clubs and developing food growing areas in schools
£		• Workplace Charging Scheme: schools are eligible to apply for a grant of up to £2,500 per socket to support the installation of electric vehicle charging points
Green Careers & Skills	 Develop teachers' knowledge and understanding of green careers and skills Support and inform students 	 Email the Green Growth Team at Essex County Council for support with CPD for teachers and opportunities for young people: <u>GreatStart@essex.gov.uk</u> Visit the <u>National Careers Service</u> <u>website</u> and <u>Education Hub</u> for green careers advice & opportunities
	about the prospect and opportunities of pursuing a green career	 Visit the <u>Essex Opportunities Portal</u> and <u>Essex Green Skills Hub</u> for information on Green and other careers and jobs
Outdoor	Trepresso	- Free planning, trace and marterials from
Space	 Improve biodiversity Improve school environment Free support and materials 	 Free planning, trees and materials from the Essex Forest Initiative. Contact: <u>environment@essex.gov.uk</u> Discounted <u>water butts</u> from the Floods team (with an Essex postcode) <u>National Education Nature Park and</u> <u>Climate Action Award</u>

Issue	Opportunity	Support	Page
Procurement	Reduce your carbon footprint	Consider these top tips for sustainable procurement	33
	Improve your procurement practicesSave money	 The Department for Education (DfE) provides an <u>approved framework</u> <u>agreement</u> to help your school buy goods and services, including from pre-approved suppliers, for needs such as: LED lighting, gas, electricity, liquid fuel, water contracts, renewable energy, and more 	31
School Networks	 Connect with climate ambassadors in schools across Essex 	 Join the Essex Schools' Climate Action Network (ESCAN) and share ideas on best practice for climate action projects. Email: <u>Environment.</u> <u>ClimateCommunications@essex.</u> <u>gov.uk</u> 	9

Issue	Opportunity	Support
Transport	 Reduce carbon footprint Reduce traffic and pollution around schools Help students, parents and colleagues to understand climate-friendly transport changes they can make 	 Development the transmission of transmission of transmission of the transmission of transmiss
Waste	 Reduce waste produced at your school Manage waste more efficiently Find ways to reuse items which benefits your students, school and community 	 Under make more. for fre Set up shop t with th Reuse servic (upcyc) becon recycli with B or The cartric
Water	 Reduce water wastage and improve efficiency Save money 	 Water Water Discouteam of

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elop a School Travel Plan – email ravelplanteam@essex.gov.uk for e info and free support	15
air quality website – <u>Essex Air</u> – has ecific schools zone section, with urces and toolkits available for hers te a <u>clean air action plan</u>	19
erstand what waste is created and e a plan to reduce waste/ recycle e. See <u>Busy Bins</u> and <u>Love Essex</u> ree guidance on waste audits	27
up a uniform swap or second-hand to reduce waste and help families the cost of uniform	23
se, recycle and upcycle through ices and organisations like <u>Reschool</u> ycle unused classroom equipment); ome a <u>Terracycle</u> collection point for cling; set up a battery collection box <u>BatteryBack</u> ; use <u>Return A Toner</u> <u>he Ink Bin</u> to recycle empty printer ridges	24
<mark>er Saving Calculator</mark> by Thames er	42
ounted <u>water butts</u> from the Floods n (with an Essex postcode)	44

2. Framework for Action

There are some important strategic steps your school can take to develop a framework for action to tackle climate change.





School-wide Initiatives -**Framework for Action**

- Could you develop a defined **climate strategy**, which sets out ambitions and commitments you would like to achieve? This could include targets ranging from becoming a net zero school by a certain date to eliminating the use of single use plastics in classrooms and the canteen. Such a strategy will help to crystalise your aims and commitments.
 - Could your school pledge to incorporate its climate strategy into the school's overarching strategy? This would highlight your school's commitment to tackling climate change and increase accountability.
 - The Department for Education offers advice and guidance regarding sustainability leadership and climate action plans in education, including how to develop your sustainability leadership structure.
 - Friends of the Earth has developed a Climate Action Plan for Schools resource.
- You may wish to establish a climate committee or • develop an existing climate group at school. This provides students with an opportunity to voice concerns and share ideas about what your school can be doing to tackle climate change. It can work to develop initiatives, such as introducing incentives (e.g. badges, rewards, etc.) for students to take action or introducing green school assemblies with commendations for environment related achievements. You may also wish to involve teaching and other school staff, such as senior leaders, catering and site managers, to help young people express their concerns directly to those who can take

You may wish to establish a climate committee or develop an existing climate group at school.

- action. In addition, you may wish to expand this committee to include members of the wider community (please see page 52).
- The Essex Schools' Climate Action Network (ESCAN) aims to bring together students and teachers from across Essex to share ideas in relation to climate action. Members of the network will become Essex Climate Ambassadors and meet virtually, sharing success stories of climate projects undertaken at their schools and learning from others. If you are interested in joining the network, please contact: Environment.ClimateCommunications@essex.gov.uk.
- Understand your carbon footprint. The Count Your Carbon Calculator is a **free** resource for schools, colleges and nurseries, which allows you to understand the sources of your carbon footprint. It also provides recommendations for steps you can take, to both reduce your impact on the environment and save money.
- Get free support and take action to reduce your carbon footprint and save money:
 - Essex County Council has a team of School Energy Surveyors who are visiting all maintained schools completing energy audits. The team visits schools for free and aims to help identify opportunities for carbon reduction and improved energy efficiency throughout their school. Maintained, City, Foundation, Voluntary Controlled or Voluntary Aided schools interested in scheduling a school energy survey with the team are encouraged to contact schoolenergyteam@essex.gov.uk.
 - Let's Go Zero has a network of Climate Action Advisors who can visit your school for free and support efforts to reduce energy use and your wider carbon footprint, as well as explore options to upgrade existing buildings.



- You can also independently work with site managers to understand your school's energy usage and implement behavioural changes to tackle energy bills and carbon emissions.
- Information about good estate management for schools can be found on the Department for Education's website.
- Carbon Literacy training & CPD can help teachers and other school staff to deepen their understanding of climate and environment discourse, as well as provide practical advice for action you can take in school. For instance, UCL offers free training across History, Geography, English and Mathematics, with more subjects to be added.
- Include climate action throughout the curriculum. For example, learning about the impacts of carbon emissions in science, through to persuasive writing exercises in English to influence politicians. You can find out more about teaching and learning resources (including curriculum-aligned resources) on pages 20 and 54.

Engage with the Parent **Teacher Association** (PTA) – PTAs often arrange key events (such as summer fetes and Christmas fairs), so initiatives such as reducing the use of plastic could be developed. PTAs also often fund play equipment. You could work together to develop a commitment to purchase only climatefriendly equipment.

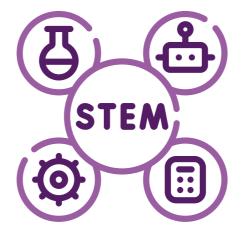
- Climate Anxiety For some young people, climate change and damage to the environment is not only of concern to them, but is extremely worrying. Many children now have access to unfiltered information online and this may only increase their anxiety. It is important to recognise that when speaking about climate change, you are **providing** information which empowers young people to understand the facts and demonstrates that they can be part of the solution. Ultimately, it is important to remain conscious that this level of worry will vary from child to child and that a tailored approach may be necessary. By forming a climate committee, holding green-themed assemblies and perhaps special Q&A climate sessions, you can provide a way for young people to **discuss their concerns** openly with their peers, with guidance from teaching staff.
- You may wish to consider the work of **Healthy Schools Essex**, which places an emphasis on improving the health and wellbeing of young people. The programme provides a strategic framework for schools to reflect on their provision and includes topics such as PSHE, Mental Health and Emotional Wellbeing and Pupil Voice. Climate change and the environment can be incorporated into a Healthy Schools project with a focus on emotional wellbeing. For any activity undertaken, schools can nominate themselves for a Healthy Schools Best Practice Award at an annual celebration event.
- Consider how sustainable the journey to and from school is (both for students and staff) - could walk to school weeks help to build momentum? You can read more about this in the 'On the Way to School' section on page 14.
- Instil environmental values into the staff code of conduct (e.g. printing doublesided and only when necessary).



Waste - consider undertaking a waste audit to understand what waste you create and how you dispose of it. You can find free guidance on waste audits on Busy Bins and Love Essex (plastic audits).







The Young Green Briton Challenge (YGBC) - An initiative for students aged 11-14 to take part in workshops, which consider the local contributing factors and the impacts of climate change, delivered by the YGBC team. Students are then split into teams to develop solutions, which they then pitch at an 'Eco Dragons Den'. Schools will be provided with £150 of seed investment funding. The next stage for successful teams is support from YGBC mentors to put their ideas into action. One team project is then progressed to the National Award Finals, where four teams will receive an additional £1,000 to build on the success of their initiative.

