

LOW CARBON COMMUNITIES HANDBOOK

This handbook has been produced to assist local community responses to climate change in Oxfordshire, though much of the material will be useful for community projects across the UK. It is regularly updated, and all comments are welcome! Please email peter.lefort@resourcefutures.co.uk if you have any suggestions or questions. The handbook is anti-copyright. Please feel free to copy, adapt and distribute it as long as the final work remains anti-copyright.

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1. RUNNING A GROUP

This handbook is for already formed groups, to help them grow in size, ambition and possibility, wherever their starting point. For a step-by-step guide to how to set up a Community Action Group in the first place, read the CAG Quickstart Guide, available from the Low Carbon Hub website.

1.1 Engaging the community

“It starts when you say We and know who you mean, and each day you mean one more”

(Marge Piercy, *The Low Road*)



How do a few concerned people go from ideas to a group? It doesn't take much to get the energy rolling, so think who you know nearby who is interested in these issues, involved in community affairs, or involved in Community Led Planning projects, as they will be key connections to others.

Some groups have started by bringing a few friends together over a drink or some food to think about how they can take action locally, whilst others have advertised by posters in the newsagent or a note in the village magazine/newsletter. From this some groups have an open event, such as a talk or a film, and ask people to come along to follow up meetings.

A good place to start are the blogs on the Low Carbon Hub website:

Setting up and running a climate change community group

<http://www.lowcarbonhub.org/advice/setting-up-running-a-climate-change-community-group>

Powering down

<http://www.lowcarbonhub.org/advice/2011/11/14/starting-a-greener-living-initiative-in-your-community>

Here are some more resources to help you:

The CAG Quickstart Guide

<http://cagoxfordshire.org.uk/downloads/category/1-cag-admin-files>

A step by step guide to setting up a Community Action Group

Low Carbon Hub

<http://lowcarbonhub.org>

Access to services, resources and advice on renewable energy and energy reduction projects for community benefit.

How to plan and deliver a successful community climate change project

<http://bit.ly/JEQG91>

Effective planning will help make sure your community project is a success. This guide will help you to get the most out of your community project.

Community Led Planning projects

<http://www.acre.org.uk/our-work/community-led-planning>

Website enabling you to check which communities are involved in Community Led Planning in the South East.

Holding events

Events are crucial to gauge the interest in the community and to invite people who might not ordinarily consider getting involved. Before planning the event it's a good idea to ask friends and colleagues what would encourage them to come along, then try to provide it. People will come for many different reasons – some to find out what action they can take on climate change, some to find out what they can do personally, some checking it out for interest, and others coming because they want to meet new people.

Make it fun and interactive

Some people hear the words 'community action on climate change' as 'doom-mongering guilt trippers wanting to stop me from having fun' – so it's up to you to prove otherwise and use your imagination to attract people along. Our best thinking and creative solutions happen when we're stimulated and enjoying ourselves, so think 'social event' instead of 'meeting' and you're on the right track.

Ensure to have a good balance of information and interactions: get people talking to each other as much as you can, and have a variety of activities. How about serving popcorn and a glass of wine with films? Beer and cake at meetings? Some groups have asked their local suppliers of beverages (including breweries, juice makers and their local Co-op store) to sponsor them through providing refreshments at events.

Is there anyone local who could give a climate change overview? Ask them if they could contribute. You could ask someone from a neighbouring climate change group (see Appendix), someone from your Local Authority (see Appendix) or local climate change speakers (see Section 3.4)

Case Study: Film screenings with a difference

Low Carbon Wolvercote launched with a buzz back in 2007: "A sell-out crowd came to our village hall to launch the Low Carbon Wolvercote project on Friday 27th April 2007. With "No room at the Low Carbon Inn", the local Reverend was Master of Ceremonies... introducing local renowned author Mark Lynas (High Tide, Six Degrees) and his "Wolvercote Weather Forecast, Year 2049". A quiz, beer and cakes, and the Low Carb Diet top 10 hits kept the climate buzz going all evening."





Film screenings are a great way to introduce the whole topic, or ways that people are responding to climate change. Some films are more upbeat than others, so take a look at the ones available. See the details in resources for what you can borrow in Oxfordshire.

Transition Henley screened an Inconvenient Truth, but with a difference. They showed short snippets of the film, and interspersed the snippets with small group discussions, which was a great way to get the main messages of the film across, and encourage a lot of group interaction.

For a range of opinions, why not invite a range of local people who will have different experiences and expertise on climate change. This can be a great way to get a range of experiences and opinions about the impacts and actions needed, help people see the problem from a variety of angles, and counteract the idea that only certain people care about, are impacted by, or can take action on climate change.

If you're doing an info based event, such as a film screening or talk, make sure to leave time and space for people to talk and share their responses afterwards.

Interactive Ideas

-  **Talking in pairs**
Ask people to turn to the person next to them or someone they don't know and briefly discuss how they felt about the film/talk, what they were struck by, and what questions they have. This gives people a chance to think through and process thoughts and ideas before open questions, and can help speed up the discussion time.
-  **Small group discussions**
You could have short snippets of talks about some key areas (for example home energy, transport, food, waste) then have the group spilt up according to which are they'd like to find out more about, and have clusters of chairs in different parts of the room.
-  **Get out the post-its!**
Ask people to write what areas they'd like to focus on or what questions they have on post it notes. Cluster them on large sheets of paper to capture ideas and identify where the energy lies.
-  **Try 'Open Space'**
Many Transition Initiatives use a form of meeting technique called 'Open Space', whereby the agenda is set by participants suggesting topics to talk about, and many discussions are held simultaneously. The Transition Network writes: 'In theory it ought not to work. A large group of people comes together to explore a particular topic or issue, with no agenda, no timetable, no obvious coordinator and no designated minute takers. However, by the end of each meeting, everyone has said what they needed to, extensive notes had been taken and typed up, lots of networking has had taken place, and a huge number of ideas had been identified and visions set out.'
The essential reading on Open Space is Harrison Owen's Open Space Technology: A User's Guide: http://www.openspaceworld.com/users_guide.htm.

Outreach and engagement ideas

'Involving and engaging a local community in discussion, debate and actions to mitigate the effects of climate change is challenging, rewarding and frustrating!... it's about changing hearts and minds and promoting a positive 'can do' approach which will lead to permanent and lasting changes in behaviour, habits and attitudes'

Candy Kerpache, Challenge North Leigh.

People are motivated to take action on climate change for many different reasons. We've found it effective to lead into climate change from where their interest already lies. Put simply, make climate change...

Relevant

Make it relevant for the audience that you're trying to attract. If there's a strong local group, have a think about what's relevant for these groups, how they might be impacted, and what their involvement could look like.

Balanced

If you want people to take action, try to consider how this could be tied into their existing actions, and try to balance the urgency of the situation, with a chance for their agency.

Understandable

Go for maximum inclusivity by ensuring that any jargon is explained in any communications you do.

Visual

Try to use pictures over words. Evoke pictures in people's minds.

Local

What's precious and resonant locally? How could climate change impact different aspects of your community? What links are there between your community and other parts of the world?

Skills workshops:

If getting people to take action to improving the planet seems too large a task, then you can start with getting them to take action to improve their own lives and, by proxy, their community. You could try organising a series of skills workshops, to introduce people to topics in an involving way. To give you an example, read the below case study from Abingdon Carbon Cutters.

Case Study: Abingdon Carbon Cutters 'How To' meetings organised between 2009 and 2010

All the 'How to' Workshops were well attended with a minimum of 15 people and quite often 30 or even 45. A core group of regulars attends with a variety of others including newcomers, depending on the topic. The venue was a very pleasant setting in Abingdon. Homemade cake using local ingredients where possible were served.

Topics included:

How to make a good compost heap

Led by a Master Composter who gave a practical demonstration, which was very participative. This transformed a mediocre compost heap into one that produces fine compost in a fraction of the previous time.

How to grow a lot of food in a small space

Talk with practical examples of container vegetable growing from Robert Longstaff of The Oxford Garden Project (www.oxfordgardenproject.com), a local organic grower.

How to waste less food

Talk from Emma of Love Food Hate Waste with advice on cooking with and storing leftovers!

How to farm for the future

How to slash your fuel bill

Talk and power point presentation by Mark Saunders from the Vale of White Horse District Council.

How to look after your bike

Discussion and practical demo (in the garden) using bikes brought in by participants.

How to plug into solar power

Talk from Chris Jardine of Oxford University Environmental Change Institute.

How to live a sustainable life using Permaculture

Talk by Sophie and Martin Bowes on basic theory. Contact www.oxfordpermaculture.org

Reflection on the 'How To...' events:

Most of the meetings attracted about 30 people and what is fascinating is that different people came to different topics. All were deliberately very participative and people loved the chance to share their knowledge and experience. We used to start by asking everyone to turn to the person sitting next to them and spend a minute telling them why they have come and what they hope to gain from the evening, then after the talk ask them to chat again for a few minutes with their initial reactions. People now do this without being formally prompted!

We have the speaker for an hour then break for cake, it is during this time that informal links are made. Coffee/tea and delicious home-made cakes have become an integral part of the evening – so much so that we are thinking of widening the circle of potential cake-makers.

If you don't have the time, resources or ideas to put on your own events, remember that there are often other local groups, and other events, that you can work with.

Piggy backing on existing events is a great way to spread the word about your group, attract more people, and encourage people to take action. Check out when the village or school fetes are and set up a fun interactive stall.

Stalls at fetes

Instead of organising your own event, hosting stalls and tables at existing fetes or farmers markets are a great way of engaging people who might not be able to get out to an evening meeting.

Things that work well on stalls are:

- ➔ Information about energy and energy efficiency, such as case studies of Eco-renovated homes.
- ➔ Hands-on things to look at and touch, such as low energy light bulb libraries, or samples of insulation materials.
- ➔ Posters and displays that people can interact with, perhaps with Post-it notes so that people can write what they would like to see happening locally.
- ➔ Asking questions and provoking discussions. For example, asking people how they feel about climate change or what step they'd like to take next.

Make stalls interactive

Sustainable Wantage held a stall at the Dickensian evening at Christmas. They found that having demo mini solar panels and insulation made out of plastic bottles were good talking points, alongside a game: people had to pay money – they hid £5 in the occasional low energy light bulb box, got people to pay £1 and pick a box. This worked really well; it got people to the stall and they then were more likely to engage and look at other materials.

Resources for stalls

The Community Action Group Project have two kits which can liven up any stall:



Cycle Powered Smoothie Maker

This kitted out bike allows users to make smoothies while pedalling. A great way to engage young (and old) children, and you can even raise donations whilst giving away the smoothies.



Apple press

Make fantastic fresh apple juice with this press, mill and pasteuriser. A great way to use up your community's apple glut towards the end of the year while engaging people who might not otherwise be interested.

Contact the CAG Project for more details: <http://www.cagoxfordshire.org.uk>.

1.2 Legal issues

Insurance

If you are running any kind of public event, you will need insurance. Many organisations that you might be working with will insist on seeing your insurance documents before hiring out a venue or closing a road. The amount and type will obviously depend of the kind of activities that you're running, but the minimum you will need is public and employer (read "volunteer") liability. You can get varying levels of cover on both of these, cover for £10m public liability and £2m employer liability, should be enough for most events.

These liabilities cover you against accidents to members of the public, your volunteers, or damage to property that occurs as a result of your activities. It also covers any related legal costs. For more information about what liability insurance covers, http://en.wikipedia.org/wiki/Liability_insurance.

Oxfordshire groups that are part of the CAG Project are automatically covered by their own network policy and so it's worth getting in touch to see if they can help, contact peter.lefort@resourcefutures.co.uk.

Another option for community groups is Your Square Mile. The Your Square Mile mutual is the first of its kind and is open to everyone aged 16 or over in the UK. Amongst a whole host of other benefits, the mutual offers £1m of Public Liability Insurance and £25,000 of Personal Accident Insurance, to cover any kind of volunteering, for just £10 per year. <http://yoursquaremile.co.uk>.

Risk assessments

When organising an event attended by the general public, it is necessary to complete a risk assessment. A risk assessment (RA) is an important step in protecting your group members and the general public. It is a legal requirement to ensure that your insurance covers you should anything happen, as you will have taken all reasonable precautions, but more practically it also helps you focus on the risks that really matter at your events – the ones with the potential to cause real harm. In many instances straightforward measures can readily control risks, for example ensuring spillages are cleaned up promptly so people don't slip, or cabling is kept tidy so people don't trip.

There are various methods of completing a RA and a good guide can be found in the CAG downloads section (<http://cagoxfordshire.org.uk/downloads/category/1-cag-admin-files>). For an alternative method, take a look at DEFRA's Five Steps To Risk Assessment. There is also a risk assessment template in the appendix that you can adapt for your event.

The CAG Project offers practical help and advice to low carbon groups on insurance issues and also training on completing risk assessments, contact peter.lefort@resourcefutures.co.uk if you have more questions!

For more comprehensive detail visit Simon Kenton's blog on the Low Carbon Hub website: <http://www.lowcarbonhub.org/advice/2012/03/07/how-to-insure-you-run-a-good-event>

1.3 Diversity of volunteers

The most resilient responses to climate change will come about by thinking about and incorporating the skills and strengths of the whole community – so reach out wide. It's important not to get disheartened if you're not reaching everyone, as groups do take time to build up and are often a result of a few determined people at their core. It's also important to actively try and engage as diverse a range of community members as possible, as they will be the best routes to encourage others on board.

What is a volunteer?

It can be misleading to use the term 'volunteers' with regard to your group as there can be an idea of volunteers being disconnected, part time and in it for the experience. However you are all giving your time and expertise for a cause you believe in, and as such have the same needs as every other volunteer.

Oxfordshire Community and Voluntary Action have some very useful factsheets about working with volunteers, from how to attract people to specifics such as CRB requirements:

http://www.oxnet.org.uk/volunteer/useful_documents

Online resource: Broadening the diversity of your volunteers:

<http://www.hlf.org.uk/grantholders/heritagefocus/diversity/Pages/diversity.aspx>

Resources for Diversity

Black Environment Network (BEN) http://www.ben-network.org.uk/	BEN is established to promote equality of opportunity with respect to ethnic communities in the preservation, protection and development of the environment. They work across diverse sectors for ethnic environmental participation.
Living Space Project http://www.livingspaceproject.com/	LSP pioneers environmental justice solutions tackling social justice and environmental issues in urban locations worldwide. See their website for a host of materials, info, details of projects and links to many other resources on environmental justice and inclusion.
Reachability: Climate Reach http://reachability.co.uk/pages.lasso?pagelD=16&page=prog	Oxford based Reachability has produced a range of materials, ideas for workshops and ways to engage groups of people as part of their Climate Reach project.
Climate Outreach and Information Network http://www.climateoutreach.org.uk/portfolio-item/how-to-engage-your-community-on-climate-change/	A guide on how to engage your community and communicate about climate change
Transition Network http://www.transitionnetwork.org/	The Transition Network is currently developing materials and toolkits to encourage diversity in groups. Check the website further details, plus see the info contained in the Transition Cities Diversity Workshop here: http://tiny.cc/yvce0

1.4 Training

Another way to attract volunteers is to offer training, but there are also lots of opportunities for you and your group to attend external training in anything from staying motivated to using a thermal imaging camera.

It is always also worth asking your group (or friends and family not yet connected to your group) if anyone has any skills which might be relevant and they would be happy running some training on. Skill sharing from within the existing network is a great way to give people ownership and confidence, as well as the opportunity to develop their training skills.

Community Action Groups have access to a wide range of free bespoke workshops, for more information contact peter.lefort@resourcefutures.co.uk.

OCVA: <http://www.oxnet.org.uk/civicrm/event/ical?reset=1&page=1&html=1>
Accredited training around working with volunteers

Seeds for Change: Activist-run organisation offering group and campaign skills
<http://www.seedsforchange.org.uk/>

Qualifications

Some activities require specific qualifications, for legal or insurance purposes. A lot of energy can be wasted if these are gained when they are not actually needed, so here is a short summary of when you have to act:

First Aid

(from British Red Cross)

According to the Health and Safety (First Aid) Regulations 1981, employers are not obliged to provide first aid for members of the public.

However, if your organisation is involved in providing a service to members of the public (for example in places of entertainment, shops and sports and leisure facilities), the HSE (Health and Safety Executive) strongly recommends that employers include the public when making their assessment of first aid needs. Event organisers in charge of large events (like concerts) must ensure there is adequate first aid provision at the venue.

The HSE has produced a guide to event safety which is available on their website. You can also read more about the British Red Cross' event first aid.

Food Hygiene

(from the Food Standards Agency)

You do not need a food hygiene certificate – it is not mandatory for anyone, either working full-time or at one-off events. If you are working with food you do need to be supervised and instructed and/or trained in food hygiene matters proportionate to the work. If you wish to study for a food hygiene qualification, try your local college of further education, or local authority for information about what is available in your area.

CRB (now DBS)

Anyone who has unsupervised contact with children or vulnerable adults must have a check done. Also, it is recommended good practice that trustees of organisations working with children or vulnerable adults should be checked.

For more information visit <https://www.gov.uk/disclosure-barring-service-check/overview>

1.5 Funding

Funding for your project can be essential, and sometimes more ambitious projects need large scale funding. Generating a sustainable source of income for your group can help your projects run more smoothly.

Before looking into grants which will usually require the money to be spent in a certain way, consider whether you have the time to raise your own funds locally. As well as involving the community, this will provide money which can be used on whatever you like, so projects can be more flexible in terms of size, scope and timeframe.

Below you'll find a list of some Grant making bodies that groups have used, plus a very helpful guide for affiliation schemes. If you know of more useful sources, please let us know.

If you're a new community climate change group, ORCC has a small grants pot, but does not have resources for other groups at present.

If you have got a specific project in mind, you might consider 'crowd funding' website like <http://www.peoplefund.it>. You put your project up, and send the link to others. The website sorts out the back-room nuts and bolts, such as bank accounts and transferring money.

If you are a registered Community Action Group, you will have access to a small grant to use for your group, contact CAGs directly via peter.lefort@resourcefutures.co.uk.

