



FOREST
SCHOOL
SUSTAINABILITY



Environmental Sustainability
Strategy & Development Plan
2023-2025

The greatest
threat to our planet
is the belief that
someone else
will save it

ROBERT SWAN

CONSCIOUSLIFEANDSTYLE.COM

The international scientific consensus is that to prevent catastrophic climate damage, by 2030 global net human-caused emissions of carbon dioxide (CO₂) need to fall by about 45% from 2010 levels if we are to reach net zero by 2050. Global warming is proportionate to cumulative CO₂ emissions, which means the planet will keep heating for as long as global emissions remain more than zero.

Pupil sustainability working committee Chair Isobel O'Neill, Year 13:

“To me, this sustainability plan represents the beginning of holding our School and ourselves accountable for our actions and the impact they have on the environment. It’s the start of a long journey that will hopefully ensure action is taken to make all aspects of Forest life more sustainable.

I hate to use a cliché, but it is our futures that are on the line here; we don’t have much time and we all need to be part of the change. I know sometimes it can feel hopeless when big conglomerate organisations are burning fossil fuels like there is no tomorrow, greedy for the profit when you’re making those sustainable changes in your life, but every action counts.

As a school, Forest is responsible for the impact it makes on the world and honestly, we could do better, we need to do better. Let me be clear, I’m not perfect, no one is, but I don’t think this is about being perfect; it’s about taking responsibility, having a passion for wanting to make positive change and doing what we can to reduce the impact Forest has on this Earth. Not only does this plan cover reducing our carbon footprint from building work to waste management it is also about education.

Preparing pupils to leave the white gates into the big bad world able to make educated, sustainable decisions is vital. From getting rid of single use plastic to making sure our energy is from renewable sources and embedding sustainability throughout the Forest curriculum there are some quick wins but also difficult 10-20 year journeys to embark on, but I’m looking forward to this being a project that makes institutional change and I feel fortunate to be part of it.”

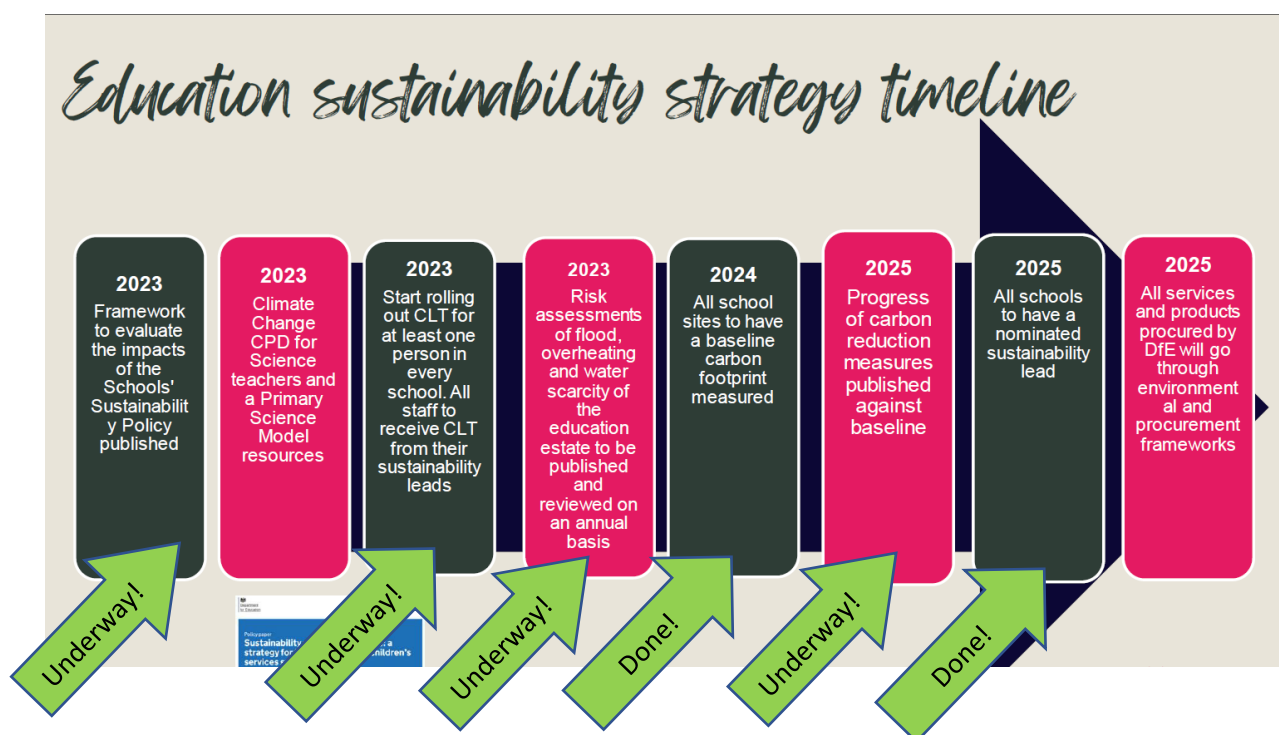
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INTRODUCTION

Forest's Environmental Sustainability Strategy & Development Plan is the beginning of the School's firm and ambitious commitment to its future and its practical and educational response to the climate change emergency more widely. It will not be without its challenges, not least because of the historic nature of parts of the School, but management of the physical site and the School's teaching and learning need to work in tandem as we strive to become an educational centre of sustainable excellence.

This strategy document signals Forest's firm commitment to helping meet these goals by placing environmental issues at the centre of school life – through both practical measures and the enrichment of the curriculum, to develop pupil knowledge and understanding of these important issues.

