# Information Collected For Olly Glover MP to Support The Mass Lobby of MPs on 9th July 2025


Part 1:
Local, National and Global we ask our MP to bring to the attention of the Government. Please use your influence to help to issues redirect Government policy towards a Sustainable Economy.

Part 2:
One-page descriptions and pictures of environmental projects in the Didcot and Wantage Constituency.

# Environmental Initiatives in Didcot

# and Wantage Constituency

**Introduction.**

This folder contains Information to support the environmental work of the MP for Didcot and Wantage, , Olly Glover MP.

Paet 1  A list of environmental issues that we, your constituents, feel that our MP should raise with Government Ministers.

This Section is available on the Bioabundnace Website

Part 2.  A folder showing environment initiatives in our area.

This shows how people in our communities are genuinely committed and taking action themselves. The folder is arranged showing Constituency-wide projects first, then some of the Harwell sustainability projects, and then local initiatives, listed roughly East to West across the Constituency.

This list was compiled by editing the results of asking Chat GPT to list environmental initiatives in South Oxfordshire and making Google searches linking the names of parishes and towns in the Constituency with the words ‘sustainable…’ and “environment…’.

The environmental projects in this Constituency range from the development of Fusion energy to large solar farms, to communal gardens, wood and fields. This Constituency must rank as among the most significant in the country in our quest for net zero.

This briefing pack has been assembled by:

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# Index Part 2A Initiatives Across the Constituency and at Harwell Campus

## Initiatives available across the Constituency.

**1. Oxfordshire's Local Nature Recovery Strategy (LNRS).**
**This is a Government mandated local nature partnership for strategic nature recovery.**
https://www.oxfordshire.gov.uk/residents/environment-and-planning/local-nature-recovery-strategy

**2. South Oxfordshire Nature Recovery Fund.**
– A £50 k fund administered via Trust for Oxfordshire's Environment - supporting biodiversity, tree & meadow planting, pond creation, and access works with grants from £2.5–25 k southoxon.gov.uk+15southoxon.gov.uk+15whitehorsedc.gov.uk+15.

**3. Council support programme.**
– South Oxfordshire District Council offers grants, fundraising advice, and even lends thermal cameras to communities for energy efficiency audits southoxon.gov.uk+1southoxon.gov.uk+1.

**4. CAG Oxfordshire groups.**
– Dozens of Community Action Groups around the district (e.g., CAGs in Wheatley, Thame) working on biodiversity, low-carbon travel and waste reduction en.wikipedia.org+13cagoxfordshire.org.uk+13southoxon.gov.uk+13.

**5. Low Carbon South Oxford initiatives.**
– Local carbon-saving charities like Low Carbon South Oxford and One Planet Abingdon/Clanfield assisting in energy projects, community car clubs, solar, and awareness-raising lowcarbonhub.org.

**6. Earth Trust projects.**
– Multiple funded undertakings: hazel coppice restoration at Little Wittenham; ponds & butterfly banks at Howe Trust (Wheatley); orchard/hedge works in Benson; boardwalk enhancement at Chalgrove whitehorsedc.gov.uk+1trustforoxfordshire.org.uk+1.

**7. Local nature reserves.**
– Villages host council/volunteer-led reserves e.g. Watlington Chalk Pit, Mowbray Fields (Didcot), Adderbury Lakes—all managed/enhanced by parish groups or Earth Trust en.wikipedia.org+2en.wikipedia.org+2en.wikipedia.org+2.

**8. Active Travel infrastructure.**
– Phoenix Trail cycle/walk route through Towersey & Bledlow; Sustrans-led conversion in 2008

**9. Support for community energy audits & retrofits.**
Council Grants & Thermal Camera Loans funded by SODC. https://www.southoxon.gov.uk/south-oxfordshire-district-council/tackling-the-climate-emergency/what-you-can-do-as-a-community/

**10. Oxfordshire Treescape Project.**
Guidance for tree planting projects run by the Leverhulme Centre for Nature Recovery.
https://naturerecovery.ox.ac.uk/projects/oxfordshire-treescape-project/

**11. Low Carbon Hub.**
This is a new initiative in development driven by Freeland Energy Group. The ambition is for the whole of Oxfordshire to be powered by an interconnected series of smart micro-grids centered around multiple small scale, community controlled renewable energy schemes. https://www.lowcarbonhub.org/

**12. Oxon Air local air initiatives.**
**A Council led initiative monitoring air quality data and encouraging local action.**
https://www.oxonair.uk/

**13. Cosy Homes Oxfordshire.**
If you'd like to reduce your energy bills, and carbon emissions, and turn your home into a cosy home, visit the Cosy Homes Oxfordshire website for more information on getting started with their free Plan Builder..