Work with External Organisations

Your school could consider working with external organisations to support your journey to becoming more sustainable, including:

- The **Count Your Carbon Calculator** is a national, free resource to help schools, colleges and nurseries calculate their carbon footprints. The resource also makes recommendations for how to reduce that footprint, as well as how you can save money by doing so.
- Eco Schools helps to inspire and empowers pupils; raises environmental awareness; improves the school environment; creates financial savings.
- Let's Go Zero is a national campaign uniting teachers, pupils, parents and their schools as they all work together to be zero carbon by 2030. As a school, when you sign up to Let's Go Zero, you'll get free support from Climate Action Advisors on setting your zero carbon targets and developing roadmaps for delivery.
 - Let's Go Zero is also working with IKEA on a competition for schools to kickstart green projects.
 - Let's Go Zero also runs the Climate Action Countdown a month of action held every year (June - July) - where a coalition of organisations help schools to take on a different daily activity linked to sustainability, and celebrate what schools across the UK are doing for climate and biodiversity.

The Royal Society – The Partnership Grants scheme funds schools and colleges up to £3,000 to run investigative STEM projects in partnership with STEM professionals from academia or industry. The scheme runs annually and is open to both primary and secondary schools, including sixth form colleges. The Tomorrow's Climate Scientists is an extension to the Partnership Grants scheme, which funds schools specifically undertaking research into climate change and biodiversity topics. The Royal Society also provides teaching resources focusing on climate change and biodiversity.



Tesco Stronger Starts – provides grants of up to £1,500 to charities and community organisations (including schools), with priority given to projects that provide food and support to young people. This includes, but is not limited to: breakfast clubs; to buy equipment for outdoor or indoor activities; support for school clubs and developing food growing areas in schools.

3. On the Way to School

Transport is an important element for teachers and school staff to think about, both for themselves and for pupils.

Don't forget:

Changing the way you travel not only helps the environment, but can improve physical and mental health, as well as help to improve air quality around schools!

Consider transport links in your area, and how pupils and their families can choose the most **sustainable methods to travel** in their day-to-day life and when travelling to school.

We recognise that for most of us in Essex, a car is vital for our daily lives. However, perhaps there are some journeys where we could consider alternatives. Examples could include walking, cycling, scooting, car sharing between households, public transport, or, if your school has it set up, park-and-stride.

According to DEFRA, the average petrol car CO2 emissions amount to 263.9g per mile, or a kilogram of CO2 per 3.8 miles (2023 figures). Compare this to buses (164.6g per passenger per mile, or a kilo of CO2 per 6.1 miles) or trains (57.1g per passenger per mile, or a kilo of CO2 per 17.5 miles) and the difference is stark.

Given how rural parts of Essex are, car journeys are sometimes necessary, but it is worth considering how introducing public transport or car sharing between different households into your travel routine once or twice a week can make a real difference in terms of reduced emissions and the money you can save. As a member of school staff, could you discuss with colleagues, friends and neighbours the possibility of car sharing as a means to make your way to and from work? For students, you could suggest to parents who have children at the same school to also consider car sharing. You can find out more about car sharing on the **Essex Highways website**, including details about the **Essex** Car Share scheme. This has been developed by Essex County Council and Liftshare as a free service which helps to match people who wish to car share for journeys around Essex. If you are driving, you can help to reduce your emissions by limiting 'idling' - if you turn your engine off when parked you'll save emissions and money.



The National Travel Survey 2022: Travel to and from school indicates that 78% of primary school trips between one and two miles are undertaken by car, which is up by over 10% since 2002.

All schools in Essex have free access to **STARS**, which provides a Travel Plan Toolkit for schools. Woodville Primary School has been recognised with "Outstanding" accreditation for its travel plan (and was also named STARS' East of England Primary School of the Region 2021/22). Essex County Council can also provide free support and advice for developing bespoke travel plans for schools. If you have any queries, please contact travelplanteam@essex.gov.uk.

There are a number of sustainable travel initiatives your school may wish to explore:



- Introduce walk to school schemes (ensure parents are consulted). Examples include:
 - Walk to School Week
- Walking the School Run
- where pupils earn badges for walking, scooting or cycling.
- Or you could set up your own scheme, incentivising students by offering rewards and keeping a class-wide tally.
- Organise a 'walking bus', where students meet at a set location before walking together to school (with adult supervisors - the 'driver' and 'conductor' at either end). A free guide about setting up walking buses is available. Please contact travelplanteam@essex.gov.uk.
- Help students to create a cut-out 'bus', to carry on their walk to school
- Consider how to keep active through broader, walking, jogging and running initiatives, such as The Daily Mile.

- WOW - the walk to school challenge - A year-round active travel challenge,



2. Cycle more উদ্

- Introduce cycle to school schemes (ensure parents are included). For example, you • could consider a scheme such as The Big Walk and Wheel (Sustrans).
- Combine with **Bikeability cycle training**, with levels for infants, juniors and secondary • students for those who need to learn or would like a refresher. Adult cycle training for staff is also available.
- For teachers and school staff: The **Cycle to Work scheme** allows staff to save money • and spread the cost of buying a bike. Speak to your school to see if it is already part of a Cycle to Work scheme.
- Essex County Council encourages cycling for work, school or pleasure. Bikeability • offers courses for those who want to cycle, ranging from 'Learn to Ride' to advanced level. Every school in Essex has the opportunity to have cycle training (across all ages and adult lessons for staff).
- Scooter training resources are also available. Contact travelplanteam@essex.gov.uk. •





• Are students using public transport? It is worth considering local bus and train provisions for getting to and from school. For instance, **Greater Anglia** offers discounted travel for some students.



- There are a number of 'gamification' apps which help make active travel fun for both young people and adults. You can find out more about apps such as Beat the Street, Street Tag and Go Jauntly on the Active Essex website.
- The Move With Us campaign supports young people across Essex to become active and explore local opportunities through its activity finder. The campaign has resources for schools which are supporting the campaign.
- Path to Paris To celebrate the Paris Olympics and Paralympic Games, children aged 5 to 11 (and their families) are invited on a virtual journey with Path to Paris, Team GB and Paralympics GB's free programme. Teachers can create a team for their class, allowing students to get active and log their activity online in order to power their team around the world to reach Paris in time for the Games.

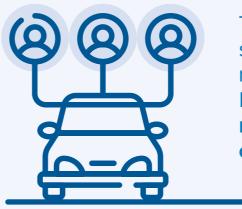


- "Park-and-stride", where families park their cars at an agreed location away from the school and walk the remaining distance.
- If you have to drive in, could you park elsewhere?
- Can you come to agreements on school traffic with local businesses? Stanway Fiveways Primary has arranged for parents to park in a large supermarket's car park for school pick-up and drop-off, reducing traffic, pollution and the risk of accidents.

5. Rethinking School Trips

- When you are taking school trips, do you have to drive? Can you walk?
- If you have your own fleet of minibuses or other onsite vehicles, if and when these • need to be replaced, consider electric vehicles.
 - Workplace Charging Scheme: schools are eligible to apply for a grant of up to £2,500 per socket to support the installation of electric vehicle charging points.





6. Other Resources

- Active Essex has produced an Active Travel Toolkit for Schools. Essex County Council is in the process of developing "Healthy School Streets", to explore what schools can do to promote active travel, improve air quality and reduce congestion outside schools. We hope to launch this soon.
- The **Essex Car Share scheme** helps to match people across Essex who wish to make journeys by car sharing.
- The HomeRun app, measuring the carbon emissions from different journeys to school.
- Air Quality
 - Transform Our World has developed a free Clean Air for Schools Framework resource. This is an online tool to help every school create a tailored clean air action plan to tackle air pollution in and around the school.
 - Essex Air provides information about air quality across the county, including readings from live air quality monitors. It also has a **<u>School Zone</u>** section on its website, which includes lesson plans for primary and secondary school age children.
 - The Global Centre for Clean Air Research, University of Surrey, hosts resources and guidance for schools on how to mitigate children's exposure to traffic pollution in and around schools.
 - You can find more information and resources about indoor air quality on page 30



The Essex Car Share scheme helps to match people across Essex who wish to make journeys by car sharing.

4. In School and the Classroom

There are many small changes which can be made in school and the classroom. Over time, these will make a big difference to the overall impact we have on the climate.



The <u>Government's ambition</u> aims to deliver a 'world-leading climate change education through a model science curriculum' (including the introduction of a natural history GCSE by 2025), meaning that climate change and environment related teaching resources will become increasingly relevant. This ambition is part of the Government's Sustainability and Climate Change Strategy for the education and children's services systems, which you can read in full <u>here.</u>

There is a wealth of **resources available to support teaching** in relation to climate change across a number of subjects including geography, mathematics, science and food technology. Educational and environmental charities are increasingly producing resources linked to the national curriculum.

