



# **A Practical Toolkit for Communities Aiming for Carbon Neutrality**

*Produced by the Ashton Hayes Going Carbon Neutral Project  
in conjunction with The University of Chester*

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## 1: Introduction and project overview

**Developed by Ashton Hayes Parish Council, this toolkit is designed to help like-minded communities adopt and implement a going-carbon-neutral policy.**

The toolkit contains all the elements we have employed in a campaign that began on 26<sup>th</sup> January 2006 at Ashton Hayes Primary School. This proved to be a truly remarkable evening. Around 400 people from our tiny village braved a freezing cold night to find out how we might work together to stem climate change. Never in our village history had we seen such a turnout.



On that evening we realised that it was **important to record our journey** and this toolkit is basically a **record of our activities** – **all the actions we have taken to ‘make it happen’**. You can use all the elements freely and can copy/modify/ignore whatever you wish. There are no charges or legal constraints. We just ask that you try your best to credit the Ashton Hayes Going Carbon Neutral programme (and link to our website [www.goingcarbonneutral.co.uk](http://www.goingcarbonneutral.co.uk)) if you find it useful. We also ask that you send feedback to us on any ideas that you try out in your community.

From the start, we have tried to **make the whole project fun**. (This is why we encouraged **local businesses to pay for the English sparkling wine and apple pies that we gave out on our launch night**.) It has been an approach that has paid dividends beyond our expectations. We have seen our community **relations enhanced**, and **developed a common sense of purpose**.



The ‘**Big Rules**’ we adopted for our project have helped to prevent conflict and avoiding engendering feelings of guilt or fear associated with climate change. We recommend that you consider adopting and adapting them to suit your community. They have served us well, allowing the residents of Ashton Hayes the time they needed to join in **without being pressurised into action**. The idea is to **encourage people to participate** in **whatever way they can without pointing the finger or criticizing anyone’s lifestyle**.

There is also no doubt that the immense media coverage we have enjoyed has also energised the population, many of whom have now become very media savvy (especially the school children)! We strongly recommend that you **develop supportive relations with your local media – newspapers, radio and TV** – before you launch any scheme as this gives you a cheap, rapid and authoritative way of keeping your community informed and motivated.

It is difficult to pinpoint any single element of the project that has been crucial to success. **Synergy seems to be the key**. We all agree that having the **support of the local primary school teachers, children and parents has been essential**. As has the **technical support and long-term commitment of the Universities of Chester and East Anglia** in helping us **measure and reduce our carbon footprint**. Indeed, one of the big strengths of this toolkit is that it gives you ready access to our survey forms and footprint calculations that you can embrace and enhance to suit your needs. We hope this will save you a lot of legwork as we have improved and modified the forms and computations along the way.

In the various toolkit folders you will find examples of the **community communications** we have issued, press releases and even posters and videos. These have been assembled by our band of active helpers which, at the time of going to press, has grown to over 30 people. There is also a tremendous amount of background information that you might find useful and informative. In fact, the **sharing of ideas between residents who trust each others’** views and opinions has emerged as a crucial element in our success.

### *Ashton Hayes: A quick insight into our community*

Shortly after our launch it began to dawn on us that our Going Carbon Neutral Project was being watched closely by large numbers of people. We began to wonder if Ashton Hayes was perhaps a ‘special’ community and if it would be hard to replicate this enthusiasm elsewhere.

Many of us involved with the project had lived in the village (population 1000) for between ten and thirty years and already enjoyed a great sense of community spirit. Our population comprises farmers, blue-collar and office workers, teachers, scientists, university lecturers and business people. We are probably better-off than the average UK community but not markedly so.

We know we are very fortunate in having a well-frequented pub, a shop and post office, an excellent primary school, two churches, a football team, women’s institute, scouts, brownies, gardening club, theatre group...the list goes on. We really are the archetypal village – all that’s missing is a village green! No wonder people who live here seem reluctant to leave.

But we have discovered that we are not special.

Over the past year we have given talks to almost thirty communities around the UK and have come to realise that every one of them is similar to us. They are about the same size, sometimes bigger, sometimes smaller and have enthusiastic people and strong community spirit. And they are all keen to do something about climate change.

However, each community faces a different challenge. This is why it is important to share our ideas, try out new and sometimes innovative concepts and shape our experience, together.

The human race really has to work together on this one.

Garry Charnock  
Project originator



## 2: Kick starting your project – you are not alone!

**Finding a way to encourage people to start on a journey towards carbon neutrality may seem daunting and it does require you to stand up and communicate your thoughts and ideas and to inspire your community.**

This is a little scary, especially if you are not used to public speaking or facing an audience. But take courage. We found that we were not ridiculed and the ideas we presented were welcomed by the community. In fact, everyone seemed delighted to discover they were not alone in having concerns about climate change.

So if you are about to embark on the road to carbon neutrality our advice is that you first try out your ideas and thoughts on some trusted friends within the community. If you find they support your idea, take the next step and chat to respected individuals in your community such as landowners, leaders of clubs and societies, the church and most of all the primary school teachers. If you get a warm and generally supportive response go outside your village and engage your local environment representatives such as your Town & County Councils and explain to them that people within your community are keen to help and do something about climate change. We find that local authority officers already have some excellent ideas on recycling and other issues which they can bring to the table.

If, however, you find you meet a very negative response from your community consider 'holding fire'. Perhaps wait for six months while the climate change debate in the press hots up (as it will) and then try again. Your Parish Council or other community representatives might just be amenable to a new idea.