14. Oxfordshire County Council Progress in creating a greener Oxfordshire in 2024/25.
Copied from News from Oxfordshire County Council.

Positive progress has been made in 2024/25 against priorities set for Oxfordshire County Council by its cabinet, with notable achievements in the council's work to tackle climate change.
The 17 June meeting of the council's cabinet was presented with the authority's annual report, which detailed many positive developments during 2024/5.

**Councillor Liz Leffman, Leader of Oxfordshire County Council, said:** "Across the wide array of services we provide to the Oxfordshire public, from highways to social care, our aim is to make Oxfordshire a greener, fairer and healthier county. Our officers have worked hard to deliver these priorities in partnership with many other organisations. It was great for the first cabinet meeting since the elections to report on the progress that has been made in supporting our communities and protecting our environment over the past 12 months. It is worth noting that these achievements have been delivered against a backdrop of financial constraints and high, complex demand on our services as we continue to work with our communities to support those who are most vulnerable."

## Achievements in 2024/5

Action to tackle climate change lies at the heart of the council's work and 2024/25 has seen the authority being ranked as the top performing waste disposal authority in England for the eleventh year running as well as expanding the council's electric vehicle fleet and reducing operational emissions by 71 per cent. Since the report was published the council has been told that it is the best performing county council in the UK for tackling climate change.

Meanwhile £3.6m has been secured to improve public EV charging to make driving electric vehicles more accessible in the county and more than 200 requests have been approved to reduce speed limits to 20mph in towns and villages. Five new bus routes began operating to connect more villages and market towns to Oxford following a £1.2m allocation from the council.

During 2024/5 the council planted 825 trees and 16 new community orchards. It completed more than 3,300 tree care operations and 20 new road verge nature reserves were designated. The council's work to support residents during the cost of living crisis includes providing 500 vulnerable households more than £1.2m in supermarket vouchers, energy credit and essential household items through the council's government-funded resident support scheme; and providing £3.3m to ensure families entitled to free school meals received support during school holidays. And in terms of wider support to the most vulnerable, the council was awarded local authority of sanctuary status for supporting people fleeing war, persecution and serious human rights violations - the first county council to do so.

Many accolades were achieved by the council in 2024/5 including the 2024 LARAC Best Partnership award for improving recycling and reducing waste (jointly won with community action groups), and an MJ award for the "Cheers M'Dears" Community Support Service in Banbury.

The council's performance and insight analyst team won the best teamwork award in the ONS Datathon 2024 and a construction project to improve Banbury railway station won a Green Apple Environment Gold award.

**15. Oxford Friends of the Earth Campaigning for Cleaner Air in Oxfordshire.**

Oxford Friends of the Earth has been campaigning for cleaner air in Oxfordshire for several years. County and City councils accept that there is a serious public health issue. The challenge is now to bring air pollution down to safe levels.

How we can do that is set out in the Oxfordshire Clean Air Charter which we launched in June 2018.

Our ambition for change is to make Oxfordshire a clean-air county
• All areas should be at 'safe' levels (by World Health Organisation standards) by the end of 2020
• Air pollution-related mortality should fall by at least 50% by 2030

To do this the Charter calls upon the County, City and District Councils to agree and implement the following policies:

Control polluting vehicles

1. Restrict vehicle access in high pollution areas
2. Accelerate the development of Oxford's Zero Emission Zone
3. Introduce workplace parking levies and parking charges to favour less polluting vehicles
4. Enforce a ban on idling by taxis, buses, tour coaches and school drop-offs

Promote a sustained shift from car use to more sustainable forms of transport

5. Develop infrastructure that promotes shift from private vehicle use to cycling, walking and public transport
6. Introduce a freight consolidation center to enable fewer and cleaner delivery journeys

Create safer streets for walking and cycling

7. Develop a programme to make Oxford by 2025 the UK city where the highest percentage of people use walking and cycling for local journeys
8. Make streets friendlier to pedestrians and cyclists and create 'livable streets' Invest in improving public transport across the county.
9. Work with national agencies to invest in upgrading rail services across the county
10. Ensure that local transport plans focus on improving urban and rural bus services

The Charter also sets out targets for businesses, voluntary groups and individuals.