Resources are diverse and cover topics such as plastics, healthy seas, the natural world, food production and consumption, energy conservation, waste management and carbon emissions. A list of teaching and learning resources is included on page 54 of this pack. Below are a few examples you may wish to use in your school:

 <u>Common Seas</u> aims to quickly and significantly reduce the amount of plastic produced and to stop it polluting our rivers and seas. It provides a number of curriculum aligned <u>resources and practical activities</u>. It also works with the organisation <u>Kids Against Plastic</u> on Plastic Clever Schools, with the aim of helping schools to work sustainably with plastic.

😭 Case Study

The Wilderness Foundation is a charity which has its primary site in Britain based in Essex. The organisation offers nature-based outreach programmes and nature therapy camps, along with wilderness trails which enable adults and young people to explore unspoilt wild places. The Wilderness Foundation's CEO, Jo Roberts, is a member of the Essex Climate Action Commission.



- Essex Outdoors (ECC) provides outdoor learning at its four centres across the county – with the aim of delivering an inspiring educational experience beyond the classroom. With offerings available to both primary and secondary schools, including forest schools, day trips and residential trips, Essex Outdoors emphasises the importance of learning through outdoor activity.
- <u>The Essex Wildlife Trust</u> offers schools, colleges and nurseries opportunities to visit its education facilities (with ten sites across Essex).
- Learning Outside the Classroom Providers includes a list of organisations and sites which can support teaching and learning outside of the classroom, including in relation to the environment and sustainability.
- <u>The Ministry of Eco Education</u> provides free support for more than 3,650 schools to embed sustainability across their existing curriculum. It gathers free resources and opportunities from hundreds of organisations across the education and sustainability space, developing them into a series of lessons aligned to the national curriculum.

😭 Case Study

Trips to visit green spaces or renewable energy sites can provide hands-on learning, as well as being linked to the national curriculum. Woodville Primary School in South Woodham Ferrers achieved this with its visit to a water recycling centre.



Don't forget:

Libraries across Essex offer a number of ageappropriate fiction and non-fiction books focusing on climate change and protecting the environment. Britannica Junior and Britannica Student are also available online for children and families to use in the library or from home/school. They will need their library card to log into the site.



Many young people will grow up to pursue green careers – these jobs focus on sustainability, the environment and mitigating climate change.

A green job isn't just about preserving nature; it's a commitment to living, working, and thriving without further harm to our planet. This changing world opens up a variety of roles, not just in traditional conservation but also in areas such as clean energy; digital innovation; construction and retrofit; repairing electric cars; or working in financial markets which prioritise green investments.

In Essex, it is expected

that there will be over

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We know that the number of green jobs is set to rise - and fast! In Essex, it is expected that there will be over 27,000 new green jobs by 2050¹. For instance, we know that in our county we will need to make nearly 650,000 homes energy-efficient. This will require 10,000 sustainable jobs². That means that we need to make sure young people are equipped with 'green skills', which encompass knowledge, values, and abilities supporting carbon reduction, resource efficiency and climate resilience across all sectors.

It is important for teachers to be given guidance about green careers in order to help them support, inform and prepare those they teach. For young people, it is vital that they are equipped with skills and knowledge which can prepare them for green jobs, as well as helping them to understand that a passion for nature, the environment and tackling climate change can be a part of their future career!

You can email the Green Growth Team at Essex County Council for support with CPD for teachers and opportunities for young people: GreatStart@essex.gov.uk

Looking for inspiration?

Websites such as This is Engineering and Faces of Wind Energy feature case studies about areen jobs, providing students with a first-hand look at what a 'green' role might look like.

Additional resources:

- The National Careers Service website and Education Hub provide guidance, advice and explanation when it comes to green careers.
- The **Essex Opportunities website** provides information about green careers, • including details of apprenticeships, jobs and courses in Essex.
- If you would like to find out more about green skills in education and employment, the • UK Parliament's research briefing provides an overview.

Case Study

Some schools, such as The King John School in Benfleet. have social media pages where items of school uniform can be swapped, sold or given away for free. Could an online presence such as Facebook group - help your recycle and reuse efforts, whilst saving parents money?





There are a number of ways your school can reduce its waste:

- or becoming paper free.
- materials.



Use of Materials and Waste

Waste prevention, reuse and recycling can help tackle climate change by making better use of natural resources, saving energy and ultimately reducing greenhouse gas emissions.

• Firstly, consider waste prevention and the steps which can be taken to stop waste being produced in the first place.

Provide different types of bins for different waste in the classroom and educate students about which rubbish goes where. You could also think about composting, promoting litterless lunches, eliminating bottled water

Lots of schools now have branded water bottles with their school logo on - this will encourage sustainable use of

For school uniforms (if applicable), avoid uniforms imported from far afield. You might also wish to consider ways you can reuse and recycle school uniforms. Could a second-hand uniform shop work at your school? This could be run by volunteers at home time, with proceeds being reinvested - perhaps into climate change initiatives.

😭 Case Study

At Colchester County High School for Girls, a second-hand school uniform shop helped to provide good quality and affordable clothing for pupils. Between July 2020 and September 2021, over £14,000 worth of uniform was sold. The money helped to fund additional equipment and resources for departments across the school.



<u>The Essex Free School Uniform</u>

Project (run by the Essex Child and Family Wellbeing Service) is open to everyone. It provides new and used school uniforms (as well as other school items). It runs regular local events for those who wish to pick up uniforms.

- <u>Uniformerly</u> is an award-winning online school uniform marketplace for schools, PTAs and parents to sell or donate items of school uniform.
- Some schools are now offering second hand coats, wellies and clothes in general for free.
- Host a clothing event to swap or sell preloved clothing and potentially raise money for your school. Arrange a clothing collection with <u>LMB</u>, Bag2School or Essex Textiles.
- Speak to your local council or waste collection contractor to see what services they can provide to recycle or compost waste.
- Litter picking both within schools and in the community (please see page 52 for more information).
- Consider opportunities to hold school talks/assemblies with external speakers or ready-made resources.
- Speak to your suppliers to see if packaging for items being delivered regularly could be reduced.
- Include plastic-free requirements in agreements with contractors.
- Help your school subscribe to the circular economy, which emphasises reuse to minimise waste. Essex County Council was the lead partner in <u>The BLUEPRINT</u> <u>Project</u>, which offers <u>free resources</u> on the circular economy and examples of activities carried out by schools in England.
- <u>Reschool</u> allows you to upcycle unused classroom equipment and to reduce waste. It serves as a platform for the advertisement of disused classroom equipment for recycling, rental and donation.
- Become a <u>Terracycle</u> collection point for recycling.

Set up a battery collection box at your school with <u>BatteryBack.</u>

- Sign up to <u>Return A Toner</u> or <u>The Ink Bin</u> to recycle your empty printer cartridges.
- Find recycling ideas and posters by visiting **Recycle now Schools.**
- Visit the <u>Keep Britain Tidy</u> website for ideas and activities to reduce waste.





Tendring Primary Recycling Scheme is an example of how much of a difference a school can make when it comes to recycling in the local community.

Managed by volunteers, the scheme collects and has drop off points for those wishing to recycle waste items – many of which are difficult to recycle. The school allows volunteers to use a cabin and enclosed space on its site as a base of operations.

The scheme helps to raise funds for Tendring Primary School and other good causes via Terracycle, with money raised for the school being spent on eco-friendly projects, such as outdoor classroom resources or the conversion of lights to LEDs.

The scheme has grown significantly since it first started and now has more than 20,000 members on its Facebook group, who often donate and collect items which could otherwise end up in landfill.

Love Essex provides detailed information about composting.





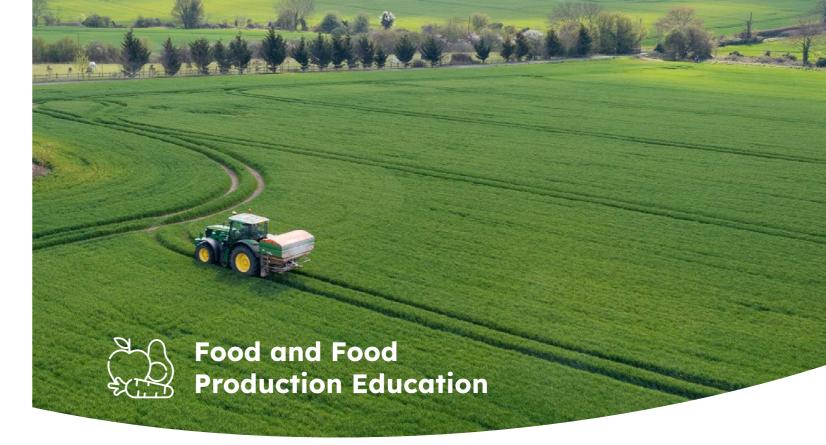
Food waste is a problem across many parts of our society.

