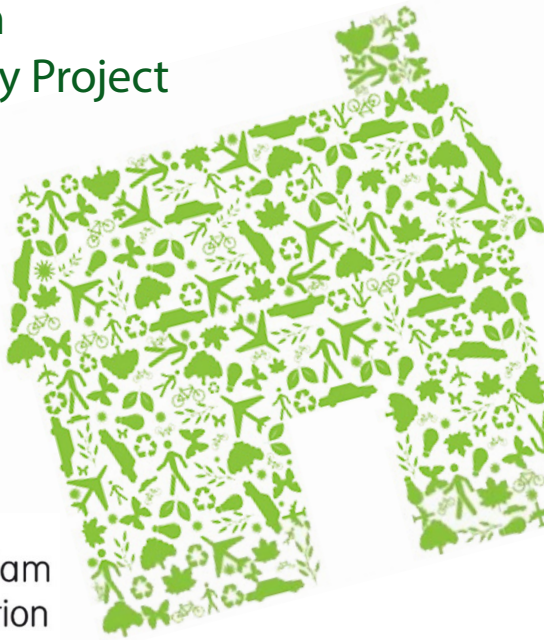
Monk Fryston and Hillam
Community Sustainability Project
2020 - 2024

Making Sustainability Happen



Monk Fryston & Hillam
Community Association

Thank You for Your Help so far

Climate Change - The World is a Different Place

We didn't know at the start of the project that within months, all our lives were going to be changed as we were plunged into the global coronavirus Pandemic in spring 2020. Two years later in February 2022 the Russians invaded Ukraine, leading directly to the energy crisis which fanned the flames of inflation. Only now in autumn 2024 is inflation falling to 'normal levels.' All these events had a direct impact on our project – some positive, some negative.

One thing which changed for the better is it is now accepted that climate change is real. Previously, it was safer to talk about abnormal weather events. Recently, these have become more frequent both locally and globally, often with devastating outcomes. These are warnings to us all.

However, the investment in green technologies and the development of sustainable energy infrastructure are gathering pace. Some infrastructure developments are happening in Monk Fryston and Hillam, which not everyone supports.

Therefore, we have dedicated a section to this as the Rawfield Lane Substation is a key part of the Great National Grid Upgrade and provided a short overview of each current development and contact details if you wish to find out more about any of them.

Going forward, we continue to work towards creating exemplar Sustainable Community Buildings and welcome anyone who would like to learn more about technologies we have used, or to see first- hand what we have done or share their journey so far.

We hope you find our report interesting and it stimulates you to consider what you might do to reduce your energy consumption, your climate change emissions and invest in renewable energy technologies.

Ray Newton
Project Manager
November 2024

Contents:

Where to find more information

Videos and Podcasts:

Recordings of presentations we have made about the project are as follows:

Community First Yorkshire Podcast:

Community Project Collaboration to transform Community Buildings.
www.communityfirstyorkshire.org.uk/resources/ podcasts/community-collaboration/

Ryedale Environmental Group Video Talk:

Green Transformation of Community Buildings Energy Sustainability
https://www.youtube.com/watch?v=cjY4YIc0C4I

Tees Valley Rural Network Video Talk:

Energy Sustainability: Getting started and saving money in community building
www.youtube.com/watch?v=O4YQ7Ve_gPU

At the outset of the Project, we committed to sharing learning and information as we installed and tested Renewable Energy Technologies.
We have done this in 18 Project Updates. There is far too much to include in this project booklet.

All the updates can be found on the Monk Fryston and Hillam Community Association website Monk Fryston and Hillam Community Association-Sustainability Project:
https://www.mfhcc.com/

It is currently being upgraded to provide more capacity. From January 2025 more details about the technologies we have installed, associated data, learning and general information will be progressively added.

By investigating the Sustainability Section, you may save some time, money and avoid some of our pitfalls.

How have we done?

Project Aim Number One:

To make our Community Buildings into exemplar carbon neutral buildings.

What has been achieved?

- St Wilfrid's Church: energy consumption and carbon emissions reduced, technically carbon neutral.
- Community Centre: energy consumption reduced, carbon emissions reduced and then eliminated, completely energy self-sufficient for part of the year, technically carbon neutral.
- Primary School: energy consumption reduced, carbon emissions massively reduced, sustainable energy generated, multiple Eco Schools Gold or Merit award winner.
- Sports clubs: energy consumption reduced, carbon emissions reduced, sustainable energy generated.

Project Aim Number Two:

To share our experience, learning and data with residents and similar communities across North Yorkshire.

What has been achieved?

- 18 project updates to subscribers
- 2 project update booklets to every household in Hillam & Monk Fryston
- Multiple Features in newspapers and on radio in North Yorkshire
- Presentations to multiple village groups in North and East Yorkshire
- 5 training presentations to sustainability groups
- Held 6 local information meetings
- Recorded 3 presentations on-line available nationally
- Member of North East Yorkshire Net Zero Hub Community Energy Strategy group

Project Aim Number Three:

To provide hope to our youngsters and others by showing that something can be done, no matter how small, to reduce carbon emissions.

What has been achieved?

- The school instigated, inspired and embedded the Eco Schools Green Flag pupil led eco programme.
- The school attained Gold or Merit status for the past 4 years.
- We have widely publicised case studies of our project actions and explained how individuals can do the same at home.

We couldn't have done these things without the help of our Funders and Supporters!

Hillam Parish Council, Rural Communities Energy Fund, The Post Code Lottery, WSP, Public Sector Decarbonisation Fund, The National Lottery Community Fund, Monk Fryston Parish Council, DfE Energy Efficiency Grant for schools via the Star Mat (replacement Windows and Solar Panels)

This booklet is paid for by the generous support of the National Lotteries Community Fund.

COMMUNITY FUND

Project Summary:

'We have No Expertise, No Money and No Time'

These perceived problems were quickly addressed with the help and guidance of Chris Hailey-Norris, CEO of Up for Yorkshire and Kate Urwin, the founder of the Yorkshire Energy Doctor CIC. While still living with the Pandemic, our project featured in November '21 as the headline item on Radio York throughout the opening day of Cop 26 in Glasgow. In April 2024 Robin Parkin, chair of the Community Association was interviewed live again by Radio York in a feature during Village Halls Week about Sustainability when he proudly declared that he expected the Community Centre to become carbon neutral. This landmark was notched up the following month in May 2024.

Not only had we managed to achieve one of our aims, but clearly, as illustrated by the Radio York features throughout the project we have been fulfilling another aim; that of sharing our encouraging experiences and learning with others via the series of project update newsletters, local publications and regional press, on-line and live presentations and podcasts. Details of these can be found elsewhere in the booklet. This culminated in us being invited to become a member of the government funded North East and Yorkshire Net Zero Hub Community Energy Strategy Committee.

Our third major aim was to give our youngsters hope by demonstrating we could do something about climate change and sustainability – that no matter how small we all could make a difference. Our project is work in progress, but it is encouraging that the Community Centre has not created any emissions since the installation of a Heat Pump in July 2023; the school has used gas for cooking only since summer 2021 when a Ground Source Heat Pump was installed. Our parish church St. Wilfrid's, when faced with unexpected problems started buying only 'green energy' from mid 2023. Our other partners have endeavoured to reduce their CO_2 emissions but again have come up against some significant barriers.