OCVA have some factsheets on fundraising, including a handy guide on how to apply for and report back on grants: <http://www.oxnet.org.uk/old-factsheets>

Good places to start

- Environmental Funders Network
- <http://www.greenfunders.org/>
- The Environmental Funders Network (EFN) is an informal network of trusts, foundations and individuals making grants on environmental and conservation issues, with a full list of trusts and foundations involved in environmental funding.
- Awards for All
- <http://www.awardsforall.org.uk/england/index.html>
- Awards for All England is a small grants scheme making awards of between £300 and 10,000. The Awards for All programme aims to help improve local communities and the lives of people most in need.
- Mid counties Co-operative
- <http://www.midcounties.coop/Our-Values/Community/Co-operative-Community-Funding/>
- Provide grants of up to £250 to support local community groups and projects.
- Oxfordshire Community and Voluntary Action (OCVA)
- <http://www.oxnet.org.uk/funding>
- OCVA provide funding support and guidance at their many Information Points across the county, where you can also make a comprehensive search for funding using their 'Funder Finder' software.

Funding Resources

<p>TOE2 (Trust for Oxfordshire's Environment)</p> <p>http://www.trustforoxfordshire.org.uk/</p>	<p>TOE2 provides grants of up to £2000 for small scale projects working on biodiversity, access to green spaces or energy efficiency and use of renewable resources. They are very happy to discuss projects informally to strengthen applications.</p>
<p>Oxfordshire Community Foundation</p> <p>www.oxfordshire.org/index.php</p>	<p>The Oxfordshire Community Foundation is a charity run by local people that makes grants to other voluntary groups across the county.</p>
<p>EST Green Communities Funding Database</p> <p>http://www.energysavingtrust.org.uk/cafe/Green-Communities/Funding-Advice</p>	<p>Searchable database of funding for a range of projects.</p>
<p>Charity Bank</p> <p>http://www.charitybank.org/</p>	<p>The Charity Bank is a bank that's also a charity. That means it has a mission: to help charitable organisations transform people's lives – and to do this by harnessing the nation's wealth and using it to create a social return. It provides financial support and guidance to charities, social enterprises and community organisations. They do this thanks to the support of savers and investors to use their money to help charities change lives.</p>
<p>The Community Chest Fund</p> <p>http://www.ocha.org.uk/modules/standard/viewpage.asp?id=463</p>	<p>OCHA has established a Community Chest to help local community and voluntary groups that help improve the lives of OCHA residents and the surrounding community in which they live. Normally grants are available up to a maximum of £500, but grants of up to £1,500 available in exceptional circumstances.</p>
<p>Grant Finder</p> <p>http://www.grantfinder.co.uk</p>	<p>Online searchable database for grants.</p>
<p>The Funding Network</p> <p>www.thefundingnetwork.org.uk</p>	<p>The Funding Network (TFN), founded in 2002, enables individuals to join together to fund social change projects. Look for Oxford under the TFN Groups.</p>
<p>FSE Community Generation Fund</p> <p>http://www.financesoutheast.com/our-funds/index.aspx?id=1778</p>	<p>Finance Southeast runs a fund for community environmental projects, offering loans for feasibility and construction costs.</p>
<p>PURE Community Energy Fund</p> <p>http://www.puretrust.org.uk/page.jsp?id=105</p>	<p>Low interest loans to help communities with the initial outlay for renewable energy projects.</p>

Local Authority funding

District and County Councils also have some funding that is available to community groups and, depending on the authority, can range from £500 to £100k depending on the project and how much spare money they have when asked.

Oxfordshire County Council

To help local organisations in their search for funding Oxfordshire County Council have taken out a subscription to GRANTnet. This allows you to search the database which contains over 4,000 funding opportunities from United Kingdom and European Commission sources. GRANTnet is a user-friendly free to use service which has been devised to assist community and voluntary groups, sports and other clubs, schools, social enterprises and small businesses in identifying funding opportunities for specific projects.

More information on how to use this can be found here:

<http://www.oxfordshire.gov.uk/cms/content/funding-and-grants>

Cherwell District Council

<http://www.cherwell.gov.uk/index.cfm?articleid=1258>

Oxford City Council

http://www.oxford.gov.uk/PageRender/decC/Grants_occw.htm

South Oxfordshire District Council

<http://www.southoxon.gov.uk/services-and-advice/community-advice-and-support/grants-and-community-loans>

Vale of the White Horse District Council

<http://www.whitehorsedc.gov.uk/services-and-advice/community-advice-and-support/grants>

West Oxford District Council

<http://www.grants4.info/westoxon>

Social enterprises

Social enterprises are businesses trading for social and environmental purposes. They make and do things that earn money and make profits like any business. It is how they work and what they do with their profits that is different: working to make a bigger difference, reinvesting the profits they make to do more good.

To find out more read the case study in the appendices.

Resources for groups considering becoming a social enterprise

Get Legal http://www.getlegal.org.uk/	A free online reference and decision-making tool for charities, social enterprises and co-operative organisations.
Social Enterprise UK http://www.socialenterprise.org.uk/	The national body for social enterprise, offering events, advice and support.
UnLtd http://www.unltd.org.uk/	UnLtd's mission is to reach out and unleash the energies of people who can transform the world in which they live. Advice, support and small grants (awards) available.
Low Carbon Hub http://www.lowcarbonhub.org/services	The Hub helps community groups interested in setting up a community energy project and start a social enterprise as part of their Community Energy Service.

Other kinds of help and support

It's always worth a punt speaking to other local businesses to see if they would be will to support you in some way. Whilst this is rarely money, it can be products or services, or in kind support of some sort.

The Midcounties Co-op have a scheme where their employees can offer their time and expertise, such as accounting or website design, to worthwhile projects – speak to them for more details. <http://www.midcounties.coop/>

Carbon Leapfrog is a unique business-led charity that galvanises and channels high-value, professional advice from leading service providers across a range of disciplines including legal, finance, marketing and consultancy into UK and international carbon reduction projects – for free. www.carbonleapfrog.org

Oxford University runs a scheme to give students interested in strategy and consultancy the opportunity to get work experience through working on local projects. Over 8 weeks, a team of four students will undertake market research or create a funding strategy, for example, based on developing and carrying out surveys and other research. The groups need very little hands on support from groups and will produce a strategy which the group can freely use or not with no obligation. This has already been utilised by Low Carbon Oxford North very successfully. More information can be found here: www.careers.ox.ac.uk/TSC.

1.6 The human element

What have feelings got to do with climate change? Are they relevant?

“If you’re really paying attention, it’s hard to escape a sense of outrage, fear, despair. Don’t even try.”

Author, deep ecologist and Buddhist scholar Joanna Macy

My candle burns at both ends;
It will not last the night;
But ah, my foes, and oh, my friends—
It gives a lovely light!

Edna St Vincent Millay
(1892-1950)

Many studies (see Randall’s ‘A new Climate for Psychotherapy’, and the report of the American Psychological Association Task Force on the ‘Interface Between Psychology and Global Climate Change’) suggest that how we feel about an issue will influence how we act, or whether we even bother to get involved in an issue. Different feelings can arise from being confronted with information about the causes, impacts and politics of climate change.

Unfortunately, the increase in reportage over the past few years has not resulted in the necessary action, the tone of the reportage is usually anything but empowering, and there are precious few examples of what people are doing to reduce CO2 emissions.

Why engaging with feelings is important

Whatever we may feel about climate change, it’s good to make space for an emotional dimension, as sometimes people feel drained, overwhelmed, or sense an impending doom that they are powerless to avert. Sometimes people can assume that they are the only ones to feel this way, which can lead to feeling isolated and powerless, or lead into a burnout cycle of overwork.

How feelings can be used

Some of the projections about climate change are painful and overwhelming, and it’s sometimes hard to talk about painful things. In the UK we tend to avoid sharing painful or overwhelming issues in public, but in doing so it makes it harder to come up with positive and engaging solutions.

How to start the process of reclaiming responsibility

Simply by sharing how we feel, and allowing others to share how they feel, we can open up a valuable space from which sustained engagement and action can grow – and enabling people to respond to the information. In this way we’re using our feelings as a way of bringing people together, instead of remaining isolated and scared. By mentioning how you, and others, feel about climate change in your talk, you give people permission for themselves to engage with how they feel about the issue.

Online resource: 16 tips for avoiding burnout:

<http://grist.org/politics/2010-05-12-coming-out-of-the-closet-my-climate-trauma-and-yours/>

There are many approaches to avoiding burnout, for example for those working for social change, or for those working in an office environment. A good place to start is with this simple checklist from the excellent *In the Tiger's Mouth* by Katrina Shields:

Think over the past 3 months and answer the following questions according to how often you have experienced these symptoms.

0 = Never 1 = Very rarely

2 = Rarely 3 = Sometimes

4 = Often 5 = Very often

Adding up your total score will give you some indication whether you are likely to burn out or not.

1. Do you feel fatigued in a way that rest or sleep does not relieve?
2. Do you feel more cynical, pessimistic or disillusioned about things you used to feel positive about?
3. Do you feel a sadness or an emptiness inside?
4. Do you have physical symptoms of stress, eg insomnia, stomach pains, headaches, migraines?
5. Is your memory unreliable?
6. Are you irritable or emotional with a short fuse?
7. Have you been more susceptible to illness lately, eg colds, 'flu, food allergies, hay fever?
8. Do you feel like isolating yourself from colleagues, friends or family?
9. Is it hard to enjoy yourself, have fun, relax, and experience joy in your life?
10. Do you feel that you are accomplishing less in your work?

My score _____ Date: _____

Scoring

0 – 15 You are doing well

16 – 25 Some attention needed, you are a candidate.

26 – 35 You are on the road to burnout. Make changes now.

36 – 50 You need to take action immediately – your health and well-being are threatened.

Reference: *In The Tiger's Mouth: An Empowerment Guide For Social Action*, Katrina Shields (2000) self published, p.130.

You and your group

Training and facilitation

Emotional wellbeing is crucial if your group is to maintain enthusiasm for sustainability and helping your community. External input can be extremely useful to offer perspective and expertise. If you'd like to incorporate an element of deeper emotional exploration into your work, it's worth taking half or whole day. To contact some Oxford based facilitators, email peter.lefort@resourcefutures.co.uk.

The Change Agency also offer workshops and resources aimed at sustaining activism:
http://www.thechangeagency.org/01_cms/details.asp?ID=100

N.B. Activism doesn't have to mean chaining yourself to something, anyone who is active is an activist! If you're reading this, chances are you are an activist and therefore welcome to the hundreds and thousands of support networks nationally and worldwide.

Inner Transition

The Transition Towns movement is bringing an awareness of the emotional dimension of this work through their Inner Transition movement, formerly 'Heart and Soul' groups, which allows a space and structure to acknowledge and process the emotions that arise, including everything from dealing with the information to the frustrations experienced at the pace of change. In Totnes, the Inner Transition group is exploring ways to support and inspire us through these challenging and exciting times'.

See full information and examples of meetings here:
<http://www.transitiontowntotnes.org/groups/inner-transition>

Others

One word feelings

When people are introducing themselves ask them to say one word which best describes how they feel about climate change and one thing that makes their heart sing. This gives an indication of their feelings and something you can also reflect on later, either with the one word feelings slide /poster (see above) or by reflecting that people have different feelings about climate change. If you've had a talk or shown a film, it's a good idea to invite people to talk to the person next to them about how they feel about the issue. This not only gives them a chance to engage with their feelings, but also breaks down isolation, which can creep in if people are feeling overwhelmed by the impacts and realities of climate change.

Poetry and Pictures

The British Council have produced a great anthology called 'Feeling the Pressure: Poetry and Science of Climate Change' which you can access here:
<http://www.britishcouncil.org/anthology.pdf>

Developing relationships with local artists is also a good way of engaging with the community through shared thoughts and feelings which link to climate change but might not be explicitly connected. Look in local newsletters or message boards for artists in your community.

Open ended sentences

This is a great exercise to do as part of a meeting. You'll need to have a bell (or ting on a glass), and explain clearly. Here's some text you could use:

- I'd like you to get into a pair, and number yourselves 1 or 2.
- I'm going to read out the beginning of a sentence, and I would like the number 1s to repeat what I've said, then complete the sentence with whatever comes into their head.
- This is about exploring your initial thoughts and feelings about climate change, so there are no right and wrong answers.
- Number 2s just listen attentively, but don't engage in conversation. You might want to remind your partner of the beginning of the sentence if they dry up.
- After about a minute, I'll ring a bell, and read out the beginning of another sentence.
- Number 1s will then start that sentence and complete it in the same way, then I'll start the third sentence after another minute.
- After three sentences, I'll ring a bell and encourage you to swop roles, so the number 2s speak, and the number 1s listen.
- The first sentence is: When I think about climate change, the feelings that I have are....
- At the end, encourage people to reflect on and share their own (not their partners) experience.

Hints:

Try this out on a small group before you do a larger group, and choose some sentences that are appropriate for your meeting. For example: "Something positive I've heard about climate change is...", "Things that I could do to take action on climate change include...", "The support I would need to take action on climate change are..."

Not everyone will be happy to engage with their emotions in such a formal way, so it is important to ensure that everyone in the room is comfortable when the exercise happens. Some icebreakers or general discussion beforehand can help created a relaxed atmosphere.

Resources for 'feeling under the weather'

Chris Johnstone www.chrisjohnstone.info	Including details of his articles and newly updated book: 'Find Your Power'.
Joanna Macy www.joannamacy.net	An overview of her work, with plenty of links and resources: Book: 'Coming back to Life: Practices to Reconnect Our Lives, Our World' (NSP, 1998) The Greatest Danger (article from Yes Magazine): http://www.yesmagazine.org/article.asp?id=2295
Active Hope www.activehope.info/	How to face the mess we're in without going crazy.

2. DEVELOPING LOW CARBON COMMUNITIES

2.1 Knowing enough yourself

Before you start on a project, or attempt to help others become interested in climate change and sustainability, it is common to feel that you need to be an expert yourself. While this is not the case, your enthusiasm, ideas and dedication is enough to engage others, there are a few steps you can take to boost your own expertise.

First remember that with climate science progressing all the time, you can never know everything. However this also means that neither can anyone else, so you are not falling behind. The important things are to keep up to date with large developments and to ask why you feel you need to know more: is it for you or for others?

Resources to help

The Low Carbon Living Programme

The Low Carbon Living Programme is a community-based initiative that encourages people to take practical action to reduce their carbon footprints. As a member you would receive:

- A detailed carbon footprint showing where you could cut your CO2 emissions
- Free expert advice and help on how to do it, but you decide what is doable for you.
- Help with applying for government grants
- Invitations to attend optional workshops on a number of carbon-busting topics
- You'll also be part of a friendly, innovative and successful community project which is influencing government policy and being followed by other communities.

To find upcoming programmes contact the Community Action Group Project:
peter.lefort@resourcefutures.co.uk.

Once you have been on the programme you can access the toolkit which will allow you to run your own version in your community:
<http://www.lowcarbonhub.org/low-carbon-living-programme>

Carbon Conversations

Carbon Conversations Groups offer a supportive group experience that helps people halve their personal carbon footprint. The 6 meetings create a non-judgmental atmosphere where people are encouraged to make serious lifestyle changes

To find a course near you email peter.lefort@resourcefutures.co.uk.

Guardian Environment

All the latest international environmental news:
<http://www.guardian.co.uk/environment>

The Key

Oxfordshire's Sustainability Newsletter. To sign up to this fortnightly e-newsletter, compiled by CAG and the Low Carbon Hub, visit <http://cagoxfordshire.org.uk/newsletter>.

Other resources

There are also many other places to get ideas and information, for example the Greening Campaign (<http://www.greening-campaign.co.uk/>) and Transition Together (<http://www.transitiontogether.org.uk/>)

2.2 Communicating Climate Change

Once you're confident with your own knowledge you can try to communicate it to others. It is important to remember, however, that scepticism is not always a problem at the local level and there are many other motivating factors around the work your group will do, e.g. saving money, improving the community or holding fun events.



There are many reports about communicating climate change. The selection below summarises some of the different approaches.

Communication Resources

How to engage your community and communicate about climate change

<http://tinyurl.com/3yedfpd>

Great resource pack produced by George Marshall for the Energy Savings Trust

Futerra – Rules of Climate Change Communication

<http://www.futerra.co.uk/downloads/RulesOfTheGame.pdf>

Futerra is a leading UK Sustainability Communications Agency. See their research and thought leadership on sustainability communications for the last eight years on their website.

WWF's Strategies for Change project

http://www.wwf.org.uk/what_we_do/strategies_for_change22.cfm

WWF's Strategies for Change project re-examines some of the assumptions that underlie current environmental campaigning, and suggests new evidence-based responses. In particular, the project looks at the importance of collective social values in driving change and at the ways those values are shaped. It highlights the important role that community groups play, the need for a space to consider the emotional responses to climate change, and an awareness of the confusion that exists about climate change in the public mind.

Defra's Framework for Pro-environmental Behaviours

<https://www.gov.uk/government/publications/a-framework-for-pro-environmental-behaviours>

DEFRA's recent theory uses a social marketing approach (according to the National Social marketing Centre, this is the systematic application of marketing, along with other concepts and techniques, to achieve specific behavioural goals for a social good), but their analysis of the different triggers for different population segments is worth considering, to question who you are aiming at, and if the messages are appropriate for that audience.

Talking Climate

<http://talkingclimate.org/>

With a comprehensive and frequently updated database of academic papers, a regular newsletter, and a blog featuring comment and analysis from climate change communication experts, Talking Climate is the gateway to research on climate change communication.

2.3 Low carbon activities

Once you are comfortable with your own views on climate change and how to communicate it, you can choose from the myriad of sustainability events and projects being pioneered across Oxfordshire. The examples, information and resources have been split into the four core areas of waste, energy, food and transport, though there are clear links between them and in practice they are hard, and generally unnecessary, to separate.

More details on examples are always available, as well as contact details for an informal chat about how a particular project or event worked or didn't work:

www.cagoxfordshire.org.uk/contact-us.

This should not be seen as an exhaustive list, and new ideas are always possible! This section should be used as a guide to help you and your group decide on the best approach for your community.