*Our friends in the tiny community of Brilley, near Hay-on-Wye, Herefordshire found this part really difficult. However, with dogged perseverance, Ruth Morgan and others eventually found a way to bypass the local disinterest of the Parish Council – they used Press coverage to engage DEFRA's interest, then that of the Herefordshire County Council and, finally, the local Parish Council. "Some people take longer to persuade than others," says Ruth.*

## **Doing it democratically**

Once you feel you have significant support to start some action we advise that you approach your local democratic body, in our case this is the Parish Council. In our view, engaging the Parish Council and getting its mandate was critical as it not only gave us a democratic and transparent way forward for the project but enabled us to come under the umbrella of the Parish Council's insurance, legal and financial systems.

It also gave us the authority to go and talk to city councillors in Chester. When our Parish Council decided to adopt the challenge of Ashton Hayes becoming the first carbon neutral village in England, the vote was not unanimous. But we helped to swing the decision by explaining that, if the Parish Council decided to adopt the project, our team would take responsibility for running it and we would generate the finance it needed without using monies from the Parish Council Precept. The Parish Council in return insisted on three things:-

- That one of us join the Parish Council as there was a vacant seat.
- That we tested the idea in an open forum to gauge the level of village support.
- That we share any experiences of our journey with other communities (which is what this toolkit is all about).

We are not clear on how we would have fared going forward as an independent group within our community. Our feeling is that we might have been seen as a pressure group rather than having a mandate from the community for action. We hope to learn more about this at our grassroots conference in Chester in April 2007.

## **Obtaining higher level support**

There is no doubt that having full Parish Council backing enabled us to stimulate our City and County Councils into supportive actions. The City Council agreed to attend our launch meeting where we would test public opinion. They immediately gave us contacts in recycling, planning, conservation and transport. They were able to ease the way forward and introduce schemes to the village. The Parish Council mandate gave the Press more reason to cover the idea, as it was an official community project. We really were seen as a community trying to become the first carbon neutral village in England and the headline woke up the press and helped us to generate the understanding and interest we wanted from our own community.

*"I have to say that Ashton Hayes has led the way and inspired Chester City,"*  
*Andrea Mageean, Chester-in-Partnership.*

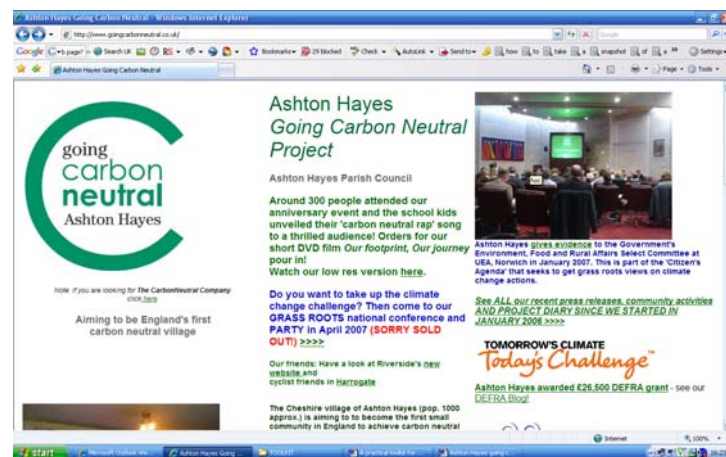
*"Ashton Hayes really is breaking new ground,"*  
*Joan Fairhurst, Chester City Councillor.*

### 3: Launching your project in the community

The Parish Council had set us a challenge; *show us that the people of Ashton Hayes are really concerned about climate change*. They insisted we held a meeting within one month of their acceptance of the idea. This meant that we had to hold our launch on a very dark and extremely cold Thursday night in January. We realised it was not going to be easy to prise people away from their firesides on such an inhospitable evening to hear about global warming. Moreover, at that stage the media frenzy about climate change was in its infancy.

#### *Planning the launch and enlisting willing helpers*

Planning for the meeting was probably the most important element in the whole project. We had to show that local people were concerned and engaged about the issue. This is where we drew on the support of the Energy Saving Trust and primary school. Both these organisations were crucial. We were also fortunate in being able to engage communications experts and business leaders who had offered us support.



Our first challenge was to raise the money and support we needed to pay for the signage and for printing our leaflets and notices. We identified all the business leaders and owners in the village and asked if they would consider providing money or support-in-kind for the launch. After a quick series of phone calls (many via personal contacts) we raised £3,500 and several businesses also offered to send staff and exhibition stands to the launch.

We called these supporters 'sponsors' and gave them publicity on our website, which we set up in time for the launch. Giving the sponsors accreditation for supporting our project was very important and we always ensure our supporters are congratulated for their support and return the favour by helping them to produce their own company communications about the project.

*"We supported the Ashton Hayes project because our staff had put concern about climate change at the top of their list when we carried out a company-wide corporate responsibility survey". Dr. Alan Ryder, Chairman, RSK Group plc.*

The donations ranged from £50 to £1,500, and the money came in quickly, allowing us to move the project forward rapidly without waiting for local or government grants.



### *Making the project visible*



We asked a supportive designer (Steve Holland) to design us a simple logo for our project and used this on all signage and notices to the public. We also added the sponsor's logos to our handouts.

*"We supported the Ashton Hayes Project because the residents worked hard to give us something in return. They offered us a willing community in which to test our technology and included us in their publicity and invited us to join the project team,"*  
Dr Mary Gillie, EA Technology.



*"Our permanent and rigid road signs (bottom sign) cost us around £300 and were paid for out of our sponsorship budget,"* Garry Charnock.