Despite the Pandemic, the school has won recognition as an exemplar organisation by attaining the internationally recognised Eco – School green flag award each year since 2020- 21. This inclusive project-based programme, led by teachers and an elected team of pupil eco warriors, is now embedded into the school curriculum and ethos. It provides pupils and staff with the knowledge and tools to live in a sustainable way. This is undoubtedly shared with their families.

Doing, Learning and Analysis

Alongside our objective to make our Community Buildings Sustainable, came a commitment to assess the performance of whatever we decided to do to make it happen with the aim of providing a long-term, honest assessment of each element. This has involved learning what to do, benchmarking existing performance, recording and auditing on-going activities, energy efficiency activities and installing renewable technologies…plus gathering and analysing a lot of data. We wanted to be able to give an honest assessment of what works and perhaps doesn't work. This monitoring quickly illustrated what we subconsciously knew. That each organisation was setting off from a different start point. It has provided us with lots of surprises and learning points which we will share later.

The unexpected global challenges we have all personally faced have applied equally to the Project Partners as well. How each organisation reacted to their challenges has again provided an opportunity to recognise their differences and reflect on what needed to be done to continue operating– i.e. Operational Sustainability in a changed world, ever more on-line and individually focused.

Finally, news been released that the world broke it's global average temperature record twice during one week in July 2024. At this point it is probably worth us all pausing and reflecting on the comments of Shirine Khoury-Haq, Net Zero Council co-chair, and Co-op Group Chief Executive August 14th 2023 (This is a partnership between government, business and finance, providing cross-cutting strategy across major business sectors to deliver our net zero target.)

'None of us will get to net zero without all of us getting to net zero. Ensuring every sector has a clear plan for delivering this non-negotiable target is key'

We hope you enjoy reading our report, find it interesting and that it stimulates everyone to start making a difference – no matter how small.

St Wilfrid's Church and Church Hall

The oldest building in our community is our uninsulated, limestone church of St Wilfrid. It has an old heating system powered by a thirty-year-old gas boiler and has extensive energy hungry lighting. In contrast, the Church Hall was built around 1970, extended around 2000 and looks modern. At the start of the project, we knew it needed updating but optimism was high. Actions were undertaken to implement the vision of what was required to become a carbon neutral Church Hall. This was against the backdrop of having to find a pathway through multiple barriers. It is a listed building and sits in the village conservation area and has to conform to the Church's own ecclesiastic development rules.

Finally, one further big issue to overcome is its status as a religious property and so it is excluded from obtaining grants as many funders exclude religious organisations. Nevertheless, following surveys, we obtained quotes for solar panels and storage batteries. Then we reached one of those 'you don't know what you don't know moments'. We discovered the original 1970 roof had no insulation and very little in the walls. To compound this discovery, following the appointment of a new architect to conduct the regular quinquennial survey, she questioned if the Church Hall roof was structurally sound. Fortunately, following further detailed examinations, it was declared fit for purpose but not able to carry additional weight such as insulation and solar panels.

The Pandemic wasn't kind to St Wilfrid's which had to close for a very long period. After reopening many of its regular supporters were deemed to be vulnerable and were wary about re-joining group events. Consequently, a generally pragmatic approach to sustainability was adopted to all church matters. This led to the church becoming our first carbon neutral organisation as the Parochial Church Council (PCC) chose to purchase sustainable energy from a new supplier and at a lower cost.

However, the church team continued in its quest to reduce energy consumption as they undertook a series of low-cost measures to nibble away at overall consumption.

What does being Pragmatic looks like?

The PCC did what many households did when faced with the conflicting challenges of how to manage the financial crisis, the energy crisis and the desire to be more sustainable.

They endeavoured to get the most bangs for their bucks! They identified the problems and then broke them down into smaller elements.

The roof problem was resolved by having an independent structural engineer assess it so they knew the extent of the problem. The challenge of obtaining grant funding was addressed when North Yorkshire County Council offered the opportunity to conduct a further sustainability Feasibility Study on buildings used by the community. The Church team took advantage by demonstrating that the Church Hall was overwhelmingly used by the whole community.

This was accepted, demonstrating that in effect it is a second Monk Fryston Village Hall.

The challenge of financial frugality was addressed by a combination of self-help and making the most of what you have whilst doing what is necessary. With one eye on being more sustainable they put insulating foil behind the radiators, purchased green energy at a lower cost and activated the wifi heating control system to reduce running times.

A plan to reduce the number of big lights used in the church was agreed, thereby reducing the amount of power consumed. Finally examples of 'doing what was necessary' with clear, quick paybacks were the replacement of two old gas boilers with a single more efficient boiler to serve both buildings. This saved energy as did the replacing of fluorescent lights with LED lights.

The Community Association (CA)

Never Enough Money

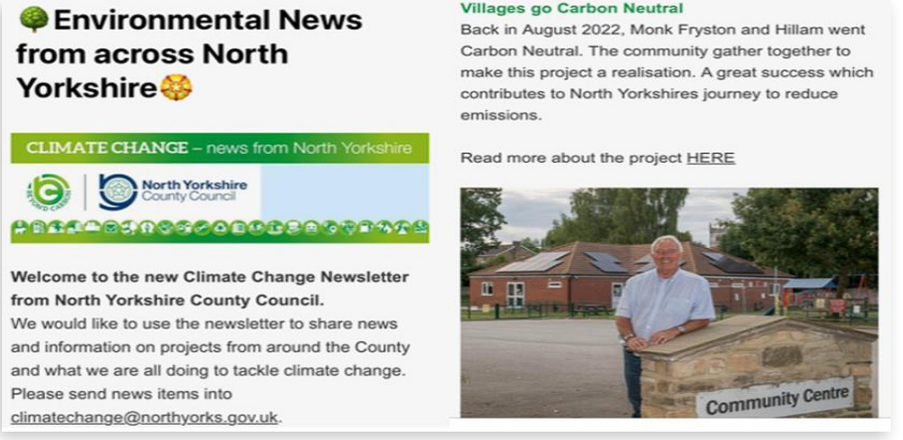
The CA, a volunteer operated and funded community charity, was established in 1970 to provide a village hall (Community Centre) and playground for residents of Monk Fryston and Hillam and visitors. Like most similar volunteer operated community buildings its popularity and support has ebbed and flowed over the years with the only constant being a struggle to fund its on-going operation. After another crisis in the early 2000's, a new committee was formed and their enthusiasm proved to be a watershed as the building was made more attractive and the committee led activities to encourage more use of the Centre.

A small extension was built in 2011 followed by a conservatory; neither of these had any heating. With hindsight this was the start of the drive to become energy sustainable, the first steps being to reduce energy use by introducing some simple energy efficiency measures in the all-electric building.

A big step forward occurred in 2014 with the major redevelopment of the Community Centre by adding improved insulation to the extensions, LED lighting throughout, and an underfloor heating system powered by a new gas boiler.

