

CONNECTING LOW CARBON GROUPS ACROSS THE COUNTY

Low Carbon Warwickshire Network Newsletter

January 2022 - Issue 13 - Church Lawford event

The Low Carbon Warwickshire Network aims to connect low carbon groups across the county, sharing ideas and stimulating and supporting new activity. Although primarily rural in focus, we exclude no one.



<https://www.harburyenergy.co.uk/warwickshire-low-carbon-network>

Welcome to the Low Carbon Warwickshire Network (LCWN) Newsletter

The LCWN aims to create a central hub providing guidance, information and inspiration for new and existing groups, mainly in rural areas. 'Low Carbon Communities' events have been held in Harbury, Napton on the Hill, Henley-in-Arden and Church Lawford. The next event will hopefully be in Rugby in Spring (March) 2022 – we're awaiting confirmation.

A range of partners are working together to help secure the resources the Network will need to grow and deliver on its vision.

Happy New Year Everyone

RSA Warwickshire and the Low Carbon Warwickshire Network event at Church Lawford – Sunday November 7th 2021: Your community - towards a greener future



Here is a summary of the presentations given at the event.

Janet Mobbs – Lineside Nursery, Church Lawford.

Janet and her husband Martin produce plants in their nursery in Church Lawford for sale to the wholesale trade. The polytunnels in which the plants are grown ideally need to be heated to 4°C during the colder months of the year (unfortunately, the nursery does not have frost protection in all their polytunnels at the moment). How to provide this heat in an eco-friendly and economic way has exercised their minds since first setting up the business. Since moving the business to Church Lawford, they have always lived on-site: first in a poorly insulated mobile home then, more recently, building their own state-of-the art energy efficient 'WikiHouse' with the help of friends in the village ('wiki' means 'quick' in the Hawaiian language). The son of Janet and Martin's friends originated the WikiHouse building system and this is now the basis of a global foundation.

Janet, this year, won first prize in a national competition entitled 'Towards Net Zero Emissions in Protected Horticulture' organised by the Glasshouse Crops Research Institute (GCRI) Trust. Having tried various fossil fuelled means of heating their polytunnels she accepted that, with the low profit margins of their business, the opportunities do not present themselves to self-finance renewable energy-based schemes. She



proposed in her competition entry, therefore, a long-term loan arrangement in which repayment of capital costs for such schemes could be deferred until the nursery was sold.

Following the mantra: 'reduce, reuse, recycle' they have sought to:

- a. minimise the need for artificial heat (insulate), and
- b. make maximum use of naturally occurring energy (solar gain)

Re-using or recycling CO₂ emitted during fuel combustion by capturing it, storing it and subsequently applying it at other stages of the growing process is probably only ever feasible for large scale edible crop production. With reference to a. and b. Janet was able to show with graphical data how well their house performs compared with an average house of similar size.

In conclusion, she thanked those members of Church Lawford community for the help freely given over the many months it took to build their house.

Written up by Keith Sinfield 09/12/2021 and edited by the speaker.

Ross Hatton – Professor of Chemistry, University of Warwick.

Professor Hatton began his talk by exploring the rising demand for energy worldwide, both in the developed and developing world – a process exacerbated by rising populations and, with it, rising living standards and consequent increased demand for energy. Here in the UK our economy has continued to grow (2005 to 2019 by 20%!) but, in spite of this, we have successfully both reduced our energy demand and made unprecedented progress towards decarbonising the electricity supply. This has been achieved by a combination of ceasing our dependence on coal coupled with an increased use of renewables - the latter made possible by reduced costs arising from advances in technology and economies of scale.

Professor Hatton has a particular interest in the materials used for solar photovoltaic (PV) cells. He explained that the cost of silicon-based panels (the dominant technology) has fallen dramatically and is expected to continue to do so, encouraging greater use. However, silicon solar PV are not well suited for some important applications (e.g. in transportation) and so he is particularly interested in developing alternative, organic PV. These offer a number of advantages: they are widely abundant elements, are low cost, and can be extremely light weight. Surprisingly, the electronics industry already makes use of organic semiconductors – so why aren't organic photovoltaics not yet a commercial viability? Because for practical application, photovoltaics must be able to withstand the elements for a decade or more and so the long term stability of organic photovoltaics still needs to be improved to reach this high stability bar. However, public influence in helping to bring on emerging clean energy technologies must not be underestimated – a groundswell of opinion in favour of a greener, more sustainable, future is emerging and we must all do our bit in embracing this change for the better.