To keep peoples' awareness high we made some **traditional hard road signs and fixed them under the two main village entrance** signs on our local B road. This made a clear declaration that the village **was trying to become England's first carbon neutral community**.

We phased our publicity campaign very carefully. We installed the permanent road signs about two weeks before the launch. This alerted all drivers to the project. A week later we erected flexible signs at the school and in different parts of the village. During this time we also posted several bulletins to each house, telling residents what was going on and explaining that if they came along to our meeting they could view energy saving devices, get free energy saving light bulbs (Energy Saving Trust / Energy Projects Plus) and discuss issues ranging from insulation to wind turbines and solar panels. They could even sit in a range of hybrid cars (provided by Shell Global Solutions' vehicle testing labs).



*These flexible, all-weather signs cost around £70 each but can be reused. Having the web address on the sign was crucial to 'spreading the word'.*

We also worked hard to engage the local and national media by sending out press releases and emails. In the toolkit folders you will find examples of press releases that we sent out to local TV and radio media to encourage them to cover the project. We think this engagement with the media has been crucial. On the launch night we had coverage on the BBC NW Six o'clock news and Granada TV. We also had coverage in local newspapers and on Dee 106.3 radio – the Chester-based radio station.



*Kate Simms, BBC NW Tonight, visited the village and gave us coverage on the local TV news. This helped to raise awareness of the launch event among the public. Claire Ashforth of Granada TV also covered the launch. The primary school children became particularly excited when a satellite uplink truck pulled up at the school! Thanks to Claire for allowing the kids to see inside the vehicle.*

The village signs and local and national media coverage provided timely reminders to residents about the event. There is no doubt that gaining such publicity at this early stage paid dividends in terms of project support and helped us to develop and maintain excellent relationships with the media.

In addition we used a little gentle persuasion to encourage people to attend the launch! Every adult who came along was given a celebratory glass of free English ‘bubbly’ (from the Chapel Down vineyard in Kent) and apple pie and cream, courtesy of the local Women’s Institute, who were keen to support the project and demonstrate their commitment to climate-change action.

In the weeks leading up to the launch, Eric Whitworth and his team at the Winsford Energy Saving Trust/Energy Projects Plus ran energy-awareness lessons for the primary school children. As part of this, the children were asked to make a display of ‘vehicles of the future’ for the launch meeting. This meant that parents and siblings became aware of the launch event. The displays also gave a visual focus for the media for both TV broadcasts and newspaper articles.



*Francesca Deynem being interviewed by Kate Simms (BBC TV Northwest Tonight) about the ‘vehicles of the future’ display. This interview was broadcast on the day before the event and this helped to remind people to come to the event.*

This intense media coverage resulted in 400 people turning up for the launch. This was a remarkable turnout from a community of just 1000 people. Previous village meetings had never drawn more than 40 or 50 people.



## Running the launch

Having a successful reaction to the launch event was essential if the project was to get off the ground. We had to engage everybody's interest and explain clearly what we planned to do in the coming months.

We decided to keep all the presentations brief – no more than 10 minutes each – to ensure we covered the key points without boring people. This turned out to be an excellent decision as the massive turnout meant that we had to repeat the show for the people who had waited patiently outside the crammed main hall.

We also kept our sponsors happy by providing a programme of events carrying their company logos. We also invited the main sponsors to pour sparkling wine, serve apple pie and display their exhibition stands. They all accepted readily and enjoyed meeting many members of the local community.



*Local business owners, Lynn and Richard May of M&M Communications have continued to give major financial and staff support to the project ever since the launch night.*

In addition, we reassured residents that we could deliver on our promises by enlisting the technical backing of The University of Chester. Dr Roy Alexander, a lecturer and village resident, explained how second-year students from The University of Chester would spend six weeks in the village each May, assessing and calculating the village carbon footprint and mapping the biodiversity across the Parish. Roy explained that the students would undertake an initial 'baseline' survey in 2006 to determine how much carbon dioxide our community emitted to the atmosphere.

The City Council and the County Council also gave very brief talks about their 'carbon strategies' and outlined how they would support the Going Carbon Neutral Project.



*Like all speakers, Dr Roy Alexander was allocated just 10 minutes to explain the carbon foot-printing programme and how his students would carry out the baseline survey in 2006.*

During the launch evening a number of people told us that they were very concerned about climate change but were anxious about taking individual action (such as installing wind turbines or solar panels) as they thought they might be considered rather cranky. Richard May summarised their feelings in his comment: “Having a community-wide project ‘gave everyone permission’ to take action.”

We also learned that people respected the people running the event because most of them had lived in Ashton Hayes for years. People were also pleased that they were not being ‘sold’ ideas, just being asked to do whatever they could to stem climate change.

We were very fortunate that the BBC World Service Radio covered the launch evening and broadcast their programme to 60 million listeners. Such media attention reassured village residents that this was a worthwhile project and that the outside world would respect rather than ridicule our efforts at addressing climate change.





*Andrew Luc-Baker from BBC World Service Radio visited the village on the day of the launch and interviewed residents. His programme went out to 60 million listeners. A week later we were contacted by the town of Castlemaine, Australia – and this led to our two communities ‘twinning’ on climate change action. (You can see Andrew holding the microphone just above the laptop computer screen.)*

The World Service Radio coverage drew a global response and led to us making our contact with people from Castlemaine in Australia. They told us that they were aiming to be Australia’s first carbon-neutral community and wanted to share experiences. By working together with Castlemaine we not only generated enthusiasm for action between the two communities but also attracted more media attention. Chester City and County Council officers were fascinated when we told them our two communities wanted to link up to tackle climate change.



