



going  
carbon  
neutral  
Ashton Hayes

**Roy Alexander**

**Ashton Hayes  
Going Carbon  
Neutral Project**

**and**

**University of  
Chester**

**RSN Seminar  
10 September, 2013**

The  
Low Carbon  
Communities  
Challenge

[www.decc.gov.uk/lccc](http://www.decc.gov.uk/lccc)



ACT ON  
CO<sub>2</sub>

# Structure

Background

Getting started

Moving forward

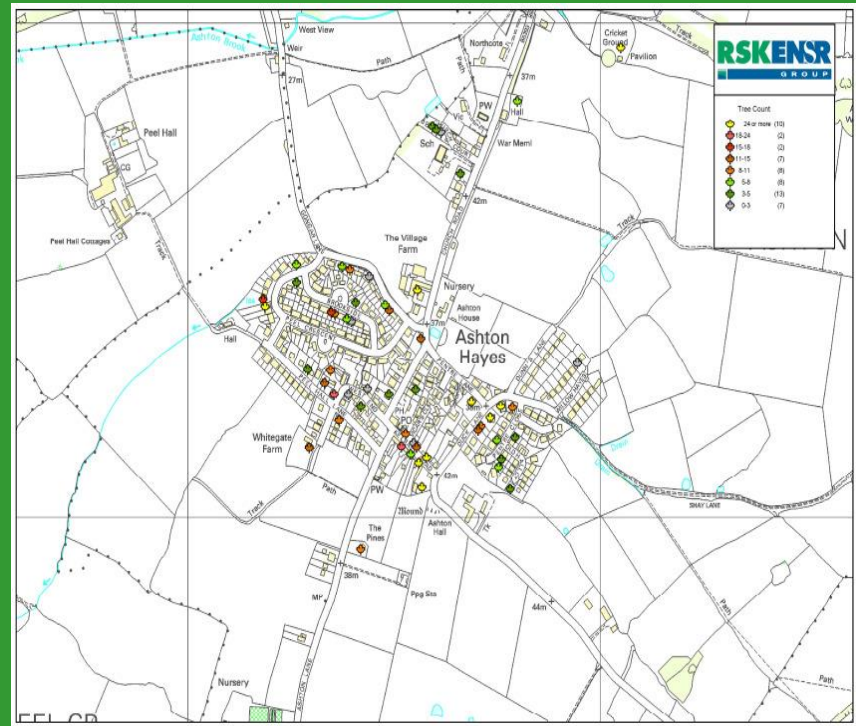
Some key achievements and learning

Some hurdles

The importance of connections

Next steps

# Ashton Hayes, Cheshire

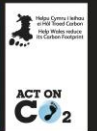




Ashton Hayes

936 people

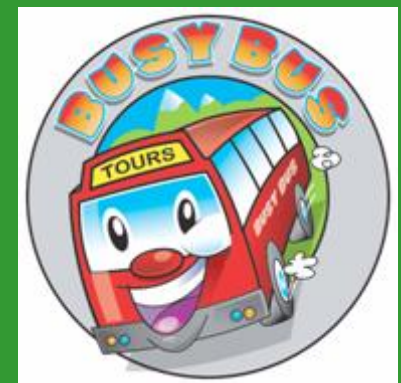
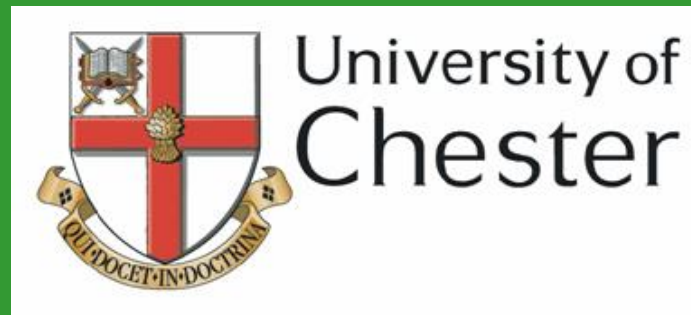
420 homes



# Our aims and motivation

- **Aim: to become the first small community in England to achieve carbon-neutral status**
- **We want our children and future generations to know that we tried to do our bit to stem global warming and encourage other communities to follow suit**