A review process is underway to create the data from which to launch our work; the challenges within the School community need to be fully understood if we are to achieve our aims. Every Forest pupil, and staff member, has a role to play in educating others in the School community through example: developing better practices and behaviours to help Forest achieve outstanding environmental performance.



This is a pictogram from the published [DfE Sustainability and Climate Change Strategy](#) April 2022. Although Forest is not a maintained school, we will meet and where practical exceed the targets provided by the Department for Education. The green arrows show we have made a positive and impactful start.

VISION



Forest by name, Forest by nature. The aim is to develop a School community that is outward looking, with a strong global perspective, focusing on cumulative steps that will develop and deliver significant culture-changing impact. Technology alone will not address the challenges. We need to promote and support positive environmental behaviour changes, where the whole community thinks and acts differently, creating a ripple effect that travels beyond the School gates and out into Forest homes and communities. Among the ways to achieve this are:

SCHOOL VALUES

Growth: Giving our pupils the tools, resources and learning to become the next generation of environmentalists

Learning: Giving our pupils an excellent environmentally focused education, providing opportunities for learning across the whole spectrum of sustainability

Hard work: as we know, the planet is starting on the back foot. Little by little, piece by piece, our pupils can make a positive difference if given the right opportunities in School

Diversity: Creating the next generation of environmentalists can only occur if the workplace provided, allows them to be themselves and contribute to their best abilities

Responsibility: Giving our pupils the motivation and encouragement to become active, responsible transition leaders now and in the future

Wellbeing: Pupil wellbeing is a core Forest value. Developing environmentally conscious young people will increase their sense of control over their future

Community: Sharing our carbon literacy educational programme with other local schools through our outreach programme

STRATEGIC AIMS

As set out in our initial planning document towards the end of 2022, Forest has developed three clear sustainability strategies:

- tackling the challenges set by the environmental impact of the School site
- enabling the expansion of teaching and learning to cover key issues
- addressing how we can affect carbon reduction

The School recognises the enormity of the challenge to meet these aims which follow meaningful and science-led data. Therefore the Warden has appointed a current staff member, Wayne Bishop, as the Operational Sustainability Lead to work alongside the Pupil Sustainability Working Committee, as well as with curriculum leaders and others, on building an appropriate educational and operational framework to help realise our ambition and exceed DfE expectations. These include:

- Staff with academic, co-curricular and pastoral responsibilities
- Head of Futures: ensuring pupils are given the most appropriate pathways to careers in the green economy
- Working with the on-site catering providers, Chartwells, developing aspects of their provision to ensure it is sustainable and carbon efficient

The plan will be supported, monitored and challenged, where appropriate, by Forest's Governing Council.

AIM 1 – ENVIRONMENTAL IMPACT OF THE SCHOOL SITE

ENERGY AND DECARBONISATION



Finding ways to remove our reliance on fossil fuels is non-negotiable if the world is to meet the global climate challenge. Exploring ways we can do that on the Forest School site is both the right thing to do and a powerful way to educate pupils and staff on responsible practice in everyday life.

Targets

Operational
Consult with experts to audit, review and improve current systems; develop appropriate metrics to monitor emissions and analyse energy and carbon data
Explore the potential for onsite renewable energies (or low carbon sources); include on-site sustainable energy generation in new projects (e.g. photo voltaic/ground source heat pumps)
Establish Building Management Systems (BMS) within all feasible buildings, linked to and controlled by the Operational Sustainability Lead
Introduce asset management system to evaluate assets, ensure efficiency through servicing and replacements
Set realistic targets to reduce carbon emissions through pupil and staff education programmes and working with the Estates Team

Structured Replacement of light fittings to LEDs and sensors when being replaced or as part of a refurbishment programme
Investigate replacing fitness studio equipment with manufacturers that use no electricity or can generate electricity
Provide real time data to staff and pupils forming the basis of an energy policy and educating them on reducing and turning down where possible
Achieve progressive changes to energy contracts e.g. 100% renewable electricity by 2025

Key performance indicators

- % of natural gas used (m³) for space heating, swimming pool management and catering measured against a trend line
- % of carbon dioxide emissions from heating per staff and pupil (Tonnes/FTE)
- % energy (KWh) for electricity, year on year, from fossil fuel sources
- Migration of electricity suppliers from non-renewable sources to renewable sources by 2025
- Fuel use (litres) by School vehicles reduced or conversion to electric vehicles
- Reviews of performance in energy conservation with Estates and the Bursar to occur once a term

Successes

- *Commitment to measuring carbon footprint of the schools' activities year on year to gain an understanding of pinch points and regularly be making efficient and direct improvements to reduce these emissions.*
- *appointed Positive Planet to support with calculating baseline carbon footprint and reduction recommendations.*
- *Sensor LED lighting installed in Science Building (2017), Gilderdale (2020), Prep School (2021), Drama Office (2022), DT Storeroom (2023)*
- *Energy Sparks dashboard monitors the School's gas and electricity usage with actions to reduce.*
- *Boiler timers adjusted and 102 hours of operation removed across all buildings (Dec 2022)*
- *Decarbonisation plan tendered and commissioned with data gathering work to commence in June 2023*
- *Removal of paper towel dispensers across 67 bathrooms and replace with eco-model hand dryers. This will save per year 10,000 kg of carbon emissions (CO₂eq*)*

“Carbon dioxide equivalent” or “CO₂e” is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO₂e signifies the amount of CO₂ which would have the equivalent global warming impact