A positive move towards sustainability

This step was reinforced in early 2019 as the Trustees reacted positively to feedback from Centre users of a desire to become more sustainable. They adopted a policy that whenever possible the CA would 'do things in a sustainable manner'. Consequently, after ad hoc discussions with other leading Community Groups, a partnership of organisations was established with the objective of making all our community buildings carbon neutral. The CA became the natural leader. The project formally started in April 2020.



Environmental News from across North Yorkshire

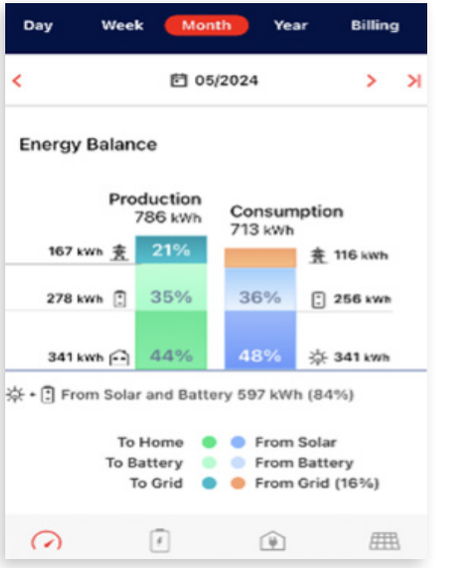
CLIMATE CHANGE – news from North Yorkshire

North Yorkshire County Council

Welcome to the new Climate Change Newsletter from North Yorkshire County Council.
We would like to use the newsletter to share news and information on projects from around the County and what we are all doing to tackle climate change. Please send news items into climatechange@northyorks.gov.uk.

Villages go Carbon Neutral
Back in August 2022, Monk Fryston and Hillam went Carbon Neutral. The community gather together to make this project a realisation. A great success which contributes to North Yorkshires journey to reduce emissions.

Read more about the project HERE



Making Sustainability Happen

The CA's approach has been to build on this policy and successfully apply for grants from various funders. This led to professional energy surveys and obtaining grants to purchase a thermal imaging camera, installing solar panels, electricity storage batteries, an air source heat pump plus energy efficiency measures such as additional insulation material, replacing existing lighting with more LED lights controlled by lux sensitive movement controllers. The installations were accompanied by a series of performance monitors to ensure that new renewable energy technologies could be fully evaluated.

The outcome of these initiatives has been that the CC has achieved carbon neutrality for the months of May, June, July and August in 2024 after removal of the gas boiler in July 2023.

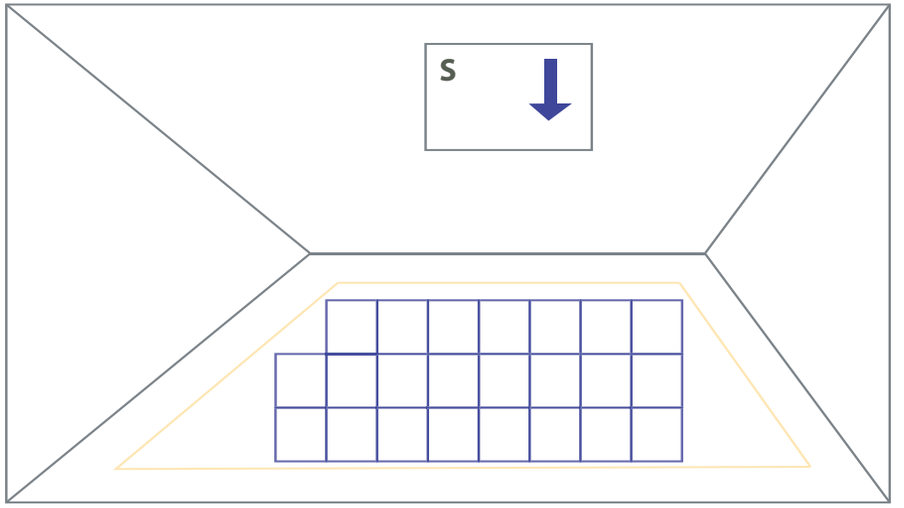
The Sports Clubs

Sustainability, the Pandemic and Changing Priorities

Hillam and Monk Fryston Cricket Club

At the start of the Project, the Cricket Club had taken decisive action to ensure its general sustainability as a building and as a club. In 2012 the members built a new 'state of the art' pavilion. Soon afterwards it started to offer cricket coaching for village youngsters from the age of six. The pavilion was enhanced in 2018 by adding exterior insulation to make it suitable for year-round use and provide accommodation for a new village nursery. The nursery provides rental income to make the club financially sustainable and helps finance the Junior Cricket section which is thriving and starting to provide players for the senior cricket teams.

The optimism following the initial surveys which confirmed they had an excellent insulated property was dented somewhat when the pandemic struck and participation in sports was stopped by the government. This was followed by a push by national sports club funders to direct grants towards enticing the public to taking part in sport again. Nevertheless, the club worked hard to obtain quotes for a biodigester, solar panels and battery installations as well as carrying out energy efficiency work.



Hillam Pavilion: A schematic of the Solar Panel layout

The focus was on finding a solution to the growing problem of waste water disposal. The Cricket and Football Club share all utilities and were expanding their activities, growing their teams and increasing daily usage by the new nursery during the week. The problem was compounded by several abnormal weather events which caused ground water to seep into the waste tank.

A biodigester seemed to provide the ideal sustainable solution to the challenge and save money for the clubs as well as reducing carbon emissions by not having to tanker away the water.

Unfortunately, for various reasons the biodigester scheme was abandoned. Not to be deterred, they then searched and agreed a route of a long- distance pumped drain connection to the main sewer only to be turned down by Yorkshire Water.

Meanwhile, whilst both clubs are still searching for a solution, the Cricket Club has taken a number of energy saving measures by replacing conventional lights with LED lights, seen the value of measurement and saved money and energy by simply turning off the beer fridge when not required and on one occasion notified the Football Club when it identified an abnormal use of water. On investigation, it was discovered that a tap had been left on at the club after a weekend game.

After four years of declaring their wish to be sustainable, the club with the generous support of new neighbour SSE they are able to install approximately 10kWh of solar panels and a 15kWh battery. This will be a big step towards becoming carbon neutral and for the Football Club to be able to use its rechargeable batteries for floodlighting in a more sustainable manner.

Two smart plugs in action

The Sports Clubs

Sustainability, the Pandemic and Changing Priorities

MF United Junior Football Club

The Football Club is relatively new, becoming established at Stocking Lane since 2000. It operates teams for children aged 6 to 16 and is run by a very active and visionary group. Like the Cricket Club, they can only spend what they raise, so are always searching for new funding opportunities or to reduce their operating costs. They have very minimal, fit for purpose facilities created from shipping containers which provide toilets, storage and refreshments. Just before the Pandemic they identified an opportunity to reduce operating costs – with a long-term environmental benefit. This was to acquire portable rechargeable floodlights similar to the ones used by the village netball group at the school. This would allow the teams to continue to train during the dark nights at their base at Stocking Lane; whilst saving the cost of hiring indoor training facilities. It also eliminated the need for parents to transport, the young players out of the village and thus save on CO2 emissions. This was achieved with the help of a grant from Monk Fryston Parish Council.