## 16. The Owl Conservation Project

The Owl Conservation Project works in the conservation of UK Owls through surveying, habitat restoration, expansion and networking, citizen science and education enabling the increased understanding of and connection with these amazing birds.

Owl Conservation Project

Owls are an indicator and umbrella species and their presence and population size is an indication of the health and balance of their ecosystem and its biodiversity.

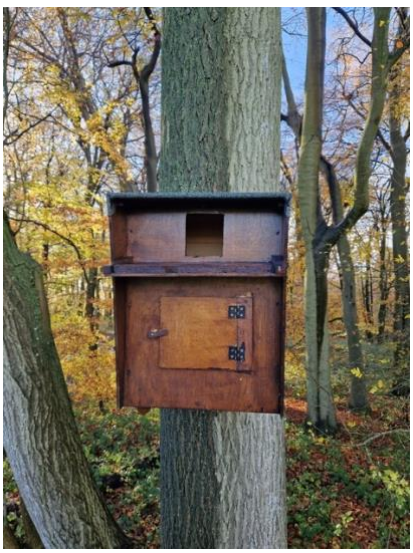
Part of our work is looking at our Owl populations and monitoring them enabling us to build a better picture of where they are, where they're not and their behaviour. We then use this information in formulating our habitat plans.

Our project now includes our habitat work (which also considers soil biology), surveying, installation and monitoring of nest boxes (including Barn Owls under Lu's Section 1 Disturbance Licence); population and behaviour surveys – we are working with the Little Owl Monitoring Network (a national project) to survey and collect data on our Little Owls to investigate the reasons for their significant decline and hopefully turn their fortunes around. Our plans for later this year include the surveying of both the Long-Eared Owls and Tawny Owls.

We are involved in the educational aspect of conservation undertaking various events, talks and workshops, together with the training and helping individuals and groups who wish to get more involved in this work.

Owl Conservations Projects in the Didcot and Wallingford Consistency this year include: Springline Talks in the Aston Tirrold Village Hall on 4th March and at The Pavilion, Cholsey on7th March. A number of Owl boxes are being installed in these villages and the countryside between them.

The Owl Conservation Project also featured at the Harwell Spring Fayre on 6th April, Earth Trust Spring Festival on 3rd & 4th May, Young Farmers Annual County Show at Blewbury on17th May.



Nest Boxes

**Harwell Campus.**

[Harwell Campus Sustainability.]

At Harwell, we have a vision to develop a sustainable Campus for world-class science & innovation, and to be recognised as a catalyst for sustainable growth. To put its Vision into Action, Harwell has identified 7 Key Focus Areas, aligned with the UN Sustainable Development Goals (SDGs), as the guiding principles for a successful, prosperous and sustainable Campus:


## Net Zero Carbon Buildings

Designing new developments for net zero operational carbon and reducing upfront embodied carbon by at least 50% by 2033

## Carbon Intensity Reduction

Reducing operational carbon emissions by 75% per square metre by 2033

## Biodiversity Gain

Delivering additional biodiversity enhancements, above and beyond statutory Net Gain

## Zero Landfill

Exporting zero waste to landfill and recycling over 90% of construction waste

## Sustainable travel

Reducing Average Commuter Emissions Level (ACEL©) by at least 30% by 2030

We aim to protect the natural environment and manage our estate sustainably, enhancing its biodiversity whilst creating a network of green spaces for people & nature.

This is being achieved by:

Avoiding the loss of biodiversity and preserving trees, as far as possible.
Managing our landscape to maximise its biodiversity value.
Delivering new and improved ecological habitats on Campus.
Securing significant biodiversity net gain through off-site contribution & partnerships.
Preventing air, land, and water pollution.

Our Award-winning Woodland Habitat Improvement Project (WHIP), designed by Adam Frost and delivered by Nurture Landscapes, is an example of how we're turning our commitment to Biodiversity into tangible action:

- BIG Biodiversity Challenge Awards 2023 – Habitat Creation: Project of the Year Award (Small scale biodiversity enhancement of up to 0.5ha)
- Gold Winner at The International Green Apple Awards for Environmental Best Practice 2023

**Harwell Based Projects of National and International Significance.**

**ISIS Neutron and Muon Source.**

ISIS Neutron and Muon Source based at the Rutherford Laboratory is a world-leading centre for research at the STFC Rutherford Appleton Laboratory. Our neutron and muon instruments give unique insights into the properties of materials on the atomic scale.