# Working together – money and time







## Primary school & media – the catalysts



# Launch 26<sup>th</sup> January 2006. Outside temperature -2°C



**400 people turn up – 75% of Ashton Hayes adults**

# Media support – sustaining interest

Local newspapers  
Granada/Channel 4  
BBC Radio 2, 4, 5  
World Service radio  
National newspapers  
European nationals  
French radio  
Web sites/web TV  
AFP and NZTV  
Sky News live  
BBC World News TV  
Live Earth Concert 2007



# Local landlord was a key influencer



# Sharing experiences – Parliament and the web



# Importance of Measurement



Annual house to house, carbon footprint surveys by University of Chester students 2006 – 2010 to establish baseline and track progress

# A 7-year journey for our community

## How are we leading a lower carbon lifestyle?

Adopted by Parish Council November 05

Local business gives £3600 in support + time

[www.goingcarbonneutral.co.uk](http://www.goingcarbonneutral.co.uk) website launched

University of Chester baseline survey May 2006 (4700t CO<sub>2</sub>)

DEFRA awards us £26,500

Cheshire Community Council donates laptop computer

Community works together saving energy, improving recycling

Media coverage intense

Government supports project



Chapter 4: Transforming our homes and communities

### UK Low Carbon Transition Plan White Paper, July 2010.



**Box 3 Case study: Ashton Hayes used a grant from the Climate Challenge Fund to cut carbon emissions from the village**

Ashton Hayes, in Cheshire, was the first village in the UK to announce its intention to become a 'zero carbon community'. Since January 2006, the community has cut its carbon dioxide emissions by 20%. The project has partnered with Chester University to establish the baseline and measure carbon savings. The village is currently working with partners to look into the feasibility of a 'microgrid' to generate and supply electricity to buildings in the village on an opt-in basis.

Ashton Hayes received support of £26,500 from the Government's Climate Challenge Fund, which was used to promote the initiative and share lessons with others. A film was produced and a conference was run for other community carbon projects. See [www.goingcarbonneutral.co.uk](http://www.goingcarbonneutral.co.uk)

Fifteen communities will be at the forefront of pioneering green initiatives with the new £10 million 'Green villages, towns and cities' challenge

raise awareness of climate change; and the Big Green Challenge from the National Endowment for Science, Technology and the Arts, a £1 million prize to galvanise community-led innovation in response to climate change. The Big Green Challenge is the first prize of its scale for the not-for-profit sector. Given the number and quality of the proposals, the Government has now provided £800,000 to expand the Challenge and fund a new round of projects drawn from the top 100 unfunded proposals.

The Government wants to take community transition to the next level, announcing £10 million for 'Green villages, towns and cities'—a challenge for communities to be at the forefront of pioneering green initiatives.<sup>27</sup> Around fifteen communities will be selected to participate as 'test hubs', with local residents, businesses, and the public sector



# 2006/7 The journey continues

## Cutting our footprint by 20%

Second University survey (May 2007)  
reveals **20% CO<sub>2</sub> savings**

Evidence given to Defra Select  
Committee

150 attend our Grass Roots conference  
Community initiatives – solar panels,  
school turbine

*Our Footprint, Our Journey* DVD wins  
IVCA Clarion Award

Project featured in *FT*, *Live Earth* and  
in Inigo Gilmore film, *The Village Green*

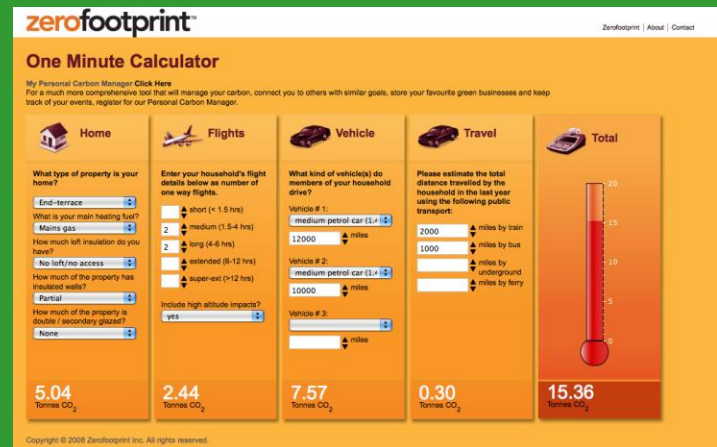
Awarded Energy Institute *Community  
Initiative* award