The recharging would be done on site – so an opportunity to use solar power or off- peak power presented itself. The challenge would be to find funding for the solar panels and batteries. This is now happening.

The Pandemic and The Changing Priorities

A widely recognised outcome of the Pandemic was the reduction in number of people willing to volunteer to help run organisations.

This has impacted on the Football Club's post Pandemic sustainability aims. Their aim has refocussed on two new opportunities. One was to absorb the players from the South Milford junior football teams which folded due to a lack of volunteers to operate the club.

Similarly, another nearby club, Hambleton, could not find volunteers to administer theirs.

The players from both clubs have been welcomed at Stocking Lane so the youngsters still have the opportunity to play football and recently the second opportunity came as the club negotiated the acquisition of a large piece of land nearby, which was surplus to Yorkshire Water's needs; so providing more space for local expansion.

Monk Fryston Church of England Primary School

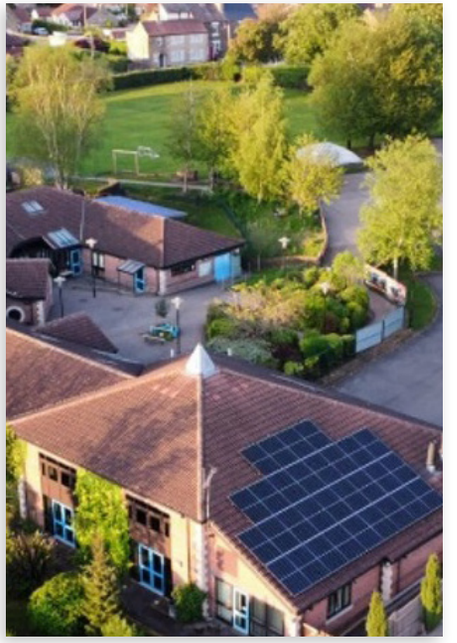
The School will be ok – It's a new building… isn't it?

The school is new in comparison to the old one built around 1850 and felt like a palace by comparison when it opened in 1999. After over 20 years of hard use when the project started, it was the village's biggest energy consumer and carbon emitter; things started to wear out and times had moved on, new, higher building standards and technologies had been developed. Much work was needed to be done to achieve the project's objectives.

Everyone knew that the double - glazed windows were draughty and heating systems controls had a mind of their own! Both the self- conducted and Locogen energy surveys highted significant opportunities to become carbon neutral. Whilst the school addressed these items, Rick Weights and his teaching team, took a big decision to fulfil despite the pandemic, a widely spoken desire from the school children that they wanted to 'do something about sustainability' by quickly applying to join the Internationally recognised Eco Schools programme.

At its heart, this education programme is aimed at creating a lifetime learning opportunity for the pupils and staff, to understand and adopt sustainable behaviours, and create a school wide environmentally sustainable Ethos.

The school's achievements in both aspects of the Project have been widely recognised.



The Transition from Fossil Fuels to Sustainable Energy

At the outset, the school, like all the partners, shared past energy usage data, current purchase prices and undertook self- conducted and Locogen energy surveys. The Locogen survey was focused on opportunities to introduce renewable energy systems and therefore the school concurrently started to look for energy efficiency opportunities. These quickly manifested themselves by the introduction of a New Heating Management System and a Thermal Imaging survey was conducted. Gas is now only used for cooking school meals.

A major infrastructure investment was made in summer and autumn 2021 with the replacement of gas heating and hot water system by a Ground Source Heat Pump. Next the existing lighting was replaced with energy efficient LED lights. The thermal imaging survey led directly to the progressive replacement of existing windows with high specification double glazed ones to reduce heat loss.

A further less glamorous innovation was the introduction of thermal curtains onto doors which have to be kept open during outdoor playtime breaks. The final major change was the installation of solar roof panels in late Autumn 2023.

Eco Schools

Encouraging Environmentally Sustainable Behaviours

The Eco School's Green Flag

'The children would love to do something about sustainability' was Rick Weights initial response in an informal discussion in September 2019 exploring options to develop a joint village project.

Less than 2 years later, the school were proud recipients of their first Gold Standard Eco Schools award. In 2020 the school organised a competition for the children to create a project logo which we continue to use and award to every member of each school year as a long-term symbol of what they have achieved which is very impressive… and some has rubbed off on parents and the rest of their families, which is what we hoped might happen. Parents speak with pride about what their children are doing at home, at school and in the wider community.

LET'S GO ZERO 2030

Schools working together to be zero carbon

An extract from this year's assessors report is below

The fact that they cover a wide range of outdoor activities (community litter-pick, Big Walk & Wheel, a 'no idling' vehicle policy, new outdoor bins, animal homes and feeders, and refurbishing your pond) is excellent. Your Curriculum Link examples are imaginative, practical and fun, making environmental education accessible and engaging, well done!

We're really impressed at how you've linked environmental issues to a variety of curriculum areas. We loved seeing the lovely examples of your pupil's work and the photos of them enjoying their activities. This is a great example of layering in sustainability and climate change into your studies.

We loved reading about how you had incorporated learning about global issues not simply into the Geography and Science Curriculum (most common ones) in your school, but also into other areas such as English and Art. Great work!

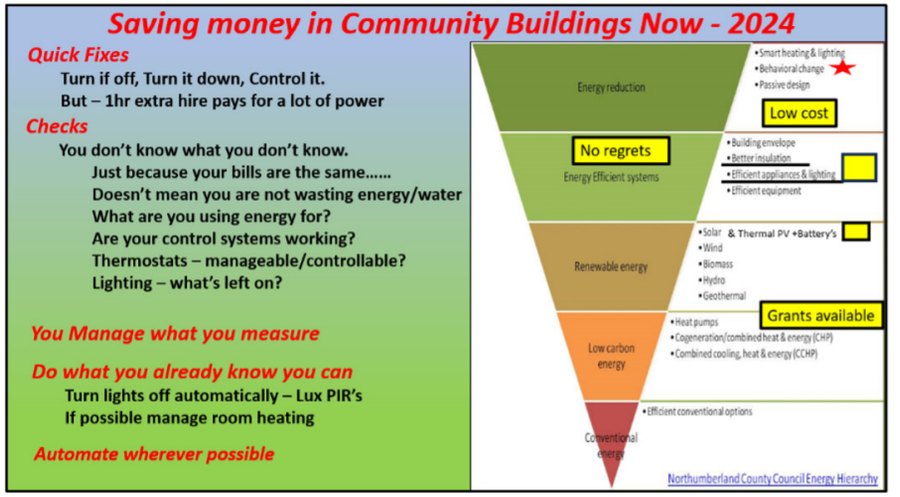
Project Experience shared

Our Techniques, Technologies and Learning

As all the project partners started from a position of having 'No Time, No Money and No Expertise' our learning curve was steep and we are indebted to Kate Urwin and Chris Hailey-Norris of the project steering group for getting us onto the right track and also the many potential suppliers and contractors for freely sharing their expertise with us.

We developed and shared our learning along the way and continually analysed our experiences.

An unlikely source of learning was a potential funder, The Energy Redress Scheme. They advised us to consider the Energy Hierarchy when applying for funds. Look at our energy triangle.