**National Quantum Computing Centre.**

The NQCC based at the Rutherford Laboratory is a national centre that focuses on translating UK research into innovation. We are addressing the key engineering challenges involved with scaling quantum computers, and we are engaging with industry, government and the research community to support the growth of the UK's quantum computing ecosystem.

**Particle Physics Department.**

We design, build and operate detectors worldwide, analyse data and support the UK particle physics community.

**RAL Space.**

RAL Space offers state-of-the-art facilities for the design, build, and test of space hardware and instruments. RAL Space is the UK's national space laboratory advancing the understanding of space and our **environment** for the benefit of all. Our activities and our facilities enable scientific research in disciplines such as **climate science**, space weather and astronomy.

**Scientific Computing Department.**

Our depth of expertise and knowledge across the full range of advanced computing technologies, combined with our global network of partners and internationally-renowned facilities, enable us to provide the vital skills and tools required for modern research and innovation.

**Technology Department.**

Our role at STFC is to empower researchers to solve global challenges through the invention, development and application of cutting-edge technologies. With multidisciplinary teams, we enable a diverse range of research projects and support large-scale facilities, delivering impact on a local, national and global scale. From specialist detector and electronics engineering to cryogenics, data acquisition solutions and accelerator engineering, we offer a vast array of expertise and can deliver specialist technology for niche environments.

**Research Complex at Harwell.**

Research Complex is the centre of multidisciplinary cutting-edge scientific research at the heart of Harwell's thriving science and technology campus. Building on synergies with large scale facilities at Harwell, our mission is to accelerate research collaboration and generate internationally leading science. Research Complex brings together research teams from universities and industry under one roof and we train the next generation of scientists and engineers.

**Quantum Detectors.**

Quantum Detectors is a small business leading the global market for electron detector systems – cutting-edge technology helping scientists collect vast amounts of data using light. UK Export Finance and Lloyds Bank are providing a new funding package that will enable the firm to invest in new technology and export even more of its British-made wares. In less than two decades, the Oxfordshire business has established itself as a supplier to major government labs across the world and become a partner to institutions like CERN, which runs the Large Hadron Collider.

**CERN.**

CERN is the UK's national laboratory for particle physics. UK technicians, engineers and physicists have been involved in all the major experiments and discoveries at CERN: discovery of neutral currents at Gargamelle bubble chamber, the discovery of the W and Z particles at the proton-antiproton collider, and the rich harvest of results from the Large Electron Positron (LEP) collider.

**UK involvement in international collaborations**

We also facilitate UK involvement in several international science collaborations. We see our many partners around the world as a trusted and valued part of our team, and as one that adds an extra dimension to our mission, the way we work and what we're capable of achieving. These include:

- European Organisation for Nuclear Research (CERN)
- Square Kilometre Array Observatory (SKAO).
- European Space Agency (ESA)
- European Southern Observatory (ESO).

## Space Solar.

**Space-Based Solar Power is the ultimate form of clean dependable energy.** Constant, clean solar power from space is unaffected by the weather, seasons, or time of day. Independent Government-led studies confirm that Space-Based Solar Power is now technically viable and economically competitive with other renewables. Space Solar is developing Space-Based Solar Power to provide abundant, affordable energy for Net Zero and energy security.

Space Solar, based at Harwell has a single corporate priority, which is to develop Space-Based Solar Power for the benefit of our stakeholders and the world. Our work will support the transition to Net Zero and provide global energy security, delivering a safe and secure world where clean, affordable energy is available to all.

The founders of Space Solar first established the Space Energy Initiative (SEI) to bring together the space and energy sectors and demonstrate to government the broad support for this ambitious concept. The SEI is now a collaboration which includes UK Government and over 80 organisations, with a shared belief in the potential and vision of Space-Based Solar Power. The SEI forms a world-class innovation and manufacturing powerhouse to develop and industrialise the technology.

The technology is highly flexible and can export energy to other co-operating nations without expensive fixed infrastructure such as underwater power cables. It can be switched rapidly to power green Hydrogen generation or water desalination plants, as well as providing electricity into the grid.

The system comprises a kilometre scale satellite in a high earth orbit. It features lightweight solar panels and a system of mirrors to concentrate sunlight onto the panels. The electricity generated is converted into high frequency radio waves, and the power is beamed to a receiving antenna at a fixed point on the ground below.