# 2008 Our journey, the next steps

## Looking at other measures?

Maintaining the impetus and seeking other routes forward  
Third University survey reveals 20% CO<sub>2</sub> cut maintained ... but behavioural change will only take us so far.  
University of Chester leads £86,000 Carbon Connections bid with EA  
Technology  
Microgrid study starts – a model for UK?  
Cheshire County Council builds footpath to show support  
Government interest intensifies  
Presentations given to over 100 communities in UK  
Zerofootprint 'Villages without borders' project begins





# Recognition via awards and grants



£86,000 to fund microgrid study  
£26,500 from DEFRA  
£1000 computer from Community Council  
£400k from DECC  
£5k from Coop  
£200k from SPEN  
£47k under LEAF



# Another Award

## Award Winning Leadership

MONDAY, APRIL 18, 2011 AT 3:23PM



Congratulations to Garry Charnock on winning Climate Week's 'Most Inspirational Leader' award on 21 March. A high-powered judging panel that included Tony Juniper, Lord Nicolas Stern, author Ian McEwan and Tony Smit of the Eden project and Terry Tamminen, Arnold Schwarzenegger's environmental advisor presented Garry with the accolade.

Tim

# Tangibility: Our new footpath is completed!



# Microgrid Project - powering our own community



# 2011 Our journey, the next steps

## Community generation begins

Sports pavilion completed – a demonstration low carbon building, super insulated, Air Source Heat Pump, 10kWp pv panels  
15 kWp pv on school



# Community energy company & car



# PV panels become popular with residents



# What have been the essentials?

Raising awareness - meetings and events

Encouraging people to get involved by being inclusive

Measuring progress and providing feedback to the community

Collaborating with others

Having fun!



# Key connections

Local businesses donated money, time and materials -  
*tes*/RSK, M&M Communications

Many businesses/organisations have been keen to visit  
our project or invited us to speak to them - BiTC,  
Rathbone Greenbank Investors, National Grid, Defra,  
Defence Academy

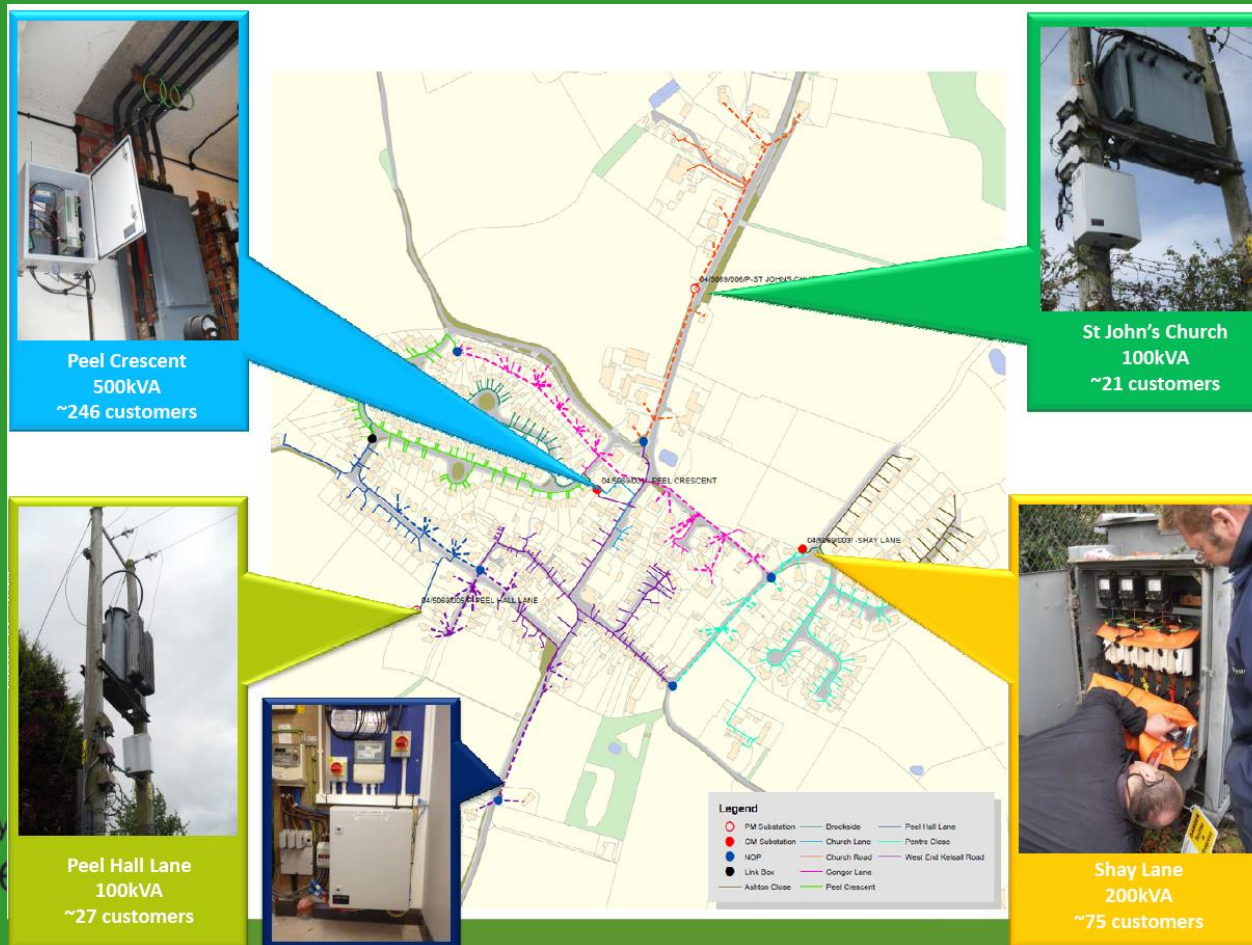
Others have got directly involved or provided ongoing  
support– EA Technology, SP Energy Networks, United  
Utilities