*Jean Briffet, Andrea Mageean (Chester City Council) and Eric Whitworth (Energy Saving Trust) were surprised and influenced by the turnout and media coverage of the launch. This generated increased support for the project from local authorities who felt the launch turnout had given them a clear mandate to support us.*

## **Ashton Hayes Primary School – a catalyst for change**

Hosting the event at the school proved to be a key element in spreading the word. A week prior to the launch the children ran various 'eco-projects' and prepared displays for the event. This raised awareness of our activities among village families and encouraged parents to attend. Having journalists interview Rob Ford, the headmaster, and the children, also gave a clear signal that something special was going on in Ashton Hayes.

We could not have a more helpful group of teachers. Supporting the project launch caused disruption in the school but Rob and his team took it all in their stride. Rob now says that the children are all engaged with the project and that the school has benefited from the publicity in terms of promotion and image. More residents have visited the school and seen its wonderful classrooms and IT facilities – and this helps them to make better informed decisions when selecting schools. In addition, the measurements and calculations involved in the school's energy-saving programme fit in well with the National Curriculum.

Our team has received emails from parents who report that their kids are now turning off their Playstations™ and room lights to save energy at home. They also tell us that children have influence over major decisions such as car purchase and holiday travel.

In the year since the launch we have presented to over 30 communities in the UK and many have told us of the key role that their primary schools play in increasing local awareness of climate change. We recommend that you engage your local schools in your project and use their facilities as much as possible for your meetings.

***Note:** At the meeting we recorded people's postal addresses but we failed to record all their email addresses, which with hindsight was a mistake. We would advise anybody who is holding meetings to try and get email addresses because this facilitates a very fast, economical and eco-friendly way of keeping the message going through the community.*



*Naomi Deynem, Parish Council Chair (2006), opens the launch meeting and thanks the school for hosting the event. At this point we had 250 people in the school hall and another 150 latecomers filling the classrooms struggling to hear! Many of them sipped sparkling wine and ate apple pie until we could repeat an abridged version of the event one hour later.*

## 4: Post-launch activity and web site development

Immediately after the launch we emailed out a Press release outlining how many people had attended. This gained the project more publicity. We also made regular updates on web site and listed the actions for the coming months.

We now realise the importance of the website in communicating locally and nationally. Many website visitors have emailed us with excellent ideas and suggestions. A year on from our launch, our website ([www.goingcarbonneutral.co.uk](http://www.goingcarbonneutral.co.uk)) receives around 200 users per day. We have also added a 'blog' to enable people to record their comments on the project.

We try to refresh the information on our website every couple of days. Users tell us that they are inspired by the activity recorded in the simple diary we have maintained since our first meeting. This now extends to several pages and is an important record on which much of this toolkit is based.

The period following the launch was extremely busy. Members of the project group, which comprised around four people at the time, visited City and County Council officers to secure their help and clarify the kind of support we could expect. They also made preparations for the student team that would arrive in May to undertake the baseline carbon footprint. During this time we asked people in the community to try to switch over to a green energy supplier and install energy efficient light bulbs.



## 5: Carbon neutrality and carbon sinks

Most residents seem to comprehend the concept of carbon neutrality quite quickly. We kept our explanations simple, outlining how we might try to reduce our energy in order to minimise carbon emissions. We would also be trying to find ways to absorb or offset remaining emissions by planting trees that would act as carbon sinks or investing in renewable energy projects in the village.

At first we felt our 'carbon sink' would comprise several thousand trees that we intended to plant on tracts of land donated by local farmers. These trees would absorb any remaining CO<sub>2</sub> that we emitted, making us 'carbon neutral'.



*Barking up the wrong tree? At the start of the project we were confident that newly planted trees would develop into a carbon sink that would absorb our CO<sub>2</sub> emissions, helping us to become carbon neutral. Our plantations now total 14,000 trees but we have so far found it difficult to assess their effectiveness as a carbon sink. We are seeking clarification on this from tree specialists.*

We were also 'given' the carbon-sink potential of newly planted trees by supportive landowners, some of whom had just planted several thousand saplings. In the first year we managed to plant or receive 'donations' of up to fourteen thousand trees and at that time we thought we were well on our way towards carbon neutrality.

**Note:** *Initially, we believed that planting sixteen trees per person would make us carbon neutral. However, as the year has progressed, the science surrounding trees as carbon sinks has become clouded and we are no longer confident of their effectiveness. So we have had to rethink the tree-planting scenario and we are now considering our own offsetting scheme in which we finance direct investment in renewable technology for our public buildings.*



We are currently working with the Woodland Trust and other organisations to clarify the carbon sink potential of tree planting and to see whether this is a suitable way forward for a village like ours'. However, we do recognise there are many communities that do not have land or the ability to plant trees and that offsetting schemes may be necessary.

In the lead up to the May baseline survey we noticed that several people had installed solar thermal panels or bought wood burning stoves. We asked them to report on the effectiveness of the panels and stoves, so we could relay their feedback to the rest of the village.



*Solar thermal panels began to appear on rooves in the village in 2006. In the first year six residents installed these systems and are now giving us useful feedback on their operational effectiveness. Each system costs about £3000 (Grants sometimes available!).*

## 6: Measuring Your Footprint (by The University of Chester)

### *Devising and implementing your baseline survey*

In order to make any attempt to go carbon neutral it is important to know where you are starting from; thus a baseline carbon footprint survey is an essential first step. We were fortunate in having the University of Chester involved in our project from the outset as this meant that we could plan the baseline survey thoroughly before it took place. However, no plans are perfect and we cover the lessons that we learned from the first survey below.