Similarly, John Blaza, a Hillam resident, advised us during our Thermal Imaging course to concentrate on 'Fabric First' meaning to focus on Energy Efficiency. Very wise advice!

As it has been three years since we sent the Project Update Booklet No 6 to every household, you may wish to refresh your memory by re-reading it.

It can be found at Monk Fryston and Hillam Community Association - Project Updates and perhaps also the Locogen Feasibility Studies for understanding our learning journey at Monk Fryston and Hillam Community Association - RCEF Feasibility Study.

Techniques:

- We benchmarked our start point.
- We conducted Energy Surveys of our buildings
- We obtained a grant for a professional project feasibility study - Locogen
- We gathered data so we could make before and after investment comparisons.
- We took advice from anyone who could provide it.
- We conducted Thermal Imaging surveys
- We started to undertake energy efficiency work including lights and more controls of heating and lighting.
- We searched where we could get grants for the work.
- We started to get more precise data to help us manage our buildings.

We thought we knew our buildings, but had surprises at every step of the journey!

Technologies:

The major technologies we have installed or recommissioned are -

- Insulation and energy efficient materials
- Solar Panels and PV management control systems (Solar Edge)
- I-Boost, grid override for control at times of power cuts.
- Electricity storage batteries,
- Air Source Heat pump
- Ground Source Heat pump
- Rechargeable lighting
- LED lighting
- Movement and Lux sensors
- Heating Control Systems
- Emergency Heating and Electricity Generation provision

All the Techniques and Technologies will be described in more detail in due course on our expanded website.

Project Learning

The Importance of Measurement – Data, Data, Data

At face value this looks like a pretty dry and potentially boring couple of pages; let's hope we can make everyone pay a bit of attention, smile a bit, maybe learn from our examples and potentially save some money (or at least avoid wasting it).

A few weeks ago, whilst passing Monk Fryston Hall, I came across the caretaker who looked agitated.

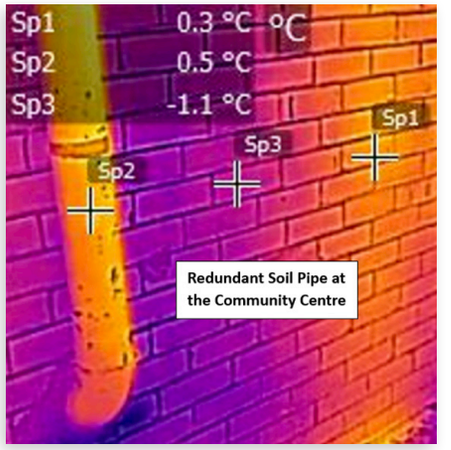
I asked, What was wrong? He told me that he had been contacted by Yorkshire Water to alert him that they might have an underground leak and he didn't know how long it had been going on. He asked if I knew any water diviners? I don't know if the leak has been found yet … but – it's still costing the new owners money. There is a serious side to this story – ***none of us know what we don't know!***

Could it happen to us? Yes! (well to 4 of the 5 partners)

The first case of 'not knowing what we don't know' happened at the Community Centre as a result of the thermal imaging surveys, when we identified we had not sealed an old stench pipe and we were pushing heat up into the atmosphere – that had been going on for at least 7 years when we identified it.

The second, was again at the Community Centre, when after installing the solar panels and Solar Edge management system we saw some strange spikes in the readings. After 3 months we discovered we had left the immersion heater on permanently… an estimated use of about 6 years at 5kWh per day – expensive – Yes!

The third was at the Church Hall when they discovered that they had no insulation in the roof! How much had that cost since 1970 – who knows? Probably a lot.



The fourth case at the sports clubs - by this time, we had shared our learning about the importance of measurement, and it had been noted.

One week, Steve Venables the cricket club chair, spotted that the water consumption at the Football Club was rocketing and informed them, and sure enough a tap had been left on – only 1 week of wasted running water to pay for. Steve also spotted that he could save money by turning off the beer cooler for the week between games and save energy and money.

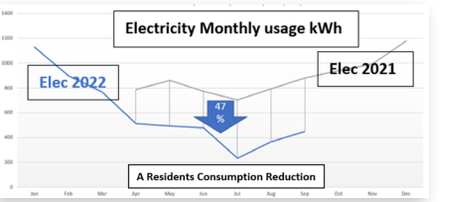
Finally, after the air source heat pump had been installed at the community centre, although everything looked ok things didn't seem to be quite right. Close examination of the data highlighted that it had been wired into the wrong electrical system and was switching off automatically when the CC 'all – off button' was activated as users left the building. Hopefully no one reading this has a 'You don't know what you don't know' moment happening right now, but I hope not… It does lead to the well-known saying 'You manage what you measure' as you can see in the story below.

A Resident's Story:

Finally, a Monk Fryston resident was brave enough to share a similar story about the importance of measurement. As the energy crisis reached its peak and energy bills rose dramatically, a resident who was following our project decided to take our advice and measure their home's power consumption circuit by circuit.

In brief, there were lots of things happening they were unaware of – and the biggest and most expensive one was their electric underfloor bathroom heating had a control fault on it and was permanently on. He lives in a house with 3 ladies – so no one is going to complain if the bathroom is super cosy…

But there is a limit to everything! Discovery of that easily repairable fault, along with buying and installing around £100 of timers and controllers enabled them to take control and halve their energy consumption – as you can imagine it was a massive saving with no detriment to the family lifestyle. Please note we have much more learning to share on our website when it is updated after Christmas.



The CA's position re Energy Transition Developments

Over the last eighteen months it has become clear that there are a number of developments: solar farms, biodigesters, battery storage farms, and the expansion of Monk Fryston substation at Rawfield Lane, that are applying for planning permission or have started development in the local area. Many of these are offering some level of funding to our local communities over both the short and longer term.

There are lots of potential projects in our two villages that could make good use of these funds, so it seemed to make sense to form a group to try and coordinate those involved to make best use of these potential funds and where appropriate to co-ordinate potential applications. Monk Fryston and Hillam Community Association, is an independent, self-funded registered charity, managed by volunteers for over 50 years. They give their time willingly for the benefit of the residents and by implication are altruistic.

The CA already has a subgroup working on Sustainability Projects in the villages (these are likely to form some of the major potential projects along with the others suggested by the Sustainability Project Partners) so it appears appropriate to expand its activities include the new remit. To be clear, the purpose of the subgroup is not to support or oppose the planning applications, but to establish good neighbour relations and communications with the developers without compromising or curtailing residents and parish councils' ability to comment or object to a development. If, after the planning process has been exhausted, any funding does become available the CA will endeavour to ensure it is put to best use within our community.