Adaptation

Adaptation can link the gap between communicating climate change and acting on it. It is a response to climate change that seeks to reduce the vulnerability of natural and human systems to climate change effects. Even if emissions are stabilized relatively soon, climate change and its effects will last many years, and adaptation will be necessary. For more information and ways to act on and engage people through adaptation click on the links below:

Oxfordshire County Council's Emergency planning publications
Useful documents and publications relating to emergency planning, including an 'Are you ready?' booklet

<http://www.oxfordshire.gov.uk/cms/content/emergency-planning-publications>

The Greening Campaign Community Adaptation Toolkit
Information, research and tools for engagement through adaptation

<http://www.greeningcampaign.co.uk/Phase-3---Adaptation.html>

2.3.1 Waste reduction

Waste and re-use are important parts of the climate challenge. Many groups are tackling waste head on and organising an imaginative range of events, which can also be a great way of involving more members of your community. The table below shows examples of a range of waste reduction activities:

Case Study: Rose Hill & Iffley Low Carbon electrical waste project

At a meeting of Rose Hill and Iffley Low Carbon, a member mentioned that a resident was turned away from the recycling centre in Abingdon Road because he'd brought his old vacuum cleaner on foot. Apparently it is against Health and Safety rules to come in without a car. The consequence is that people without cars cannot recycle electrical goods since the council doesn't collect them. Yet they contain many precious metals that have been mined at the cost of the environment somewhere else in the world. There are a lot of people without cars in Rose Hill and there's also quite a bit of dumping. So we decided to do something about it.

Between 9 am and 12 noon on the first Saturday of every month, we hold an electrical goods collection. We invite all local residents to bring unwanted old electrical goods to Church House, The Oval, a central place that is visible to the whole community. So far, we have collected nearly a van load of old vacuum cleaners, TVs, toasters, printers, electric typewriters etc. One of our members takes all goods that can be refurbished to Bicester Green Centre for Renewables, where they will be mended and PAT tested before being sold in the Sobel charity shop. Those that can't be mended will be taken to the recycling centre off Abingdon Road. The council has given us a special licence to take multiple items without charge.

We feel the project has got off to a good start partly because the scheme has been well publicised in the Oxford Mail and Rose Hill News. Although this is a new venture, the word is getting round Rose Hill that people can get rid of electrical clutter they don't want. It's also worked because each of our members has taken a turn to be present at Church House and talk to people who arrive - which means the burden doesn't fall too heavily on one person. We are very grateful to Sarah Northall who has kindly allowed her drive to be covered with clutter once a month - her house is in just the right place! It's been a good way to publicise our group and win good will in the local community. We need to make it clearer in our publicity that goods can only be left between 9 am and 12 noon on the first Saturday of the month.

Example activities

Eco Detergent
refilling station

This is an opportunity to refill empty bottles with environmentally-friendly household cleaning products, thereby reducing packaging and saving money. Dorchester Carbon Project open twice a week and also use the station as an information point, and to collect items recyclables that are not collected at the kerb-side

Food waste
events

Many CAG members have been trained by Love Food Hate Waste experts giving them the facts on how much food is wasted and ways to use-up leftovers. More details of the Love Food Hate Waste initiative via www.oxfordshirewaste.gov.uk.

Christmas tree
recycling

Shredding old Christmas trees is a great way to stop them being sent to landfill, as well as bringing people together just after the holidays. The trees can be recycled into woodchip to use in the parks and open spaces.

Litter picking

Studies have shown that people are less likely to drop litter in areas which are litter free. Bringing a community together to collect litter gives a tangible result in the form of (weighable) bags which directly saves money for the local council.

Share Cropping	<p>Charlbury Area Waste Action Group started their share cropping scheme in 2008. This involved linking people in the village who had either spare land or fruit trees with others who were prepared to work the land or pick the fruit. The group also encourages purchasing of local foods at farmers markets, etc and actively also work with their local Cooperative store to encourage local purchasing.</p> <p>Many groups also give demonstrations on how to use up gluts of fruits and vegetables by teaching the lost arts of juicing or making preserves and jams.</p>
Guides to reduction and recycling	<p>Several groups have made their own guide to local recycling and waste reduction to help residents understand what they can and cannot recycle or how they can reduce waste in other ways. Details on Oxfordshire recycling can be found on http://www.owp-reuseguide.co.uk/</p>
Swap shops	<p>Swap shops are an easy and fun way to engage people in waste reduction and reuse. The idea is that people bring unwanted but usable items and can take other items in return. You don't need to bring anything in order to take something and vice versa.</p> <p>Each year CAG swap shops divert over 30 tonnes of items away from landfill.</p> <p>A guide which gives you everything you need to know about holding a swap shop can be found on the CAG website: http://www.cagoxfordshire.org.uk/downloads/category/2-information-sheets</p>
Swishing	<p>The art of swishing involves getting your friends together for a clothes swap. This is best done with a group of friends, ideally of similar size.</p> <p>Everybody attending should bring at least one items of good quality clothing or an accessory that she would feel proud of but want to pass on. Making it into a party and trying on each other's clothing can be a fun way to help reduce waste.</p> <p>Examples have been hosted by Sustainable Wantage (http://www.cagoxfordshire.org.uk/events/all-events/details/801-swishing-party) and the Oxfordshire Waste Partnership (http://www.oxfordshirewaste.gov.uk/wps/wcm/connect/occ/owp/home/news/owp+++news++30+jan+2012++re+fashion+a+hit)</p>
Gardening and composting	<p>Many CAG members are also Master Composters (www.homecomposting.org.uk) and take a keen interest in producing home grown food.</p> <p>While food waste collection schemes can be successful, it is important to remember that composting suitable food waste at home is even better for the environment. In small spaces, such as flats and boats, it is useful to have a compact worker for reducing food waste. For details of how to build your own, visit: http://www.cagoxfordshire.org.uk/downloads/category/2-information-sheets</p>

Case Study: Dorchester Carbon Project

Dorchester Carbon Project joined the network in October 2007, made up from the 1000 residents from the parish of Dorchester-on-Thames, a community with around 450 households.

Aims of the Group

The aim of the Dorchester Carbon Project is to provide easy ways for the community to live a lifestyle less damaging to the environment by providing information, events and facilities on the doorstep.

DCP Launch

Their launch event was a swap shop which also had a range of eco stalls, demonstrating reduced energy light bulbs, real nappies and lots of ways to get involved and reduce waste. A member of the group attended a Portable Appliance Testing (PAT) workshop so that they are qualified to undertake PAT testing at swap shops so that small electrical items can be passed on for reuse and not simply recycled.

Refill & Recycling Station

The group have an established Refill & Recycling Station held weekly in the village hall. Bottles of household cleaning products such as washing up liquid and laundry liquid can be refilled and items are collected for recycling which cannot go in the council bin such as printer cartridges, batteries etc.

Plastic bags free village

In their bid to rid the village of plastic bags, they worked with the local school, St Birinus Primary to produce a design for a sturdy reusable bag. Once the bag had been produced DCP undertook a "door stepping" campaign to ask each household to undertake a small change. They worked with the retailers in the village to support the initiative and are now pleased that they have rid the village of plastic bags.

Zero Waste Place

In November 2009, Dorchester-on-Thames Carbon Project (DCP), in partnership with the Community Action Group Project, Oxfordshire County Council and Oxfordshire Waste Partnership were successful in their bid for Defra's Towards Zero Waste Places funding aimed at innovative projects that would help reduce waste.

Waste reduction in the school

The DCP worked alongside pupils, teachers, parents and governors to reduce waste in the following areas:

- Food waste. A "Scotspin Compost Tumbler" and "Hot Box" were installed to compost all food waste to make compost for the school garden.
- Paper Towels. Dyson Air Blade Hand Dryers were installed to reduce the 95,000 paper towels being sent to landfill every year.
- Paper. Each classroom has a paper tray and the children are encouraged to use both sides of the paper before putting in the recycling bin.
- Packaging in Lunch Boxes. The children did a waste audit of the types of packaging in their lunch boxes and took part in a workshop. The introduction of a school drinks bottle will reduce the tetra-pak and other non re-usable drink containers.
- More items for recycling. The support of the District Council has allowed a wider range of materials to go for recycling.

Waste reduction in the community

The DCP held “back to basic” workshops designed to get people using the things they have and reducing what they buy new. These included “Basic Sewing and Mending”, “Cooking with Leftovers” and “Natural Cleaning for Body and Home.”

Laura Bristow, DCP secretary, said “The funding has been a huge boost to our project and will help us to work with the entire village. We want to show people that reducing waste doesn’t need to be a chore but can also be really fun and save money at the same time!”

Zero Waste Place Standard

In April 2010 Dorchester-on-Thames was awarded the ‘Zero Waste Place’ standard by Defra, following a series of initiatives led by the Dorchester Carbon Project. ‘Zero Waste’ is considered to be a simple way of encapsulating the aim of going as far as possible in reducing the environmental impact of waste. It is a visionary goal which seeks to prevent waste occurring, conserve resources and recover all value from materials.

More details at <http://www.cagoxfordshire.org.uk/component/content/article/47-cags-news/167-towards-zero-waste-places>.

Waste Resources

WARP-it

www.warp-it.co.uk

Matching organisations together to give unwanted furniture and equipment a new home, instead of being thrown out.

Community Waste and Recycling Guide

<http://www.energysavingtrust.org.uk/Take-action/Community-projects/Support-and-guidance/How-to-guides/How-to-recycle-and-reduce-waste-as-a-community>

EST Guide for:

- Individuals considering setting up a group to tackle the need for waste reduction in their community.
- Community environmental groups who wish to use waste reduction as a way of engaging the general public.
- Existing community waste reduction groups who wish to expand into other areas.
- Projects already working with people with specific needs such as learning difficulties or social exclusion.

Oxfordshire Recycling A-Z

<http://www.owp-reuseguide.co.uk/>

Compiled by Oxfordshire Waste Partnership, this is a comprehensive guide to what can be recycled, reused and donated and where across the county.

Oxfordshire Waste Partnership

<http://www.oxfordshirewaste.gov.uk>

Homepage for the OWP, containing news, resources and information.

Zero Waste Scotland

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

Information and resources to give ideas towards what can be achieved and how.

2.3.2 Energy

Renewable energy projects

Renewable energy is a rapidly developing field, so rather than an extensive list of information which may become outdated soon we have attempted to point you towards the best and most up-to-date information possible.

Renewable energy information

Centre for Alternative Technology

CAT have guides to all forms of available renewable technologies

<http://info.cat.org.uk/>

Community Energy Online

Signposting website produced by DECC to help communities working on renewable energy projects.

<http://ceo.decc.gov.uk/>

Feed-in Tariffs

This site gives the lowdown on feed-in tariffs – how they work, legislation, as well as updates on reviews and changes.

<http://www.fitariffs.co.uk/FITs/>

Low Carbon Hub

The Low Carbon Hub aims to support communities to cut carbon across Oxfordshire.

Barbara Hammond, Chair of West Oxford Community Renewables, writes a blog to take you through the process step-by-step to help you to select a suitable renewable energy option for your community and support you in raising funds, the tendering process, and planning. She will also look at several case studies of successful projects, quite a few of which are in Oxfordshire.

<http://www.lowcarbonhub.org/advice/generating-community-energy>

Example

Solar Photovoltaic (PV)

2012's change in the feed-in-tariff has made large scale solar pv projects seem unfeasible.

However with the price of panels dropping quickly, and the FiT scheme under long-term review, it is well worth investigating.

ONCoRe (Oxford North Community Renewables) raised £145,000 to put solar panels on the roof of their local school and have raised money for new school projects.: <http://oncore.org.uk/>

Example

Hydro electricity

Oxfordshire has an abundance of Rivers, mills and mill races, and many groups are working towards micro-hydro schemes in their local area.

Osney Lock Hydro has been developed by Osney Lock Hydro Ltd. <http://www.osneylockhydro.co.uk/>

Two schemes that are at an advanced stage are at the Goring Lock and Weir by the Goring and Streatley Sustainability Group and Abingdon Carbon Cutters are working to install micro-hydro at the Weir in Abingdon.

Case Study: Goring & Streatley Sustainability Group (GSSG)

Contact: Dave Holt: 0776 570 4959 www.gssg.org.uk

The scheme aims to extract energy from the river and turn it into 250 Kilowatts of electricity to feed a local business and the national grid => street lights, freezers, fridges etc.
Equivalent to the average electricity consumption over 24 hours of 500 homes

Idea raised with the Goring Parish Council (GPC) in October 2005

Feasibility Study - completed July 2006

Outline Design Study - completed March 2008

Defined type, number, exact location and size of turbines, identified potential suppliers and provided detailed cost estimates - £1.066M - and financial return - £130,000 per annum at today's prices

Environmental Survey complete. Began June 2008.

Look for protected species, invertebrates; river corridor sampling above and below weirs; landscape and visual survey; produce report

Process and learnings:

I got early support from Goring Parish Council and SODC, then the Village Planning and Amenities Association, then Streatley Parish Council

Use local environment and sustainability consultancies – I made early contact with Ian Bacon, then of Thames Valley Energy (TVE) – who usually give free advice when contemplating such ventures

Trawl the Internet for similar projects in the UK and elsewhere. There's every likelihood that a project is underway somewhere else

Be active in the community. We have run public events in the Village Hall to screen films, promoted car sharing, organized local organic 'Food Fests', are campaigning for allotments, and have performed a thermal imaging audit on 36 homes and a pub

The Hydro project was instrumental in Goring winning both the South England and Oxfordshire Village of the Year competitions, being awarded the Sustainability Prize on both occasions
<http://news.bbc.co.uk/1/hi/england/oxfordshire/8144374.stm>

Renewables Resources

NEF

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

The National Energy Foundation, a not for profit company providing services to the Public Sector, Business, and individuals.

DECC Renewables map

<http://restats.decc.gov.uk/app/pub/map/map/>

This online map, published by DECC, shows key renewable installations around the country.

Community Energy Online

<http://ceo.decc.gov.uk/>

Signposting website from DECC to help communities working on renewable energy projects.

Westmill Sustainable Energy Trust (WeSET)

<http://www.weset.org>

Co-operatively owned 6.5MW Westmill Wind Farm and 5MW Westmill Solar Park - visits, help forming other Energy Co-ops, advice on feasibility of wind projects, Oxfordshire's link to Energy4All

Home energy reduction

Home Energy is an area people like to focus on for many reasons:

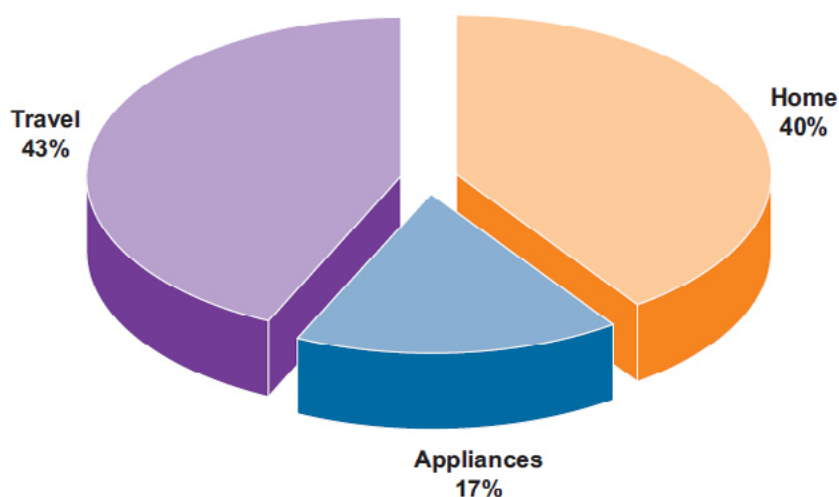
- ➔ Homeowners have a degree of control over their energy
- ➔ They can save money through energy efficiency
- ➔ People in rented sector can also save money and take action on home energy
- ➔ There are many tools and resources to help you take action in this area.

Below is a table giving a national average breakdown of household and individual CO₂ emissions by activity area, which gives you an overview and benchmark. For a more useful comparison, you'll need to input more details into a carbon calculator, which will all have different parameters. For the purpose of this pack we've tried to consistently use the Act on CO₂ Calculator Version 2.0: Data, Methodology and Assumptions Paper (DECC 2009).

National Average breakdown of household and individual CO₂ emissions by activity area . Source: Act on CO₂ Calculator Version 2.0: Data, Methodology and Assumptions Paper (DECC 2009), p 46 July 2009.

http://www.decc.gov.uk/assets/decc/what%20we%20do/global%20climate%20change%20and%20energy/tackling%20climate%20change/ind_com_action/calculator/1_20091120174357_e_@@_actonco2calculatormethodology.pdf6pmFT6LHOoSt8gOhvMS3Bw&usg=AFQjCNGXzxGeXZjhIz3Wk1XYd057Lfsk7w&cad=rja

National Average (Average household = 2.34 people)	Household kgCO ₂	Individual kgCO ₂	%
Space Heating	2,473	1,055	24.8%
Water Heating	1,197	511	12.0%
Lights	358	153	3.6%
Kitchen	952	406	9.5%
Study	249	106	2.5%
Entertainment	384	164	3.9%
Other Electricity Use	71	30	0.7%
Personal Transport (cars/motorcycles)	2,630	1,122	26.4%
Other Transport	267	114	2.7%
Flights	1,395	595	14.0%
Home	4,028	1,719	40.4%
Appliances	1,656	707	16.6%
Travel	4,291	1,831	43.0%
TOTAL	9,976	4,256	100.0%



Low Carbon Hub

Saskya Huggins and Jo Hamilton ran a blog on the Low Carbon Hub website entitled 'Powering Down Your Community' looking at supporting individuals within your community to lower their carbon output. They will give you the inside track on measuring carbon footprints and goal-setting for individuals as well as communities, and how you can best support these goals. This blog will also recommend successful schemes for reducing carbon. <http://www.lowcarbonhub.org/advice/powering-down-your-community>

When aiming to reduce energy consumption in the home, it's important to focus on the big wins. The chart below shows the importance of focusing on space / room and water heating in the home – which is why insulation, energy efficiency and having an efficient boiler is so important.