Schools can play an important role in reducing food waste, as well as potentially being recipients of food donations before it ends up going to waste. WRAP (a climate action NGO) estimates that total food waste arising in the UK in 2021 was 10.7 million tonnes³.

Your school may wish to consider:

- Building a relationship with local supermarkets to access food which would otherwise go to waste. Many supermarkets have community engagement teams which work to make sure food that cannot be sold before its expiration date is donated to good causes. For example, Aldi has partnered with Neighbourly to donate surplus food to local organisations, including food for school clubs.
- Buying from and/or working with local businesses and food suppliers. This has the potential to reduce carbon emissions from long haulage journeys and refrigerated storage. It may also provide opportunities for children to learn about the journey of food from harvest and production to reaching their plate. Sustainability and nutrition are an important aspect of broader climate and wellbeing knowledge.
- Food waste should be segregated so that it can be **collected separately.** It is worth • speaking to your waste contractor/collector about options available.
- Undertake a **food waste audit** to see what is being wasted and to raise awareness • throughout school (students and staff). This could be part of a whole school waste audit, including waste produced in classes, school lunches and school events. See Busy Bins and Love Essex for guidance on conducting broader waste audits.





We know it is important to eat a balanced diet, but how sustainable is our food? One activity that could be undertaken in class is research into the sustainability of some of our meals.

Resources and activities you may wish to consider include:

- Annual Essex Schools Food & Farming Day Organised by the Essex Agricultural Society for school children aged 8-11 to find out first-hand how their food is produced, the role of farmers and about jobs in the industry.
- **Barleylands Schools** Offers school visits aligned to the national curriculum. Primarily focused on food, farming and Science, Technology, Engineering and Mathematics (STEM) delivery, with tailored visits to meet other subject needs, such as History and English, also available. Its guided tour emphasises outdoor learning and interaction with animals.

Food Miles Calculator - A tool which helps to calculate how far food has travelled before it reaches the consumer.

- School Food Matters Offers advice, resources and fully funded food education programmes to schools.
- **The Country Trust** Offers school trips to local farms and resources for primary aged children to understand the food cycle. The Country Trust works primarily with disadvantaged children. You can find out more about their criteria here.
- Tesco Stronger Starts provides grants of up to £1,500 to charities and community organisations (including schools), with priority given to projects that provide food and support to young people. This includes, but is not limited to: breakfast clubs; to buy equipment for outdoor or indoor activities; support for school clubs and developing food growing areas in schools.





Thinking about the types of food we eat and where they come from is an important means to tackle climate change.

Simple steps, such as bearing in mind that vegetarian and locally sourced options have a lower carbon footprint, will reduce the climate impact of your diet. Choosing local, smaller-scale producers makes a bia difference on how the land is treated and maintained. Their impact on the environment is far less than that of larger scale, international food supply chains. As well as supporting your health and local economy, you might get to know local producers and get tips on how to prepare seasonal foods.

Some schools have introduced 'climate friendly' meal days. These often include vegetarian/plant-based options and meals sourced from local produce.



Five schools in Essex (Mayflower Primary School, Harwich; St Osyth Primary School, St Osyth; Prettygate Primary School, Colchester; Millfields Primary School, Wivenhoe; Elmstead Primary School, Elmstead Market) have planted food forests in their school grounds. A food forest is an area of purposely designed edible woodland and typically contains a variety of indigenous trees, bushes and groundcover plants. Each of the food forests is approximately 100m² in size but a food forest can be anything from 5m² upwards. To create one costs approximately £15/m², plus £500 for design and set-up. The project was delivered by The East Anglia Permaculture Association and was funded by **NINEVEH Charitable Trust**, **Essex County Council** and the **Essex** Forest Initiative.



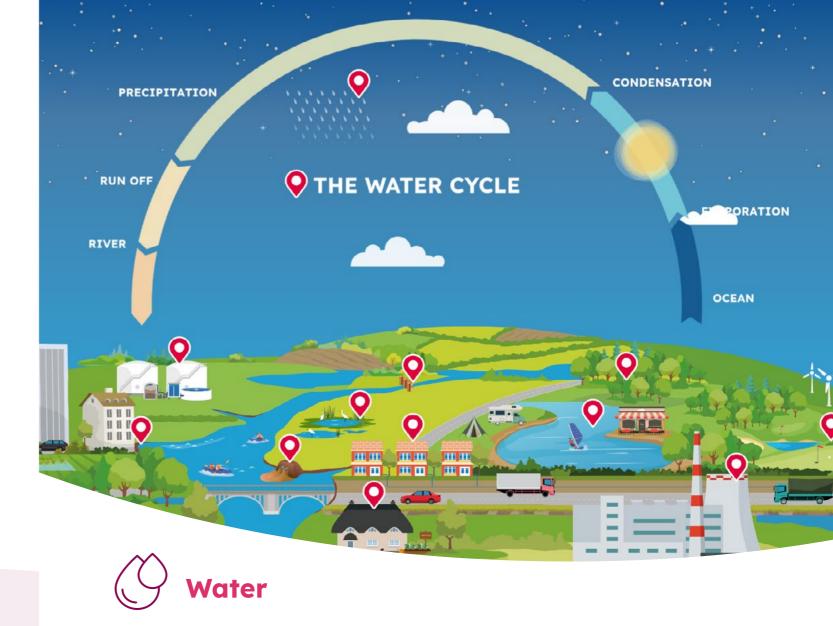
Case Study

The Essex School Meals Advisory Service (ESMAS) has been recognised by ProVeg UK with a Bronze Award for its menu. This achievement acknowledges the positive steps the Essex School Meals Advisory Service (ESMAS) is taking to make its menus healthier for children and the planet. By using these menus, schools are making a significant difference to reduce their carbon footprint, whilst providing healthy meals to children.

Whilst developing its menus, the ESMAS took into account:

- Aimed to reduce the amount of meat on the menus, including by adapting recipes to • include pulses, vegetables or other alternatives.
- Reducing carbon footprint by: •
 - Sourcing local food supplies
 - Using seasonal vegetables and fruit in recipes
 - Reducing the number of documents sent to schools
- Removed all single-use plastics from price lists, with alternatives available for purchase (such as Vegware, Bagasse plates/cups, paper straws and wooden cutlery). The ESMAS has also worked with suppliers which can assist with re-usable dessert pots.

Find out more about The Essex School Meals Advisory Service by completing this form or emailing school.meals@essex.gov.uk



In March 2024 Essex County Council launched the **Water Strategy for** Essex, alongside the Essex Water - Your Future online explorer tool.

This free interactive tool was created in partnership with the Young Essex Assembly and includes videos explaining the water challenges in Essex and what we can all do to help save water.

All Essex based water supply companies also provide free teaching resources which explore the water cycle.

- Affinity Water <u>Get Water Smart</u> (for schools and pupils). Includes water-saving curriculum resources and lesson toolkit.
- Anglian Water Schools' portal. Includes primary age resources; secondary age resources; online STEM lessons; school water audit resource; Sustainable Drainage System for Schools (SuDS) resource pack; and a free one hour virtual session for KS2 on the water cycle.
- Essex & Suffolk Water Working with schools portal. Includes water-related curriculum links; school visits to water treatment sites; and speakers who can come to your school. The Ripple Effect provides quizzes, worksheets, interactive games and assembly planning support.
- **Thames Water** includes resources and online talks about the water cycle
- You can also find out more about the Essex water challenges using the interactive website www.essexwateryourfuture.co.uk.



Air quality both inside and outside of school can have a number of effects, including on pupils' health and attention levels.

- The <u>SAMHE</u> (Schools' Air quality Monitoring for Health and Education) research project is investigating air quality in schools nationally and providing the technology and educational resources to enable schools to understand their own indoor air quality. SAMHE has previously offered indoor air quality monitors to schools, which measure carbon dioxide (CO2), total volatile organic compounds (TVOCs), particulate matter (PM), temperature and relative humidity. The monitor sends this data to the <u>SAMHE Web App</u>, allowing teachers and pupils to view the data in a range of interactive chart and graph formats and see how air quality changes. SAMHE educational resources and advice are still available for schools. These resources will be compiled into a free, standalone Teacher Pack.
- Transform Our World has developed a free <u>Clean Air for Schools Framework</u> resource. This is an online tool to help every school create a tailored clean air action plan to tackle air pollution in and around the school.
- <u>Essex Air</u> provides information about air quality across the county, including readings from live air quality monitors. It also has a <u>School Zone</u> section on its website, which includes lesson plans for primary and secondary school age children.
- The Global Centre for Clean Air Research, University of Surrey, hosts resources and guidance for schools on how to mitigate children's exposure to traffic pollution in and around schools.