There is nothing particularly difficult about carrying out a baseline carbon footprint survey and most communities should be able to find the resources needed to plan and execute such a survey either within their community or close by. A copy of our survey questionnaire is included in the folders in the appendix together with our carbon footprint calculator and examples of our feedback forms containing recommendations for action.



*Survey in the spotlight: The University of Chester students enjoy media coverage while interviewing a resident. Most people told us that they enjoyed seeing the students around the village for five weeks.*



*Carbon calculators: Our baseline survey crew from The University of Chester started surveying the village on May 8<sup>th</sup> 2006. Left to Right: Steve Wright, Danny Baxby, Jen Snelson, Sabine Helmig, Jennifer Brealey.*

You are welcome to use our forms and indeed many communities have already done so, adapting the forms to suit their particular circumstances. (If you do elect to use them then please respect the effort that went into their creation by acknowledging their source.) Several communities have found that they have members with experience of survey work who have helped to draw up or adapt a survey questionnaire. Some have chosen to distribute the questionnaires along with a regular community newsletter whilst others have linked up with a local college or university who have been happy to develop the work as part of a student project. In general, questionnaires that are interviewer-administered get much higher response rates than those involving post-and-collect.

We managed to cover 45% of village households in the Ashton Hayes survey and we are carrying out a statistical analysis of our data to examine how much the results would be likely to vary with smaller sample sizes. So far we have found that very small samples (5%) often produce average values that vary significantly from the average calculated from our 45% sample, but that samples of 20% show no significant difference and thus might be perfectly adequate.

Another approach to sample distribution is to look at the types of homes in the community (e.g. detached houses, semi-detached bungalows, flats, etc.) and to stratify the sampling by these house types, ensuring that sub-samples of similar proportion are taken from each type. We broke our results down by house types and used these to scale up our findings to get a whole village estimate of the carbon footprint.

In looking for support ask yourself these questions:

- Is there somebody in the community with experience of survey design?
- Is there a local sixth form college, further education college or university that would be interested in getting involved? Look up the Geography or Environmental Science department on the institutional website.
- Is there a local group that delivers newsletters who would be prepared to make house to house calls?



## ***Maximising the response to your baseline survey***

When preparing for your survey it is useful to consider the following:

- Think about the proposed timescale; when will the survey take place? Who will be involved in carrying it out and how? What will be required from the householder, e.g. how much time is it likely to take each person to complete? What information should the householder be asked to have to hand, e.g. fuel bills, house details (age, construction, amount of loft insulation, etc.)?
- Provide as much detail as possible of how the process will work in advance of carrying out the survey. In that way, people will be prepared and each questionnaire will take less time to complete. Also make clear to everybody why the survey is being done and why it is important (your aims and objectives) and tell them what will happen to the data collected, who will have access to it and how the results will be used and fed back.
- If you are using an interviewer-administered approach, make sure people know this in advance and tell them who the interviewers will be. For the Ashton Hayes baseline survey we told the community *via* a newsletter a few weeks in advance that students from The University of Chester would be conducting the survey during May. We introduced the students at our launch event in January and the first thing they did in May was to distribute a leaflet to each household saying who they were (with a photograph), what was involved in the survey and when they would be calling. They also wore University sweatshirts so that they could be easily recognised which is particularly important where more vulnerable members of the community are concerned. They also asked people who did not wish to take part to place the leaflet in an easily visible window so that they would know not to call at the house.
- Make sure that people are informed about when the survey will be taking place; which days and at roughly what time of day.
- Alternatively, if you are planning to do a postal questionnaire, let people know in advance when the questionnaires will be distributed and either when they will be collected or by when you wish to have them returned. In the latter case, either have a central and easily accessible collection point(s) (e.g. shop, post office, church, pub) or provide an SAE or freepost envelope.



## ***Measuring your community's carbon footprint***

The Ashton Hayes baseline survey is freely available for you to use or adapt to suit your own purposes. However, it is just one of many possible approaches. It is important to think carefully in advance exactly what you wish to get out of the survey and in how much detail you wish to explore the carbon footprint.

You should weigh up the amount of detail you will ask for against the time it will take each respondent to complete. For the Ashton Hayes household baseline survey we deliberately went for an approach that would pick up most of the primary sources of carbon emissions without asking too much of the respondents. Although we could have delved further into sources of 'embedded carbon', for example in foods and household products, we decided it was preferable in the first instance to get as large a sample as possible covering the key sources of carbon dioxide emissions for which the calculations are relatively straightforward. We are looking into more detailed studies for our follow-up surveys.

There is now much more information available and many easily accessible carbon calculators (e.g. on the World Wide Web – and DEFRA's new calculator) but at the end of the day the choice of approach and the specific questions to ask depend on the aims and circumstances of each community project. So far we only have results for our domestic output. We have some community buildings and some small businesses in the village and we produced a separate version of the survey questionnaire for these. We found, however, that a 'one size fits all' approach did not really work in this situation and so we are gradually carrying out surveys of each business and building, adapting our questionnaire to fit their individual circumstances.