GREEN DESIGN, CONSTRUCTION, RENOVATION AND MAINTENANCE



Adapting existing buildings and designing new ones which respond to environmental challenges will undoubtedly be a significant challenge. By developing and delivering evidence-based solutions for decarbonisation and climate resilience we will:

- *reduce energy demand*
- *adapt to climate risks*
- *drive innovation in construction*
- *act as a catalyst for green jobs*
- *deliver savings*

Targets

Operational

Incorporate objectives into the tendering and procurement of construction work and compel designers to ensure that all new build completions achieve a BREEAM rating of “Very Good” or “Excellent”

All new school buildings (not already contracted) will be net zero in operation. They will be designed for a 2°C rise in average global temperatures and future-proofed for a 4°C rise, to adapt to the risks of climate change, including increased flooding and higher indoor temperatures

Sustainable ICT solutions will be integrated into new-build schools as standard, via sustainable procurement, design, implementation and management

Key Performance Indicators

- aspire to achieve BREEAM 'excellent' standards for every new building and refurbishment project over £1 million
- develop codes for buildings, standard specification for low-energy technologies

Successes

- Areas have been identified within Forest School grounds for areas of planting and increasing opportunities for environmental education (March 2023)

FOOD AND CATERING



Food systems account for up to 30% of all global greenhouse gas emissions and some of the most expensive food items are the most carbon intensive, with deadweight beef prices around a £4.20/kg while root vegetables are in the region of £0.50/kg.

Different production systems mean some foods are responsible for considerably more emissions than others. For instance:

- 1kg Beef emits equivalent of 60kg of carbon dioxide
- 1kg lamb emits equivalent of 24kg of carbon dioxide
- 1kg Pork emits equivalent of 7kg of carbon dioxide
- 1kg chicken emits equivalent of 6kg of carbon dioxide
- 1kg root vegetables equivalent of 400g of carbon dioxide (150 times less carbon intensive)

A scientific carbon impact assessment tool has now been developed to count the carbon intensity of school meals. This brings simplicity and clarity to measuring and reducing carbon emissions in a once complicated area (capturing 30% of global GHG emissions). Traditionally, focus was on simple scope 1 & 2 emissions only. This brings about the prospect of a sustainable school concept, where we can begin to measure the carbon intensity of school supply chains in addition to property and utilities.

Targets

Operational

Pilot a food curriculum and whole-school approach to food. Promote accountability and transparency of School food arrangements by adding a statement on our website setting out our whole-school approach to food, with voluntary reporting

Introduce Meat Free Mondays across both Schools and use the data to educate our staff and pupils on the benefits on not eating meat even if for just one day

Investigate more plant-based options for staff and pupils and reduce beef, fish and lamb consumption
Training for School Governors on a whole-school approach to food as set out in the forthcoming Government Food Strategy (School Governors have a responsibility to ensure compliance and should appropriately challenge the Warden and the Senior Leadership Team to ensure the School is meeting its obligations)
Food supplier contracts and their food preparation and practice, giving consideration to the ingredients they use and their environmental impact
Gather data and act on food waste, and share the evidence-based best practice for sustainable waste prevention and management
Align with DEFRA's Resources and Waste Strategy to reduce all waste, moving away from single-use items and towards reusable alternatives where possible
Dramatically reduce or remove single use water bottles from site
Improve quality of recycling and waste management
Improve food waste management by setting up a compost area on the School site, using technology to reduce the amount of waste we create
Investigate removing all single use food containers and cutlery

Key performance Indicators

- Establish measure of food wastage per day, week and month with a view to reduce through the setting of achievable and realistic targets
- Establish measurement of the amount of recycling and general waste produced with a view to increase the amount of recycling currently being performed

Successes

- Cooking oil is collected from Forest School weekly and recycled into bio-diesel
- Winnow Food Waste system installed (April 2023)
- Removal of single use plastic water bottles and brown paper bags (Jan 2023)
- Removal of disposable cups from staff canteen and sports fixtures (Jan 2023)
- Meat Free Mondays introduced (9th Jan 2023)

SUPPLIERS AND THIRD PARTIES



Achieving the highest standards in the way the School conducts itself as a business and demonstrating respect for the environment and the natural world as an expression of our values in our dealings is vital. This should extend to what we expect from our suppliers and supply chains: are they morally and ethically compliant and are mitigations of environmental damage a consideration in their practice?

Targets

Operational
Ensure sustainability is part of the assessment and validation criteria for including suppliers in our procurement framework, to support sustainable purchasing of products and services, including energy
To ensure all budget holders are aware of the importance of sustainability and explicitly include a reference to it in the School's financial and ordering procedures
To develop a Supplier Sustainability Risk Assessment (RA) that identifies the suppliers that are most likely to create a large carbon footprint
Reduce Scope 3, procurements, carbon footprint by 10% by Sept 2024

Key Performance Indicators

- start a baseline review of procurement procedures and processes
- establish a sustainable procurement policy and processes (following on from the baseline review findings)
- Reduce Scope 3, procurements, carbon footprint by 10% by Sept 2024.

Successes

TRAVEL AND TRANSPORT



Like many schools, Forest focuses on reducing car use for the school run and inspiring our pupils – and parents – to travel to school sustainably, actively and responsibly. From increasing cycle and scooter storage provision to engagement with local campaigns on cycle training and walking, we are doing what we can to champion active travel and public transport as an alternative to the car.