Procurement

Overview

A significant proportion of carbon emissions from the schools' sector comes from purchasing: the day-to-day buying choices and decisions made by each school. This creates an opportunity for environmental factors to be embedded into the core delivery of contracts. The early stages of the buying process offers the most opportunity to implement significant environmental considerations and targets.

The Department for Education (DfE) provides an approved framework agreement to help you buy goods and services for your school, including from pre-approved suppliers, for needs such as: LED lighting, gas, electricity, liquid fuel, water contracts, renewable energy and more.

Need Assessment

Thinking about basic purchasing questions before buying can help you incorporate environmental factors into any purchase.

- Is your purchase really required or could the need be met through existing projects
- What alternative solutions may be available, e.g., sharing equipment or services with another school?
- Can you schedule your purchasing to avoid peak buying periods? High demand reduces your leverage to secure good deals with suppliers.
- Could you gain from economies of scale by delaying short-term purchases where possible? Bundling together purchases from the same supplier can cut down delivery costs – less mileage means less fuel consumed to supply you.
- Determine if the need could be reduced. For instance, can fewer products be ordered? Reducing consumption at the earliest stage is the most significant and effective way to protect the environment.



All purchasing decisions will have some impact on the environment.

A good buying decision is one that evaluates these impacts in the same way that other purchasing factors are evaluated.



Issues for consideration

Environmental issues that you may wish to consider include, but are not limited to:



Increasing biodiversity and natural habitats



Supporting the circular economy (designing what happens to a product after it is used – e.g. reuse)



Energy; reducing energy used, increasing energy efficiency, sourcing clean energy, more sustainable food (considering source, packaging, transportation, and type)



Reducing greenhouse gas emissions



Reducing packaging and single use plastics



Reducing greenhouse gases and air pollution from transport



Waste reduction



Water efficiency



Climate Question Suggestions:

Examples of environmental quality questions that you may wish to ask suppliers could include, but are not limited to:

> How will you deliver the expected services or products in a way that minimises environmental impacts?

> > What steps do you take to encourage locality of food and use of seasonal produce in the delivery of school meals?

Do you have specific solutions or practices regarding food waste which minimises environmental impacts?

> How do you plan your deliveries in terms of transportation to ensure minimum impact on the environment?

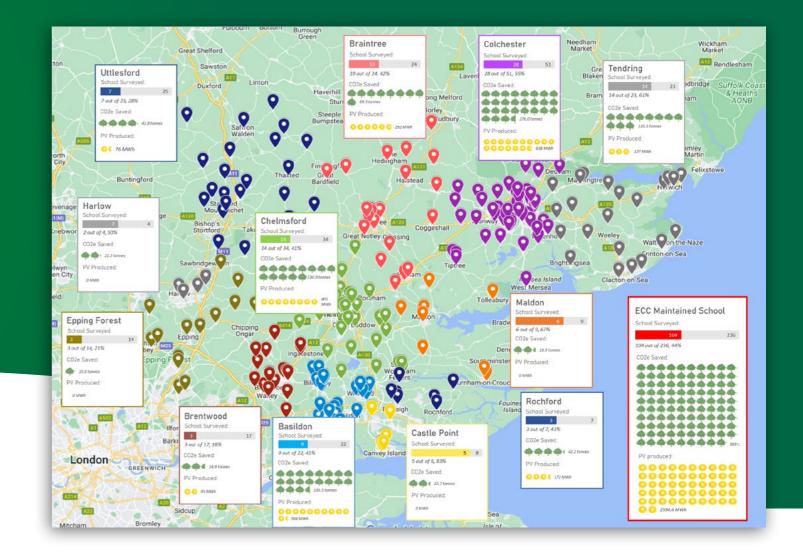
Additional Resources

- <u>Tips for sustainable procurement</u>
- Department for Education Energy efficiency guidance for school estate (see 'Buying your energy' section)

Can you provide examples of successful carbon reduction projects or initiatives that have been implemented within your organisation?

How do you ensure packaging and use of single use plastics are kept to a minimum in your operation?

5. School Buildings: Energy Management, Retrofitting and Water Efficiency



Effective management of energy can play a vital role in reducing carbon emissions.

In addition, this can lead to other benefits such as cost-savings and future-proofing your premises through improved technology and/or infrastructure. You can read more about **good estate management for schools** on the Department for Education website, as well as **guidance for schools on energy efficiency**.

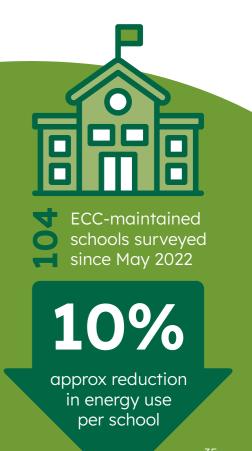
Conserving Energy and Electricity

Heating and electricity are key contributors to our carbon emissions. The vast majority of this will come from heating and electricity.

The <u>Count Your Carbon Calculator</u> is a free, specially designed tool which can help you to **understand your school's carbon footprint**. Designed for schools, colleges and nurseries, the tool takes into account the specificities of education establishments, which other carbon calculators do not. The calculator can help you to understand your carbon footprint, provide recommendations on **how you can reduce it** and ultimately, help to **save your school money** by improving efficiency and future-proofing your school site. You can watch a short explainer video about the Count Your Carbon calculator <u>here</u>.

Essex County Council has a team of School Energy Surveyors who are **visiting all maintained schools for free and completing energy audits.** The team aims to help schools identify opportunities for carbon reduction and improved energy efficiency throughout their school. The energy surveyors can help schools obtain, analyse and understand their energy data; allowing them to see the potential energy and cost savings associated with suggested initiatives. The team will also document all heating and hot water equipment, assessing suitability for grant funded upgrades – putting opportunities "on the shelf" for future funding applications – such as the Public Sector Decarbonisation Scheme. Maintained, City, Foundation, Voluntary Controlled, or Voluntary Aided schools interested in scheduling a school energy survey with the team are encouraged to contact <u>schoolenergyteam@essex.gov.uk.</u>

Since its establishment in May 2022, the School Energy Team has surveyed 104 ECC-maintained schools. On average, these visits have resulted in an approximate 10% reduction in energy use per school. This map tracks schools across the county which have been visited and also highlights solar power generation across 31 solar PV installations in Essex schools. Funded through a combination of Salix funding and ECC contributions, these installations have collectively generated £1,288,540 worth of solar energy since their inception in 2021.



The collective efforts of school energy surveys and solar installations have led to an approximate saving of 989 tonnes of CO2 emissions, with significant reductions observed in areas including Colchester, Tendring, Basildon, and Chelmsford.

Case Study

Essex County Council's School Energy Surveyors visited Montgomery Infant School in Colchester in January 2023 and helped the school to make the following changes:

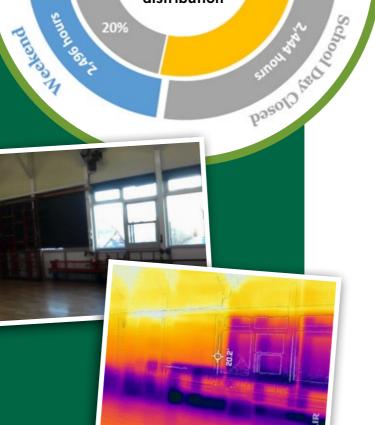
- Lowered all heating setpoints from 20-24°C to the DfE recommended settings of 19°C;
- Changed heating times from 7:00am - 6:00pm to 7:30am -2:45pm, for zones of the school which would be unoccupied after the end of the school day - a 34% reduction:
- Removed unnecessary weekend operation of the hot water;
- Ensured end of day blind-closing during heating season - as seen by the thermal images shutting blinds can make a huge difference, improving heat retention.

Let's Go Zero also has a network of Climate Action Advisors, who can visit your school for free and support efforts to reduce energy use and your wider carbon footprint, as well as explore options to upgrade existing buildings.

