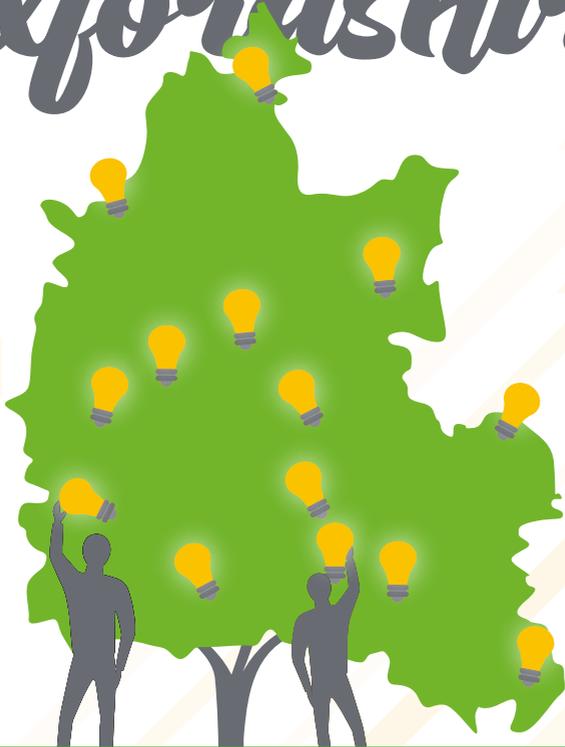


Oxford Friends of the Earth

FAST FORWARD *Oxfordshire*



**A ZERO CARBON OXFORDSHIRE IN 2040
AND HOW WE GET THERE**

A RESPONSE TO THE CLIMATE EMERGENCY CHALLENGE

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CREATING A SAFE FUTURE FOR OXFORDSHIRE

Climate change poses a massive threat to our future here in Oxfordshire and across the world.

We need to act at every level - we need the United Nations, governments and large corporations to act responsibly to reduce emissions fairly and urgently. Changes are being made, but the pace and scale of change needs to accelerate. National plans need to support local action, in every city, town and village. **We need Oxfordshire (and everywhere else) to move 'fast forward' now.**

Tackling the climate breakdown is partly about avoiding disaster. But we should recognise that making the right choices to deal with this challenge can also deliver a very positive future - clean energy and clean air, better transport systems, better food and health, more space for nature to thrive, and an end to fuel poverty and cold homes. The changes we need to make offer the opportunity to deliver a fairer and healthier society.

We face a very uncertain future. This publication cannot cover every aspect of what will happen because of our changing climate. Worldwide issues will certainly impact on Oxfordshire and on all our lives.

Oxford Friends of the Earth know that there are solutions to the climate crisis. What we offer here is what our councils and communities (and our government) can do to give us all the best chances for a better future.

THE CLIMATE CRISIS THE NEED FOR ACTION NOW

This publication is about how we move 'fast forward'.

It looks at what our society might be like in Oxfordshire in 2040 if we have tackled the climate crisis effectively and are avoiding the worst consequences. It covers **Homes and settlements, Transport, Work, Energy, Food, and Nature.**

Alongside these visions are policies for each of these six issues that we need to implement now if we are to have a good chance of delivering that positive future. Some policies need national action but many can be taken forward by our councils.

Finally we highlight changes that are happening now - examples of what cities and communities across the UK and around the world are already doing that show how we get to a much safer future. In many cases national change is being led locally, and here in Oxfordshire we are well placed to deliver real innovation.

We offer this report to our councillors, and decision-makers in the private, education, health and voluntary sectors. We urge you to use all the powers you have and act now for all our futures.



This report is short and covers a range of issues. If you'd like to know more about the ideas, policies and actions set out here, visit our website: www.oxfoe.co.uk/FastForward

Key words and phrases in the report that may need explaining are highlighted like ***this*** and can be found in the Glossary on the website.

OUR SOCIETY NEEDS TO CHANGE

Climate change poses a massive threat to our future here in Oxford and across the country. We are two 15-year-old girls so for us the threat is even worse. It is our future at stake. It is us who will suffer. It is our children that will suffer.

Together we pioneered work to make climate change a part of the education system and Labour added this to their policies. This is one step but it's not enough. It is not just the school system that needs to change but our whole society.