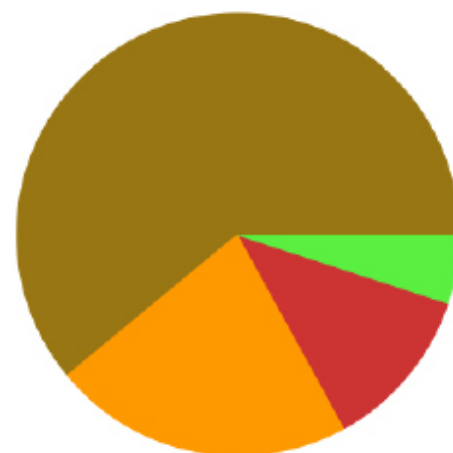
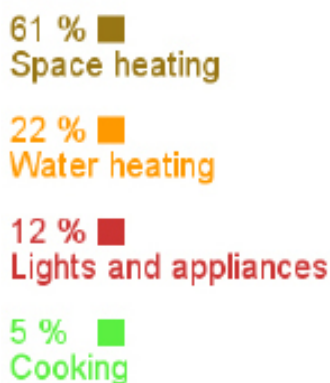
Where energy is used in the home

Nearly 2/3 of domestic energy is used on space heating in the home

Nearly 1/4 of domestic energy used for heating water

Lights and appliances moderately small, but rising rapidly (digital etc.)

source: Environmental Change Insitute, 2005



Activities

Measuring - How much energy are people using?

Get people measuring their energy consumption.

Energy monitors give you a real time display of the energy you're currently using, and how much it's costing. They're simple to fit, so it's worth getting one and using it for a while, then passing on to friends and neighbours and comparing results.

Single appliance monitors can be a useful way of finding out how much energy single appliances use over time. They retail from between £7-£20.

Carbon Foot-printing calculators

There are many varieties of foot-printing calculators available, most of which give you an approximate idea of your household's energy use, in the home and through travel, at a certain point in time. Many different versions of carbon calculators exist and so it's worth finding out what's actually being measured, what's being left out, and the assumptions used. This can be the basis of an evening event where people bring details of their fuel bills and transport, or can be an ongoing community engagement programme.

Online energy management

Online energy management tools rely on you inputting meter readings, and receiving detailed feedback about your energy use over time. See resources for details.

Energy Monitoring and Energy Surveys

Community led monitoring schemes are a good way of engaging people with energy and encouraging team effort. Many groups across the county have done community focused energy monitoring.

Case Study: Challenge North Leigh

Challenge North Leigh monitored their energy through collecting meter readings in the community and working with local energy provider Scottish and Southern Energy.

They were able to achieve an overall reduction across the village of 10%, resulting in a £20,000 award towards renewable energy for the village. Going into the school and encouraging children to monitor really helped increase the numbers of household monitoring their energy, alongside community engagement such as giving away energy-efficient lightbulbs, village fetes, and a display in the Memorial Hall showing how much energy the village is using, with advice on cutting consumption.

See their website here: <http://www.challengenorthleigh.org/> and a slideshow of their activities here: <http://tiny.cc/5xptg>

Web based Carbon Footprinting Calculators

COIN's carbon calculator http://coinet.org.uk/training-materials	A hardcopy calculator that can be printed out and distributed in workshops and similar events for participants to measure their carbon footprints there and then.
Low Carbon West Oxford's Quicksilver Calculator http://www.lowcarbonhub.org/quicksilver-carbon-calculator	Detailed carbon calculator, covering home, transport and lifestyle choices over the past 12 months. The Quicksilver Calculator builds up a comprehensive picture of your household's annual carbon footprint.
Energy Saving Trust Community Carbon Footprint Tool http://www.greencommunitiescc.org.uk/Page.aspx?ID=1	The Green Communities carbon footprint tool allows groups of individuals measure their carbon emissions and workout their community carbon footprint. Local businesses and community buildings in your community can also calculate their carbon footprint.
How to get the most out of community carbon footprinting http://tinyurl.com/2v6az54	Background for creating a community carbon footprint
Act on Co2 http://actonco2.direct.gov.uk/actonco2/home.html	DEFRA's online calculator, with email updates.
imeasure www.imeasure.org.uk	Online carbon management tool from Environmental Change Institute, with useful email updates for users.

Making energy visible: Thermal imaging projects

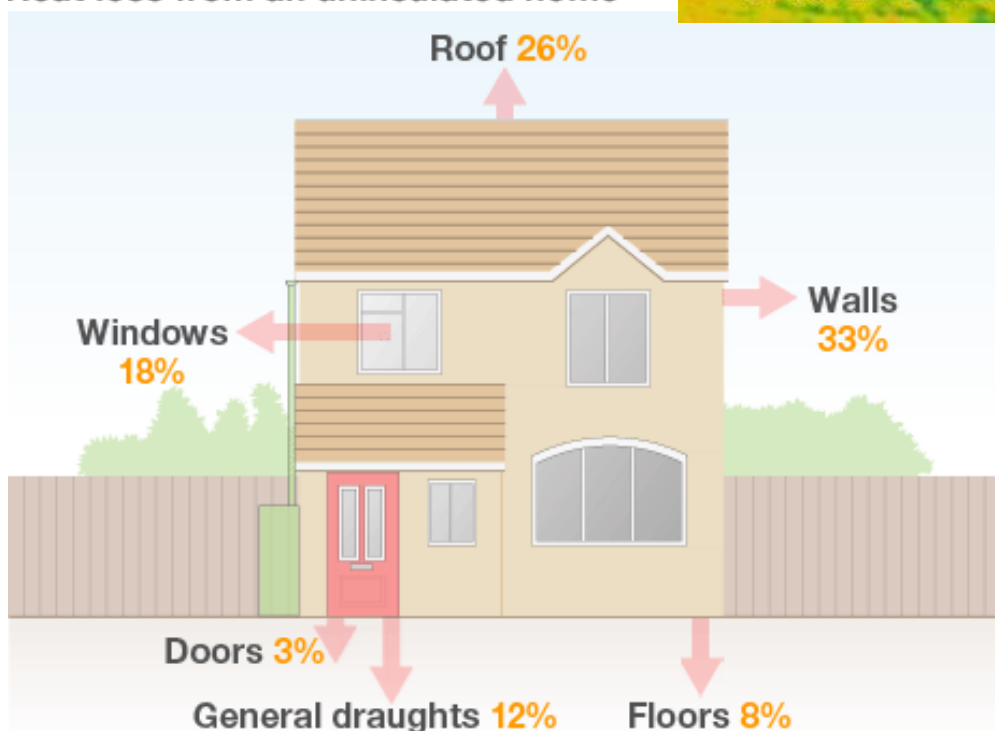
Many communities have done a thermal imaging study of homes in the community. This can be a useful tool to make energy visible to householders, and can be a start of greater engagement in home energy reduction.

A number of CAGs have run thermal imaging projects, and have used the results to both help residents improve their homes via advice from experts and to raise the profile of the group in their community.

Thermal imaging allows users to see where heat is escaping in their property, and so visually demonstrates where home improvements such as insulation will directly reduce energy usage and bills.



Heat loss from an uninsulated home



Source: Energy Saving Trust

Thermal imaging can only be done at certain times of year (ideally November through to February/March) and in certain conditions, and if doing it yourself you'll need to get some training in using and interpreting the pictures that are taken. Many district councils have cameras to lend, while the CAG Project lends out two belonging to Oxfordshire County Council. It is important to book your place if you wish to use a camera, and ensure that your group undertakes training in using it.

Alternatively commercial companies offer the service from around £100 - £150 per property, which includes a report.

Case Study: Low Carbon East Oxford's Thermal Imaging campaign - Winter 2012/13

Low Carbon East Oxford (LCEO) borrowed a thermal imaging camera from the Community Action Group (CAG) Project in order to visualize areas where local houses were leaking heat. The Thermal Imaging campaign was done in two phases; we first had the camera on loan in December 2012 for a month, and then continued with the second phase in January and February 2013. All in all we had around 20 volunteers going around the community over 26 evenings, taking 2500 images of 213 homes across East Oxford.

In order to operate the camera correctly, we attended a short training session with the CAG Project, who explained how to use the camera, what to expect to see in the images and how to interpret the information from the images. We then ran an initial campaign kick-off meeting to the local community, inviting anyone interested to attend and learn more about thermal imaging. The meeting was advertised in our monthly Newsletter and a Newsflash was sent out via email. We then set up a draft schedule of the areas where we had received requests from households to have their images taken, matching these with the volunteers available, whilst keeping one eye on the weather forecast. On suitably dry and cold nights we sent out teams of volunteers to predetermined areas, trying to cluster the areas together to maximise the imaging time while minimising the time spent walking from one area to another. At the end of each phase, we then proceeded to send out the images to participants according to a master spreadsheet containing the names, addresses and emails of the households involved.

To wrap up the campaign, we held a Thermal Imaging Get Together in March, where we invited everyone involved in the project to give people chance to share ideas and for us to find out what actions people had taken or were planning to take based on the campaign.

The campaign was very popular amongst the East Oxford community and we received a lot of positive feedback from participants. We feel it definitely reached the goal of making people more familiar with LCEO, as well as giving people tangible information of their own property and its strengths and weaknesses regarding energy efficiency. The campaign required a lot of volunteer time to get everything organised and this was sometimes a bit of a challenge. We needed to respond to thermal imaging requests via email, import the property information to the master spreadsheet, recruit and organise the volunteers on the nights when the weather was suitable for thermal imaging (resulting in last minute changes of plans). Keeping track of the 2500 images and correctly assigning them to the 213 properties was also rather time consuming, as was the final emailing of images to the households. In retrospect the campaign was a big undertaking and could have benefited from more volunteers, especially at the 'behind the scenes' organising tasks.

Despite the challenges we are hoping to run the Thermal Imaging campaign again this winter. We would like to contact the people who were involved last year and see whether they have taken any action since the images last year and we would like to take 'after' images of their properties to see what has changed. In order to decrease the admin burden of the campaign, we are hoping to recruit 'area champions' who could coordinate the imaging more independently within their particular areas. We are also looking at the possibility of recruiting some student volunteer help via Brookes University Sustainability Team.

Eco-renovation and efficiency

Building renovation – where to start? Who to trust? What to do? Many people are attracted by the idea of a greener and more energy efficient home, and one of the best ways of doing this is by demonstrating it.

Activities

Talks | A great way of introducing the topic of home eco-renovation is to ask someone who has done it themselves to give a talk. The CAG Project has contacts with people who have eco-renovated their home and who would be able to give an illustrated talk about what they did, the suppliers they used, what they learnt, and the advice they'd give for people contemplating similar actions. Similarly it's well worth asking Eco-renovation suppliers and professionals to give a talk.

Open Homes Days | These events are usually very popular, and consist of people who have renovated their homes opening them up for people to visit.

Example: Faringdon organised an 'Eco-trail' as part of their Green Week, and other groups have organised smaller events such as Energy Trails, Eco-Safaris, or smaller Open Homes events.

Eco Centres | Oxford Brookes University's Environmental Information Exchange (EiE) runs the Enrich programme, offering energy efficiency support for village halls and community buildings. www.brookes.ac.uk/eie/about-us/enrich-project-page.htm

Eco-renovation Resources

Case studies of Eco-renovated homes

<http://climatex.org/articles/eco-renovation/case-studies-web/>

Many case studies are available online from www.ecovation.org.uk, and you'll find details of other case studies here.

United Sustainable Energy Agency (USEA)

<http://www.usea.org.uk/>
Tel: 01993 894830

A not for profit company providing services to the Public Sector, Business, and individuals to help them reduce carbon, adapt to climate change and tackle fuel poverty. Contact them for details of local reduced price insulation, and the local Affordable Warmth Network.

Oxfordshire Eco-renovation Directory

<http://www.lowcarbonhub.org/resources/supplier-directory>

Directory of over 50 local Eco-renovation suppliers, which you can download, or request hard copies, plus links to other information on eco-renovation.

Energy Saving Trust

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

Free, independent and local energy saving advice: 0800 512 012

Comparison Websites for Eco-renovation professionals: these sites offer different types of rating and comparison for eco-builders and Micro generation installers.

YouGen: <http://www.yougen.co.uk/>
AECB: <http://www.aecb.net/findmembers.php>
Green Register: <http://www.greenregister.org.uk/>
BRE's TZero website: <http://www.tzero.org.uk/>
Sustainable Energy Academy (SEA) My Green Builder: <http://www.sustainable-energyacademy.org.uk/get-informed/my-green-builder>

2.3.3 Local food

The relationship between food and climate change is more complex than simply calculating 'food miles' - the distance that the food has travelled.

Making Local Food Work's report *Local Food and Climate Change* (<http://www.makinglocalfoodwork.co.uk>) argues that:

'what you eat is more important to the climate than where your food has come from', and advocates 'comprehensive lifecycle assessments which take account of the impact of all stages of the supply chain, from agricultural production through to processing, packaging, transport, retailing, home storage and preparation, and final disposal'.

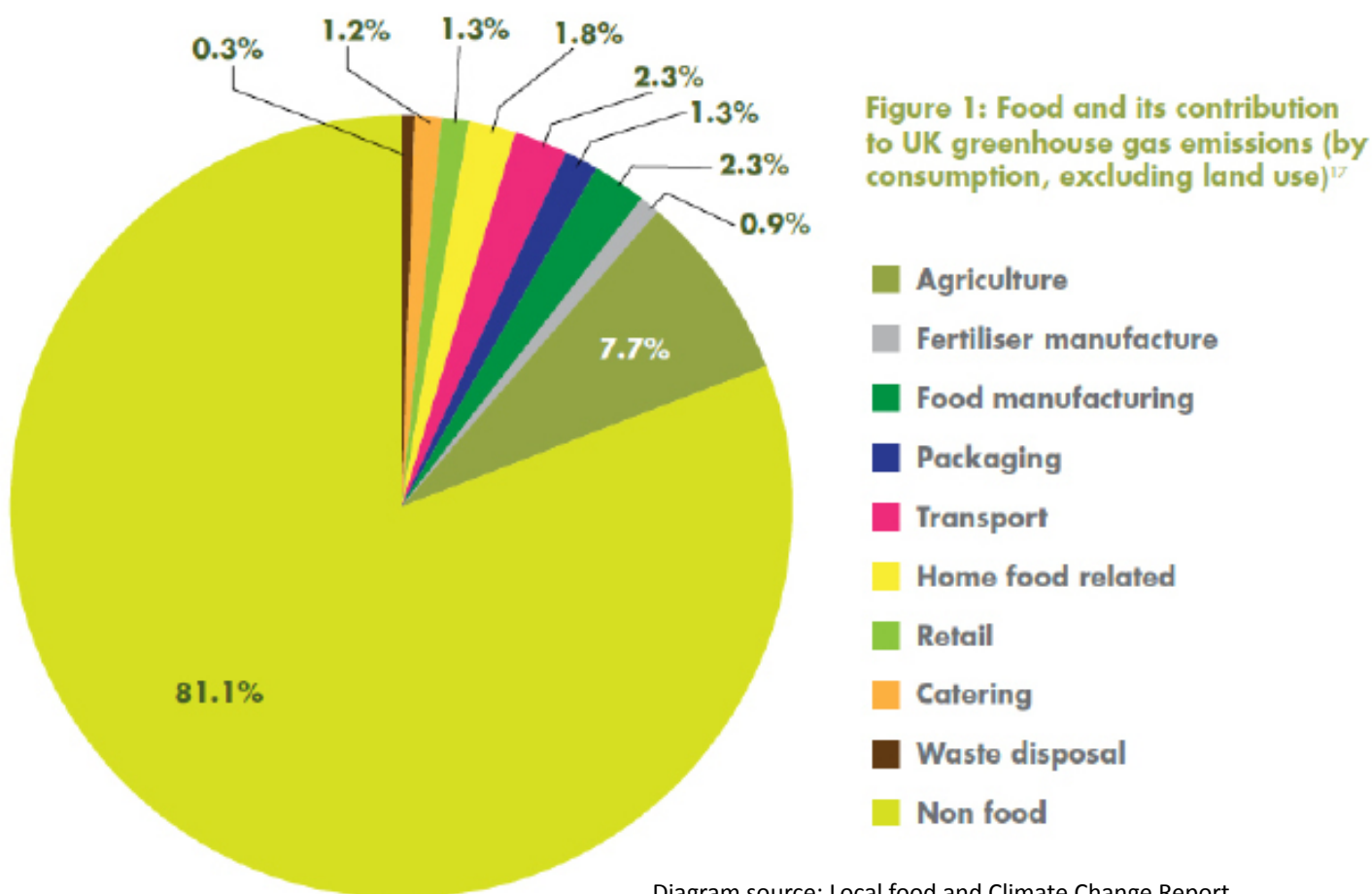


Diagram source: Local food and Climate Change Report
<http://www.makinglocalfoodwork.co.uk/>

Low Carbon Hub

Dan Betterton has written a blog entitled 'Setting up a sustainable food project', giving guidance on food facts to help decision-making about the type of group to set up; tried and tested ideas for food events; organisations that can help you; and setting up a co-op buying scheme.

<http://www.lowcarbonhub.org/advice/powering-down-your-community>

The good news is that community food enterprises are flourishing, offer a great way to engage and involve the local community, and offer a range of positive social and economic benefits alongside their contribution to reducing climate change. If you and your group are interested in getting involved in local foods, there are four general categories:

Growing

Distributing

Eating

Educating

- Growing**
- Local allotments can be a great space to run community growing sessions, inviting people to learn how to grow their own food in a local space. To find available spaces near you visit:
<http://www.allotment.org.uk/articles/Finding-Allotment.php>
- Food can also be grown in almost any public space with soil! The Guerilla Gardening Project helps people to grow beautiful and tasty things in their community:
<http://www.guerrillagardening.org>
- Distributing**
- The CAG Project has an apple press which can be borrowed by groups to run apple or pear pressing events, inviting the community to bring their fallen fruit and create delicious juice.
- Local food markets can be organised in partnership with local growers, incorporating other events such as craft sales or even a swap shop.
- Community Supported Agriculture schemes can make links between local growers and the community, and have become a popular way for consumers to buy local, seasonal food directly from a farmer:
<http://www.localharvest.org/csa/>
- Eating**
- Invite the whole community to a meal cooked by the group/volunteers with all of the ingredients sourced locally. For information about food local to you contact the CAG Project for help in finding out:
www.cagoxfordshire.org.uk.
- Community Kitchens – see DinnerTime case study.
- Educating**
- Low Carbon West Oxford produced a seasonal recipes calendar (http://www.lowcarbonwestoxford.org.uk/index.php?option=com_content&view=article&id=8&Itemid=89), giving info about food and climate change, whilst promoting local produce.
- OxGrow host an educational garden in South Oxford and run work parties every Sunday afternoon for people to come and help shape the space:
www.oxgrow.org.
- Barracks Lane Community Garden has been transformed by local effort from a toxic waste-filled old garage site into a beautiful garden. The project is a registered charity managed by the local community and runs weekly workshops along with hosting local community groups: www.barrackslanegarden.org.uk.