Targets

Operational
Introduce additional cycle parking and clothing storage to encourage more staff and pupils to cycle to school
Complete update to the School's TfL STARS Travel Plan by August 2023, aiming to keep our current Gold accreditation
Achieve progressive reduction in on-site staff parking
Review the School's flight policy with a view to reducing the number of flights taken and thus reducing our carbon footprint; consider carbon offsetting during phased changes
Replace the School minibus fleet with electric or hybrid vehicles (with appropriate provision for charging being incorporated into capital project designs)
Reduce the number of staff and pupils travelling to school by car (most notably in single occupancy vehicles)

Key performance Indicators

- capture commuter and business travel data for carbon-footprint purposes
- once a baseline is established by the travel plan, set targets for the following:
 - an increase in cycling for commuting and work business by staff
 - an increase in use of public transport for commuting and for work business and study purposes
 - a per capita increase of secure cycle storage on site
 - an increase in walking to work
 - a decrease in carbon emissions from commuting and business travel
 - maximising the adoption of lower carbon fuels in School vehicles

Successes

- Replacement of Estates team petrol buggy with electric model (Sept 2022)
- An additional 38 secure cycle spaces have been provided, along with sustainable shelters. This will encourage behaviour changes and support low emission travel. (Feb 2023)
- Conducted a staff and pupil survey for travel habits to and from the School (Jan 2023)

WASTE MANAGEMENT



Like all businesses, Forest must adapt and prioritise its approach to waste management, when half the waste produced in the UK still goes to landfill contributing to greenhouse gases and leaking toxins into water supplies. Finding solutions to processing and managing our waste sustainably and employing the 'reduce, reuse and recycle, recover' hierarchy whether on site or via our waste management contractors, is vital.

Targets

Operational
To improve recycling percentages from the baseline data captured From January 22 by 8% per month
To reduce non-hazardous waste to landfill from construction projects
To achieve year on year increases in recycling as a proportion of waste
To monitor, educate and actively promote the reduction in printing. Where printing is required, ensuring this is in black and white and publish KPI's accordingly
To remove all general waste bins from site and replace with clearly signed recycling bins
To set up events, such as a stationery amnesty, throughout the year for staff and pupils
To work with suppliers and every department and creature a circular economy culture and step away from, where possible linear economy

Key Performance Indicators

- complete the first review of waste and recycling with the ambition to set targets for waste reduction, including recycling and separation of waste by the School
- Achieve 60% recycling on average by Jan 2024, from our baseline of March 2023
- Carbon literacy training completed by SLT and Heads of Department/Representative from each Department

Successes

- All non-recyclable waste produced is collected by Bywaters. This is then transported down the Thames via barge to an Energy for Waste (EfW) facility. The waste is incinerated, and the resulting energy is used to generate electricity that helps power London
- Battery collection points set up around the School site (Jan 2023)
- Sports shoe recycling facility in the leisure centre (Feb 2023)
- Textile Recycling for the whole School community (March 2023)
- Waste audit completed (Feb 2023)
- Printing data now available and converted into a Power BI Dashboard (Feb 2023)

WATER MANAGEMENT



Water is a finite resource. How we manage water sustainably on the Forest site in a way that acknowledges environmental and economic needs and with a view to needs in the future is important.

Targets

Operational
To implement programme of leak detection or inspection
To replace taps with sensor taps where appropriate and practical
Install aerators onto taps and showers
Grey water implementation for gardens and fields
Install waterless urinals where practical

Through asset management ensure water systems are efficient, well maintained and any replacements are the most efficient

Key Performance Indicators

- set targets for reduction over a fixed time period once review data becomes available

Successes

- Sensor taps installed throughout the Prep School (Feb 2021)
- Waterless urinals in the Prep School (Feb 2021)
- Water saving devices installed in urinals (July 2022)
- Three new water fountains (re-useable bottle fillers) installed in/near Sport Hall, Theatre and Chapel Quad (Oct 2022)

BIODIVERSITY AND THE NATURAL ENVIRONMENT



Forest School is a large site in a privileged location alongside Epping Forest. Augmenting our natural environment as well as actively working on conserving the biodiversity of habitats already in place should inform any decision making on site.

Targets

Operational
Increase the number of trees and plants on the site; increase the number and variety of native plants that we propagate/germinate on site
Reduce pesticide and herbicide usage and increase the production of our own composting/natural recycling (where possible)
Create run-off prevention zones and flood mitigation strategies
To reduce our use of irrigation on ornamental areas and to employ ground water run off capture systems (where appropriate)
To increase the diversity and population of the species found on our estates
To ensure that careful attention is paid to biodiversity, ecosystems and the natural environment whilst planning the landscaped elements of capital projects

Key Performance Indicators

- Land identified for wide planting and calculation of new trees planted
- Creation of on-site composting area and promotion of use. Record where and how this is being used
- Investigate the storage and use of ground water run off storage. Calculate volume saved per term

Successes

- Land identified for wide planting and calculation of new trees planted (March 2023)

COMMUNICATIONS



Awareness and concern about environmental issues is growing and people everywhere are beginning to understand the effect which they, personally, are having on the planet. Forest will use a variety of communication methods to speak about what is happening on site and, in doing so, aim to build on these trends of growing awareness to motivate all our stakeholders to help us achieve our sustainability goals.