Creating a brand-new energy technology requires strong international collaboration. Successful development of Space Based Solar Power requires international collaboration to build enduring political and societal support. Legislation, technology development and finance are key areas for co-operation. International standards and regulation are needed to establish a sustainable and responsible framework to build and operate these systems securely and safely. We welcome discussions with international partners who share our vision.

**Spottitt.**

Spottitt is based at Harwell. Spottitt's platform enables effortless integration of remotely sensed data and derived analytics, allowing more frequent, more insightful digital monitoring of land and assets.

1. **Source Data Acquisition**
We fully coordinate the tasking and acquisition of source data with our trusted providers, selecting the most suitable sensors and spatial resolutions, determining capture dates and revisit frequencies, and defining coverage areas while optimizing client's monitoring budget. After obtaining the source data, we thoroughly cross-check and validate it to ensure it meets our quality standards.

2. **AI-Powered Data Analysis**
We conduct pre- and post-processing of the source data, implementing necessary corrections before analyzing it with our proprietary machine learning algorithms. These algorithms are designed to identify man-made and natural objects, and recognize patterns to extract relevant analytics. By automating the analysis process, we efficiently handle large volumes of data, uncovering details that may be challenging or subjective to detect manually.

3. **Decision-Maker-Ready Analytics**
The output analytics is delivered through our cloud-based platform, which displays a variety of data layers and monitoring metrics in both table and map formats. The analytics are directly mapped to your assets, providing clear visualizations and facilitating easy interpretation. Our platform offers a range of flexible, dynamic, and customizable reporting options, all in GIS-compatible formats, ensuring seamless integration with other data sources and platforms to enhance data utility.

**Protect Assets Health and Performance of Utilities by Making Them Less Vulnerable to Risks**.
With the increased number and severity of extreme weather events caused by climate change, infrastructure owners and operators face pressing challenges in ensuring network reliability and uninterrupted service to customers. Extreme heat and cold, heavy rains, and windstorms can drastically damage or completely destroy equipment, cause power outages and wildfires, and other safety risks to power grids, utility pipelines, and infrastructure assets. Renewable energy systems, such as solar and wind farms, can also be impacted by extreme weather events, affecting assets performance and output efficiency. Monitoring and understanding the changing climate and environmental conditions is essential to mitigate these risks and ensure optimal performance. Ageing infrastructure adds to the challenge, making it a priority for maintenance managers. Spottitt delivers satellite weather monitoring for utility assets. This data can help operators make informed decisions about infrastructure design, maintenance, and emergency response, improving the resiliency and reliability of critical infrastructure.

**Wildfire and Vegetation Monitoring.**
Spottitt is playing an increasingly vital role in wildfire and Vegetation monitoring. Vegetation management involves regular monitoring and controlling of trees and other vegetation growth and changes over time to identify priority areas for pruning, trimming, and removal activities. However, vegetation management is more than trimming trees and bushes. It is about keeping critical infrastructure secure from encroachments and wildfire risk to ensure safe, cost-efficient operations and uninterrupted service to customers.

## ESA Climate Office.

ESA Climate Office is based at Harwell Campus

The ESA Climate Office is the focal point for the Agency's climate-related activities and is based at ESA's ECSAT facility, Harwell in Oxfordshire, UK. It is part of the ESA Climate and Long-term Action Division within ESA's Earth Observation programme.

The United Nations Framework Convention on Climate Change (UNFCCC) is leading international efforts to combat climate change and limit global temperature rise to well below 2 degrees Celsius above pre-industrial levels, as set out in the Paris Agreement. In response to UNFCCC requirements for systematic monitoring of the climate system, ESA launched the Climate Change Initiative (CCI) research programme in 2008. Through the CCI, we are developing a suite of global data records of key components of the climate system, known as Essential Climate Variables (ECVs).

The climate-quality datasets produced by CCI are a major contribution to the evidence base used to understand climate change, which drives international action. Climate modelers use the ECVs to study drivers, interactions and feedbacks due to climate change, as well as reservoirs, teleconnections, tipping points, and fluxes of energy, water, carbon, and predict future change. A total of 55 ECVs have been identified by the Global Climate Observing System (GCOS). Information derived from satellite data can contribute to more than half of the ECVs, and the CCI research programme addresses 27 of them.

Recent Reports:
June 26, 2025 Cracking the climate code: Six research projects lead the way

June 25, 2025 First accurate records offer insight for coastal community protection and climate resilience strengthening.

June 24, 2025 Integrating tipping points into climate science: A call for enhanced monitoring and modelling

June 23, 2025 ESA's Climate Change Initiative: A European response to support climate action