Robin Parkin
Chair and Trustee of the Community Association
30th October 2024

Energy Transition Projects Approved and Proposed Developments:

Approved Energy Transition Project -

The National Grid rebuilding and doubling in size of RawField Lane Substation

Pelagic Energy – 57MW Battery Farm at Rawfield Lane

SSE – 320MW Battery Farm at Rawfield Lane

Proposed Energy Transition Projects

Hillam Solar Farm – 49.5 MW

Harmony Energy – 200 MW Battery Station at Rawfield Lane

Light Valley Solar – 500 MW either 1 or 2 Battery Farms in the vicinity of Rawfield Lane Substation

Light Valley Solar – 500 MW Solar Farms, multiple sites including:

- Fields at the east end of Fryston Common Lane
- Fields east of Hillam interspersing with Hillam Solar Farm
- Fields in Hillam on the west side of Roe Lane
- Fields in Birkin east of Roe Lane, fields to the West Haddlesey boundary and to the south by Haddlesey Road and River Aire flood bank
- Solar farms around Temple Hirst
- Solar farms around Escrick Park, between Selby and York

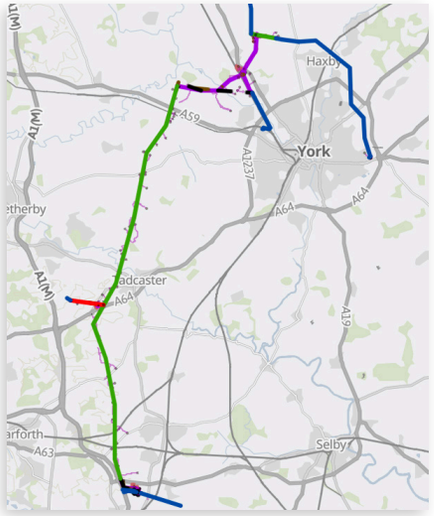
The Great Grid Upgrade and Yorkshire Green Project

Work begins to deliver National Grid's Yorkshire GREEN project

National Grid have recently started construction on their Yorkshire GREEN project.

Yorkshire GREEN, which is part of The Great Grid Upgrade, will upgrade and reinforce Britain's high-voltage electricity network to allow more clean, green energy to get from where it's generated to where it's needed by homes and businesses in Yorkshire and further afield.

The Great Grid Upgrade is the largest overhaul of the electricity grid across England and Wales in generations. It comprises 17 major infrastructure projects that will both scale up the grid and update our existing networks. It will enable more clean, secure energy to be carried from where it's generated – like out in the North Sea by wind turbines – to where it is needed; boosting energy security and helping the nation to become self-sufficient.



For more information about The Great Grid Upgrade, visit: *nationalgrid.com/the-great-grid-upgrade*

Yorkshire GREEN includes upgrades to existing infrastructure and the construction of new infrastructure, including substations, pylons and overhead electricity lines, between Shipton, just north of York and Monk Fryston.

Yorkshire GREEN in Monk Fryston

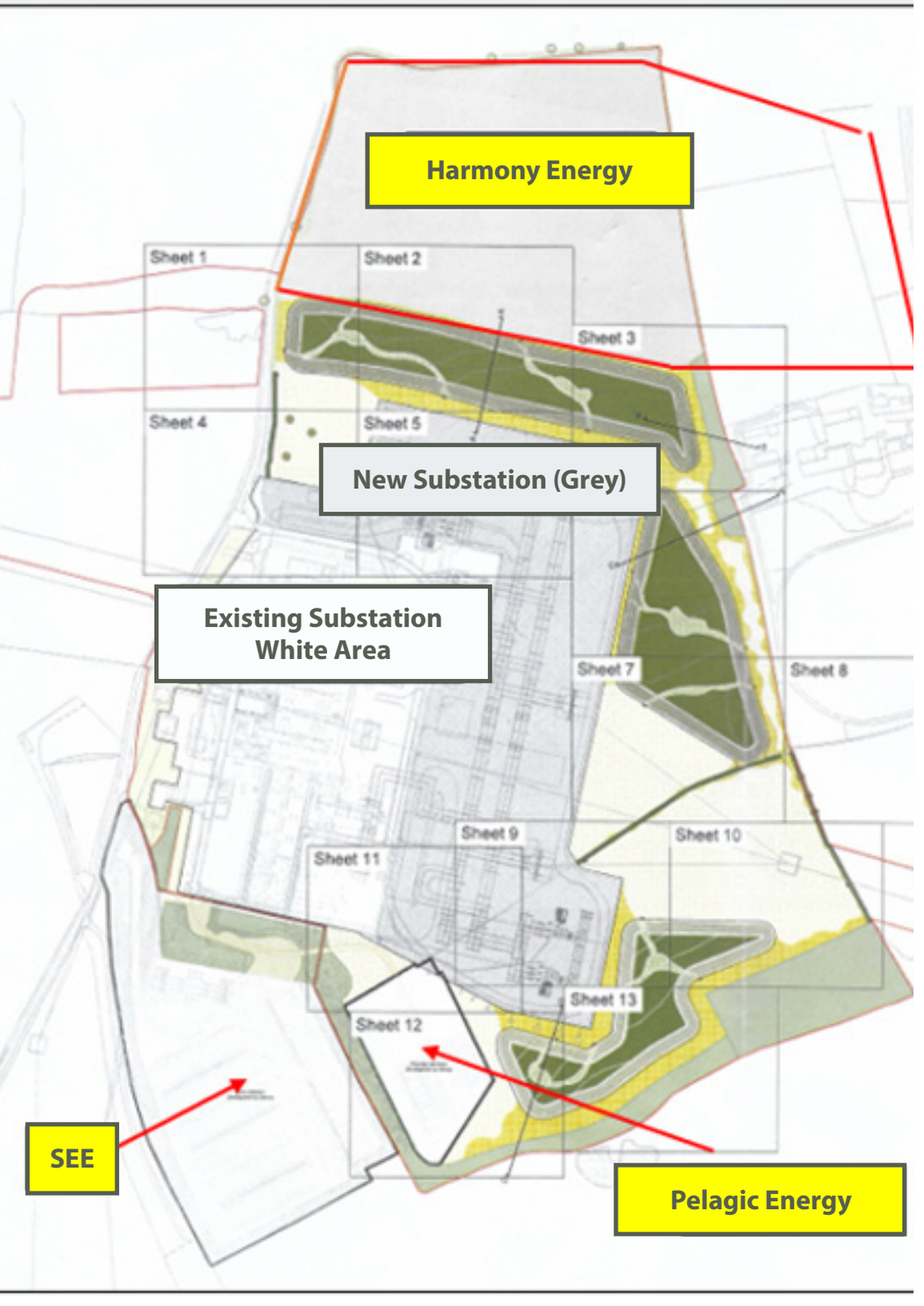
Work in Monk Fryston and the surrounding area will involve construction of a new substation next to the existing Monk Fryston Substation, off Rawfield Lane, to reinforce and increase the capacity of the electricity network in the North Yorkshire area. To connect the expanded Monk Fryston Substation to the overhead line in the local area, National Gird will move a 1.45 km section of overhead line which is currently located to the west of the existing Monk Fryston Substation and south of Pollums House Farm.

To move this section of overhead line National Grid will need to dismantle 4 existing pylons and build 5 new ones. While this work is carried out, temporary pylons will be used to ensure that power is maintained in the area.

The existing 275 kV overhead line between Monk Fryston Substation and Tadcaster will be upgraded. This work will include replacing existing overhead line conductors, replacing pylon fittings, strengthening steelwork and works to pylon foundations.