Written up by Keith Sinfield 09/12/2021 and edited by the speaker.

Ryan Rushton – Younity Coop.

About Younity

Midcounties Co-operative and Octopus Energy signed a strategic energy partnership in August 2019. This saw Octopus Energy take on ownership and responsibility for the management and supply of energy for 300,000 customers formerly supplied by Co-op Energy which also included Flow and GB Energy customers who Co-op Energy acquired previously. Part of this strategic partnership included the creation of Younity, a joint venture between the Midcounties Co-operative and Octopus Energy. Younity aims to provide vital

support for community generation across Great Britain, drive investments in local communities and pay generators a fair price for the power they produce.

Power Purchase Agreements (PPA's)

Younity are currently purchasing community owned electricity from over 150 PPA's. In short, a PPA is a contract between a supplier and a generator to purchase the generators export generation. You will not just get a single payment per MWh for your export, we will also make an embedded benefits payment as well per MWh and a REGO (Renewable Energy Guarantees of Origin) payment per MWh. We offer a range of contract lengths in which Younity pay a fair price to the community generators for their energy and will offer PPA's to any community owned site regardless of their size, giving greater market access.

Community Power Tariff

In January 2020, Your Co-op Energy launched the Community Power tariff. This is a domestic supply tariff backed by the energy Younity are directly buying through Power Purchase Agreements (PPAs) from community energy projects across Great Britain plus fully carbon offsetting the gas through the charity Renewable World. Your Co-op Energy assign the power from Younity's PPA's to this tariff through the REGO's to prove where the origin of energy comes from.

Powering Communities Fund

For every customer that signs up to the Community Power tariff, Younity will donate £10 to go into a Powering Communities Fund created by Younity which is exclusive to community energy groups and organisations who are affiliates of Your Co-op Energy. To date Younity have distributed nine grants of £2,500 to community energy groups to help them bring their community energy projects to fruition, this can range from education, renewable energy to biodiversity.

Your Co-op Energy Affiliate Partnership

Community energy groups can become an affiliate partner of Your Co-op Energy and get exclusive access to apply for a distribution of the Powering Communities Fund. There is no financial commitment expected from Your Co-op Energy upon signing an affiliate agreement and no commitment on how much you need to promote the domestic tariffs. In order to receive an affiliate payment the community energy group will have a unique reference link that your members can use to sign up to a Your Co-op Energy domestic tariff. You will be able to embed this link into newsletters, social media, web pages etc. At this moment in time due to the extreme volatility of the market the message from Your Co-op Energy is to stay put and speak to your existing supplier if you are considering switching away. It's really important that if you decide to switch away that it's right for you from a financial and ethical perspective.

Current State of the Energy Market

Your Co-op Energy are a white label of Octopus Energy, meaning that the supply license is with Octopus Energy. While the energy market remains extremely volatile we can re-assure you that Octopus Energy long-term hedging arrangements and financial strength mean that it is reasonably well-protected from the current situation. This provides peace of mind for those who are Your Co-op Energy or Octopus Energy customers. However, just to reiterate my message above if you are or not currently with Your Co-op Energy or Octopus Energy then the message is to stay put and speak to your existing supplier if you are considering switching away.

Ryan Rushton 23/12/2021.

Delegate Suggestions for Community Action

Everyone at the event discussed possible areas of action with others. From those discussions the top three priorities were collected from each table. Here are the collated results – in no particular order:

- Establish 'Repair Cafés' in each community.
- Create a trusted source of information for use by all communities in Warwickshire.
- Create a body which can give trusted local advice in the community for the community. Provide contact details for all such bodies (for example Act on Energy) in the Low Carbon Warwickshire Network Newsletter.
- Create a body, or provide contact details of any organisation which can give reliable sources of information from suppliers on, for example, air source heat pumps and other less familiar technologies.
- Look at how to effectively engage the wider community - particularly the young. What do we need to do?
 - Use social media?
 - Provide local analysis?
- Compile and provide up to date information on energy suppliers, featuring which suppliers are investing in renewables.
- Share amongst all member groups in the Low Carbon Warwickshire Network any finished articles on energy and other environmentally related matters to provide copy for local publication (eg. In Parish magazines).
- Find out if Warwickshire County Council were going to run the the 'Solar Together Warwickshire' initiative again and if so, promote it through all groups in the Low Carbon Warwickshire Network.
- Require local Councillors to come up with specific practical measures on carbon reduction.
- After due consideration support all appropriate low carbon local energy initiatives.
- Provide information and education on how to make homes more energy efficient. Engage with local communities, Parish and other councils on this agenda.
- Create a blueprint for enabling small scale solar PV for other local communities to follow.
- Provide clear signposting on setting up a community energy group, promoting local EV charging schemes and setting up renewable energy projects.
- Create a sustainable strategy for transport with provision for safe cycling.
- Undertake energy consumption review for:
 - Street lighting.
 - Electric cars.
 - Parcel deliveries.