Case Study: DinnerTime

In November 2011, members of Community Action Groups, OxGrow, Student Hubs and the Oxford Food Bank got together to create a new community kitchen model.

The aim is to combine an important food waste message with an excuse to meet new people and learn new skills, bringing people together with surplus food that would otherwise have been thrown away.

After successful pilot events individual groups have started running their own DinnerTimes using the comprehensive step by step guide on the DinnerTime website: itsdinnertime.org.

Case Study: Apple Days in Brightwell cum Sotwell

Alison Bloomfield writes: “Our first Brightwell-cum-Sotwell Apple Day (2009) at in proved to be very popular. The Red Lion pub garden was transformed into an orchard market. Along with many villagers, there were visitors from Wallingford, Didcot, Abingdon and local villages, as well as apple enthusiasts from as far away as Oxford, Thame, Henley and even Maidenhead.

The main comment from visitors was how amazed they were to see so much fruit and have a chance to taste so many apples they hadn’t even heard of. All were very impressed with our village juice and there was much discussion and debate about the five different blends available; all 100 bottles sold out. We started this project because we wanted to take an opportunity to showcase the village fruit, press some juice for people to try and celebrate the impressive number of varieties we have in the village. So far we have discovered 43 varieties of apple. “

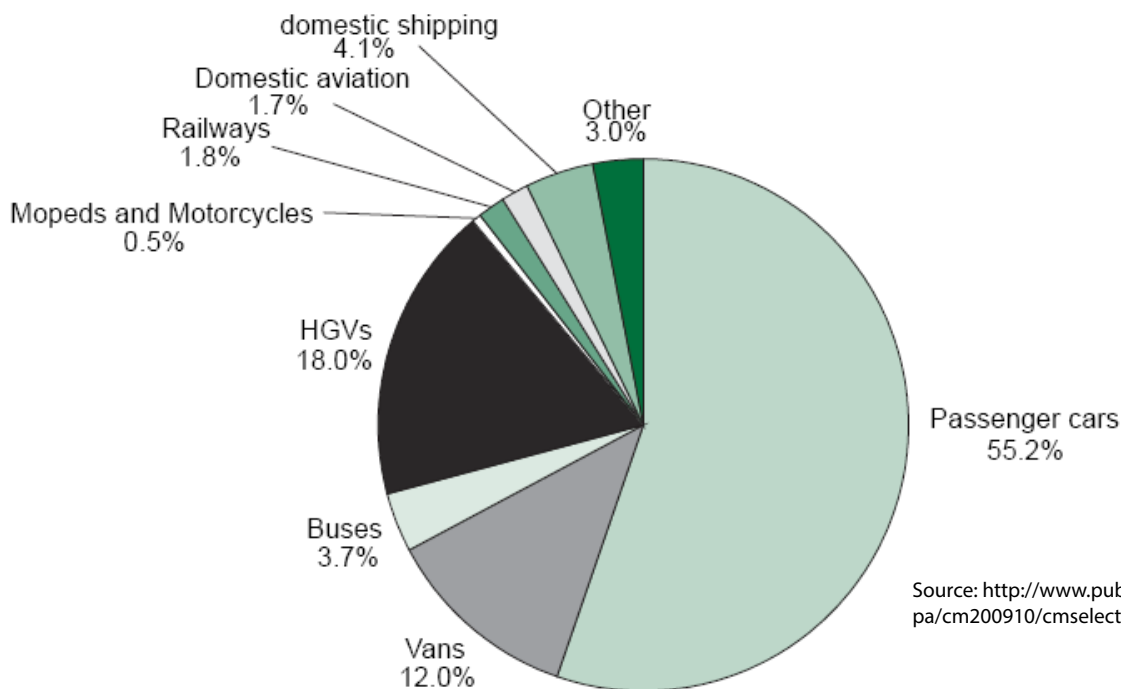
For more information about the history of Apple Day go to the Commonground website:
www.commonground.org.uk

Food and Suppliers Resources

Thames Valley Farmers Market Co-operative www.tvfm.org.uk	TVFM run markets in towns across Berkshire, Oxfordshire and south Buckinghamshire, bringing local food to local people.
Big Barn www.bigbarn.co.uk	Big Barn helps you buy local, seasonal, fresh food - and saves you money. Find local food by entering your post code or place name.
Love Food / Hate Waste http://www.lovefoodhatewaste.com/	For the Oxfordshire campaign contact Paul Mocroft: Paul.Mocroft@Cherwell-DC.gov.uk
Oxford Permaculture Group http://www.oxfordpermaculture.org/	Permaculture is an approach to designing human settlements and perennial agricultural systems that mimics the relationships found in natural ecologies. The Oxford group has regular activities and workshops.
Workshops from the Oxford Garden Project www.oxfordgardenproject.com	Robert Longstaff regularly runs workshops on growing food in small containers, composting, growing with minimum input, etc: robert@longstaff.co.uk
Common Ground http://www.commonground.org.uk/	Common Ground offer ideas, information and inspiration through publications and projects.
Report: Eating Oil – Food in a changing Climate http://www.sustainweb.org/pdf/eatoil_summary.PDF	Good overall report written in 2001 examining the petroleum dependence of the food industry.

2.3.4 Transport and travel

According to DECC, transport is the source of 25% the UK's carbon dioxide emissions. Large CO₂ reductions from transport are possible, but only with real and early change in transport behaviour. This means switching modes from energy intensive travel, such as single occupancy car use and heavy air miles, to less carbon intensive forms, such as car sharing, public transport, walking and cycling. As the diagram below shows, private motor transport is the dominant source of the transport sector CO₂ emissions.



Source: <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmtran/505/50503.gif>

Who travels in Oxfordshire?

There is a clear correlation between the level of disposable income and distances travelled. Put simply, people with higher incomes are responsible for more transport carbon dioxide emissions. Research at the Environmental Change Institute (ECI) showed that the top 10% of emitters are responsible for 43% of emissions and the bottom 10% for only 1%, with those in the top 10% flying 5 times more than the sample average. 61% of emissions were produced from respondents in the highest emissions quintile (20%).

Around 3,500 households in Oxfordshire don't have a car, so addressing transport goes side by side with addressing exclusion and isolation.

We are reaching the end of the era of cheap oil, and rises in oil prices will have a large impact on transport as the UK is heavily dependent on oil for its transport. 74% of UK oil consumption is used for transport, and 98% of fuel used for transport is based on oil.

Most Oxfordshire groups have focused on car and cycle transport

Cycling events

Groups have organised family friendly cycling events. Abingdon Carbon Cutters' Freewheeling event is promoted for Bike Week: 'Freewheeling is a unique cycling event for all, to promote cycling for health, fun, the environment, and just a great way to tour around the beautiful countryside surrounding Abingdon.'

<http://bit.ly/HHMxfc>

Car Clubs	<p>Joining (or forming) a car club instead of running your own car, is a big step towards improving your environmental footprint. One car club car can replace between 10 and 20 private cars, meaning less traffic and more free parking spaces. You can cut your contribution to congestion, pollution and the clutter on your street.</p> <p>http://www.commonwheels.org.uk/</p>
Cycle maintenance	<p>Broken Spoke Bike Co-op in Oxford is a DIY (do-it-yourself) bicycle workshop that teaches people of all ages and backgrounds how to ride and repair bicycles, creating a culture of cycling in Oxfordshire. Similar projects exist around the UK. Basic cycle maintenance also takes place at Bring and Fix events, encouraging people to take ownership of their bikes and feel more comfortable with them.</p>

Transport and Travel Resources

<p>Carbon Calculator: Act on CO2</p> <p>http://actonco2.direct.gov.uk/actonco2 And http://tiny.cc/jmp69</p>	<p>Carbon Calculators to enable you to work out transport emissions.</p>
<p>Sustrans</p> <p>www.sustrans.org.uk</p>	<p>Sustrans is the UK's leading sustainable transport charity. See http://www.sustrans.org.uk/sustrans-near-you/south-east/oxfordshire for details of the National Cycle Network routes and upcoming events in Oxfordshire.</p>
<p>Cyclox</p> <p>http://www.cyclox.org/</p>	<p>Cyclox is the voice of Oxford cyclists, they lobby Oxfordshire County Council and Oxford City Council for better conditions.</p>
<p>ORCC Community Transport Advisor</p> <p>http://www.oxonrcc.org.uk/what-we-do/rural-transport</p>	<p>ORCC's Community Transport Adviser (CTA) is one of a team of 3 who provide independent, impartial advice and information on a range of transport solutions.</p>
<p>Oxford Pedestrians Association</p> <p>http://www.oxpa.org.uk/</p>	<p>Working to make Oxford a better place for people on foot.</p>
<p>LoCO2</p> <p>http://loco2.com/</p>	<p>Travel planning tool for holidays and other great ideas.</p>
<p>Oxfordshire Car Share</p> <p>www.oxfordshirecarshare.com</p>	<p>An online car sharing scheme available to anyone travelling in or through Oxfordshire. There are no obligations involved in signing up for the service – members can use it as often as they like and in the way they like.</p>
<p>Electric Car Clubs</p> <p>http://www.nef.org.uk/e-carclub/</p>	<p>The National Energy Foundation (NEF) is running an Electric Car Club trial scheme across the country, with two Oxfordshire groups (Low Carbon Oxford North and Abingdon Carbon Cutters) involved.</p>

2.3.5 Other Activities

There are many more ways to develop low carbon and sustainable communities beyond the 'usual suspects' of waste, energy, food and transport. Here are some examples of other categories you could consider.

Water

Using water, especially hot water, uses energy and increases emissions of greenhouse gases which contributes to climate change. During a drought it's even more important to make sure that water is not wasted.

Did you know?

The average person in England and Wales uses 150 litres of water a day. By 2020 the demand for water could increase by 800 million extra litres of water a day.

Most of this water is used for washing and toilet flushing, but it also includes drinking, cooking, car washing and watering the garden. We use almost 50 per cent more water than 25 years ago, partly because of power showers and household appliances.

Using water in our homes contributes around 35 million tonnes of greenhouse gases a year. The average family uses 500 litres of water a day (due to some communal use of appliances). That's equal to 1.5 tonnes of greenhouse gases a year.

What can you do?

Future Water, the Government's water strategy for England, outlines a vision for the average person to reduce the water they use by 20 litres per day to 130 litres a day:

<http://archive.defra.gov.uk/environment/quality/water/strategy/pdf/future-water.pdf>

Future Water - the Government's water strategy for England (PDF, 2MB)

Use the GRACE Water Footprint Calculator to get an idea of just how much water you use and learn ways to conserve. <http://www.gracelinks.org/1408/water-footprint-calculator>

Visit <http://www.startuk.org/at-home/water-saving-one-stop-shop.aspx> to see how to get free water-saving devices from your local water company, from low-flow shower heads to toilet water savers.

Raise awareness of the Give Me Tap campaign <http://www.givemetap.co.uk/>

Biodiversity

From Natural England

"Biodiversity is ultimately lost or conserved at the local level and everyone, be they farmer, developer or school pupil can play a part in helping conserve and restore our biodiversity. Wherever we manage, or influence how others manage land of any size or scale - be it in our gardens, estates, parks, playing fields, farms or other open spaces – we can do so in a way that benefits wildlife."

Biodiversity is the source of many ecosystem goods, such as food and genetic resources, and changes in biodiversity can influence the supply of ecosystem services.

Biodiversity is also about the rest of the world, and in a nutshell refers to the number of species that currently exist on the planet today.

What can you do?

Read No charge? Valuing the natural environment, Natural England's report on the contribution that nature makes to our economy. <http://publications.naturalengland.org.uk/publication/36019?category=39013>

Create a Local Biodiversity Action Plan - <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/localbiodiversity.aspx>

Raise awareness of the health hazards associated with air quality, extreme weather and climate change.

Read the Oxfordshire Community Guide to Biodiversity

<http://www.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/environmentandplanning/countryside/naturalenvironment/communitybiodiversityguide.pdf>

Wood fuel

Case Study: Sustainable Kirtlington's woodfuel sales

In December 2009, Chris Powles, a member of the environmental group Sustainable Kirtlington, proposed that it should start selling firewood to raise funds for the hydropower project the group had initiated in the village.

When Chris and his wife moved into the village their garden had needed a lot of work, including felling some trees. Sadly this had to include a beautiful ash tree as it was being killed by a fungus and was leaning over their outbuildings. However ash is ideal burning wood and so it provided the first wood, which was then sold around the village. This proved so successful that it was decided to expand the enterprise: local people who needed to fell trees for various reasons were asked to donate wood.

The scheme was given a major boost when one of the landowners offered the group a huge oak tree that had to be felled. Most of this wood was too good to burn, so a mobile saw-mill was brought in to process it, with Chris taking orders for the timber to make into floorboards, tables, benches, raised beds and many other items, enabling this fine old tree to live a new life in various houses around the village. The following year, Kirtlington Park Estate donated a large chestnut, the Parish Council then gave five beech trees that had suffered a severe arson attack, followed by 4 small oaks, and recent arrivals to the village also donated a lot of mixed hardwoods cleared from their extensive garden.

Every summer, SK organises chopping parties, when local men with a talent for swinging axes and others gather to saw, split, carry and stack the logs, rewarded by a barbecue with plenty of refreshing liquid in the evening.

The project is still evolving. It has begun to involve the Youth Club, which is paid a small sum in return for help from some of its older members in pulling down trees and stacking wood. Many villagers volunteer their labour, while a really helpful and obliging professional woodsman is paid to help with the chopping, sawing, splitting and delivering the wood with the help of village youngsters who stack it neatly for our customers. In the winter of 2012/13, twice as much wood was sold as in the previous year: it was sold out in November and the project made a profit of approaching £1,500. We now rent a small section of a field owned by the Parish Council, where wood can be stored to weather and then stacked in an old animal shelter once it has been processed.

3. EXISTING RESOURCES

3.1 Background reading

We have put together an initial list of links to useful information and news stories on climate change and the environment. There are sure to be other good sites, please do email us your favourites and we will add them to the directory.

Carbon Commentary

Businessman, author and climate change expert, Chris Goodall's blog site discusses current issues. Well written, and worth a read.

<http://www.carboncommentary.com/>

Environment Guardian

The Guardian's latest news stories and blogs on the environment can be found on this link.

<http://www.guardian.co.uk/environment>

Guardian Green Living Blog

The Guardian's Green Living blog is an excellent source of information on all things "green" with lots of useful advice.

<http://www.guardian.co.uk/environment/green-living-blog>

Earth Island Journal

Investigative articles on today's most pressing environmental issues.

<http://www.earthisland.org/journal/>

Green Futures

Online magazine on environmental solutions and sustainable futures, published by Forum for the Future.

<http://www.forumforthefuture.org/greenfutures>

Met Office

The Met Office website has an informative section on climate change, including guides, climate news, policy-relevant science, and related resources.

<http://www.metoffice.gov.uk/climate-change>

New Economics Foundation

The New Economics foundation is an independent think-tank that challenges mainstream thinking on social, economic and environmental matters and will, sometimes, give you a new slant on things.

<http://www.neweconomics.org/programmes/climate-change>

Royal Society

The Royal Society website has up-to-date, unbiased information on the current climate change science and thinking. It is worth looking at their guide on Climate Change: A summary of the Science (2010).

<http://royalsociety.org/>

The Most Terrifying Video You'll Ever See

Compelling video on climate change that poses the question "What's the worst that could happen?"

<http://www.youtube.com/watch?v=zORv8wwiadQ>

The Truth About Global Warming

Legendary broadcaster, David Attenborough explains in this short video what made him realise that climate change was real and man-made.

<http://www.youtube.com/watch?v=S9ob9WdbXx0>

The Ecologist

News, analysis and comment on environmental issues as well as a green living directory. Published since 1970, The Ecologist has a 40+-year online archive.

http://www.theecologist.org/News/news_analysis/

3.2 Specific sectors

It's recognised that climate change communication and engagement has tended to attract a fairly narrow range of people, thus there is a great opportunity to broaden the reach, appeal and engagement to a broader sector of society. Here are some ideas for specific communities of interest, through faith groups, schools, businesses and campaigning groups.

Faith Groups

Faith groups can play an important role in tackling climate change, and many faith groups are already taking action in Oxfordshire. Below we outline some of the sources and ideas for activities.

Diocese of Oxford

As part of the Living Faith vision the Diocese of Oxford wants to see the integration of an active concern for the environment and climate change into the life and mission of the whole diocese and its churches, and, thereby, affirm their commitment to the Fifth Mark of Mission: 'To strive to safeguard the integrity of creation and sustain and renew the life of the earth'. The Oxford Diocese Environment Group (ODEG), which is an active group of volunteers who meet regularly and have established environmental issues within the diocese.

Further information: <http://www.oxford.anglican.org/environment/>

Initiatives within the Oxford Diocese is being encouraged through the collaborative website 'Earthing Faith': www.earthingfaith.org which aims to 'provide a space to share ideas and experiences around the environment' and 'spark ideas and connect you with other peoples experiences and stories'. It is a space to share ideas and experiences, and you'll find lots resources and actions, along with case studies of what people are doing. Visit www.earthingfaith.org where you can subscribe to stay up to date.