National Grid understand that communities near to the locations where work is planned may have questions about the project. For more information please visit project website with an interactive map at *nationalgrid.com/yorkshire-green* or contact their Community Relations Team at 0800 029 4359 (monitored Monday to Friday 9am–5pm excluding bank holiday).

nationalgrid



The Rawfield Lane Developments

There are currently 3 approved and 1 proposed Development at Rawfield Lane

Approved:

- Doubling the size of the National Grid Substation
- A 57 MW Battery Farm being built by Pelagic Energy
- A 320 MW Battery Farm by Scottish and Southern Energy (SSE)

Proposed:

- A 200 MW Battery Farm by Harmony Energy 04/11/2024

A Further Proposal

Light Valley Solar have proposed that they want to build either 1 or 2 Battery Farms in the vicinity of Rawfield Lane Substation to support their proposed 500MW linked Solar Farms in Monk Fryston, Hillam, Birkin, Temple Hirst and Escrick.

Note: Battery Farms are best located adjacent to our country's major infrastructure – to provide easy quick cable access to enable fast draw down and supply of power to the grid at times of peak or slack demand. The Government has identified that they are a very important, if not essential, part of our national Energy Transition.

Construction underway on SSE's largest battery storage project

Construction has begun on a new Battery Energy Storage System at Monk Fryston, which will be the largest of its kind when it hooks up to the grid in 2026.

A ceremony to mark the start of construction works on the 320MW facility took place on Tuesday 8th October with representatives from SSE Renewables, principal contractors Morrison Energy Services, and energy storage supplier Sungrow, in attendance.

Once completed, the site could power over half a million homes for up to two hours at a time, during times of peak demand.*

The purpose of a Battery Energy Storage System (BESS) is to capture excess energy produced by renewable sources, such as wind and solar, when conditions are favourable and store it for use at other times. Retaining energy in this way greatly increases the efficiency of renewables which will, over time, will help to lower everyone's energy bills.

SSE Renewables is a division of SSE PLC and one of the largest developers and operators of green energy in the UK.

In addition to Monk Fryston, the company is also constructing a BESS at Ferrybridge, on the site of a decommissioned gas power station, and is seeking to develop a BESS at Eggborough.

Heather Donald is Director of Onshore Wind, Solar & Battery at SSE Renewables. She said:

"It's fantastic to have construction underway on our largest battery storage project at Monk Fryston, and to have been joined by our project partners Morrison Energy Services and Sungrow to mark the occasion. Battery storage projects like this one at Monk Fryston will be vital in reaching the UK's net zero targets, providing flexibility to the grid when the sun isn't shining, and the wind isn't blowing."

SSE will provide information during construction at Monk Fryston to make sure people who live and work in the area are aware of progress at the site. Alan Greenwood, Stakeholder Engagement Manager for SSE Renewables in the North of England, encouraged residents and businesses who would like to find out more about Monk Fryston to get in touch.

He said: *"This is a nationally significant energy project but, first of all, we want to make sure that our neighbours feel able to speak with us about what's happening at Monk Fryston. We are also keen to help, where we can, by supporting Net Zero initiatives in Monk Fryston, Hillam and the surrounding area."*

"Like all of our major energy projects, Monk Fryston will be accompanied by a community benefit programme, which will provide direct investment through a locally managed fund. There is also an opportunity for the experts who are working at the site to provide advice and practical guidance for any community Net Zero initiatives that are planned in the area."

Anyone who would like to know more about Monk Fryston can contact Alan at: alan.greenwood@sse.com

*Once complete, the site will be capable of powering approximately 533,000 homes for up to two hours at a time. Calculation is using OFGEM's published average household consumption figures adjusted to reflect a peak in energy demand usage (i.e. winter day time).

Harmony Energy

Harmony Energy intends to submit a planning application for a proposed 200MW Battery Energy Storage System (BESS) with associated access and landscaping at the land east of the Rawfield Lane, Monk Fryston.

The innovative BESS will directly connect to the Monk Fryston Substation, enabling grid stabalisation and storage of renewable energy from sources like solar and wind farms.

Website: *harmonyenergy.co.uk*
Contact: *01423799109*

View location (not to scale)

Existing View from Butts Lane North of the Site

Illustration of the Proposed Development with Earth Mounding and Planting (Year 1)

Illustration of the Proposed Development with Earth Mounding and Planting (Year 15)

HARMONY ENERGY

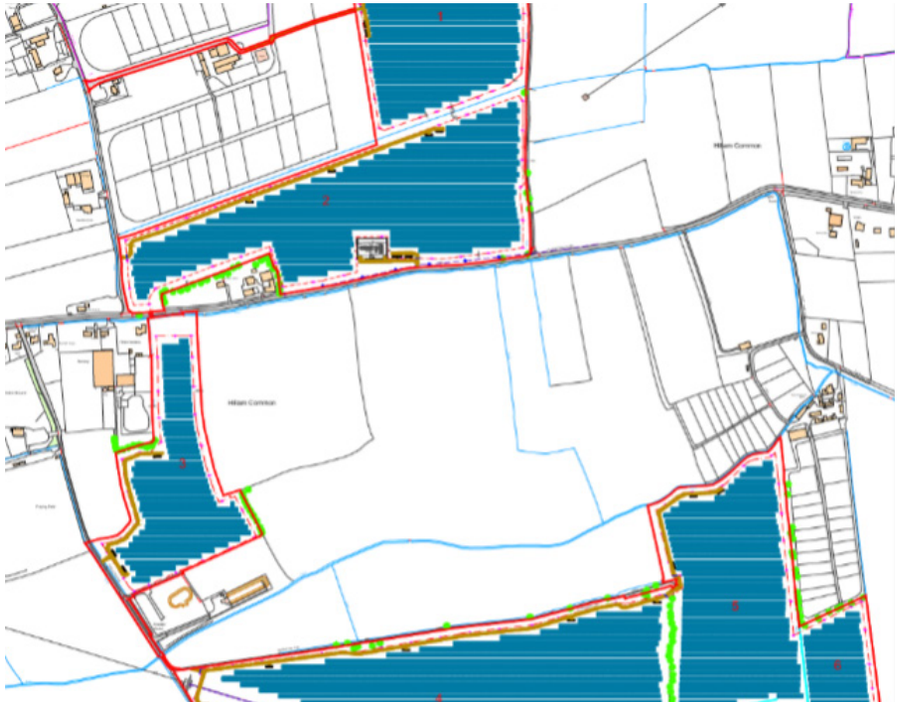
Hillam Solar Farm

Status: Planning Application Submitted

Noventum Power submitted the planning application to create Hillam Solar Farm in January 2024 to have an electricity generating capacity of 49.5 MW. Hillam Parish Council have objected to the proposal. It is understood that the application is being reviewed by NY Planning Officers in November.

If you have any questions related to the planning application, please contact *Hillam@pegasus.co.uk* or more general enquires email *info@noventumpower.co.uk* whose registered office is 19, Eastbourne Terrace, London W2 6LG.

NOVENTUM POWER



Agricultural Waste Anaerobic Digester

Sherburn in Elmet

The Engie Group is in the process of submitting a planning application to build an Anaerobic Digestion Plant Between the A162 and Railway as you approach Sherburn from Monk Fryston and South Milford roundabout.