University of Chester – annual carbon footprint surveys  
and leading on research and development in  
partnership with our business contacts



# Ashton Hayes Smart Village Project

ScottishPower Energy Networks has invested £200K into the village from a Low Carbon Network Fund project



## Learning to Date



**1.857GWh**

The electricity required to supply Ashton Hayes per year



**3% (12,274kWh)**

The electricity supplied by the village PV in Q2 2012



**213 tonnes**

The emissions associated to the village's electricity supply



**573kW**

The peak load drawn by Ashton Hayes

# Key links to business

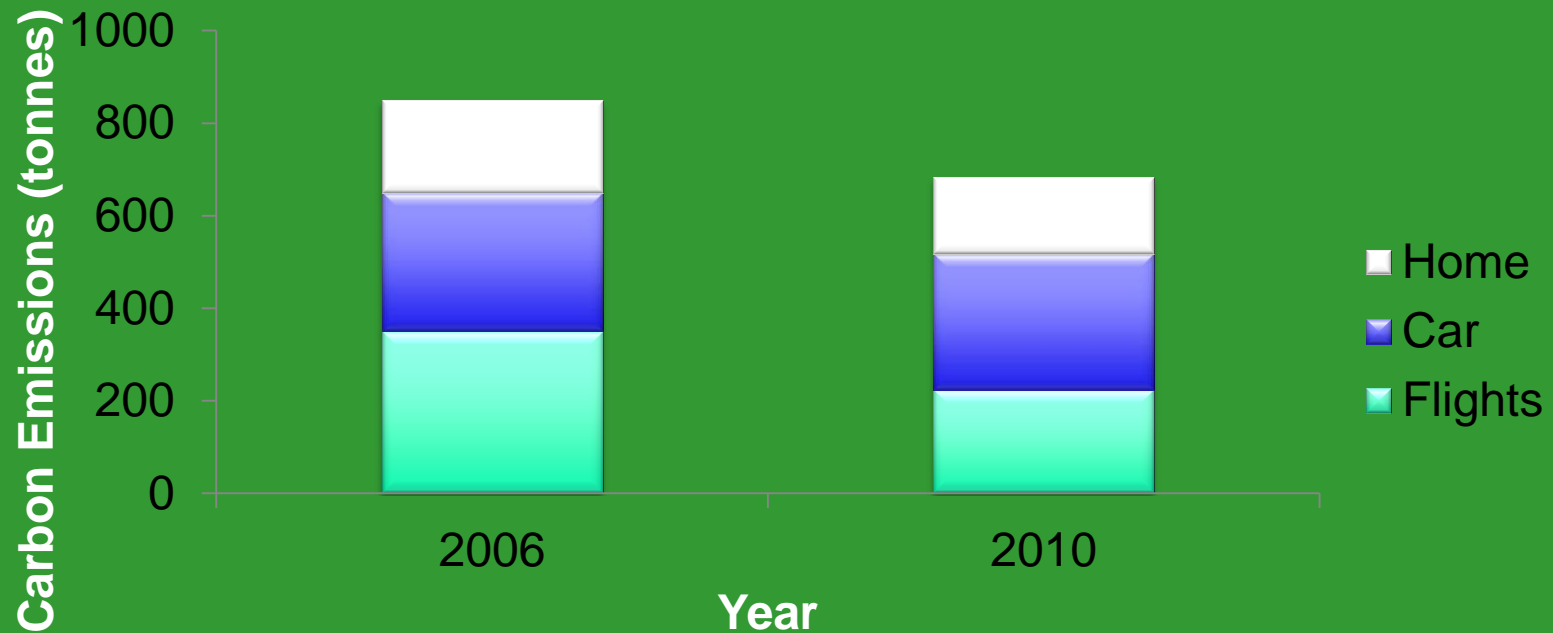
A most critical link since 2009 has been Carbon Leapfrog

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!