It's not something we can ignore anymore. Not something to push to the side. Projects like this Oxford FoE 'Fast Forward' report are what will make the change; they are what will help combat the climate crisis. Thanks to actions like this we will have a better future but only if everyone works together to make the change we need to see.

This is why we, the youth, support this cause. It is why it's so important.

Lucy Gibbons

Izzy Lewis

Lucy and Izzy are part of the Oxford Youth Climate Action group who launched a national petition about better education on climate change that has been signed by over 80,000 people.



OUR HOMES AND SETTLEMENTS

Life in 2040

Suravi is leaving the house in Blackbird Leys where she has lived for almost 15 years. It was built as part of a major regeneration programme in 2026, is owned by the council's housing company, and has recently been improved to bring it up to the 'passive house+' standards of the 2030s. As a result her fuel bills are near zero, leaving more money for other essentials.

The solar roof provides most of the power, and heat comes from a district system funded by the Community Infrastructure Levy (CIL). Surplus electricity generated from the local area is managed by the community-owned Leys Energy company. Shutters on the houses keep heat in (and out in summer) while the water system stores rainwater for dry periods and can cope with intense storms.

She likes the area - the park and woodland, now owned by a Community Land Trust, link to tree-lined cycle routes that she uses to get out into the countryside or down to the Thames. New housing nearby is of mixed tenure, with lifetime housing and *work-live units*, built by local companies employing a highly skilled workforce, supported by ongoing technical training.

Following the death of her partner, she is moving into a 'co-housing' project that is designed for the needs of - and largely run by - older women. It's a big change, but the workspaces there will enable her to continue her work as a carer, and her tutoring work at a family centre.



Policy goals

We need to ensure all existing homes are well insulated to at least 'EPC C' level by 2035 at the latest, and to have eradicated fuel poverty by the same date. Sooner than that, all new buildings need to be zero carbon and this must be a planning condition.

Oxfordshire Councils must

- + Require zero carbon standards for all new homes and other buildings in Local Plans from now (see also Energy section).
- + Ensure that all homes have access to safe and attractive open spaces, such as gardens, play spaces and parks, in line with national targets.
- + Establish and lead local partnerships to coordinate area-wide home retrofitting programmes to reduce energy use and tackle fuel poverty in existing homes, starting with the most deprived areas first.

National government must

- + Revise the **National Policy Planning Framework** to require zero carbon and **water-neutral** developments.
- + Ensure that **Land Value Uplift** income from developments is ploughed back into new infrastructure to create genuinely sustainable homes and settlements.
- + Develop financial support and revenue funding to enable local partnerships to deliver mass energy retrofits of existing housing as part of a wider publicly funded national green infrastructure programme or **'Green New Deal'**.

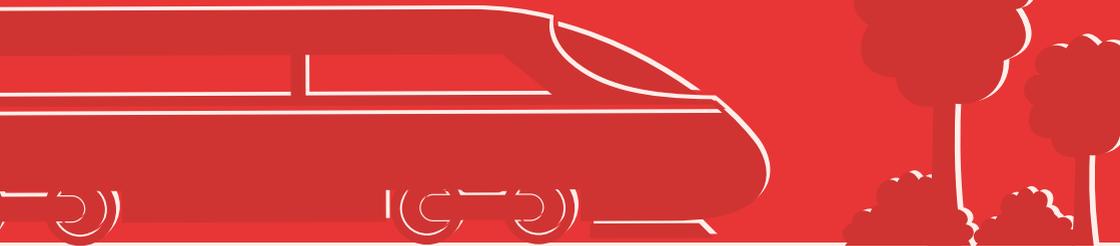
Changes happening now

Derwenthorpe, York

Derwenthorpe has been created as an edge-of-town extension to allow residents to link to the existing infrastructure. It is a development of 'attractive, affordable, eco-friendly' family homes in a mixed-tenure community set up by the Joseph Rowntree Housing Trust. The community uses a district heating system so that heating and hot water is efficiently distributed to all homes by the predominantly biomass boilers in the village's centrally located 'Super Sustainability Centre'. Local amenities include schools, doctors' surgeries, dentist, a library and a post office. It is served by excellent transport links into York and beyond. <https://www.jrht.org.uk/community/derwenthorpe-york>

Older Womens Cohousing (OWCH)

OWCH has been created by a group of women over 50 in a new, purpose-built block of flats in North London. Occupants enjoy their own accommodation, personal space and privacy, and have common areas for joint activities. There are 25 self-contained flats with shared communal facilities and gardens, managed on cohousing principles. 17 flats are owned by their occupants on 250-year leases; eight are for social renters on assured tenancies. www.owch.org.uk



TRANSPORT

Life in 2040

Running her gardening business used to be a nightmare for Suzanne; having to carry tools and a lawnmower meant she couldn't really cycle or use a bus. Often she couldn't park near enough to clients because of the parking zones, so ended up just taking on work outside the city. It's so much easier now. There are far fewer cars because public transport is so much better, with local services meeting up with longer distance buses and new MetroRail services (with new stops at Kennington, Littlemore, Kidlington and other places).