These suggestions and the LCWN Facebook group will be discussed by the Steering Group soon.

Ideas needed - The LCWN is working with Garden Organic to identify ways we can work together. If you have any project ideas for how Garden Organic could work with several community groups – please let us know.

Do you want to host an event in your community?

If you would like to host a "Low Carbon Community" event where you live, please email:

lowcarbonwarks@gmail.com and let us know where and when and we'll get in touch and see how we can help.

Who are we? Introducing

This month we get **Janet Palmer** from **Stratford-on-Avon Friends of the Earth** to talk to us about her low carbon journey.

1. What is your first memory of when you realised things needed to change?

I visited the Centre for Alternative Technology in Wales when it first opened in the seventies. I was impressed by the ideas on display there and thought that this meant plans to stop global warming were well in hand! I then carried on with my career as a teacher and Educational Psychologist and had two children. I believed that my life was too hectic to worry about the environment as well. As time moved on, I realised that my early optimism was seriously misplaced but felt I lacked the knowledge to do much about it.

2. What made you commit to doing something?

When I retired at the age of sixty, I promised myself that I would learn more about the environment and see what action I could take. I joined the Green Party where I met people who had been campaigning on the climate for years, so I learned from them. I read what I could and I took a FutureLearn course. I joined my local Friends of the Earth group to find out what was happening locally. The training provided for campaigners in Friends of the Earth is very comprehensive, and during the pandemic they have kept me very busy with online webinars and discussion groups! The more I learned, the more I understood that we are facing an existential crisis and that the environmental movement has the challenging task of educating and motivating the general public.

3. What have you done?

I was very struck by the warning in Mark Cocker's book "Our Place" when he pointed out that environmental groups in the UK have not always worked together in the best interests of the planet. Policy differences and even competition between organisations can weaken the whole movement, and so can common perceptions of environmentalists as puritanical, middle-class "do-gooders". I am currently part of a group planning to create a climate hub in Stratford-upon-Avon that we hope will be an inclusive and welcoming place for the whole community.

From a personal point of view, I've changed the way I get about by giving up my car. I've also learned to cook vegetables in more interesting ways and cut down drastically on meat eating. We have made some improvements to the insulation at the back of our terraced house but there is still a lot more to do on the domestic front.

As the Co-ordinator of Stratford Friends of the Earth, I've organised educational activities, such as running stalls at community events and arranging talks. In 2020, we joined forces with Stratford Climate Action and their "Pledge for the Planet" initiative to create a display on the theme of sustainable living in Stratford town centre. We also took part in the Global Day of Action during COP26 and support campaigns such as FoE's legal challenge to the UK government's funding of the massive Mozambique Gas Project.

4. What's kept you going? What sustains you?

I think that the enthusiasm of others keeps me going. I regularly receive enquiries from local people who want to know what they can do to combat the climate and ecological emergencies. When Stratford Friends of the Earth ran an art competition for local schools in the summer, there were many brilliant entries from children who were very clear that we must look after our planet and stop being so reckless. The thought of future generations suffering from our negligence is horrifying and I don't feel that we have a choice – we have to campaign on the issues of climate and nature.

As a former psychologist, I'm also interested in motivation and our ability to change. Even people who read a lot about the climate and understand the danger we are in can find it really hard to alter their lifestyles significantly. We need to offer practical examples and friendly encouragement rather than make people feel judged.

5. If there was one thing/one solution you wished everyone knew about/did – what would it be?

I wish that everyone would contact local politicians and their Member of Parliament to express their worry about the climate and ecological emergencies. We need to keep asking politicians for stronger action and ensure fairness during the energy transition. One Warwickshire councillor recently said that during her campaigning "climate change has never been an issue high on the residents' agenda." This really needs to change.