Faith Based Resources

Christian Concern for One World (CCOW) <http://www.ccow.org.uk/> A very helpful place for people to start is the ecumenical website of CCOW. Climate change is one of the tabs under 'What we work on' which has an attachment that can be downloaded entitled 'Church Action.pdf'. This includes auditing, energy reduction, energy suppliers, heating and insulation, transport, carbon footprints, carbon offsetting, recycling.

'Finding out more' (www.ccow.org.uk/more_information) gives another comprehensive list of Christian organisations.

Much of this material is taken from an action kit for churches entitled 'Walking More Lightly' by Anne Martin. We are grateful to Anne for permission to use this material. The full resource, including a CD with a powerpoint presentation, may be purchased for £4 directly from Anne Martin (anmartin@onetel.com)

<p>Churches Together in Britain and Ireland (CTBI)</p> <p>www.ctbi.org.uk/</p>	<p>CTBI has material on Environment and Climate Change – see www.ctbi.org.uk/10/ . They include very extensive prayers and worship material for ‘Creation Time’ (1 September – 4 October) at www.ctbi.org.uk/295. There is a very extensive list of organisations involved in environment and climate change issues on the CTBI website : http://www.ctbi.org.uk/67/ . Importantly this includes faith organisations other than Christian.</p>
<p>Climate Justice Fund</p> <p>www.climatejusticefund.org</p>	<p>The Church of England in partnership with Tearfund have set up a ‘Climate Justice’ fund, which is being actively promoted within the Diocese.</p>
<p>The Alliance of Religions and Conservation</p> <p>www.arcworld.org/projects.asp?projectId=358</p>	<p>This organisation has encouraged faith communities to develop 7 year plans to protect the living planet.</p>
<p>A Muslim Green Guide to Reducing Climate Change</p> <p>www.ifees.org.uk/</p>	<p>This guide can be downloaded from the website of the Islamic Foundation for Ecology and Environmental Sciences.</p>
<p>The Big Green Jewish tops tips</p> <p>http://www.biggreenjewish.org</p>	<p>The Big Green Jewish Website is a resource for Jewish people. It is the on-line meeting point between Jewish and environmental ethics, with ideas and links for information, events, actions and resources.</p>
<p>The Akashi Project</p> <p>www.akashi.org.uk</p>	<p>Details about the Akashi Project, (part of Cambridge Carbon Footprint) which aimed to bring more people into the discussion about climate change, working through ethnic community networks, as well as faith communities in churches, mosques, temples and meditation centres.</p>
<p>Network of Engaged Buddhists</p> <p>http://www.engagedbuddhists.org.uk/</p>	<p>Engaged Buddhism views the transformation of self and the transformation of the world as indivisible. Website with links to activities of network and information.</p>
<p>Faith and Climate Change Project</p> <p>http://faithandclimatechange.wordpress.com/</p>	<p>Birmingham Friends of the Earth have a neat website about their faith and climate change project, with some examples of good practice from places of worship, community groups and individuals.</p>
<p>Operation Noah</p> <p>http://www.operationnoah.org/</p>	<p>Operation Noah is informed by the science of climate change. Their website is packed with useful and up to date information.</p>
<p>Eco-congregation</p> <p>http://ew.ecocongregation.org/</p>	<p>Eco-congregation is a tool to help churches begin to address environmental issues in all that they do. It is suitable for all kinds of churches to use. Churches are encouraged to use the resources provided and apply for the Eco-congregation award</p>

Schools

Schools in Oxfordshire are well served by some existing organisations that can provide free workshops and events for your school. Hundreds of schools in Oxfordshire are part of the Eco-schools programme. In addition many schools (such as Matthew Arnold in Cumnor and Cherwell School) have solar panels on their roofs, demonstrating renewable energy in action. Schools are a great way into a community, and also very valuable for gaining external support due to the existing networks of support which service them.

Case Study: The CIAO! Ark

The CIAO! Ark Project worked with 10 schools in Oxfordshire in 2010, linking schools with scientists and artists, and culminating in a CIAO Ark Festival in front of the Natural History Museum in Oxford.

Children from participating schools worked with specialist scientists to explore all facets of low carbon living and the ways that these will impact on and influence our lives. They then worked with professional artists to express what they have learned creatively, celebrating the beauty of the natural world and demonstrating their understanding of the choices we are all being asked to make in response to climate change.

For inspiring ideas of activities for schools, see the CIAO! Website:
http://www.ciaofestival.org.uk/index.php/ciao_website/schools_project/

Resources for Schools

Oxfordshire Green Schools

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

A Groundwork project working in partnership with Oxfordshire County Council and Oxfordshire Waste Partnership aiming to support primary and secondary schools to reduce their energy bills, minimise the amount of waste being sent to landfill and promote the benefits to the wider community

People and Planet

<http://peopleandplanet.org/sixthforms/teachers/>

People & Planet is an Oxford based charity offering an unrivalled package of global issue workshops and support materials to schools and colleges.

Solar Energy For Schools

<http://www.scienceoxford.com/>

The Low Carbon Hub solar energy scheme installs solar PV in Oxfordshire schools for community benefit. Schools get solar PV installed with none of usual hassle and have no capital outlay: the Hub has a dedicated project manager, absorbs the early viability and assessment costs and raises the funds for the project.

Eco- Schools

<http://www.eco-schools.org.uk/>

National Organisation Supporting Schools to go green, with heaps of information, resources, and case studies and school searches.

Westmill Sustainable Energy Trust (WeSET)

<http://www.weset.org>

For visits and will run an education week in June 2015.

Business and workplace

The business case for rising to the climate challenge, and considering climate change and resource depletion hand in hand is getting stronger and stronger, which can help enable links between community groups and local businesses.

Did you know that:

- ➔ 8% of the average business turnover is spent on energy (carbon management can reduce this by up to 20%)?
- ➔ 75% of UK employees would prefer to work for a company with an active carbon reduction policy?
- ➔ 67% of consumers are more likely to buy a product with a low carbon footprint? (source The Carbon Trust).

Oxfordshire is home to many environmental businesses, many of whom are striving to show how economic success does not have to be at the expense of people, the environment or the climate. Local firms such as Best Foot Forward (one of Europe's leading Sustainability Consultancies) and Seacourt Printers have won the Queens Award for Enterprise – Sustainable Development. Local businesses have a great opportunity to engage with energy and climate change through their activities, decreasing energy consumption, and encouraging colleagues in the workplace to take action on climate change, in turn boosting staff morale. Whether it's encouraging greater staff / colleague engagement and action, or procuring greener products and services locally, you'll find that Oxfordshire can deliver.

A recent report by Chatham House on Sustainable Energy Security: Strategic risks and opportunities for businesses (<http://www.chathamhouse.org/publications/papers/view/109360>) listed the following as some key conclusions, which closely link energy security and a low carbon economy:

- “Energy security is now inseparable from the transition to a low-carbon economy and businesses plans should prepare for this new reality.
- Traditional fossil fuel resources face serious supply constraints and an oil supply crunch is likely in the short-to-medium term with profound consequences for the way in which business functions today.
- Increasing energy costs as a result of reduced availability, higher global demand and carbon pricing are best tackled in the short term by changes in practices or via the use of technology
- to reduce energy consumption.
- The sooner that businesses reassess global supply chains and just-in-time models, and increase the resilience of their logistics against energy supply disruptions, the better.”

Resources for Businesses and workplaces

Oxfordshire County Council

<http://www.oxfordshire.gov.uk/cms/public-site/waste-and-recycling>

Information on recycling and food waste provisions for businesses in Oxfordshire.

Environmental Information Exchange

www.brookes.ac.uk/eie/

iE is a not-for-profit organisation that helps businesses and organisations reduce environmental impacts, from waste audits to workshops

UKCIP

<http://www.ukcip.org.uk/business/>

Information and resources for businesses.

Green Breakfast series from Blake Laphorn

http://www.bllaw.co.uk/events/events_archive.aspx

Blake Laphorn run a very successful series of business Green breakfasts in Oxford. You can access their archives and sign up for the Breakfasts mailing list here: www.bllaw.co.uk/services_for_businesses/climate_change.aspx and see their archives of events, with accompanying slideshows here: www.bllaw.co.uk/events/events_archive.aspx

Contact: Kelly Benfield, Marketing executive at Blake Laphorn kelly.benfield@bllaw.co.uk or call 01865 253268

The Carbon Trust

www.carbontrust.co.uk

The Carbon Trust works with organisations to reduce carbon emissions and develop commercially viable low carbon technologies. Offer Free energy surveys for organisations with energy bills greater than £50,000 pa

For free, ongoing advice and support call their Customer Centre Open Monday to Friday, 9am to 5.30pm. Call 0800 085 2005

2 degrees network

<http://www.2degreesnetwork.com>

The world's leading business community for driving growth, efficiency and profit through sustainability.

Climate Solidarity

<http://www.cwu.org/climate-solidarity.html>

Climate Solidarity is a trade union response to climate change. It's about learning, working and acting together to help make the kind of society we want to live in, through action groups dealing with waste, food, travel, and home energy. To find out more visit the website.

The National Industrial Symbiosis Programme (NISP)

www.nisp.org.uk/region.aspx?region=5

NISP is a great way to look at sourcing materials and disposing of waste through business-to-business services. It engages in a collective approach to competitive advantage involving the physical exchange of materials, energy, water and/or by-products. Visit their website for details of the South East Region activities.

Retrader

www.retrader.org.uk

Retrader is a brand new waste management option for Oxfordshire businesses. It's a website that allows businesses and other organisations to pass on materials they no longer need and get pre-used materials from other businesses. There are a range of different categories of items and materials that can be exchanged, from batteries to paper and furniture to pallets. Offered by Oxfordshire Waste Partnership as a free service, similar services in the UK have saved regional businesses £1.5million on waste disposal/procurement. - giving others access to goods that would otherwise end up in Landfill.

SMEasure

www.smeasure.org.uk/

A free online tool to:

- Interact with your energy use
- Assess energy wastage in your buildings
- No prior energy management knowledge needed

Benefit from Oxford University Expertise: Our building energy research feeds directly into SMEasure to ensure we are giving the best information to businesses about energy savings potential. SMEasure is the only free web-based energy monitoring solution offering this information to businesses.

Shared Energy Toolkit

www.neweconomics.org/sites/neweconomics.org/files/Shared_Energy_Toolkit.pdf

The Shared Energy Toolkit illustrates the damage climate change has already caused and shows how different climate change scenarios could affect you and your organisation. The toolkit also gives ideas about how you can improve your organisation's sustainability, and how to work with your local community to raise awareness and increase resilience.

Case Study: Smarter driving, Oxford City Council

Oxford City Council's Plan 'Getting our house in Order' identified travel at as 18% of the council's total emissions.

Oxford City Council achieved a 17% reduction in fuel use carbon reductions on their fleet vehicles by investing in Smart Driving Courses for their staff. Smarter driver training from the Energy Saving Trust helps teach your employees practical techniques, which can be undertaken with any of your drivers, whether or not they drive on company business.

This level of reduction would save the council an estimated £69,000 per year and reduce carbon dioxide emissions by over 150 Tonnes per year. For a total investment of £5,000, the scheme had a simple payback of 4 weeks.

A key aspect that contributed to the success of the project was effective partnership working across the council, including the Energy and Climate Change Team (Environmental Development), Human Resources, Motor Transport and Oxford City Homes. This enabled the prompt implementation of the scheme and maximised fuel savings. It also served to demonstrate the commitment to carbon reduction that exists within the different areas of the organisation.

The Smarter Driving Schemes, This practical training session, run from your own premises by an approved driving instructor accredited by the Energy Saving Trust, is fun, informative - and could save your organisation £250 per driver on fuel bills (based on 12,000 miles per year). It takes less than an hour per driver too.

To find out how to set up smarter driving training for your staff contact the Energy Saving Trust on 0845 602 1425 or access: www.energysavingtrust.org.uk/smarterdriving

Campaigning

Campaigning brings people together to show decision makers that people care. Whether its poverty, education or climate change, lots of people telling big business and world leaders that the decisions they take are noticed by the rest of the world is crucial if we want to make a difference. Often the lives of millions depend on the actions of a few powerful people.

This handbook doesn't currently include information about running more political campaigns, although we recognise that this is a valuable and important part of our response to climate change. Many local groups have a campaigning element to their work, allied to some of the major campaigning NGOs (non-governmental organisations). Here are some organisations that would be able to help:

Local Climate change Campaigning Groups

Oxfordshire Climate Alliance

To contact OCA email: oxonclimatealliance@yahoo.co.uk

The Oxfordshire Climate Alliance has been established in order to share information and ideas between groups campaigning and raising awareness on climate change issues in Oxfordshire. It is formed of many local climate change groups.

OCA have organised successful high profile meetings such as 'Ask the Climate Question' for MPs in the run up to the 2010 elections, and a packed meeting with Ed Miliband in 2009.

OxFOE

<http://www.oxfoe.co.uk/>

Oxford Friends of the Earth is one of over 200 local groups affiliated to Friends of the Earth in England, Wales and Northern Ireland. Actively campaigning on climate change issues.

Oxford Greenpeace

<http://www.greenpeace.org.uk/groups/oxford>

Oxford Greenpeace meets on the first Thursday of the month, 7.30 at the Mitre, High street, Oxford. They regularly hold campaign events locally.

World Development Movement

<http://groups.wdm.org.uk/oxford/>

The Oxford WDM Group campaigns in Oxfordshire, lobbying MP's, organising public meetings, undertaking street theatre/stunts and holding stalls to engage the public on development issues.

Oxfam local group

<http://oxfordoxfamgroup.blogspot.com/>

A long-established local volunteer group supporting Oxfam's work overcoming poverty and suffering around the world, with about sixty members and a varied programme of events.

Thames Valley Climate Action

<http://tvca.ox4.org/>

A collective taking and encouraging direct action across the Thames Valley to stop climate change.

3.3 Physical Resources

Items	Description
Apple press	For making excellent apple (or pear) juice from local crops, includes mill and pasteuriser.
Cycle-powered smoothie maker	Demonstrate the power of pedalling while making fresh fruit smoothies.
Thermal imaging camera	Property of Oxfordshire County Council. Show residents where heat is leaking from their homes, a great project and engagement tool.
Portable Appliance Testers (PAT)	Rechargeable units for testing the safety of domestic electrical items. Please note: these are only available to qualified testers.
Scales	Good to use at swap shops to weigh items that are taken away.
Banners	Pop up stands and swap shop banners.
Snakes and Ladders game	Play climate change snakes and ladders on a giant Oxfordshire map! This is great for larger events, but needs someone to set up and monitor.
DVDs	<p>An Inconvenient Truth (2006): Al Gore's passionate examination of climate change and the environment.</p> <p>Power of Community (2005): When Cuba lost access to Soviet oil in the early 1990s, the country faced an immediate crisis - feeding the population - and an ongoing challenge: how to create a new low-energy society.</p> <p>In Transition 1.0: (2009) 'In Transition' is the first detailed film about the Transition movement filmed by those who are making it happen on the ground.</p> <p>Farm for the Future: (2009) Rebecca Hosking's programme shown on BBC2 , the programme looks at Rebecca's father's farm in Devon, and at her wanting to rethink the farm in the light of peak oil.</p> <p>Beyond the Tipping Point? (2010) This is a film about climate change and the ways we respond to it. Through the voices of 25 people from a variety of backgrounds and nationalities, it addresses a fundamental challenge for our time.</p>

All resources available from the Community Action Group Project.
 Contact peter.lefort@resourcefutures.co.uk.

3.4 Online Resources

Items	Description	Available from
Cartoons	Great range of political and environment related cartoons	http://www.cartoon-stock.com/newscartoons/directory/c/climate_change.asp www.polyp.org.uk/cartoons.html
Posters	Oxfordshire Climate Impact Posters, MPower Climate Science Posters, Oxfordshire from the Ground Posters	http://climatex.org/articles/sections/info-tools-and-resources/
Reachability	Oxford based Reachability has produced a range of materials, ideas for workshops and ways to engage groups of people as part of their Climate Reach project. Full details and info sheets are available.	http://reachability.co.uk
Activity: Climate Change Condensed	This is an interactive, fast-moving 'all-you-need-to-know' introduction to climate change in just three hours.	http://www.coinet.org.uk/
Activity: Walking the Walk	Walking the Walk is a fun 20-30 minute group activity which enables participants to learn about the greenhouse gas emissions of the average UK resident.	http://www.coinet.org.uk/news/2010-02-16/walking-walk-training-guide-now-available-download

Local speakers

Danny Chivers <http://dannychivers.blogspot.com>

Danny Chivers is the author of the No-Nonsense Guide to Climate Change, as well as a professional environmental researcher and performance poet. He can offer talks, presentations and interactive workshops for a variety of audiences. Topics can include:

- Climate science for non-scientists
- The international picture - the UN talks and climate justice
- Taking action on climate change
- Eco-poetry for all ages

Recent speaker engagements have included the National Federation of Women's Institutes, the Oxford Climate Forum and the London Sustainable Schools Spring Conference.

Contact: dannychivers@excite.com. In order to provide his services free to small voluntary groups, he does need to ask for a fee from organisations with larger budgets.

Richard Twinch Design www.twinchdesign.co.uk

Architect integrating low energy design into sustainable architecture. Available for community groups within 30 mins drive from central Oxford to give talks to local groups, preferably early evening. He can present and discuss options for insulating roofs, walls and floors starting from theory to practice. The informal presentation includes handling various insulating materials and demonstrating Thermographic imaging.

ne: 01865 202108 Email: twinch@community.co.uk

3.5 Oxfordshire Green Directory

We have put together a directory of Oxford-based green organisations and contacts. We would like to expand the directory to make it really comprehensive but to do this we need your help. If you have organisations that you can recommend for inclusion, please email peter.lefort@resourcefutures.co.uk. Thanks!