Some of the important considerations for your approach are as follows:

- Plan how the survey is going to be conducted, postal questionnaires, door-to-door surveys, or in-depth interviews.
- The mix of people may influence this, e.g. door-to-door surveys may not be appropriate where the majority of people work during the day.
- Determine what you want to achieve from the survey, compile a range of questions and order them, if necessary into sub-categories e.g. Home Energy, transport and travel so that each section is clear and logical.
- Test out the initial draft of the survey/questionnaire with a sample group and ask them for feedback on what they found good/helpful/clear, what was difficult to understand or answer problems with terminology etc.
- Make amendments as necessary before conducting the main survey.

## Calculating the emissions

Make sure you can calculate the emissions associated with each of the items in your survey. Having said this, you may wish, as we did, to ask questions that do not lead directly to an emissions calculation but which provide contextual information. If using our calculator, ensure that the questions which provide data for the calculator are included in your survey questionnaire (see calculator instructions and notes in the Appendix).

If you wish to go beyond this and incorporate other sources of carbon emissions then ensure that you have the necessary information (such as conversion factors) required to carry out the calculations. Useful sources here are DEFRA (*e.g.* DEFRA, 2003, *Guidelines for the Measurement and Reporting of Emissions by Direct Participants in the UK Emissions Trading Scheme*; the Energy Saving Trust's website: [www.est.org.uk](http://www.est.org.uk); or Mark Lynas' book, *Carbon Counter* published in 2007 by Harper Collins, ISBN: 978-0-00-724812-4).

Given that you are unlikely to get a 100% response to your survey, you will need to find some way of scaling up your results to get an estimated figure for the whole community. We decided to divide up our results by house type (detached house, mid-terrace, end-terrace, etc.) and then to calculate an average value for each. Having checked the response rate from each house type we counted how many of each type were to be found in the village and multiplied the average value by this figure to get a total for each type. We then added up these totals to get an overall total for all households in the village.

## **Reporting the results**

### **Collectively**

Produce a summary of the results for the project as a whole. This might include the number of households that participated in the survey, the total amount of CO<sub>2</sub> emissions produced, the average carbon footprint per household, the relative proportions of the footprint coming from domestic energy use, cars, flights, etc. The results can be summarised and presented as a poster that can be displayed in public places, put onto a community website and presented at community events. Publish your results as a press release to get media coverage and thus encourage more members of the community to take part.

### **Individually**

Provide each participant with their household carbon footprint so that they can see what they are contributing to the community footprint. Also provide them with an average for their particular house type so that they can see how they compare. Individual household feedback provides an excellent opportunity to encourage behavioural change and you should try to provide each household with a set of suggested actions that they can take to reduce their carbon footprint. As feedback from the Ashton Hayes survey, we provided each household with an individual set of suggested actions tailored to the information that they provided in their questionnaire. These were divided into short term/low or no cost, medium term/medium cost and long term/high cost actions and were accompanied by an indication of the likely carbon savings associated with each and sources of further information. An example feedback letter is provided in the Appendix. The types of action suggested range from low cost ways in which they can start to reduce their footprint, through behavioural changes such as turning lights off, not leaving equipment on standby, etc., through to a range of medium to high cost measures that they could consider (such as installing wall or floor insulation, or a solar thermal panel). It is important to tailor the feedback on an individual basis based on the answers to the survey. For example, cavity wall insulation is not appropriate if the property has solid walls.

### **Learning from mistakes**

It is rare to get anything right first time. Inevitably there will be mistakes and it is important to recognise and learn from these as you reflect on each stage of the process. We learned a number of lessons from the Ashton Hayes baseline survey. Simple errors included not putting a return address on the questionnaires. We had anticipated that all of the survey would be interview-administered and, indeed, the vast majority of it was. However, in order to maximise the return rate, the student group put questionnaires through letterboxes where they had not found anybody in after three attempts, with a request that the completed questionnaire be returned to their base in the village Doctors' surgery. A number of questionnaires were returned in this way but one found its way to me at the university some six weeks later, having been around several other departments first. Thus take a belt and braces approach and allow for contingencies by providing alternatives for survey return.

A related issue involved the students' working day. They worked mainly between 10am and 6pm on weekdays but this meant that they were not able to contact several households where everybody was out during those hours. For the follow-up survey in 2007 we will suggest that they work an 'evening shift' on a few days and also at least one weekend day to maximise the opportunities for contacting all households.

Another simple mistake was not making it absolutely clear that we were looking for return journeys in the question about flights. Again, easily rectified and another example that emphasizes the importance carrying out a pilot survey. It won't pick up everything, but it will get a lot.

### ***Follow up and encouragement for action***

It is important to keep the momentum going between surveys. Information about the project, further developments, news, savings that have been achieved and so on can be disseminated through an existing newsletter with a column dedicated to the project, or through a website. These can carry up-to-date information with advice and tips on how to save energy and carbon, grants available for insulation or renewable technology, upcoming events and developments within the project. A discussion board where people can share ideas and tips on what has worked to help them save emissions can also be very useful. This sort of information can be communicated through work with community groups, for example by giving talks or practical demonstrations in schools, WI meetings, brownies, scouts, etc.

### ***Other surveys you may consider***

#### ***Biodiversity***

A biodiversity survey can be useful in order to assess the existing vegetation cover in the area, and the amount of carbon this can absorb as a carbon sink. It is also a valuable community exercise in its own right. Again look first within your community for people with the appropriate expertise, but also to schools, colleges and universities for expert help. Our student group completed two types of biodiversity survey during 2006. First they surveyed lengths of hedgerow that had been surveyed 30 years earlier by the Women's Institute. The object of this survey was to look for any changes in the diversity of our hedgerows.