Janet Palmer, Stratford-on-Avon Friends of the Earth Co-Ordinator, December 2021

News

The LCWN will soon have a Facebook group set up by Emma Powell for everyone to share useful things.
emma.powell@octoenergy.com

What do these terms really mean? The definitions and the care needed when looking at developers' plans and consultations

- Net Zero Carbon
- Zero Carbon Building
- Zero carbon Ready

Net zero carbon:

Net zero refers to achieving a balance between the amount of greenhouse gas emissions produced and the amount removed from the atmosphere.

This definition is weak. This allows the Developers to offset their emissions by buying carbon credits, which is obviously open to abuse. Indeed, such abuse is the reason why UKGBC (Green Building Council) are exploring the development of a verification process; not to ensure actual performance, just to make sure that there's a level playing field for offsets.

Zero carbon building:

A building with no net carbon emissions resulting from its operation over the space of a year.

This definition is fine. I would support the use of off-site renewables as well, so that it doesn't need to be zero carbon for each building individually – it's much more efficient to create renewable energy at scale than it is on a site-by-site basis, and many urban sites will not have sufficient footprint to generate all of their own renewable energy on-site anyway.

Zero carbon ready:

Buildings built to a standard such that no further energy efficiency retrofit work will be necessary to enable them to become zero carbon as the electricity grid continues to decarbonise.

This definition is ok-ish but could be tightened. It depends on the year you set for measuring your zero-carbon compliance. If you set 2050, then the grid is forecast to be 100% renewable by that point, so you could use as much energy as you want. If you set 2030 or 2035 then the grid may be 50 – 70% renewable, which obviously makes a difference. There is also a question of maximum demand – if we simply decarbonise the grid and switch all existing gas heating to electric, then we would have to increase the capacity of the grid by 4-6 times; the energy companies suggest that doubling capacity is the maximum that they could achieve in the timescale required. We would therefore suggest adding a clause something like “based on the OFGEM Future Energy Scenarios for 2030 or 2035”.

The work that UK GBC have been doing is also worth taking into account - see the following extract from a recent UK GBC report.

Net zero carbon definitions

UKGBC's Framework Definition provides a set of consistent principles and metrics for the built environment to apply in the achievement of net zero carbon buildings. It sets out two definitions for net zero carbon, which should be considered of equal importance: one for construction and a second for operational energy.

These two definitions provide the foundation for net zero buildings claims:

Net zero carbon – construction

For new buildings and major renovations

“When the amount of carbon emissions associated with a building’s product and construction stages up to practical completion is zero or negative, through the use of offsets.”¹

Net zero carbon – operational energy

For all buildings in operation

“When the amount of carbon emissions associated with the building’s operational energy on an annual basis is zero or negative. A net zero carbon building is highly energy efficient and powered from on-site and/or off-site renewable energy sources, with any remaining carbon balance offset.”

George Martin, Kenilworth All Together Greener, Director of the UK’s Building Performance Network and Chair of the Sustainable Development Foundation

Events and Meetings

If covid restrictions allow:

- The Spring LCWN face to face community event will hopefully be in March 2022 with Rugby Transition Town.
- The Summer LCWN face to face community event will hopefully be with Kenilworth All Together Greener.
- The Autumn / Winter LCWN face to face community event will hopefully be with friends in Snitterfield or Upper Boddington.



Useful Links

- Ryan Rushton, Younity, Business Development Manager, T: 07816 602 323, A: Co operative House, Warwick Technology Park, Warwick, CV34 6DA [Community Energy UK | Younity](#)
- LCWN Facebook group content e: emma.powell@octoenergy.com
- Janet Palmer, Stratford-on-Avon Friends of the Earth, Stratfordonavonfoe@outlook.com
- Bob Sherman FRSA BEM, Chair Low Carbon Warwickshire Network, e: lowcarbonwarks@gmail.com, T: 01926 612277, M 07919 157224
- [Warwickshire Low Carbon Network – Harbury Energy Initiative](#)
- www.harburyenergy.co.uk



Have your say— What do you want to see in future editions?

This is your newsletter and only as good as you make it – it is your opportunity to :

- publicise any on-line events you are holding
- let other community groups know what you are currently up to and other news
- share your experiences



Ideas, requests, offers, Q & A, hints & tips

Please send all copy (by 5th of each month), news items, case studies, details of events, comments, suggestions and enquiries about this newsletter to: lowcarbonwarks@gmail.com referring to the issue date and number for queries or phone Jacky Lawrence on 07906 440496.