Local environmental organisations

Affordable Warmth Helpline

A freephone line to advise residents how they can keep warm whilst keeping their fuel bills down.
0800 1070044

Best Foot Forward

Oxford-based sustainability consultants.
<http://www.bestfootforward.com/>

Broken Spoke Bike Co-op

Cycle maintenance workshops in and around Oxford
<http://bsbcoop.org/>

Campaign to Protect Rural England, Oxfordshire

Supports campaigns to protect natural beauty and diversity of rural Oxfordshire. Current campaigns are around planning and protecting the green belt.
<http://www.cpreoxon.org.uk/about/about.htm>

Climate Outreach and Information Network (COIN)

Charity formed to engage the public about climate change. Supports grassroots organisations, runs courses, and speaker events.
<http://coinet.org.uk/>

Climate South East

A not for profit partnership of organisations from across the public, private and voluntary sectors committed to taking action on climate change in South East England.
<http://www.climatesoutheast.org.uk/>

Community Action Group Project

Provides hands-on, day-to-day advice for climate change action groups in Oxfordshire.
<http://www.cagoxfordshire.org.uk/>

Cultivate

A not-for-profit social enterprise set up to make great local food fairly-priced, convenient and accessible to more people in Oxford.
<http://www.cultivateoxford.org/>

Cyclox

Run by a small group of volunteers, Cyclox promotes cycling in the city of Oxford.
<http://www.cyclox.org/>

DinnerTime!

Run by the CAG Project, Dinnertime! gives help and advice on setting up a community kitchen.
<http://itsdinnertime.org>

Earthwatch

An international environmental charity which engages people worldwide in scientific field research and education. The UK branch is Oxford based.

<http://www.earthwatch.org/europe/>

Environmental Change Institute

Oxford University's interdisciplinary institute for research on complex processes of global environmental change, the exploration of sustainable solutions and the promotion of change.

<http://www.eci.ox.ac.uk/>

Environmental Information Exchange

Based at Oxford Brookes University, EIE supports the environmental aspirations of organisations in Oxfordshire and the South East of England by raising awareness of the practical actions they can take.

<http://www.brookes.ac.uk/eie/index.htm>

Forest of Oxford

Gives help and specialist advice to communities that want to plant trees and run events in their neighbourhood.

<http://www.oncf.org.uk/tund/f04.html>

Landshare

This Oxford-based think-tank looks at the issues around managing our land and its resources. The three main areas of work are: how to feed a city; energy positive; and land partnerships.

<http://www.landshare.org/>

Low Carbon Hub

A "hub" for Oxfordshire communities that want to take action on climate change. Offers advice, resources, services and training.

<http://www.lowcarbonhub.org/>

Earth Trust

Owns and manages Wittenham Clumps, Little Wittenham, Neptune Wood and a conservation farm (part of the Oxfordshire Nature Conservation Forum).

<http://www.oncf.org.uk/tund/n05.html>

Oxford Conservation Volunteers

Organises voluntary work to conserve the wildlife and traditional landscape of Oxfordshire.

Organises work parties every weekend.

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

Oxford Data Observatory

The ward-level profiles give a handy summary of ward level statistics which can be useful when designing a low carbon project for your community.

<http://www.oxfordshireobservatory.info/wps/portal/dataobservatory>

Oxford Friends of the Earth

One of over 200 groups affiliated with the national organisation Friends of the Earth.

<http://www.oxfoe.co.uk/>

Oxford Greenpeace

Oxford branch of the well known international campaigning organisation, Greenpeace.

<http://www.greenpeace.org.uk/groups/oxford>

Oxfordshire Nature Conservation Forum (ONCF)

A partnership organisation of nature conservation groups working across Oxfordshire, ONCF produces a bulletin that lists local conservation events.

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

Oxford Permaculture Group

To support people and groups in the Oxford area who are interested in sustainability, permaculture design and community building.

<http://oxfordpermaculture.org/>

Oxfordshire Waste Partnership

Good array of resources to help with waste-related projects.

<http://www.oxfordshirewaste.gov.uk/wps/wcm/connect/occ/OWP/Home/>

People & Planet

Oxford branch of the student network that campaigns on world poverty and the environment.

<http://peopleandplanet.org/>

Plunkett Foundation

Oxfordshire-based, the Plunkett Foundation provides advice and information to rural communities working on community-ownership schemes, like village shops or food co-ops. There are some useful guides and case studies on the website.

<http://www.plunkett.co.uk/resources/index.cfm>

South East Food Group Partnership

Includes a region wide local food map and will also cover local food producers in Oxfordshire.

<http://www.tastesoutheast.co.uk/>

Wildlife Trust

Oxfordshire branch of the national conservation charity.

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

Woodland Trust

Champions native woods and trees and work with others to plant more native varieties.

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

Gardening

Barracks Lane Community Garden

Organises seed swaps, workshops on permaculture, germination and potting, eco art, tree planting and upcycling throughout the year.

<http://www.barrackslanegarden.org.uk/index.php>

Hogacre

Hogacre Common Eco-Park works with low carbon groups in south and west Oxford to provide a new natural resource and centre for excellence for sustainable living.

Contact: hogacrecommon@gmail.com

Restore

In spring and summer they have a good range of plants for sale in in Manzil Way branch as well as hand-made birdhouses and pots for the garden.

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

Energy

Thames Valley Energy Advice Centre

Thames Valley Energy offers free advice on renewables over the phone.

<http://www.tvenergy.org/>

Property

Ethical Property Company

Ethical office space for charities and community businesses: the communal “green room” is built from straw bales with a green roof. 01865 207810

http://www.ethicalproperty.co.uk/site/en/_Old_Music_Hall.php

Local & organic food

Local Food Map for Oxfordshire

This food map of Oxfordshire shows local producers, shops, markets, community groups and support networks – everything you need to get involved.

<http://maps.google.co.uk/maps/ms?msid=206861993328943337655.000495f519bae373bac54&msa=0&ll=51.996719,-1.227722&spn=0.904721,2.7053833>

Printing

Oxford Green Print

Provides low impact printing: all print runs are on recycled paper, using renewable energy with minimal waste.

<http://www.oxfordgreenprint.com/services.htm>

Seacourt

Uses waterless offset process and vegetable oil-based inks on recycled paper and is a carbon neutral company powered by renewable energy.

<http://www.seacourt.net/>

Recycling

Abingdon Wood Recycling Centre

Reuses and recycles wood and timber to help reduce the amount of waste wood sent to landfill in Oxfordshire.

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

Daily Information

Oxford's Daily Information has a section on buying and selling everything from bikes to phones.

<http://www.dailyinfo.co.uk/sales/index.html>

Emmaus Oxford

A secondhand superstore and shop at Temple Cowley which supports the homeless in Oxford.

<http://www.emmausoxford.org/superstore.html>

Orinoco

The Orinoco Scrap Store offers cheap items for art, play and creative items from paint to furniture.

<http://www.oxorinoco.org/>

Oxford Freegle

Freegle puts people in touch who want to through away stuff with people who want stuff.

<http://groups.yahoo.com/group/Oxford-Freegle/>

3.6 National Organisations

We have put together a directory of national organisations and useful links. We would like to expand the directory to make it really comprehensive but to do this we need your help. If you have organisations that you can recommend for inclusion, please email info@lowcarbonhub.org. Thank you!

Campaign for Better Transport

An independent charity providing well-researched, practical solutions to transport problems.

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

Campaign to Protect Rural England

Campaigns for a beautiful and living countryside by working to influence how we plan our towns and cities, and to ensure rural areas are protected for future generations.

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

The Carbon Account

Enables users to capture travel as well as house hold energy.

<http://www.thecarbonaccount.com/>

Carbon Conversations

Six-part course on low carbon living: it doesn't preach but gives fun and stimulating exercises to help you make your own decisions about lowering your carbon emissions.

<http://carbonconversations.org/>

Carbon Leapfrog

Network of professional organisations that help community groups working on climate change with pro bono advice and services.

<http://carbonleapfrog.org/>

Carbon Trust

A not-for-profit company providing specialist support to help business and the public sector boost returns by cutting carbon emissions, saving energy, and commercialising low carbon technologies.

<http://www.carbontrust.co.uk/Pages/Default.aspx>

Centre for Alternative Technology (CAT)

Aims to inspire and inform people to live more sustainably. Offers practical solutions to environmental problems, runs courses and provides information on all aspects of low carbon living.

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

Climate Action Network

World-wide network of NGOs that promote action to keep human-induced climate change within ecologically sustainable levels.

<http://www.climatenetwork.org/>

Community Energy Online

Signposting website produced by DECC to help communities working on renewable energy projects.

<http://ceo.decc.gov.uk/>

Community Interest Companies

Information on community interest companies (CICs) and how to set one up with guidance, case studies, and information sheets on key facts, frequently asked questions and the benefits of CICs.

<http://www.bis.gov.uk/cicregulator/>

Eco-Street

Useful green directory of UK organisations from business resources to volunteering.

<http://www.ecostreet.com/directory/>

Energy Saving Trust

Free, impartial advice on saving energy and money.

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

Environment Agency

Aims to protect and improve the environment and to promote sustainable development and delivers the environmental policies of central government.

<http://www.environment-agency.gov.uk/default.aspx>

Envocare

An information site that promotes care of the environment.

<http://www.envocare.co.uk/>

Feed-in Tariffs

This site gives the lowdown on feed-in tariffs – how they work, legislation, as well as updates on reviews and changes.

<http://www.fitariffs.co.uk/FITs/>

Friends of the Earth

A campaigning organisation that seeks to influence government to make changes to policies in favour of people and planet.

<http://www.foe.co.uk/>

FSE Community Generation Fund

Finance Southeast runs a fund for community environmental projects, offering loans for feasibility and construction costs.

<http://www.financesoutheast.com/ourfunds/index.aspx?id=1778>

Green Choices

UK guide to greener living and eco-friendly products and services.

<http://www.greenchoices.org/>

Green Guide

Online directory for planet-friendly living.

<http://www.greenguide.co.uk/>

Green Peace

High profile campaigning organisation to stop climate change.

<http://www.greenpeace.org.uk/climate>

Greenphase

UK environmental and technology guide, and green lifestyle source.

<http://www.greenphase.co.uk/>

Low Carbon Communities Network

Aims to link, network and support the rapidly growing movement of climate change groups that are forming round the UK.

<http://lowcarboncommunities.net/about/>

Low Impact Living Initiative

A not-for-profit organisation, LILI aims to help people lower their impact on the environment: check out the website for a full programme of courses.

http://lowimpact.org/venues_south_east.htm

Mailing Preference Service

Sign up and reduce the amount of junk mail you receive.

<http://www.mpsonline.org.uk/mpsr/what/>

Making Local Food Work

Provides support and advice to community food enterprises across England, whether it's a farmers market, community-owned shop, or food co-op. It has a useful resource section and runs workshops and training events.

<http://www.makinglocalfoodwork.co.uk/index.cfm>

National Flood forum

A charity to support the victims of flooding both during and after the event.

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

New Economics Foundation

An independent think-tank that aims to improve the quality of life by promoting innovative solutions.

<http://www.neweconomics.org/>

Office of National Statistics

This website holds a wide range of stats that can be searched at national, regional or local level. The search function enables you to find out information about your local community that can be crucial for project design.

<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadHome.do;jessionid=qZNnPDsQ6TPF2vYFyDJ35dwynQbSB8qqLnvWCGDhhLQwyRTbT2Qy!-68977967!1329835248349?m=0&s=1329835248349&enc=1&nsjs=true&nsck=true&nssvg=false&nswid=1044>

People & Planet

UK student organisation campaigning to protect the environment and end world poverty.

<http://peopleandplanet.org/>

Plan Local

A suite of resources including films, a resource pack and website which aims to support communities and groups that are planning for low carbon living.

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

Project Dirt

Networking site for communities working on climate change.

<http://projectdirt.com/>

PURE Community Energy Fund

Low interest loans to help communities with the initial outlay for renewable energy projects.

<http://www.puretrust.org.uk/page.jsp?id=105>

ShareEnergy

Helps communities find, build and own renewable energy generation throughout the UK.

<http://www.shareenergy.coop/>

Sustain

Alliance for better food and farming in the UK.

<http://www.sustainweb.org/>

Stop Climate Chaos

More than 100 organisations and 11 million people working together to stop climate change.

<http://www.stopclimatechaos.org/>

Superhomes

The Superhomes network organises events where you can look round houses that have done eco-retrofits. They also have a My Green Builder section of the site for recommended suppliers.

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

Talking Climate

A new source of ideas on how best to communicate climate change.

<http://talkingclimate.org/>

Transition Network

Community-led response to the pressures of climate change: they have set up projects all around the UK involving creative re-use, re-skilling, access to local food etc.

<http://www.transitionnetwork.org/>

10:10

Inspires and supports people and organisations to cut their carbon emissions by 10% a year.

<http://www.1010global.org/uk>

UK Climate Impact Organisation

Helps organisations adapt to the inevitable impact of climate change – the website has detailed information on a wide variety of adaption issues.

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

United Sustainable Energy Agency (USEA)

Not-for-profit company providing services to business, public sector and individuals to help them reduce carbon, adapt to climate change, and tackle fuel poverty.

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

YouGen

An online community to help share information and knowledge on renewable energy. Useful online directory of local suppliers and installers.

<http://www.yougen.co.uk/>

Wessex Community Assets

Advice and “rules” for setting up and registering as a community benefit society.

<http://www.wessexca.co.uk/>

Windspeed Database

Check the windspeeds in your area on the DTI’s database before thinking about a wind project.

<http://webarchive.nationalarchives.gov.uk/+http://www.dti.gov.uk/energy/sources/renewables/renewables-explained/wind-energy/page27326.html>

World Wildlife Fund (WWF)

Works to protect endangered wildlife and environments around the world.

http://www.wwf.org.uk/what_we_do/50th_anniversary/?pc=AJB004001&gclid=CKihmeeB7K4CFcwTfAodmT_CIA

Event publicity channels

As yet, there is no central 'clearing house' for environmental information and action in Oxfordshire, so to ensure your event has the maximum publicity you'll need to send it round a few email lists.

Do use local online networking too, but don't ignore the tried and trusted ways of telling people about your events.

Use your libraries

Your local library is a great place to advertise your event, and for Oxfordshire wide events you can take posters and leaflets to the Central Library to be distributed to all the libraries in the County. Groups can also book display spaces in many local libraries.

<http://www.oxfordshire.gov.uk/cms/public-site/find-library>

Online calendars and events

Oxfordshire CAGS
See events: <http://www.cagoxfordshire.org.uk/>

Daily Information What's On Index
<http://www.dailyinfo.co.uk/whatson/index.html>

Gum Tree
<http://oxford.gumtree.com/>

Oxford Mail/Oxford Times 'What's On'
<http://events.oxfordmail.co.uk/events/eventadd.asp>

Jack FM's Jacktivities list
<http://jackfm.co.uk/jacktivities/list>

Email news lists

ONCF (Oxfordshire Nature Conservation Forum)
Conservation news, events, walks, talks and volunteering opportunities
Weekly
Email cynth@oncf.org.uk

The Key
News, events, funding and jobs
Fortnightly
Email Peter.lefort@resourcefutures.co.uk

Low Carbon Communities Network
News, events and research
Weekly
Email hello@lowcarboncommunities.net

Journalists

For an up-to-date list of local media contacts email peter.lefort@resourcefutures.co.uk

Working with your Local Authority

Working with local authorities can really help community groups. You can influence the policies they make on the environment, and they may be able to offer your group their expertise, practical support and even funding. Your local authority has a range of ways to support you and your activities. The different authorities have targets on climate change, and below you'll find a list of key local contacts and web pages for your local authorities.

See the EST guide 'How to influence and work with your local authority' available from <http://nottinghamdeclaration.co.uk/cafe/Green-Communities/Guidance-and-useful-tools/How-to-Guides/How-to-influence-and-work-with-your-local-authority>

Oxfordshire's National Indicator targets on climate change are currently under review:

NI 185: CO2 reduction from Local Authority operations, (<http://www.decc.gov.uk/en/content/cms/statistics/indicators/ni185/ni185.aspx>)

NI 188: Adapting to climate change: <http://www.defra.gov.uk/environment/climate/action/local-authorities.htm#indicator>

Oxfordshire County Council

www.oxfordshire.gov.uk/climatechange

Key contact:

Susan Halliwell, Environment and Climate Change Manager
01865 815861

Oxfordshire 2030

Environment and climate change: To respond to the challenges of climate change by minimising the effects of flooding, looking after our environment, reducing waste and use of energy to improve the quality of life for all.

We pledge to:

Reduce carbon emissions and improve energy and water efficiency by public sector organisations, and encourage residents and businesses to do the same.

Support individuals, communities and businesses, to respond to climate change and to improve efficiency in their use of energy and water.

Target:

Oxfordshire's greenhouse gas emissions reduced to levels comparable with the best in the UK - a 50% reduction in CO2, on 2008 levels by 2030

<http://portal.oxfordshire.gov.uk/content/public/oxfordshirepartnership/oxfordshire2030/2030reportFINAL.pdf>

Oxfordshire County Council Corporate Plan

Environment and climate change is one of four a key priorities.

Our target is to reduce our carbon footprint by 18% by March 2012 (based on a 2005/6 baseline) http://portal.oxfordshire.gov.uk/content/publicnet/council_services/about_your_council/improving_our_performance/corporate_plan/CorporatePlan2009-14.pdf

Oxford City Council

<http://www.oxford.gov.uk/PageRender/decVanilla/LowCarbonOxford.htm>

Key contact:

Paul Robinson Team Leader, Energy and Climate Change
Environmental Development, Oxford City Council
OX1 1PT, 01865 252541

For the City Council's corporate carbon reduction work see: www.oxford.gov.uk/PageRender/decER/Climate_Change_in_Oxford_occw.htm

See the City Council's corporate plans here:

http://www.oxford.gov.uk/PageRender/decCD/Policies_and_Plans_occw.htm

The City Council's Local Area Agreements, Sustainable Community Strategy and Corporate Plan mention climate change. Specific CC policies on this page: http://www.oxford.gov.uk/PageRender/decER/Climate_Change_in_Oxford_occw.htm

West Oxfordshire District Council

<http://www.westoxon.gov.uk/environment/envpolicy.cfm>

Key contact:

Debbie Haynes, Environmental Policy Officer
debbie.haynes@westoxon.gov.uk
01993 861349

WODC has a climate change policy which includes committing to reducing our emissions by 6% according to the Local Area Agreement 2 and to achieving Level 3 of NI 188 which looks at adapting to climate change and weather impacts by 31 March 2011.