The results suggested that little had changed in the sample hedgerows over the thirty year period and, most importantly, that there had been no loss of hedgerows, nor any reduction in their biodiversity. The group also completed a land cover survey, which involved them in checking every part of the parish and colouring in a base map to record the cover of deciduous and coniferous woodland, pasture and arable land. This information will be used as a basis for our calculation of the parish's carbon sink (the amount of carbon dioxide taken out of the atmosphere each year by green plants in the process of photosynthesis). These calculations are proving more difficult than we initially anticipated and we will issue updates on our progress in this area via our website.



### *Socio-economic*

You might wish to include some socio-economic questions in your survey questionnaire in order to provide for a deeper analysis of your carbon footprint data. Variations in the size of footprint within a group of houses of the same type might be related to socio-economic differences such as household size, age profile or occupations of the inhabitants. In the Ashton Hayes baseline survey we found a very wide range of footprint sizes among detached houses but a much narrower range among detached bungalows. Collection of such data increases the length of the questionnaire and also imposes an overhead in terms of analysis effort and thus the pros and cons should be carefully weighed up before a decision is made. However, if the data are to be collected then analysis of the results might prove attractive to a student wishing to investigate these issues for a dissertation project for instance.

### *Lifestyle issues*

Similarly to socio-economic data it might also prove both interesting and useful to collect information on lifestyle issues. Switching to a low carbon lifestyle inevitably involves change and collecting information on current habits and preferences can assist when deciding which particular areas to focus upon for local campaigns. Data collected here might include access to public transport – types, cost, convenience, reliability, etc., usual shopping habits – how far respondents travel, use of online delivery, farmers markets, etc. Holiday and travel destinations, recycling and composting are other topics worthy of investigation.

## 7: Keeping the project going

When we started the project several people commented that the small team leading the actions might suffer 'burn out' and this would ultimately lead to a decline in interest and project failure.

This was worrying. However, we were fortunate in having active participants who had experience of running small and medium-sized businesses and organisations. They worked full time and realised that they could not afford to spend the time the project's demands were placing upon them. We needed more help.

But any expansion of the team also posed a dilemma. Our early success and speed of implementation was a result of our ability to take rapid decisions and actions without convening a cumbersome 'project committee'. We were determined not to have an organisational structure that would slow us down.

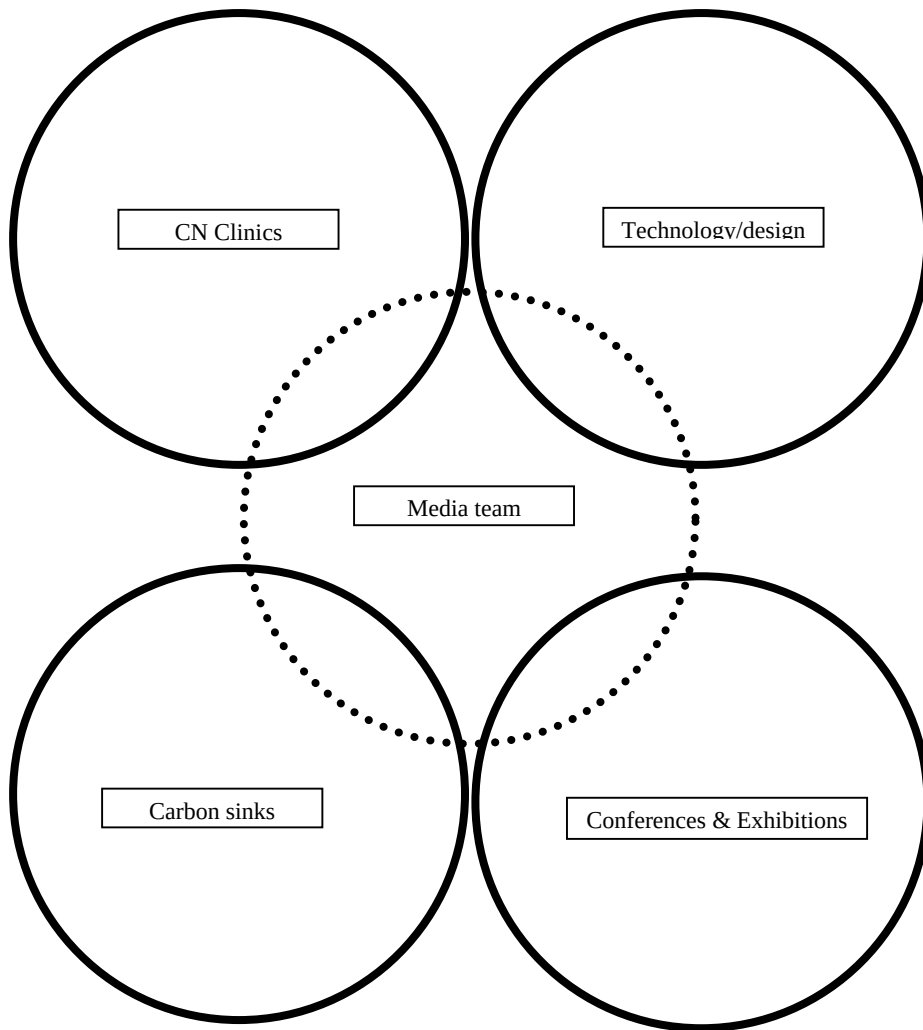
With this in mind we set about expanding the team to cope with the increasing workload. At the launch night we had obtained a list of potential volunteers who said they would be prepared to help. Our list ran to 20 names, with email addresses. Our first port of call was to ask these volunteers to join us. Many responded willingly, told us of their skills and how they would like to contribute.