Targets

Operational
To establish a communication plan to reach our target audiences (including Pupils, Parents, Carers, staff, contractors, alumni and other stakeholders) and to keep them informed and updated about our plans and progress
Improve use of the website for communications for current and prospective parents on sustainability and environmental matters
Introduce adult and pupil facing sustainability and energy-use dashboard

Key Performance Indicators

- Develop a communications map to plan regular events as well as produce constant 'drip-feed' information to School stakeholders
- Create and maintain sustainability page on the website
- Introduction of a termly newsletter, edited by the Pupil Sustainability Working Committee
- Develop a commitment statement in relation to catering sustainability and publish upon our website

Successes

- Bi-Weekly Sustainability topics distributed to parents through the Gloucester and Senior School Bulletin (Nov 2022)
- Old Forester News focused on Sustainability (Trinity 2023)
- Sustainability articles included in the annual School Magazine (Trinity 2023)
- Communication included within the Welcome Brochure to new pupils (June 2023)
- Regular items for staff training and messaging sent by our Pupil Sustainability Working Committee (Sept 2022)
- New travel information added to all new pupils that join in September. (April 2023)

ENVIRONMENTAL EDUCATION



Connection with nature declines in childhood to an overall low in the mid-teens. Creating an environment from an early age where we are able to connect to nature is essential for self-enforcement in protecting and valuing nature (The Dasgupta Review). Learning from and connecting with nature is an important factor in the education of our pupils. We will increase opportunities for all children and young people to:

- spend time in nature and learn more about it
- become actively involved in the improvement of their local environment

We know that regular contact with green spaces can have a beneficial impact on children's physical and mental health and Forest School's privileged location alongside Epping Forest, as well as our Little Acorns space on site, means this can be integrated into daily experience.

Targets

Operational

To create action through education by applying a 'green screen' approach (i.e. sustainability check) to current practice and by taking steps to reduce our carbon footprints (at both an individual and institutional level)

Visible growth of a 'Green Culture' in school through the increased adoption of sustainable practices e.g. printing/photocopying quotas are reduced; sustainable modes of transport to School are adopted; single use plastic is eliminated; reusable drinks bottles are used

Key Performance Indicators

- Pupil Sustainability Working Committee formed of staff and led by pupils by start of 2023
- Investigation into adding Environmental Science to A-levels and Natural Science at GCSE by 2024
- Wider communication, understanding and evidence-based support for sustainable working and educating through surveys

Successes

- Pupil Sustainability Working Committee has been established and meets every week. Currently has 16 members (Nov 2022)
- Sustainability will be embedded into the School curriculum from 2025
- Pupil and staff facing intranet page updated weekly with news on climate education (local, national and global)

AIM 2 – TEACHING AND LEARNING

Schools and education and climate change

“The challenge of climate change is formidable. For children and young people to meet it with determination, and not with despair, we must offer them not just truth, but also hope. Learners need to know the truth about climate change – through knowledge-rich education. They must also be given the hope that they can be agents of change, through hands-on activity and, as they progress, through guidance and programmes allowing them to pursue a green career pathway in their chosen field.”

Secretary of State for Education, (April 2022)



To promote and increase environmental literacy and awareness of sustainability through the curriculum from Prep School through to Sixth Form

To achieve this aim we will:

- Review the current levels of environmental and sustainability teaching and learning (in 2022/23) and promote expansion of literacy in these areas through appropriate programmes and courses, as preparation for working in the green economy.
- Task Heads of Departments/class teachers with responsibility for embedding sustainability into the curriculum, where appropriate, from 2024 and work in tandem with the operational management of the site to create a culture-shift in attitude and practice across Forest.
- Provide a range of opportunities for all pupils to engage in formal learning about sustainable development (such as GCSE Natural History, A-Level Environmental Science).
- Increase pupil understanding of global sustainability by integrating learning opportunities into the curriculum, creating a spiral curriculum which places sustainability at the core of the learning and operational culture of the School.

- Analyse the current delivery of Education for Sustainability Design (ESD) and proposed ESD content from 2024 against the [UN 17 sustainable development goals](#) and create a holistic education pathway for all pupils to become future environmentalists.



- Instigate a staff and pupil wide Carbon literacy Training education programme covering:
 - The science behind climate change
 - Social equity and climate change
 - What individuals can do to act on climate change
 - Strategies and skills for communicating action on climate change

This programme will enable Forest to become a certified education carbon literacy centre, able to offer training to local schools, colleges, community groups and organisations. Forest pupils will cover:

Prep School

Sustainability is embedded in the Personal Development Curriculum in the Prep School R – Y6 and has been added as a specific term-length unit in the Y5-6 carousel for Humanities based on the UN SDGs, linked to the UNICEF Rights Respecting articles and highlighting the following themes:

Key Learning Outcomes

- Understand the concept of sustainability and its importance for the future of the planet
- Recognise the impact of human activity on the environment
- Develop skills to reduce waste and conserve energy
- Understand the importance of biodiversity and the role of humans in protecting it

- Develop critical thinking skills and problem-solving abilities to address sustainability challenges

Senior School, KS3

Circular Economy is a concept that synthesises several sustainability perspectives built on the three basic principles of ecological degradation, carbon-intense production and scarcity of virgin resources. Some of the perspectives are:

1. **Biomimetics or Biomimicry** is an approach to help find solutions which meet our needs and challenges by learning from the patterns and strategies of nature, developing products, processes and policies that work with the natural world for the long term.
2. **Cradle to Cradle**, also called Regenerative Design, moves beyond sustainability by seeking to restore and replenish what human behaviours have eroded. The approach challenges the current Cradle (resource) to Grave (landfill) production and consumption model, seeking to build one that creates a net positive impact on natural systems, protecting and enriching them and based on science-based targets.
3. **Performance Economy** refers to a ‘closed-loop’ approach to production processes that pursues goals of product-life extension, long-life goods, reconditioning activities (remanufacturing, refurbishing, and repair) and waste prevention. It also insists on the importance of selling services like car hiring rather than buying cars – reducing the number of cars required to service transport needs and hence the materials required to produce cars reduce considerably.
4. **Industrial Ecology** is the study of material and energy flows through industrial systems. Focusing on connections between operators within the ‘industrial ecosystem’, this approach aims at creating closed-loop processes in which waste from one industry or process serves as an input for another, thus eliminating the notion of an undesirable by-product.
5. **Natural Capitalism** refers to the world’s stocks of natural assets including soil, air, water and all living things. In a global economy business and environmental interests overlap, highlighting the interdependencies between the production and use of human-made capital and flows of natural capital.