Check above website, key downloads include Green Travel Plan (shortly to be updated) and Local Climate Impact Profile - impacts of climate change.

You can find the Climate Change Policy at <http://www.westoxon.gov.uk/files/download/6132-3265.pdf>.

Any other info that is useful for community groups: <http://www.westoxon.gov.uk/environment/environmentgroups.cfm> - this has traditionally concentrated on ecology related groups, but welcome contributions from other community environmental groups.

South Oxfordshire and Vale of White Horse District Councils

www.southoxon.gov.uk
www.whitehorsedc.gov.uk/

Key contact:

Cynthia Sullivan
cynthia.sullivan@southandvale.gov.uk
01235 547363

Key Commitments:

Nottingham Declaration May 2007 - <http://www.whitehorsedc.gov.uk/services-and-advice/environment/climate-change/tackling-climate-change/councils-commitment-climate-c>

Carbon Management Programme December 2009 20% (Vale) 30% (South) reduction in carbon emissions by 2012 based on a 2007 baseline. <http://www.southoxon.gov.uk/services-and-advice/environment/climate-change/tackling-climate-change/carbon-management>

Energy Saving Trust 1 to 1 support programme : The council is part way through developing a local area emissions reduction strategy with help from the Energy Saving Trust. This will set out actions to reduce district wide emissions. It is envisaged the action plan will be complete by the end the year.

The council has comprehensive online guidance on household energy saving measures including links to many websites and contact details for further help, grants and guidance. <http://www.whitehorsedc.gov.uk/services-and-advice/community-advice-and-support/cradle-to-grave/keeping-warm>

The council has a community grants scheme however due to budget constraints this has been withdrawn for the current year. <http://www.whitehorsedc.gov.uk/services-and-advice/community-advice-and-support/grants>

Useful information for community groups:

Vale of White Horse Supplementary Planning Document on Sustainable Design and Construction: <http://www.whitehorsedc.gov.uk/services-and-advice/planning-and-building/planning-policy/local-development-framework/supplementary->

Cherwell District Council

www.cherwell.gov.uk

Key contact:

Gabi Kaiser
gabi.kaiser@cherwell-dc.gov.uk
01295 221962

Key Commitments:

Nottingham Declaration signatory

Working in partnership with the Carbon Trust as part of their Carbon Management Programme
Long term vision is to be Carbon neutral.

See online: <http://www.cherwell.gov.uk/index.cfm?articleid=1777>

Useful information for community groups:

Cherwell District Council is keen to work in partnership with any community group in the District. We hold twice yearly environment forums to support community activists and can offer on loan our thermal imaging camera to constituted groups over Winter months.

Case Study: Local Groups Financial Sustainability Plan

by Ramsay Dunning, **Hook Norton Low Carbon**

The plan developed by **Hook Norton Low Carbon** group provides an income for the group providing it with the resources and independence from grant funding or reliance on donations, to pursue its environmental agenda. The plan is quite simple.

Firstly by putting affiliations in place with a renewable energy provider and an ethically, socially and environmentally responsible telecoms provider, the group earns a commission on the electricity and telephones of its members.

In choosing an electricity provider they asked the three independent renewable suppliers for their proposals; Good Energy, Ecotricity and Green Energy UK. They found Good Energy would only pay a nominal one off commission when a householder switched to them and their prices are high; Ecotricity would pay 3% commission but their prices were high; Green energy UK would discount the electricity making it cheaper than brown supplies (electricity supplied by burning fossil fuels) and pay 5% commission. All were offering 100% renewable. This made it an easy decision; with Green Energy UK their members mostly save money as well.

The Phone Co-op is an ethical socially responsible organisation, whose prices are lower than BT (saving our members money) they have an excellent environmental record and offered 6% commission (except for line charges).

A community member with a typical electricity bill of £50 per month and telephone (including broadband) of £25 per month will earn the group £4 per month or £48 per year. So a hundred members gives an income of £4,800 p.a., and promoting in the wider community can share the savings and increase the income further; and they are both using 100% renewable electricity and saving themselves money at the same time.

To set up the same scheme in your own group is very simple. They started by switching half a dozen members initially, then they related back how easy it was to the wider group at the next meeting, and the group will then take it out to the wider community as part of their community engagement program this winter. For more on our two partners look at www.greenenergyuk.com and www.thephone.coop or one of their member's own website www.ramsaydunning.co.uk

The next steps:

To set up the affiliation schemes send your details to liz@greenenergyuk.com and matt.lane@thephone.coop. They will each give you prices etc and set up the affiliation

Then all you need to do is collect names addresses and emails and forward them on to your affiliation partners. They will collect the other details, and deal with Direct debit and bank details, and nobody will be switched over unless they give the go ahead. You are not switching people over, just collecting their details, with their permission, for your affiliation partners to talk to them, and switch them if they choose to go ahead. The next step following the same principles is to negotiate discounts on other energy and energy efficiency products.

Please pass this on to other groups who may be interested, the more groups there are, the greater the negotiating power we will have.

This document was written by Ramsay Dunning on 18th October 2009

Contact details:- ramsay@ramsaydunning.co.uk web site www.ramsaydunning.co.uk
Tel 07896917404 or post Namaste, High Street, Hook Norton, OXON OX15 5NF.

Case Study: RM (Research Machines) goes Green, by Anthony Simpson

RM is a successful company based in Milton Park, Didcot. Below Anthony Simpson, an employee at RM, details their activity in their first year of Green RM. In 2008 RM was named as one of the top 50 green Companies in the Sunday Times Green List.

Company information	Energy	Transport	Waste, recycling and water
Green RM initiated by interested staff in 2004	Company objective to reduce electricity use by 8% (14% achieved, but weather assisted)	Removal of gas guzzlers including 4x4s from company car list. Inclusion of full life costs in full calculations, e.g. considering fuel implications. Toyota Prius hybrid has been added to the company car fleet	Introduction of office recycling. 50% of waste now recycled
Director engagement due to multiple benefits to customers, staff and shareholders	Timer switches on office equipment	Incentive to reuse cups – remember 5 cups per day per person= 1000 per annum!	Recycling of paper, plastic, batteries, cans, CDs, printer cartridges, mobile phones and computer equipment (WEEE)
Building awareness over 200 staff have watched the Al Gore Movie 'An Inconvenient Truth'	Office audits of office equipment left on overnight and divisional league tables	Reduction in food miles through change of catering company	'Think before you print' guidelines to encourage staff not to print unless necessary, and to optimise printing (double sided, 2 pages on 1 etc)
Growing interest from new applicants (including graduates) interested in corporate responsibility including eco-credentials	Created new low energy computers for schools (www.ecoquiet.co.uk)	Lift sharing scheme introduced	Projects in place delivering reduction in paper and packaging, and transferring to be from sustainable source. New customer instruction packaging contains 80% recycled content
Huge interest from educational establishments about our environmental responsibilities	Moved company annual report, firstly to be carbon neutral, then to enable electronic distribution	Improved shower and changing facilities to encourage cyclists, walkers etc	Bringing mugs to work

Company information	Energy	Transport	Waste, recycling and water
<p>Annual Green Week to improve awareness of climate change, our activities to reduce our impact, and encourage new ideas</p>	<p>Switch to renewable energy supplier saving 2308 tonnes of CO2 per annum</p>	<p>Greener driving guidelines</p>	<p>Introduced Arriba office paper (Greenpeace endorsed) including using post consumer waste. Slight increase in cost offset by cut in paper use.</p>
<p>Green shopping site- discounts from companies for more environmentally friendly products and services</p>	<p>Server visualisation to dramatically reduce the number of servers</p>	<p>Introduction of travel card scheme</p>	<p>Coffee grounds recycled for composting use at RM and by staff</p>
<p>Staff suggestion email list set up (greenideas@rm.com)</p>	<p>Apply setting centrally managed desktops to improve consistent use of power saving facilities</p>	<p>Free Milton park bus passes</p>	
<p>Further ideas</p>	<p>New PCs bought for internal use must be our low energy eco-quiet range, a laptop and/or LCD monitor</p>		
<p>Further ideas</p>	<p>Zonal sensor lighting in Production and many office buildings to reduce lighting energy use</p>		
<p>Further ideas</p>	<p>More than half the RM computers we ship will be based on 'greener' technology, having a net power consumption per computer of less than 80W, including display, at full system load, as measured by Orthos</p>	<p>Plans to reduce air milage through more effective planning of meetings and greater use of technologies such as video-conferencing</p>	
<p>Further ideas</p>	<p>80% of RM desktops shipped to primary and secondary schools will incorporate eco-quiet technology</p>		

Case Study: Thermal Imaging Study of Brightwell Cum Sotwell

Thermal Imaging Houses – Some Conclusions

Based on experiences in the communities of Brightwell-cum-Sotwell, Blewbury, Dorchester, Sreatley & Goring using infra-red photos to highlight houses' heat loss.

The Bad News

Thermal imaging is not so easy.

Interpreting results needs training, care & experience.

Normally it needs to be done in cold weather when neither the sun nor rain has fallen on the house being imaged. This and the need for discussion with householders mean that it takes more time than one expects to image a number of properties.

The Good News

It fulfils its main function in being absolutely intriguing, raising interest and awareness.

It makes people think they should do something to save energy.

Householders are pleased and enjoy having it done. They can recognize and confirm what they see in the images. an easy decision; with Green Energy UK their members mostly save money as well.

1. Gathering initial support & involvement

It was important to advertise the project beforehand and seek committed team members and individuals interested in having their properties imaged. This can be done via personal contact and suitable local publications.

It is necessary to made clear that no images will be taken of properties without the householders' permission.

2. The Team

Team structure and the choice of committed individuals is important. Obviously the choice can be approached in different ways, but certain key characteristics are required:-

(a) Someone to set out & coordinate the imaging program (i.e. Project Director / Leader).

(b) Someone with good contacts & knowledge of the community is needed to facilitate communication & identification of individuals.

(c) Imagers who have training/experience specifically in operating the infrared camera.

Experience with normal digital photography is useful but not enough.

(d) Those downloading the digital thermal image data onto computers, processing it and probably printing it will need suitable computer skills.

(e) Someone, presumably one of those involved in (d) above, to keep track of the rather large amounts of data collected.

3. Camera Use

Thermal imaging is different to normal digital photography. Using the camera & putting in the appropriate settings is not straightforward. Training, practising & understanding beforehand is essential.

Imaging glass windows can be affected by reflection. Even the heat from the imager's body can be reflected. So the angle and what might be reflected needs care in image taking & interpretation. For example, shiny surfaces and roofs imaged at an angle can give distorted temperature readings.

4. Other equipment

Although not essential, a tripod & thermometer can be useful. For image interpretation it helps to know the temperatures inside & outside the property being imaged. The camera itself does measure ambient temperature, but takes some time to respond. Some hand held thermometers are quicker.

5. Weather

A temperature differential between inside & outside of at least 10°C is needed for good results. Solar gain is another problem. Sun on one side of a building, even hours earlier, can seriously distort the thermal imaging results.

A wet surface, such a brick after rain, can also be a problem.

Thus winter evenings after overcast skies without rain give the best results.

A local weather forecasting website, such as www.metcheck.com, can help in organizing imaging dates.

6. Time needed

Imaging a number of properties takes longer than expected. This is largely due to weather uncertainties and the establishment of coincident availability dates for householders & imagers. Contacting householders & imagers and programming imaging dates is essential. Good organisation is key! Blewbury was assigned the camera for only a short time and yet thermally imaged 18 properties in only 4 evenings. This is the best time performance to date from any of our communities.

Having the camera allocated for an extended period seems good but a shorter period a say of ~2 weeks can concentrate the mind and give better use of time if well organised (& given suitable weather). Also imaging sessions seem better fitted in after evening meals rather than before.

7. Organisation

The team organisation needs to be set up beforehand with individual roles defined. Once the camera collection date is known, a date for training the team members needs to be established. Training needs adequate time, and more than one training session may be needed. The most usual operating teams consist of 2 'imagers' one of whom concentrates on operating the camera and the other on the essential note taking. A third, a director/'imager' may be added to help coordination.

8. Note taking

Image interpretation is not straightforward. One cannot stress enough the need for careful notes of the weather, building structures & any anomalies found.

Anomalies to keep an eye open for are unexpected colours / temperatures in the image. Then it's best to try to establish & note the possible explanation. The householder's explanation / opinion is likely to help. Knowing the weather conditions & building structure (e.g. insulation already installed etc.) helps with image interpretation.

Field Note Taking is helped by having pre prepared forms for the imagers to complete on site whilst out imaging (see one example used, Appendix B).

9. Downloading, Processing Images & Producing Reports

This can take longer per property than the imaging itself. But for maximum impact the results should be fed back to the householder fairly quickly, say within a month.

Before starting report production it is necessary to decide the nature of the reports to be produced, the colour palette for the images, the software to use (this can be camera software alone or in combination with other software e.g. JPEG & MS Word), and how they will be conveyed to householders.

Some opt for reports of several pages using camera software, incorporating not only Red-Blue palette thermal images, but added normal digital images of the properties as well.

Some used the camera software to process the thermal images, but produced their 1 or 2 page reports with JPEG images using MS Word (see example Appendix A).

One community opted to save paper by circulating images via email and only printing images for householders without computers.

All the communities managed to get example results in village & local publications & on display boards at local events, all of which helps to convey the message.

10. Reactions

Our community projects have been well received. Thermal imaging is fascinating. People were very interested to see the results and pleased to have the images and analyses. Sometimes it did not tell them much they did not suspect or know, but it emphasised their energy loss and added to motivation.

As with most motivational projects continued follow-up & varied approaches are needed.

Perhaps the most difficult aspect is getting people to act on the information received and to spend their hard earned cash on energy saving improvements.

One suggestion is for a suitable member of the team to return to the householder say about one or not more than two weeks after they have received the thermal image results to discuss possibilities. For this it is helpful to have details / publications on energy saving and its costs & returns produced by organisations such as the Thames Valley Energy Centre and the Energy Saving Trust.

However, energy prices are going to rise further and people will start to see an even stronger need for making the necessary savings in the home.

11. Conclusion

Good - Planning, Organisation, Team Selection, Training, Communication & Commitment are the keys to success.

Peter Varley – BcS Environment Group 30.10.09

below: follows next page



**IR 20080308 No.
343
South elevation**

Heat escaping from
the open front door

**so shut the b-
door -**

Please.

The white spot is a
direct view of the hall
radiator.

Note We would be delighted to hear of any Energy Saving improvements you make.

APPENDIX A

Brightwell-cum-Sotwell
Thermal Imaging Study



Imagers: K. Brooks & J. Rodda

Time: 10.00

Date: 8.3.08

Temperatures: *Outside:* 7 °C

Inside: 10 °C

Image Address: Village Hall

Build Date: c1871

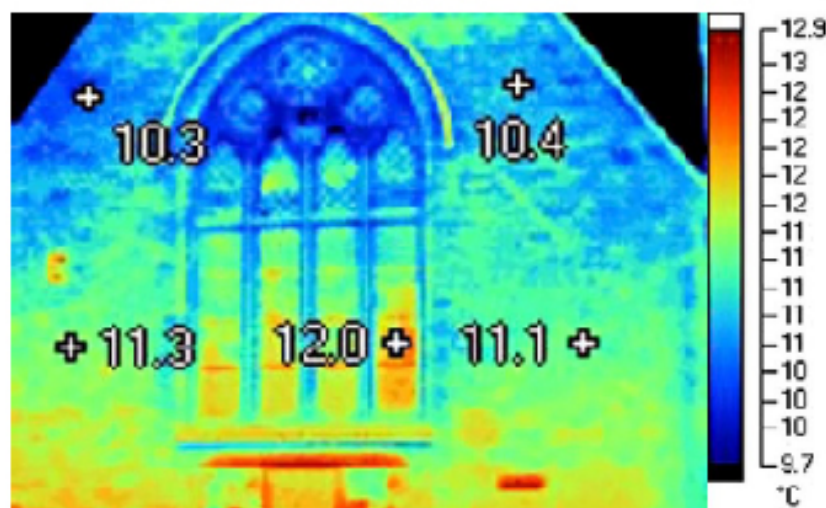
Householder: The Village

Wall Structures: Solid brick main building & cavity in extensions

Window Types: Upper single glazed & double glazed in extensions

Roof: Tile non insulated.

Image No. Orientation & Comments ▼

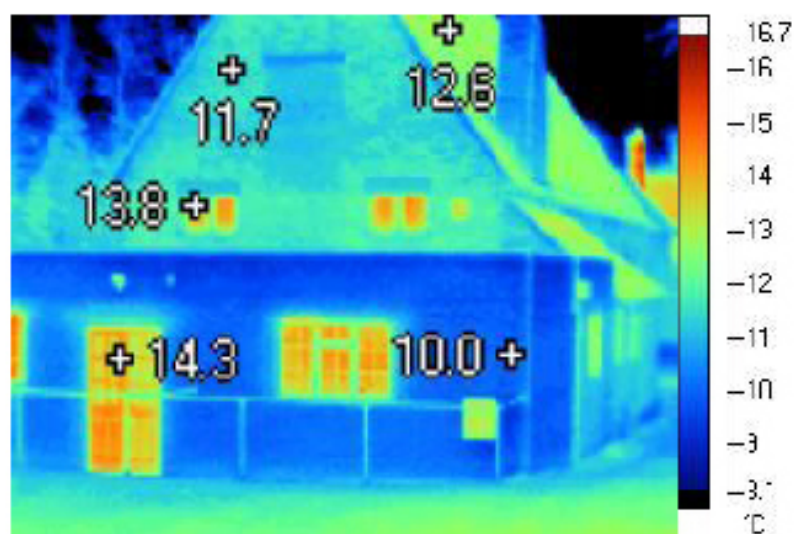


IR 20080308 No. 341
South Elevation

Front of the Village Hall

One can detect the level of the suspended ceiling and where the radiators have been heating the uninsulated wall.

The lower red marks are the wooden boards.



IR 20080308 No. 338
North Elevation

Rear of the Village Hall

Shows the insulated extension compared with the poorly insulated main roof & walls

Lower windows & doors double glazed but it was warmer inside there

Note We would be delighted to hear of any Energy Saving improvements you make.