New cycle routes are mainly away from the main roads, and the main roads are quieter with buses, electric delivery vehicles and taxis making up much of the traffic. Suzanne tries to time her Oxford

visits to only pay the £15 vehicle charge once a week. Her partner Bob is a plumber and she never thought he'd have a good word to say about paying to drive in, but he says it's well worth it for the emptier roads. They both have electric buggies (small vans really) so pay less than the few who still use petrol.

Their son Chris is glad he never learnt to drive. He says a car would be more of a liability than any use. He is off out to dinner tonight on his electric bike. Many people don't own cars any more but rent them as needed. The one short bit of the Expressway that got built is a complete white elephant. They're going to turn it into a wildlife corridor and linear park.



Policy goals

We need a transport system that works for everyone - that delivers better public health, a zero carbon economy and fair access to services for both urban and rural communities.

Oxfordshire Councils must

- + Prioritise investment in integrated cycling, walking, and public transport systems, including electric buses and taxis; a county-wide rapid transit network; electric car and bike charging points; and a network of good cycle routes within and between all larger towns.
- + Act (with government support) to reduce car use through measures such as road pricing / congestion charging, workplace parking levies and constraining road space, supported by re-regulating bus services.

National government must

- + Upgrade of rail infrastructure to include increased capacity and electrification between Didcot and Oxford, completion of the East-West Rail link to Cambridge (incorporating electrification), re-opening of the Cowley line, and new stations to service new growth / employment areas.

Changes happening now

'Liveable Neighbourhoods' in London

The London borough of Waltham Forest has pioneered the 'Mini Holland' scheme to encourage cycling and walking using integrated measures common in Dutch cities. Road and pavement design changes were introduced to reduce traffic. On 12 key roads in the 'village' area of Walthamstow traffic fell by 56 per cent. Research shows that this has led to more people walking and cycling; despite initial concerns from local businesses the area is thriving.

<https://www.theguardian.com/environment/bike-blog/2018/jun/26/mini-holland-schemes-have-proved-their-worth-in-outer-london-boroughs>

Accessible Arbroath – turning roads into cycle and walk-ways

Arbroath is a Scottish town that has been split into two by the busy A92 dual carriageway. The Accessible Arbroath plan will convert two lanes of the road into a new segregated cycleway and widened pedestrian routes. New crossings will make it easier for people to cross and improve access to the seafront, while also improving access to the train station and bus routes.

<https://www.showcase-sustrans.org.uk/projects/Arbroath-active-travel-active-town/>



WORK

Life in 2040

Thanks to the new tramway connecting his eco-home development to the centre of Oxford, Bill has extra time in the morning to play with his children and work on his project with colleges in Southern India. As a contributor to the Free University, Bill and his Indian colleagues have developed a guide to plumbing that enables homes to recycle rainwater, and a way of sharing expertise that overcomes cultural barriers using low-cost video.

The MetroRail service takes him from Oxford Central to the innovation centre at Abingdon. His daughter Amy is based near there, working hard over recent years with a cooperative *retrofitting* homes and offices to save energy. The cooperative, which employs a range of trades people, has expanded fast over recent years due to the increased demand resulting from previous government investment and

local council procurement policies. Bill uses his *Metrocard* to pay for a planned train trip to the Lille branch of Oxford University. His partner Mia is too busy to join him this time, but there are always volunteers in their cohousing project to look after their children if they are both away.

Mia works for the expanding 'healthy living' services at the new Oxfordshire hospital. With less demand on the NHS now that diet, lifestyles, homes and air quality have improved, staff have time to support the work that helps keep people healthy and reduces pressure on the clinical and emergency services. His mother Suravi, who had once complained of loneliness, now works as a tutor in the family centre in one of many multi-lingual schools.