Key Performance Indicators

- From September 2023 ESD to be integrated in the personal development curriculum
- From September 2024 a structured ESD model will cover both Senior and Prep Schools, with clear integration between Years 6 and 7.
- From 2024 the ESD framework will be robust, demonstrable, evaluated and measured against internal and national benchmarks.
- Visible growth of an environmentally aware culture among pupils evidenced by behavioural changes in areas such as food waste, recycling, upcycling initiatives, photocopying, travel habits
- Hold an annual whole School sustainability and environmental education week

Successes

- A dedicated area created for environmental education (Little Acorns) at The Park.
- From September 2023, a ten-week structured framework will include sustainability as part of Humanities curriculum for Years 5 and 6
- Through our sustainable travel partner, Flooglebinder, the School has committed to sustainability-led pupil educational visits. Flooglebinder's educational visits, aligned to the United Nations' 17 Sustainable Development Goals, will develop a wide range of pupil life skills and a deeper understanding of the environment
- In June 2023 Year 7 pupils will undertake a Sustainability, Wildlife and Adventure visit to Pembrokeshire, Wales. This will provide an immersive experience into global issues, and pupils will be learning from experts in marine biology, ecology and conservation

Route to achieving our aims

- Create an Education for Sustainable Development (ESD) Forum, with the appropriate accountability and governance, to support the integration of teaching and learning of environmental/sustainability subjects across Forest
- Enhance opportunities for all students to engage with sustainability and develop a range of sustainability-related skills
- Use air pollution reducing initiatives in the vicinity of the School e.g. air pollution monitoring; increased signage outside School; awareness-raising campaigns
- Instigate departmental sustainability and environmental educational audits as part of the 2023 broad curriculum review, to provide the School with a base-level for teaching
- Consider adding GCSE Natural Science and A-level Environmental Science to the curriculum portfolio
- Embed sustainability, alongside EDI, as part of our whole school curriculum to meet the national growing demand for sustainability expertise in university courses and the green industrial revolution.

ESD is a team task that necessitates the involvement of teachers and other staff, students, parents, and the wider community of Forest School.

AIM 3 - CARBON REDUCTION

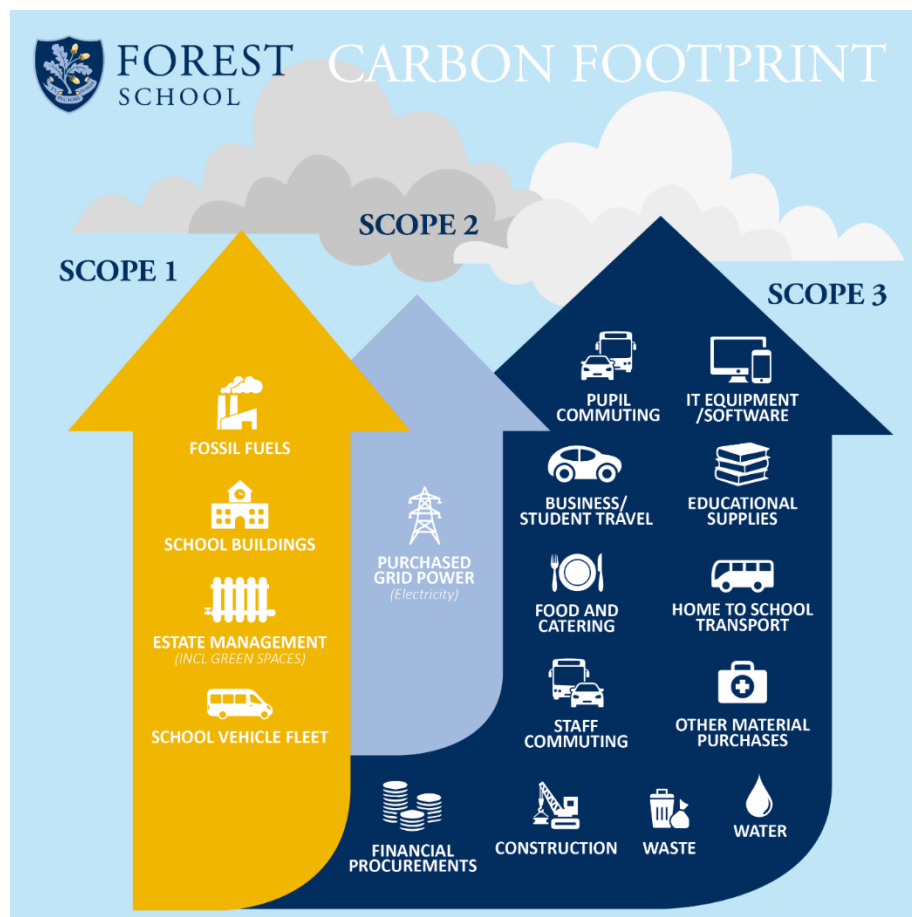


Forest School is committed to achieving the [DfE Sustainability and Climate Change Strategy](#). In particular we are committed to reducing 50% of our carbon emissions by 2030, another 50% by 2040 and a further 50% by 2050.