Montgomery 15% Infant School electricity consumption distribution 20%

12%

Holiday



Some of the first simple steps that you can take in school to tackle energy wastage include:

- Ensuring all computer monitors are switched off in schools when not in use. When multiplied by the thousands of computers in use across all schools in Essex, it is easy to see how small changes can make big differences.
- Ensuring lights and radiators are set to timers, so they turn off automatically when not in use/outside of school hours.
- Ensuring external lights on buildings are also set to timers. Lights left on overnight can also have a detrimental effect on wildlife.
- Labelling lights and appliances to show which should be left on or turned off.
- Appointing a **student 'energy champion'** volunteer, who is responsible for ensuring all monitors and lights are switched off when not in use (perhaps at lunchtime and at the end of the day). They could also monitor thermostats. This role could be rotated amongst the students.
- Signing your school up to the Pod's **Switch Off Fortnight.** It can be student or teacher led - and aims to reduce carbon emissions. Upon signing up, schools will receive a free resource pack. The average energy saving reported by schools taking part in Switch Off Fortnight is 10%.
- **Speaking to site managers** to understand what systems are in place to ensure energy efficiency and where improvements can be made. This may be part of a wider conversation with the Senior Leadership Team (SLT) and could involve discussion with students about how your school could reduce energy use and associated emissions.
- Running a campaign to **make better use of natural light** on sunny days - daylight in a classroom can reduce lighting costs by 19%⁴.
- Carrying out a campaign to inform staff and pupils about the **importance** of classroom layout to keep the heating running efficiently. Furniture is constantly being rearranged to accommodate students' needs, but it is important to make sure radiators and vents are not obstructed. This ensures better circulation of heat into the space and reduces the energy required to meet the heating demand.
- Running a "Love your Jumper Week", where classroom temperatures are turned down, and everyone is asked to come to school wearing a jumper or fleece that they feel comfortable wearing indoors. Wearing a jumper can give an extra 3°C heat, and for every 1°C you reduce the classroom temperature, you save the school about 10% of its heating costs⁵.



Case Study

By implementing the ideas above and embedding behavioural change, you will not only reduce your carbon emissions, but could save money. Simple ideas can make a big difference.

For instance, one pupil at Danbury Park Community School suggested that school ovens should be turned on an hour later than usual – this ended up saving the school £2,000!











Your school may wish to consider joining or working with larger energy projects, including some of the below:

- <u>Points4Planet</u> is a social enterprise organisation, which works with schools and local authorities to help reduce their carbon emissions. An innovative meter system allows schools to monitor their energy usage and to make effective decisions to reduce their carbon footprints. Points4Planet aims to engage with as many schools as it can and to encourage young people to be 'agents of change'.
- **Community Energy** there has been a significant number of schools and community energy groups working together across the UK to commission renewable energy installations. Since 2021, many community energy groups have been established in Essex and these local groups are keen to assist schools on their sustainability journey. Please contact lowcarbon@essex.gov.uk for further information.

Renewable Energy Projects

You may wish to think about how to reduce your school's reliance on energy from fossil fuels.

It is worth considering the feasibility of installing solar panels or mini wind turbines



In October half term 2020, Danbury Park Community School in Chelmsford installed solar panels which saved 15 tonnes of carbon in the first year and 375 tonnes over the panels' lifetime, 20 as well as approximately £5,000 annually on electricity bills⁶.

In Jur Danbu the En

Essex County Council supported the installation of roof mounted solar panels at 15 schools across the county in 2021. Together, these panels will generate 700,000 kWh of energy, equivalent to powering 180 homes a year, saving 175 tonnes of CO2 and around £115,000 annually⁷.





Case Study

In June 2021, St John's C of E Primary School in Danbury was fitted with solar panels as part of the Empower pilot and saw a 50% reduction in electricity used from the grid in the first month of their installation. You may wish to consider joining a **community energy group**, where residents, schools and businesses can work together to commission renewable energy installations. Please see page 34 for more information. We know that securing funding can be an obstacle to these more ambitious plans to tackle climate change. As a starting point, it is worth considering how solar and wind could be incorporated into new build structures at school, or during the refurbishment of existing buildings. Support is sometimes available from Essex County Council, so please watch the ECC website and social media channels.



Retrofitting refers to the addition of new components, technology or features to a building, in order to reduce carbon emissions and increase efficiency. This may include the introduction of improved insulation or the fitting of new windows.

Essex County Council has supported a number of schools across 80 retrofitting projects These projects encompass 26 heat decarbonisation plans, 32 solar PV installations, 15 window replacements (upgraded to double glazing), and plans for complete heat decarbonisation in seven schools. Overall, ECC's Salix projects are estimated to save 1,301 tCO2e annually and nearly 7 million kWh of energy.

New builds and expansions of school buildings also offer opportunities to embed new technology and good practice which lead to a reduction in emissions.



Case Study

Merrylands Primary, Earls Colne Primary and Beauchamps Secondary schools were supported by Essex County Council in adding new capacity to their schools.

These new buildings were all awarded an EPC rating of A plus and will produce an average of minus 75kg CO 2 /m 2 /year, compared to the industry benchmark of 66kg CO 2 /m 2 / year: a net impact of -141kg CO 2 /m 2 /year. Aspects of this retrofitting included the installation of Mechanical Heat Ventilation and Heat Recovery systems, whereby heat is removed from the stale air before it is expelled and used to pre-warm fresh air as it is supplied - recycling over 90 per cent of the heat in the building during the colder seasons. Energy consumption is further reduced through the use of Light Emitting Diode (LED) lighting.



Case Study

As part of his research to improve learning environments within schools, Professor Stephen Heppell worked with Essex County Council and Fingringhoe Primary School in Colchester. Professor Heppell's research showed that poor lighting can impact learning, attention span and behaviour among students. Fingringhoe introduced an LED lighting system that changed colour throughout the day to replicate changes in natural daylight, which not only improved the learning environment, but also reduced carbon emissions.

By using a Gratnells Learnometer – which records what is happening environmentally in a classroom - teachers and pupils gained access to a wealth of data. This included readings of light, temperature, carbon dioxide, noise, humidity, pollution and fine dust. You can find out more about Gratnells Learnometers here.

The benefits of retrofitting, using new technology and careful monitoring of energy use are not limited to just environmental benefits. They also encompass learning, wellbeing and financial advantages as well.

As part of ECC's commitment to net zero for schools by 2030, it is intended that 50% of all schools will be retrofitted by 2025, and 100% by 2030. All new schools have been net zero from 2022.

Essex County Council has a team of School Energy Surveyors. The team is visiting all maintained schools (for free) to complete energy audits. You can read more about the team on page 34 or contact them via: schoolenergyteam@essex.gov.uk





Essex is classified as a seriously water stressed area and could experience water shortages of nearly 150 million litres per day if we don't act.

The Waterwise UK Water Efficiency Strategy explains that the largest water efficiency savings can be possible in existing non-household organisations, including schools. Being water efficient means understanding water needs, using as little as possible and avoiding any water waste. Tackling leakage, installing smart meters and water saving appliances are steps towards water efficiency.

You can find out more about water management from the UK Government's 'Good estate management for schools' and the Department for Education's 'Buying for Schools'.

It is important to speak directly to your water retailer or supplier to find out how you can make your school more water efficient.

Within the government's **Plan for Water**, there is a target to reduce non-household (for example, schools) water use by 9% by 31st March 2038. There is also a commitment to work with **Ofwat** to ensure the water industry can play a central role in retrofitting water efficient products.

You can use the Water Saving Calculator by Thames Water to find out how much you could save. And saving water can help save on energy bills too. Schools are also able to switch their water retailer and can use the Open Water website for further advice.

On average, a leaky loo wastes between 215 and 400 litres of clean drinking water every day.

Whilst leaks are cheap and easy to fix, check with your water retailer whether they can offer any help to identify and fix leaks.

A 15-litre urinal flushed on a timing device every 10 minutes would use 800,000 litres.

If this is not related to usage for half the time, the 400,000 litres wasted water could mean a saving of as much as £800 per urinal, per year¹⁰.



A leaky

toilet can cost £100

per year⁹

A small 3mm diameter stream from one running cold tap can waste 330,000 litres per year, which could mean an annual saving of £580¹¹.



Reducing the amount of water we use is an immediate action we should all take to reduce pressure on our future water resources.

love every drop

M S ST

6. Outdoor Space



Across Essex, 36,165 residential properties are in areas at risk of surface water flooding in a 1 in 100-year return period¹².

Predictions indicate that climate change will result in up to 40% more intense rainfall during storms¹³. Local flooding is set to become more of a reality for those at risk, as our existing drains and watercourses will not always be able to cope. It is important that your school knows its risk and some of the simple steps it can take to help mitigate this.

You can search by postcode to identify your flood risk with a tool from Essex County Council.

You can help to mitigate your flood risk through effective land use and green infrastructure solutions. Planting trees can reap many environmental rewards, not least reducing your flood risk through absorption of excess water. There are a number of schemes and resources available to support this, including the Essex Forest Initiative (please see page 50).