Policy goals

We need to create and maintain high quality green jobs for unskilled, semi-skilled and knowledge workers as part of the transition to a fair zero carbon future.

Oxfordshire Councils must

- + Focus the county industrial strategy and related plans on building a **'circular economy'** aimed at minimising environmental impacts and improving wellbeing rather than just maximising economic growth, and on creating high quality green jobs that benefit all workers alike.
- + Develop local procurement plans as an incentive for rapid carbon reduction by focusing their purchase of goods and services on local businesses that meet agreed carbon reduction targets and / or have a clear social / environmental purpose such as cooperatives.
- + Create (with partners) a local **Green Infrastructure Bank** to provide investment finance for economic projects with ambitious carbon reduction targets.

National government must

- + Develop a 'Green New Deal' strategy to decarbonise the economy and eradicate inequality via public investment in clean energy, warm homes and affordable public transport that creates decent jobs and benefits for all.

Changes happening now

Local procurement in Preston

Preston City Council are working with CLES, the Centre for Local Economic Strategies, to harness the spending power of local 'anchor institutions' such as councils, universities and the police. In 2012 only 5% of total spend was with local suppliers. After six years of work on procurement policies and 'Community Wealth Building' that figure has gone up to 18% and about 80% of spend is with suppliers from across Lancashire, an increased spend in the county economy of nearly £200 Million.

<https://cles.org.uk/blog/local-wealth-building-harnessing-the-potential-of-anchor-institutions-in-preston/>



ENERGY

Life in 2040

It was windy last night, so Amy is pleased to see that her electric car has been charged up overnight for only a few pence, and that the battery in her garage has also filled itself up on cheap overnight electricity. Even better, Amy knows that this electricity has been generated by the local wind farm that she invested in. She is a bit frustrated that her village is still being supplied with expensive natural gas, when others nearby have recently been switched to hydrogen.

Luckily the measures that she and Jeevan have been taking over the last ten years for improving the efficiency of their old farmhouse mean that their heating cost has reduced dramatically. She uses her car - manufactured at the world-class

Cowley electric vehicle plant - because she's working at three different sites before going for a late evening. She drops Jeevan at the nearest Metro station where he heads to his job at a Didcot primary school.

She works with a busy cooperative retrofitting homes and offices to save energy. They work closely with local councils (whose new procurement policies support cooperatives) to provide energy assessments, insulation, new energy efficient boilers, solar PV and advice about how to reduce energy consumption. Energy researchers at the universities support them and others by holding regular open events to keep people up to date with fast-moving innovations.



Policy goals

A clean fossil-free energy system will be an essential part of the transition to a zero-carbon economy. Some progress has been made in recent years, but faster action is needed. Fossil fuel power generation should be phased out by 2030.

Oxfordshire Councils must

- + Identify areas suitable for renewable energy and require the integration of renewable energy generation in all new developments.
- + Develop and implement an energy demand reduction strategy with countywide targets. This should include a mass home retrofitting programme to reduce energy use in existing houses including energy efficiency improvements, solar PV and behavioural programmes, starting with the most deprived areas first.

National government must

- + Develop a clear Clean Energy Strategy that includes a reversal of the decision to prevent new onshore wind, support for community energy generation, and phasing out of fossil fuel extraction.
- + Phase out oil-fired boilers (still used in much of rural UK) and invest in replacing them with heat pumps or biomass boilers.

Changes happening now

Low Carbon Hub

The Hub is an Oxford-based social enterprise that has successfully developed 38 clean energy systems across the county, working with schools, councils, social housing, businesses and communities. They are funded in part by local people who have invested in their work, and surplus funds generated are used to fund new local carbon-cutting projects. Each year, Oxfordshire spends £1.5 billion on energy. By supporting energy efficiency and local power generation, the Hub helps ensure that more of this money stays local.

<https://lowcarbonhub.org>

Project LEO and Project ERIC

The new Project LEO (Local Energy Oxfordshire) will show the potential for people and communities to become active in the energy systems of the future. It will look to create opportunities for local communities to trade the energy they generate, use and store it at a local level, and will link around 90 low carbon energy projects. It builds on the success of Project ERIC, which worked with homes in Rose Hill to show how communities can generate, store and use more clean electricity within a local electricity network.