To achieve this objective we will:

- Analyse the Schools carbon footprint data to identify areas of concern and areas where immediate action can be taken to make reductions
- Communicate with staff, pupils and other stakeholders about the importance and value of carbon and energy savings and their place in achieving the School's strategic aims
- Produce a long-term Site Decarbonisation Plan for increased energy efficiency and management
- Ensure development and refurbishment plans for the School site incorporate strategies to eliminate/reduce carbon emissions where practical and/or feasible
- Continue to reduce the carbon footprint associated with the School's production and handling of waste.

Forest's carbon (Co2) measurement 2022 (following the Greenhouse Gas Protocol)



Scope 1 and 2 have been completed using June 2021-June 2022 energy bills. Scope 3 has been measured using a 'spend base'¹ to include the product/service emissions as well as any staff/pupil commute to school. Our carbon footprint completed in February 2023 has been verified independently by [Positive Planet](#).

BASELINE EMISSIONS FOOTPRINT

Baseline emissions demonstrate the greenhouse gases produced in the past, prior to the introduction of any strategies to reduce emissions and provide the reference point against which emissions reduction can be measured. This Carbon Footprint Plan (CRP) is the baseline year 2021/2022.

Baseline Year at Forest School:

Additional details relating to the Baseline Emissions calculations:

Quality of Data

- high quality data provided for subcategories: stationary combustion, mobile combustion, purchased electricity, staff/pupil commuting
- medium quality data provided for subcategories: purchased goods & services, capital goods, business travel
- low quality data provided for subcategory: operational waste

¹ This refers to the costs involved in procuring the services of suppliers. Moving to a product/service base means we would calculate the carbon footprint associated with procuring our suppliers' good and services

The following Scope 3 Emissions were measured:	
<ul style="list-style-type: none"> • purchased goods & services • capital goods • fuel & energy related activities • operational waste • business travel (coach & air travel) • staff & pupil commuting 	
Baseline year emissions:	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	560.519
Scope 2	310.629
Scope 3	1,845.154
Total Emissions	2,716.302

CURRENT EMISSIONS REPORTING

Reporting Year:	
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	560,519
Scope 2	310,629
Scope 3	1,845.154
Total Emissions	2,716.302

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard² and uses the appropriate Government emission conversion factors for greenhouse gas company reporting³.

Carbon Intensity, based on **340** members of staff and contractors during the measurement period equates to **7.989 tCO₂e** per person

Carbon Intensity, based upon **1,550** students during the measurement period, equates to **1.752 tCO₂e** per pupil

² <https://ghgprotocol.org/corporate-standard>

³ <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

This carbon model was created by the Stockholm Environment Institute (SEI) at the University of York using scenarios at a typical school.



Aligning reduction to a carbon model, such as this one, can support focus on to the management within phases.

Route to achieving our aims

In the short term, the School has developed a Carbon Management Plan (CMP). This will capture and measure continuously our carbon footprint, forming the baseline on which to calculate our targets in order to achieve net zero by 2050. We will publish these targets by 2024, once we have a full year of verified data. Using this data, and in conjunction with the Estates Decarbonisation Plan (to be completed by Dec 2023), we will have a clear picture of the scope of works required and which low or zero carbon alternatives are appropriate and practical for our site.

Whilst this work is ongoing, the School should commit to achieving a 10% reduction in carbon emissions, against our 2021 baseline, by 2024.

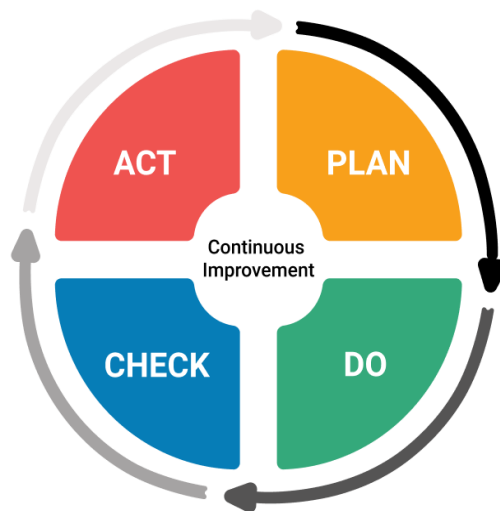
Scope 3 emissions account for 67.9% of Forest's carbon footprint where the responsibility sits largely with external parties (suppliers, investments, logistic partners etc). Decarbonising Scope 3 is dependent on 3 key areas:

- **Education** – educating our suppliers/contractors on the value of decarbonisation is key, allowing us to navigate our net zero journey with fewer challenges
- **Collaboration** – getting our stakeholders to collaborate is also critical. They often need to implement the same changes in their processes, materials and management approach. Learning from one another can save time
- **Investment** – decarbonising Scope 3 requires investment of time, resources, people and, most importantly, consistency. The argument that sustainability is costly is true only to a point: the investment and effort we make now will reduce costs later.

In order to reduce carbon linked to procurement, the culture needs to shift from a cost bottom line to a sustainability bottom line. This involves each supplier/contractor's carbon footprint being measured. This is complex, and suppliers change. However we can publicise our commitment to low carbon suppliers through an ambitious and dynamic procurement policy.

Travel - the issues

A generation ago, 70% of us walked to school. Now it's less than half. That's despite most people living within two miles of their closest primary school. As a result, one in four cars on the road during the morning peak are families on the school run, contributing to half a million tonnes of carbon dioxide emissions annually – that's more than the carbon footprint of some small countries.