We also asked our sponsors if they wanted to be even more active. To our surprise several business owners came on board, even though their work commitments were high.

Our team of active volunteers expanded rapidly to over 30 people. At each 'team' meeting we make the gathering fun by providing cheese and wine (donated by sponsors). To keep the decision making fast, efficient and free of 'red tape' we allocated members to one of 5 'autonomous' teams that would manage key aspects of the project. These are:-

- Technology team – Gives advice to residents on technical issues
- Carbon sink team – Examines our carbon sink and offset schemes
- Carbon clinic team – Gives practical advice to people willing to make changes
- Conferences and exhibitions team – Runs our annual conference and requests for talks
- Press and media team – Helps each team with words and designs and relays our information to the community and outside world

Each team now comprises 4-6 people and works independently, making decisions without referral to the larger group (unless they need advice from other teams). The only obligation is to provide the Press and media team with information so that they can relay our activity to the outside world.



### **Big rules: Useful guidance for the project team**

We also decided that we had to work to simple project guidelines that we named the 'Big Rules'. These are useful as they help us all steer the same path and avoid conflicts in the village.

Here are our big rules:-

- **Our project is owned by Ashton Hayes Parish Council**
- **Our aims are two-fold**
  - **To help Ashton Hayes become carbon neutral**
  - **To share our experiences and inspire others**
- **We see this as a journey towards carbon neutrality and do not know when we will get there**
- **It is a non-political 'grass-roots' project**
- **We are a non-confrontational group**
- **We recognise human activity is contributing to major climate change but we do not apportion blame or point the finger at anyone**
- **We welcome everyone to join in and support our aims**
- **We do not focus on the threats of climate change, more on the benefits of taking action**

**Adopting these rules has been one of our best decisions and we recommend you determine your own set as soon as you can.**

### **Engaging long-term press support**

Having the Press and media team is important as they focus on keeping the Press informed of our activity. We do not do this because we are simply publicity seeking but because research indicates that most people in our community obtain their information from local newspapers and media, rather than online or from other sources.

So we set out to use this 'free' publicity channel to ensure we captured the attention of as many residents as possible. The spin off has been that other communities in the area have heard about our project and asked us to talk to them.

*"There's no doubt that the project has influenced others and encouraged other communities around Chester and district to come on board," Derek Bowker, Cheshire Community Council.*

On our website we have a section entitled 'Press and community communications'. This lists all the media coverage we have enjoyed over the project lifetime. It also gives a good idea of the voluntary effort team members have made to inspire others by giving talks around the UK.



## *Gathering finance - not as hard as you think*

One of the strange elements of the project is that we have not been hard up for money. At the start of the project we promised that we would not draw on the Parish Council precept to fund our activities. Over a year later we are pleased to report that not one penny of Council money has gone toward the project.

Our launch funding came from local companies who were prepared to sponsor us to the tune of £3,500 and in kind. Gathering this money took just a few days and people responded rapidly when we issued simple invoices, with payment cheques made out to the Parish Council.



*Local businesses and organisations funded the launch by providing cash or support.*

The sponsors say they have benefited from the project and the community spirit it has generated. They also like having their staff involved. As a result our sponsors have repeated their donations for 2007.

Having business sponsors also attracts the interest of other organisations, such as Cheshire Community Council, which donated £1000 for a project computer when they saw the wide range of community participation in our project.

This in turn led to us being encouraged to apply for local and national support. Our media team working with sponsors and supporters, helping them to fill out grant application forms. As a result we were awarded funds for notice boards from Local Area Committees and a massive £26,500 from the DEFRA Climate Challenge Fund (over two years) to help us 'spread the word' about our activity. (None of the DEFRA money can be spent on village projects.) The University of Chester has also secured knowledge transfer funds and hopes to win a Green Gown award for the project.

One sponsor, the RSK Group, has taken a step further by donating £10,000 to kick start Chester's CRed (carbon reduction) campaign, developed by The University of East Anglia.

As a condition of our grant, DEFRA asked us to make a project film to chart our progress. The toolkit is accompanied by a DVD of our 16-minute film *Our Footprint, Our Journey*.

DEFRA also asked us to host a national 'grass roots' conference in April 2007 to share ideas with other communities. This is where the publicity has helped tremendously. Newspaper and TV coverage led to our conference being sold out six weeks before the event and has provided us with sufficient income to cover the costs of the post conference party and other materials. We now hope that the conference can become an annual event, benefiting Chester with trade from visitors but also enabling all of us to learn more about a journey towards carbon neutrality.



***DEFRA's £26,500 grant has been money well spent, we think!***

## 8: Appendix items

In our two-part DVD/CD-ROM pack you will find two disks.

One contains our 16-minute project overview film, ***Our Footprint Our Journey*** that we hope you find interesting and will help you to inspire your local community.

The second disk – the **community toolkit** – contains folders containing around 700MB of files, forms, data, photos, video clips that we hope you will find useful in building your own campaign.

Our hope is that you will find the practical examples useful and be able to modify items such as our press releases, community communications, maps, presentations, and video clips to suit your local needs. There are no hard and fast rules about what works or doesn't work. But we are told that the relaxed style of our communications helps to engage people in our community.

*The University of Chester* folder contains all our survey forms plus examples of outputs. Many communities have already asked for this.

You are also welcome to use/adopt our logo if you feel it would be useful.

There is also a large section of background material that your team may find interesting and educational.