<https://www.energy.ox.ac.uk/wordpress/project-leo-local-energy-oxfordshire/>



FOOD

Life in 2040

Chris and Amy meet in their favourite restaurant and decide that, unusually, they'll have something from the restaurant's 'meat' page at the back of the menu. Like everyone else, they are so used to eating vegetables, fruit, nuts and grains that meat feels quite strange and different.

Amy tells Chris about the peach farm next to the house where she is upgrading the solar power supply. Chris brags about the sweet potatoes in his allotment. As they talk about food, they reminisce about how so many people used to be obese, and supermarkets offered everything all year round. Now shops provide much more locally grown produce, but

meat is more expensive, reflecting the real environmental and health costs of producing and eating it. Almost no food is thrown away because it is valued more. Emergency food banks are rare; the benefit system has been adjusted so that nobody needs to go hungry.

Oxfordshire now has more woodlands and mixed farms, with land devoted to crops for humans not animals. Chris and Amy talk with restaurant staff about where their dinner has come from, though they already know that the cows and sheep have been fed largely on grass grown without artificial fertilisers, and raised to high welfare standards.



Policy goals

Changing what we eat and how it is produced will help achieve our zero-carbon target. Eating more locally grown food, fruit, vegetables, grains and pulses, and less meat, will also benefit our health, our economy and our countryside.

Oxfordshire Councils must

- + Ensure that all schools, hospitals, care homes and other institutions deliver meals that accord with the **'Eatwell'** and **WWF 'Livewell'** guidelines on healthy eating and that the majority of options on menus are healthy and plant-based, with less and better meat.
- + Retain existing land holdings and make these available where suitable for community-supported agriculture and food businesses.
- + Require food growing provision (such as roof gardens, community orchards and edible landscaping, including nut and fruit trees) to be incorporated into all new developments; and support moves to retrofit existing developments with such provision.

National government must

- + Apply Value Added Tax to meat and high fat/sugar foods, as it already does to other luxury foods.
- + Design and implement a transition plan to sustainable, agro-ecological farming (see Nature section).

Changes happening now

The UK Government's Sugar Drinks Industry Levy

The UK Government's Sugar Drinks Industry Levy of April 2018 requires producers and importers of soft drinks that contain added sugar to pay 18-24p/litre. This has already resulted in a 30% fall in the number of high sugar drinks on the market, and a 30% reduction in sugar in soft drinks.

Tamar Grow Local

Tamar Grow Local is a 'not for profit' company in Devon which works with commercial growers to increase the availability and consumption of local food, support local people to grow their own food, and raise awareness of the benefits of local produce. It is one of many local food projects across the UK linking growers and consumers.

www.tamargrowlocal.org/

Good Food Oxford

Good Food Oxford is a network of 130 organisations working together to improve Oxford's food system - making it healthier, fairer and more sustainable. Network members have all signed Oxford's Good Food Charter - a collective vision of a better food future for Oxford - and have also pledged on what their organisation can do to help deliver this vision.

<http://goodfoodoxford.org/>

NATURE

Life in 2040

It's been a warm afternoon in the woodlands north of Wheatley, where Harry and Jeevan are learning how to install the latest smart systems that monitor bee colony health. Harry is on his 'climate action year' - a popular pre-university choice for the last 15 years. He is working in a recently planted area in part of Bernwood Forest, which is now expanding after 400 years of shrinking. It's just one part of Oxfordshire's 20-year-old Nature Recovery Network that links a patchwork of green spaces, woodlands, rivers and wetlands across the county and supports the farmlands around them.

Electric bikes take them back to base via the 'greenway', round the south side of the Otmoor marshes and lakes. From there the wooded route curves down past market gardens near the Cherwell, offering quick and easy access to Marston and East Oxford through the flourishing water meadows. An evening meet-up of the 'Inter-Generational Nature Team' gives them a chance for a virtual reality tour of the upper Thames, where wildlife from beavers to curlews are flourishing thanks to careful management of the reserves and protected sites, and of the 'rewilding' going on in other areas.



Policy goals

By 2040 we need people and nature to be thriving together. People will feel healthier and happier. Oxfordshire's next generation will understand that the natural world is the foundation of our wellbeing and prosperity: that we depend on it, and it depends on us.

Oxfordshire Councils must

- + Include in local Plans a local nature and ecosystem restoration plan (Nature Recovery Network) to reverse and restore habitats and species, and ecosystem quality.
- + Commit to doubling tree cover on council owned land and update local planning strategies to support doubling of tree cover across the local authority area.
- + Require all new developments to provide **100% biodiversity net gain**.