# Outcomes

## Total Carbon Emissions for 61 Households in 2006 and 2010



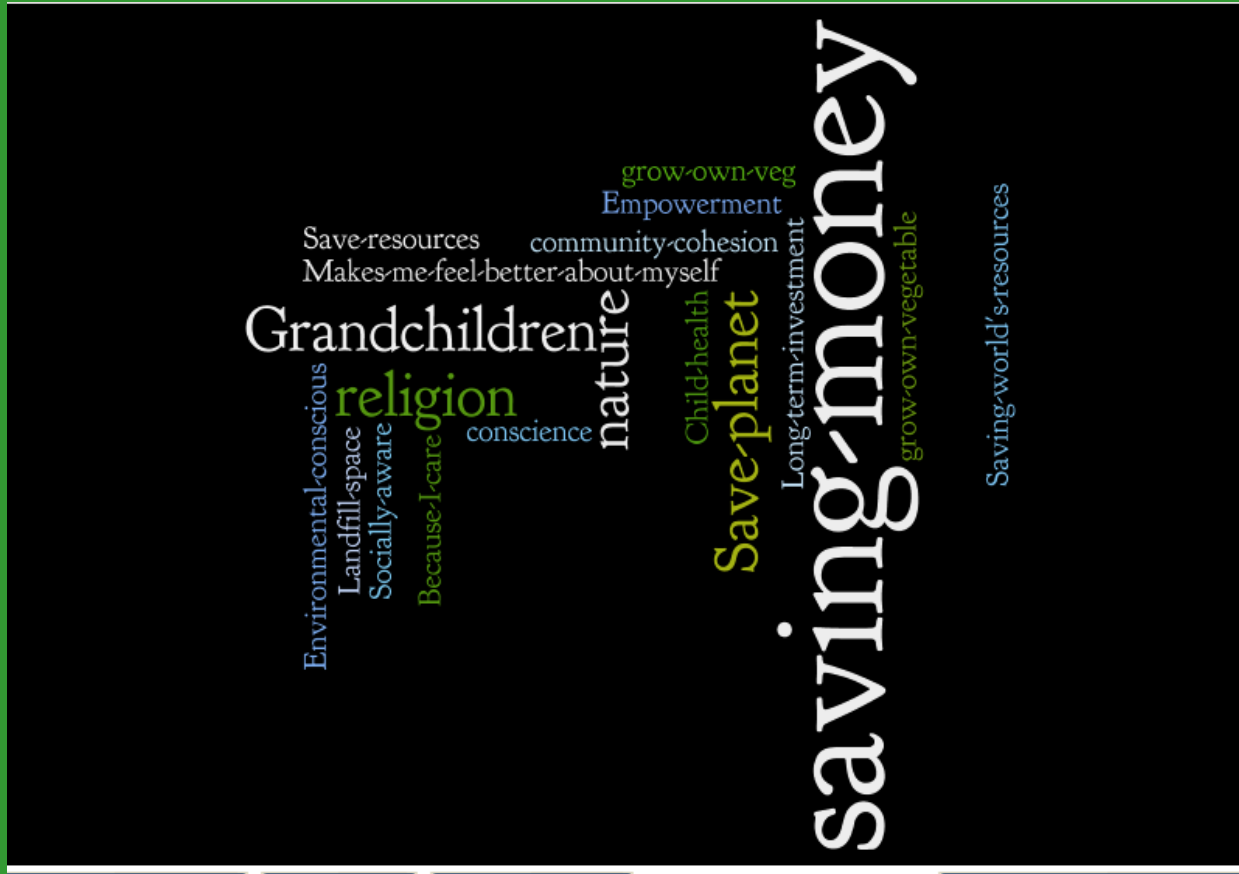
# Some Hurdles

Contracts, planning etc – vital assistance from Carbon Leapfrog

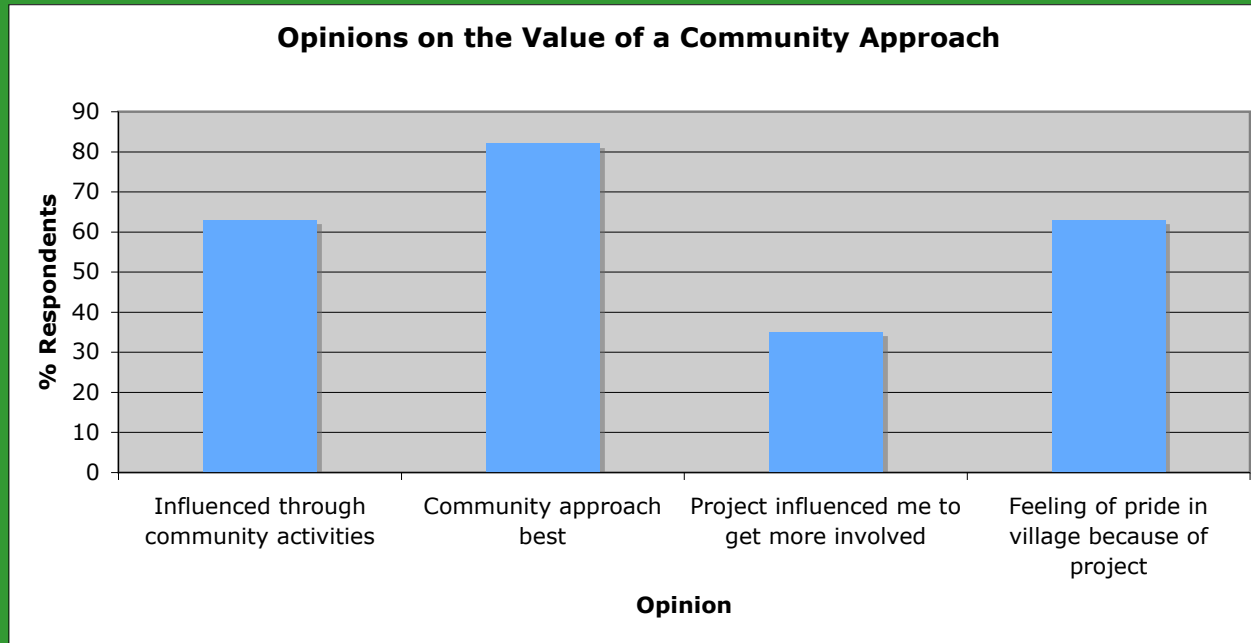
Low uptake of *Villages without Borders* electronic survey tool

Community Electric Car – insufficient engagement to maintain service so sold, late 2012

# What motivates Ashton Hayes residents?



# Why are we doing it together?



The community approach seems to work well - and has a positive spin-off in terms of community cohesion - a strong motivator.

Ged Edwards interviewed *ca.* 74 participants and 56 non-participants for his MSc in 2007 (Edwards, 2007).



# Recent Developments – our own business

Development of community energy generation in 2011 took Parish Council into new territory

Ashton Hayes Community Energy C.I.C. was established in 2011 to own and manage our generation assets on behalf of the community and to develop them further in collaboration with others.

It is run by six volunteer directors and all members of the community can become members.



# Other developments

- 2010 Community Shop opens
- 2012 on CN group works closely with PC on Neighbourhood plan and with CWaC on Climate Resilient Community project
- 2013 Earth Hour event monitored by SP Energy Networks
- 2013 AHCE works with SP Energy Networks to make film about Smart Village Project

# Next Steps

AHCE funds raised through FiTs from PV, consultancy and talks to be invested in more renewable energy:

- PV on social housing for elderly
- Ridgeblade





# Future Directions



Our 2012 LEAF study examined:

- Community approaches to energy efficiency retrofit
  - Opportunities to develop more community renewable energy
  - The 'value-added' by community projects
- ... and produced an energy information hub to disseminate these in the community and to others

This gives us a strong basis to move forward with the next phase of our work and to collaborate with other communities



# Keep in touch/find out more

Our website has lots of material about the project and links to our films.

Visit us at:

[www.goingcarbonneutral.co.uk](http://www.goingcarbonneutral.co.uk)

Or search Youtube for 'Ashton Hayes'

[www.carbonleapfrog.org](http://www.carbonleapfrog.org)



Questions?