Some initiatives you may wish to consider include:

- **Developing rain gardens** a rain garden is a sunken area in the landscape that collects surface water and allows it to soak into the ground. Planted with grasses and flowering perennials, rain gardens can be a cost effective and attractive way to reduce surface water flooding issues and control runoff from your property. They generally only hold water during and after a rainfall event and are largely dry otherwise.
- Water butts are a great way to manage water on school premises and can be used to store water for purposes such as watering school gardens. You can get a discounted water butt when buying in an Essex postcode.

- Sustainable drainage systems (SuDS) are an important means of managing water. These may include using permeable building materials; 'green roofs', whereby roofs have plants and other foliage incorporated into them to absorb rainwater; or SuDS planters, which capture water from roofs and funnel them down into planters.
- Understanding where water collects in your school it is worth working with site managers to understand where water pools after it rains, so you can identify where flood reduction measures would be of most value.

Has your school previously been flooded? Essex County Council would like to hear from you to explore possible support and funding opportunities. Please contact floods@essex.gov.uk.

Rain gardens can

be a cost effective and attractive way to reduce surface water flooding issues and control runoff from your property.



Water shortages and water quality are also something we should be concerned about. Our new Water Strategy for Essex 2024 shows that we will experience a shortage of 147.5 million litres of water every day by 2050, if we do nothing. This is a result of climate change, population growth and the need to leave water in our environment. Our water quality is also less than average when compared with the rest of the country, with only 5% of our streams meeting 'good' ecological status or near natural conditions. Find out more about the Essex water challenges using our interactive website, Essex Water Your Future.





National Education Nature Park and Climate Action Awards

The National Education Nature Park offers children and young people the opportunity to take hands-on action to improve biodiversity and tackle climate change. It is a free scheme, which is open to nurseries, schools and colleges.

Led by the Natural History Museum and Royal Horticultural Society, the Department for Education funded scheme invites young people to improve their school site and support nature. This is achieved through mapping on-site outdoor spaces, recording biodiversity and developing actionable plans to improve biodiversity, such as building habitats, raingardens or ponds. Through this, pupils will have an opportunity to take part in community science, biodiversity monitoring and data analysis, learning important skills for the future.

Students will record their data on a national online map, which will document the progress the project is making to restore habitats and protect wildlife in England.



More information about the scheme (including an explainer video) is available from the Natural History Museum, Royal Horticultural Society and Department for Education. You can also visit the National Education Nature Park and Climate Action Awards website for further information.

Funding: limited grant funding from the Department for Education is available to schools which meet certain criteria. A list of these schools, including those in Essex, can be found here.

The National Education Nature Park website also offers a library of curriculumaligned teaching resources, which can be filtered by key stage, as well as a range of webinars and events throughout the year.

The associated **Climate Action** Awards will recognise the work that young people have done to help nature recovery.

You can sign-up to join the National **Education Nature Park here.**



School Gardens

Grow your own vegetables, plant trees and teach children about gardening.

According to the Soil Association, gardening in school brings benefits to everyone, improving health and wellbeing, better levels of attention in class, higher achievement and stronger links with the local community. There are lots of small and manageable steps you can take to develop school gardens, including:

- Develop vegetable patches Lawford Mead Primary and Nursery School in Chelmsford has done this, with children taught how to sow, nurture and harvest potatoes, lettuces and raspberries.
 - You could contact local garden centres and supermarkets to see if they are willing to **donate seed packets**.
 - Could your fruit and vegetables be used in **school meals?** This will also reduce the need to buy pre-packaged (often with plastic) salads.
- Is there an area on your school premises that could be repurposed to sow seeds for rewilding? Not only does this provide children with an opportunity to interact with nature, but can also improve biodiversity on your school site. This offers a wealth of potential opportunities for exploring eco systems - such as bird and butterfly counts - which can often be linked to the curriculum or eco clubs.



As part of the BBC's **<u>The Regenerators</u>** and **The Green Planet**, you can learn **how** to make seedballs to attract birds and improve biodiversity in school grounds.

The **British Beekeepers Association** offers support and advice on the steps necessary for schools to keep bees on site. Its education resources also offer free school trips to its Apiary Garden and Education Centre, as well as curriculum aligned teaching materials. Oakgrove School in Milton Keynes has 22 hives and runs a twice weekly Bee Club. They also share their knowledge and best practice with other schools in the area and with the local community helping to demonstrate the value of beekeeping. They sell some their honey each year to help fund new equipment for the Bee Club.



The Royal Horticultural Society hosts the School Gardening Awards and has a number of resources available:

- Setting up a school garden
- **Gardening club calendar**
- **Greening your school**
- Encouraging wildlife into the school garden
- Schools can also join the Campaign for School Gardening and receive a free welcome pack
- RHS also works with The Wildlife Trusts on the Wild About Gardens Campaign

Garden Organic provides a number of **free resources**, designed specifically for schools. They include guidance on how to grow seeds and crops (including a step-by-step guide on how to sow seeds), as well as advice on construction and wildlife projects, such as how to build raised beds and ladybird houses. There are lots of other resources available, including games for children and advice on hosting events (such as a gardening day). South East Organic Gardeners offers free membership to schools.

Additional Resources

- Planting, growing, cooking and nutritional advice
 - Eat Them to Defeat Them _
 - **Food4Families**
 - Food For Life
 - Simply Veq -
 - Trees for Cities Food growing resources, including curriculum guides and lesson plans
 - Veg Power
 - World Wildlife Fund <u>School garden calendar</u>

Could you set up a compost bin at your school? Love Essex provides information about how to manage composting.

Trees play a vital role in capturing carbon from the atmosphere and storing it; providing 'green shielding' to prevent overheating; and improving biodiversity. They are a central component of outdoor spaces - and can be incorporated into playgrounds and other parts of school grounds - to help combat climate change. The next section of this pack provides ideas, signposting to resources and potential schemes your school could join in relation to tree planting and green spaces.



7. Green Space and **Green Initiatives Beyond School**

Green spaces are vital for combatting climate change and improving our environment.



Trees, for example, not only absorb carbon, but they also provide cooling in hot spots (sometimes known as 'green shielding'); act as a noise and pollution barrier when put in a row between a road and schools/ parks/houses; and are a great habitat for living creatures (improving biodiversity).

One lesser-known fact is that soil can absorb even more carbon than trees, but at a slower rate, and therefore having marshlands and peatlands are also a great way to help tackle climate change. Furthermore, we know that

access to green spaces is vital for improved physical and mental wellbeing. There are a number of initiatives your school may wish to consider:

- The Essex Forest Initiative is an initiative planting thousands of trees across Essex in order to offset carbon. Tree planting also brings many additional environmental, health and wellbeing benefits. It is supported by £1 million in funding. If your school is interested in planting trees on school land, please contact the EFI directly (environment@essex.gov.uk) to explore options. Please note that the tree planting season is from November to February/March. To keep updated on latest tree planting events, visit the EFI Facebook page.
- The Woodland Trust's Green Tree Schools Award encourages outdoor learning about trees, woods and wildlife.
- The Tree Council's 'Young Tree Champions' encourages young people to be a 'Force for Nature'. The Tree Council also offers a number of resources, including training webinars, curriculum linked activity sheets and guides.

Access to green spaces is vital for improved physical and mental wellbeing.

- Essex is fortunate to be home to a number of country parks and other diverse habitats, including woodlands and beaches. Explore Essex provides a full list of these destinations and can assist with school trips (which can include an Education Ranger leading your group for the day). Could trips linked to the curriculum be a possibility for your school? A number of education resources are available to support outdoor learning. Please see page 54 for more information.
- Essex Outdoors provides outdoor learning at its four centres across the county with the aim of delivering an inspiring educational experience beyond the classroom.
- Outdoors activity sessions for SEND students available all year round with a range of activities tailored to weather conditions. Students can attend Essex Outdoor sites, where trained instructors can offer an inclusive and exciting experience.
- Forest Schools Essex Outdoors offers both onsite (at an outdoor centre) and in school visits, where education rangers work to deliver outdoor learning sessions. Outdoor Forest School sessions are ideal for 30 students and can be a great way of connecting children with the world around them. Essex Outdoors is an active member of the Forest School Association (please see below).
- <u>The Forest School Association</u> emphasises outdoor learning to allow children to learn about nature, while building their knowledge and skills. It allows children to explore issues such as risk and wellbeing, while providing them with both the space and support necessary to develop self-guided learning.
- The Wilderness Foundation offers nature-based outreach programmes and nature therapy camps, along with wilderness trails that enable adults and youth to explore unspoilt wild places.
- Persil's **Dirt is Good Project** aims to encourage children to learn about the outdoors, the environment and climate and to feel empowered to make a difference.