National government must

- + Enact a new Environment Act to support Nature Recovery Networks, put space for nature at the heart of our farming and planning systems and double tree cover (linked to a new Agriculture Act that will place a greater emphasis on farmers to be rewarded for improving the natural assets of their land).

Changes happening now

The Wychwood Project

The old royal hunting Forest of Wychwood once covered much of West Oxfordshire. The Wychwood Project is a charity working with local people to understand, conserve and restore its rich mosaic of landscapes and habitats. The Project works across 120 square miles and 41 parishes and includes some of Oxfordshire's most important areas for wildlife. They manage four key conservation sites and have set up eight community woodlands. Their aim is that by 'bringing awareness of the identity of the Wychwood Forest to people, this will create a sense of belonging which in turn leads to a desire to care for it'.

<http://www.wychwoodproject.org>

Woodberry Wetlands

This site is a haven for wildlife and people in Hackney, consisting of 11 hectares of reed-fringed ponds and dykes next to the Stoke Newington reservoirs. It is accessible to everyone and was developed directly alongside the regeneration of the tower blocks of the massive Woodberry Down social housing estate. 'Making the most of the water' was a key theme in the redevelopment masterplan. The site was opened by Sir David Attenborough in 2016 and is managed by London Wildlife Trust.

<http://www.woodberrywetlands.org.uk>



MAKING IT HAPPEN LOCAL CAN LEAD

The UK is the first major economy to set a **legally binding net-zero target**. Making this happen will have a cost. The UK Committee on Climate Change (CCC) suggests that cutting our greenhouse gas emissions by 100% by 2050 compared to 1990 will cost up to 1-2% of GDP annually until 2050. That money will be both an investment in our future and an insurance policy against climate disaster. It will create jobs, support innovation, and change how we live, work and travel. The cost of inaction is likely to be much higher.

Current national policies are wholly inadequate to deliver what is needed, and national government must act. New Environment and Agriculture Acts are under discussion - these must be a priority to support our rural economy and safeguard our biodiversity - while increased support for renewable energy and zero carbon targets with consistent policies over the longer term will also be essential.

Major development is expected in Oxfordshire. We cannot wait passively for action by government. Our local councils, enterprises and communities need to steer and lead those changes, starting now.

Reducing emissions to zero while the economy grows is challenging but feasible. Zero carbon homes, better walking and cycling infrastructure, 'circular economy' jobs and more woodlands may





cost more in the short term, but in the long term will bring many benefits – new jobs, improved health, safer communities and a better environment.

Direct investment is needed to cut emissions from housing and transport – two key local authority responsibilities. Local authority plans, briefs and frameworks must specify the environmental and social benefits to be secured from both new and existing developments, and play an active role in making change happen. This will require changes to the planning system,

and a new investment bank to support green infrastructure developments.

How we use and generate energy is at the core of moving to zero. The success of the Low Carbon Hub in Oxfordshire has shown how popular support, along with public and private expertise and investment, can work together to turn good ideas into real change.

We need to get to 'zero carbon' well before 2050. **We need to commit to action, and to accelerate that action, to move 'fast forward' into a safer, cleaner future.**

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Over to you? Over to all of us....

This report highlights the need for rapid change and that we all have a role to play. We are the people who have to act at a unique point in history. Leaving this for the next generation could take matters past the 'tipping point' into disaster.

If you like the vision set out here and the policies that go with it, then we urge you to contact your local MP and councillors, to let them know how you feel about the climate crisis and about your ideas on how they should act to improve our environment.

Many of the changes set out here won't just happen. Changing how we travel and how we eat needs new policies and new structures. But people will need to act as well. It's about all of us - this is not 'someone else's problem'. Our own lives are part of the process of change.

We can also deliver change together. Oxfordshire has many environmental groups who will welcome your involvement. We also have many thousands of community groups, from sports clubs and book groups to community associations and lunch clubs. We're all heading for the same future and we all have a part to play in making it work.

You can resolve to act now - go to Oxford Together on Climate Change - www.change4climate.uk - for ideas on personal action and to record your commitment.

This publication has been developed by Oxford Friends of the Earth. We are a voluntary group of people living in Oxfordshire working for positive change that makes a lasting difference to our environment.

We welcome new members - find out more at www.oxfoe.co.uk and keep up to date with our work by following us:

Instagram: www.instagram.com/oxfoe/

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