Forest School's Environmental Sustainability Strategy and Development plan will follow the PDCA (Plan-Do-Check-Act) model for continuous improvements. This will add transparency to the process, allow for evidence-based decisions, scrutiny and access to data for any reports that are required now or in the future.

Carbon Neutral

Through our carbon mapping exercise and partnership with Positive Planet, Forest School is seeking to become a certified CARBON NEUTRAL organisation during 2023. This requires our carbon footprint to be financially 'offset' against a reputable cause, which Positive Planet can identify. The Senior Leadership Team has agreed that during 2023-2025 the School would invest any sustainability savings (or a defined budgeted amount) into reducing Forest's carbon footprint.

PLEASE NOTE

During this initial planning and review period it is important to understand that the details relating to priority areas often refer, necessarily, to the establishment of systems and baselines rather than to the setting of specific, data driven targets and objectives. At this early stage, flexibility in our approach is necessary as we adjust and adapt our areas of focus, targets and initial plans to achieve the most effective outcomes.

ROLES AND RESPONSIBILITIES

Senior Leadership team

The COVID-19 pandemic compelled many organisations, Forest included, to adapt and change its operating model dramatically, for both the short and long term. The latest IPCC warnings should compel us in the same way: to analyse our environmental impact and to accelerate our actions and adaptations to reach a more sustainable operation as soon it is possible and affordable to do so.

Leadership will ensure sustainability is embedded into every decision. Whether these are operational decisions or curriculum decisions, short term or long term, planning and decision making should aim for the ESG framework. (Environment, Social and Governance). This will allow us to measure and quantify both our environmental and social impact through excellent governance.

Staff and contractors

All staff are expected to show the same level of thinking and action we expect from pupils, as part of our community enterprise to reach Forest's environmental goals. Whether that it is minimising printing, reducing car use to get to work, supporting Meat Free Mondays or using reusable water bottles, on site all staff have a responsibility to set a standard and support Forest's sustainability agenda in the same way our most committed pupils are already doing.

Parents and Carers

In many ways pupils are ahead of adults in their thinking on climate change and more sustainable living so parent/carers can support the School's agenda by encouraging discussion and taking action at home. Considering alternatives to the school run in a petrol/diesel car is another active way parents/carers can contribute to this agenda.

Pupils

Forest pupils, like many young people across the world are already clued up on these issues. Forest shall encourage its pupils to continue to work with the School to develop more sustainable practices. In addition, the Pupil Sustainability Working Committee offers time for discussion and planning which is already producing positive action.

Our Pupil Sustainability Working Committee (PSWC) meet once a fortnight and we cover the following:

- Zero carbon estate (energy and water use; sustainable operations)
- Procurement and waste (purchasing policies and data; waste management)
- Travel (flights, educational visits, fixtures)
- Students and education (formal and informal education on climate change and sustainability)

- Community and engagement (creating a positive impact as part of our net zero carbon target)
- Zero carbon research (maximising our climate expertise and collaboration)

The Local Community

Forest School aims to be a beacon of sustainability. Not only will we invite schools to join us on our learning pathway, but we will invite other community groups to Forest to develop best practice, learn from experts in relevant fields and join in tackling the climate crisis together.

CONCLUDING STATEMENT

As a responsible and leading educational institution, we recognise the role in mitigating the effects of climate change. In line with our commitment to sustainability and our vision for a better future, we have developed a Carbon Management Plan that outlines the overall strategy for reducing our carbon footprint.

Our management plan includes a comprehensive set of measures that will help us achieve our goal of becoming a Net Zero institution by 2050.

This will involve reducing our energy consumption, supporting behaviour change and encouraging our pupils to take the lead.

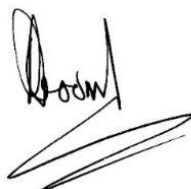
We commit to monitoring and reporting on our progress regularly, and we are committed to continuously improving our carbon management plan to ensure that we meet our goals. Our carbon management plan is a significant step towards achieving our vision of a sustainable future, and we invite all the members of our school community to join us in this endeavour.

Wayne Bishop, Operational Sustainability Lead.

Declaration and Sign Off



Marcus Cliff Hodges



Diane Coombs



James Sanderson

Co-Chairs, Pupil Sustainability Working Committee



Isobel O'Neill



Radha Andrews

References and weblinks

DfE - [Sustainability and climate change: a strategy for the education and children's services systems](#)
[The Dasgupta Review](#)

<https://letsgozer0.org/>

<https://www.carbontrust.com>

<https://www.theclimatepledge.com>

<https://carbonliteracy.com/>

<https://netzeroclimate.org>

<https://positiveplanet.uk>

<https://www.onecarbonworld.com>

<https://energysparks.uk/for-schools>

<https://www.woodlandtrust.org.uk/plant-trees/schools-and-communities/>

<https://stars.tfl.gov.uk/About/Accreditation>

<https://whc.unesco.org/en/tourism/>

<https://www.winnowsolutions.com/>

<https://www.greencommuteinitiative.uk>

<https://flooglebinder.co.uk/>

<https://www.transform-our-world.org/resources/energy/sustainable-development>

<https://www.reenergisegroup.com/>

<https://www.woodlandtrust.org.uk>

Local, sustainable links formed

<https://www.cyclespirit.com/electric-bikes> - package deals for staff

<https://nakedsprout.uk> – 10% off with FORESTSCHOOL10

<https://www.greencommuteinitiative.uk/> - savings for staff on new bikes, including e-bikes

<https://www.peacewiththewild.co.uk/> 10% discount

<https://thehiveintheforest.co.uk/climate-charter>