- There are a number of popular schemes which reward climate and environmentally friendly efforts made by young people, including the **Blue Peter Green Badge** Award.
- Schools may wish to consider working with local community groups or their local • parish to promote green areas and protect the local countryside.
- Can you bring the community to school? Danbury Park Community School successfully applied for a free crisp packet recycling bin to be hosted on its site. This has seen parents and students bring these difficult to recycle items into school and Danbury successfully become a centre for recycling an item which may otherwise have ended up in landfill. You can find out more about obtaining recycling bins on the Terracycle website.



- **Litter picking** can take place on school premises, at break times or form times, but can also be carried out in tandem with community litter picking groups. They may be able to provide advice, equipment or information about how pupils can join community litter picks (with parental consent). District councils across Essex including Uttlesford - offer to lend litter picking equipment to schools and will also organise collection of the litter for disposal. It is worth contacting your district council to see what provisions are available. Other groups, such as Love Your Chelmsford, run a litter picking volunteer programmes for schools. There are a number of litterpicking resources and idea packs available, including from Countryside Classroom.
- Climate Committee As discussed on page 8, you may wish to set up or develop an existing climate committee. You could consider including (or creating a separate committee) which invites members of the local community to explore what you can do together to make a difference.



Other Schools in your Community and School Networks

Your neighbours, residents and businesses are not the only important elements of your community, other schools in your area are integral as well. At both district and county level, there is a wealth of activity underway on a school-by-school basis to tackle climate change and improve the environment. How can this be harnessed?

There are lots of ways to achieve this. Something as simple as reaching out to a neighbouring school to share best practice could lead to new ideas and potential collaboration.

Innovative forums can lead to the sharing of ideas from both pupils and teachers.

- The Essex Schools' Climate Action Network (ESCAN) aims to bring together students and teachers from across Essex to share ideas in relation to climate action. Members of the network will become Essex Climate Ambassadors and meet virtually, sharing success stories of climate projects undertaken at their schools and learning from others. If you are interested in joining the network, please contact: Environment. ClimateCommunications@essex.gov.uk.
- The Let's Go Zero campaign (mentioned on page 12) includes over 2,700 schools in its network. The campaign seeks to reach net zero for schools by 2030 and for young people to be provided with a robust education around sustainability and to prepare them to enter adult life receptive to zero carbon jobs and lifestyles. You can find out more and join the Let's Go Zero campaign and extended network here.
 - The Young Essex Assembly is an important platform for the young people of Essex to discuss the issues which matter to them, including climate change. The two co-chairs of the Essex Climate Action Commission are members of the Young Essex Assembly. Why not encourage students to stand for **election** to join the Assembly?
- The Multi-Schools Council operates across Essex and gives young people the chance to express their concerns and priorities. Global warming is something young people are consistently highlighted and have in the past made a number of recommendations, including a ban on all plastic bags in schools by 2025. The council has also introduced a new awards in schools programme aimed at inclusion. As part of its framework, young people most have a say in the greener future of their school. Please email mschoolscouncil@gmail.com if you would like to learn more or to get your school involved.
- The Essex Schools Young Eco Protectors is a grouping of Essex schools which have joined together to become more sustainable and offer support and advice for teachers. Part of the UK Schools Sustainability Network Group, it offers a number of free resources and ideas for lessons or clubs. It also organises the annual Green Week for schools, which all schools are welcome to attend. To find out more, please email: essex@ukssn.org.uk

8. Useful Teaching and Learning Resources

Secondary

Air Quality

- Essex Air
- <u>The Global Centre for Clean Air</u> Research, University of Surrey
- Transform Our World <u>Clean Air for</u> <u>Schools Framework</u>

Primary

Air Quality

- Essex Air
- <u>The Global Centre for Clean Air</u> <u>Research, University of Surrey</u>
- Transform Our World <u>Clean Air for</u> <u>Schools Framework</u>

Circular Economy

BLUEPRINT Schools – Fox's Waste
 Adventure

Climate Change, Sustainability & Environment (General)

- <u>Earth Cubs</u> games, videos, puzzles, badges and tree planting
- NASA Climate Kids
- <u>National Education Nature Park</u>
- Young People's Trust for the Environment – <u>Better Planet Schools</u> (online environmental education programme)

Food & Agriculture

- <u>Barleylands Farm Park</u> School visits
- Eat Them to Defeat Them

- Food and Farming Day Essex Agricultural Society
- School Food Matters
- <u>The Country Trust</u> School trips to local farms and other resources
- <u>Trees for Cities</u> Food growing resources, including curriculum guides and lesson plans

Outdoor Learning

- Outdoor Classroom Day
- <u>The Tree Council's Young Tree</u>
 <u>Champions</u>
- Wildlife Watch

Plastic

Environment Agency

Power & Water

- School Visits to the Museum of <u>Power</u>
- Solar Energy Activity Pack

Waste

• WRAP – Waste classroom activities, audits and action plans

Primary and Secondary

Climate Change, Sustainability & Environment (General)

- BBC Bitesize
 - The Regenerators
 - <u>Earth School</u> Video resources across energy, transport, materials, food, nature and people
- British Council
- Department for Education
 - <u>Sustainability and climate</u> change: a strategy for the education and children's services systems'
 - <u>Good estate management for</u> <u>schools</u>
- do your :bit
- Encounter Edu
- Generation Earthshot
- Learning Outside the Classroom
 Providers
- The Ministry of Eco Education
- National Education Nature Park
- Our Planet 35

Climate Change, Sustainability & Environment (General)

- <u>Royal Meteorological Society</u> How do climate negotiations take place and how can we stage our own?
- Science Museum Carbon Cycle Caper
- TedEd Video Resources
 - <u>Can we create the "perfect" farm?</u>
 - The state of the climate crisis
 - Earth School series

- Oxfam GB
- Planet & People
- Practical Action
- Royal Society
 - <u>Climate Change</u>
 - **Biodiversity**
- Sustainability First
- STEM Learning
- TedEd Video Resources
 - Why is the world warming up?
 - What is net zero?
 - Why is 1.5 degrees such a big deal?
 - Where does all the carbon we release go?
 - Why act now?
- <u>ThoughtBox Education</u>
- <u>Transform Our World</u>
- <u>WaterAid</u>
- <u>Wilderness Foundation UK Wild</u>
 <u>Schools</u>
- World Wildlife Fund

Food & Agriculture

Food Miles Calculator

Nature & Outdoors

- **British Beekeepers Association**
- **Essex Country Parks** Education Ranger led days
- Essex Outdoors
- **Essex Wildlife Trust** School trips and education facilities
- Kew Gardens
- **Outdoor Classroom Day**
- The Royal Parks
- **Trees for Cities**
- World Wildlife Fund

Plastic

- <u>Countryside Classroom</u>
- Plastic Clever Schools

Transport and Travel

- Living Streets
- Sustrans
- Safer Essex Roads Partnership

Water

- Affinity Water Get Water Smart (for schools and pupils).
- Anglian Water
- Essex & Suffolk Water (includes school trips and speakers who visit schools)
- Thames Water

Essex-based social media pages

Facebook:

- Eco Essex
- **Essex Climate Action**
- **Essex Forest Initiative**
- **Essex Wildlife Trust**
- Love Essex

[O **Instagram:**

- Eco Essex (@ecoessex)
- **Essex Climate Action** (@essexclimatecommission)
- Essex Wildlife Trust (@essexwildlifetrust)
- Love Essex (@loveessexuk)

National social media pages

- **Facebook:**
- Energy Saving Trust
- Royal Horticultural Society
- $\left(O\right)$ **Instagram:**
- Energy Saving Trust (@energysavingtrust)
- <u>Royal Horticultural Society (@the_RHS)</u>

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X (formerly Twitter):

- **Essex Climate Action** (@essex climate)
- Essex Wildlife Trust (@EssexWildlife)
- Love Essex (@loveessexuk)

YouTube:

- **Essex Climate Action**
- Love Essex



We hope that you have found this resource helpful and informative about the steps you can take at your school to reduce its impact on the environment and to help our county reach net zero.

We are keen to make sure that this document remains relevant and helpful to schools over time. Therefore, our aim is to produce updated versions of this action pack as discussions, legislation and priorities around climate change evolve. If you have any ideas or resources which could be included in this pack – or if you think an example of your school's climate change action could be incorporated – we would like to hear from you. Please contact: **environment@essex.gov.uk**

The resources and information in this pack have been compiled and developed in consultation with individuals from across Essex County Council, school teachers, charities and not-for-profit organisations. We are extremely grateful for their expertise, insights and time.

This pack is one of four. With others having been produced for residents, businesses and Early Years providers. You can find out more about these packs <u>here</u>.





This information is issued by: Environment and Climate Action

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Stay up to date with the Your Essex e-newsletter. For a monthly snapshot of news, events and activities across the county, sign up <u>at:</u>

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The information contained in this document can be translated and/or made available in alternative formats, on request.

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www.essexclimate.org.uk

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