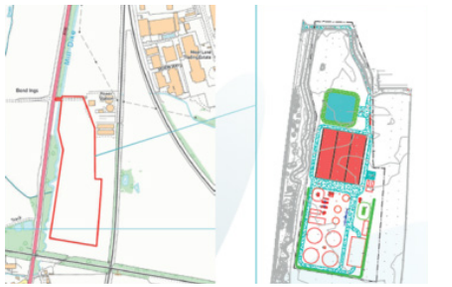
Engie is a leader in the transition to renewable energy, across Europe as well as the UK. The plant will use animal effluent and green matter to capture naturally occurring methane emissions which would normally go into the atmosphere. The output, biogas will be pumped into and distributed via the existing natural gas network. The feedstock will come from a radius of 10 miles of the new plant. Ixora Energy is part of the Engie Group. It operates several plants across the South West of England.

Following consultation Engie expect to submit a planning application to NYC later this year, and if approved hope to build the facility in Summer/ Autumn 2025 and be operational in Autumn 2026.

To find out more details please contact the Engie engagement team:

0800 689 1095
(Mon-Fri, 9am-5pm)
A162@fontcomms.com
https://ixoraenergy.co.uk/A162/

Ixora Energy
ENGIE



Light Valley Solar

The Light Valley Solar 500MW proposal, plus a Battery Farm, is described by themselves to be of national strategic importance.

The map illustrates the 5 main areas where it is proposed to locate the Solar Farms. They include Monk Fryston, Hillam, Birkin, Temple Hirst, and Esrick Park.

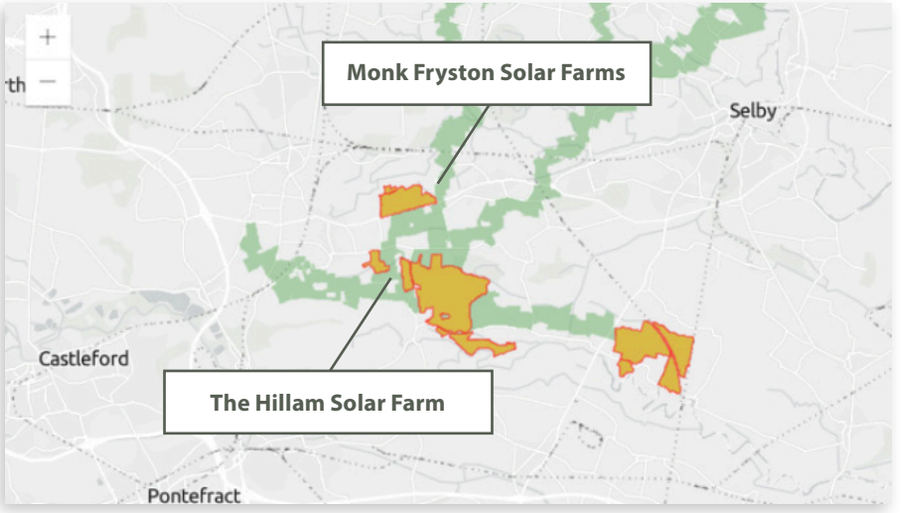
If the full Planning Process is required it is anticipated that the final proposals would be submitted to the Secretary of State for Dept of Sustainability, Energy Security and Net Zero in 2027 and if approved construction would not start until 2028 at the earliest.

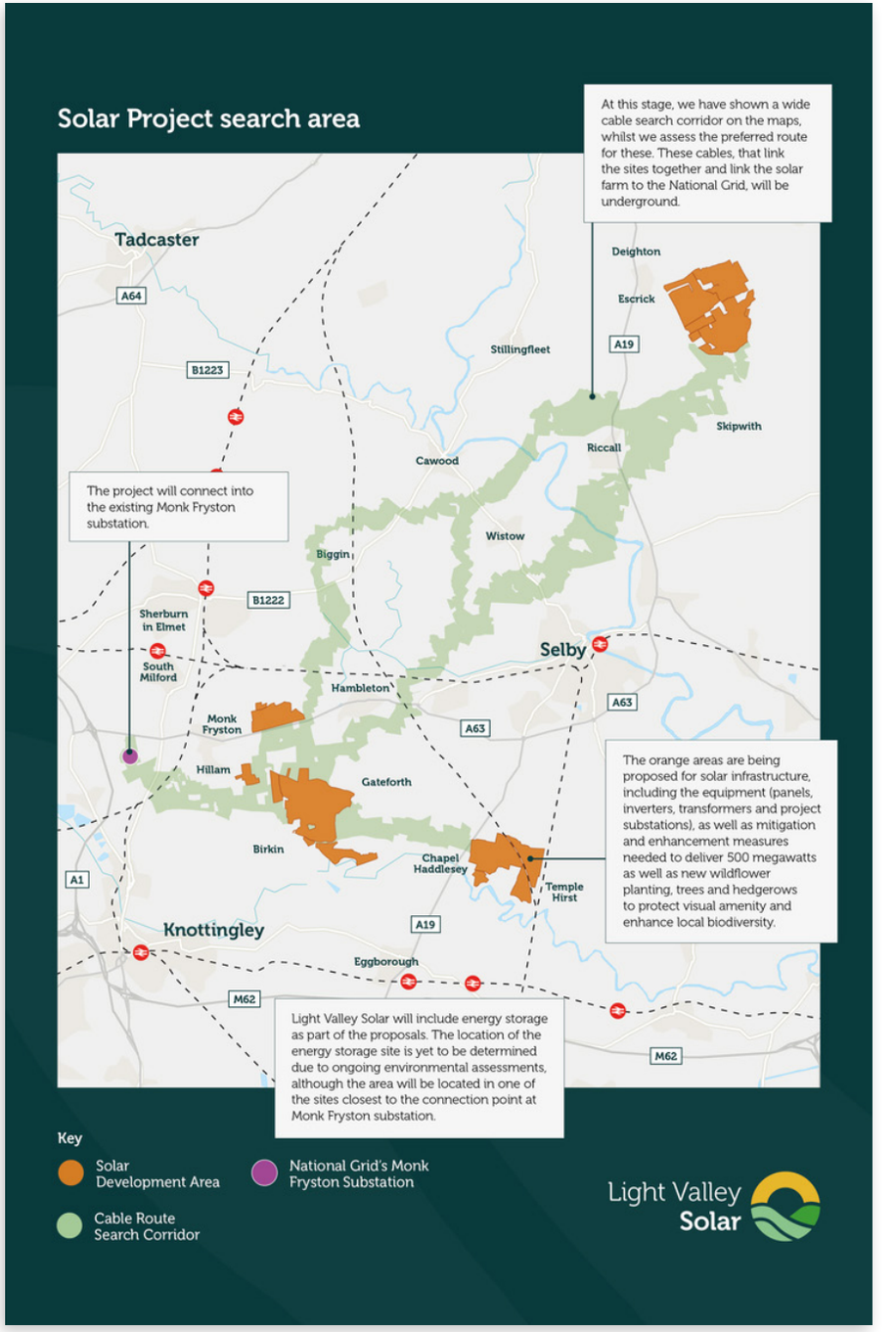
More Information can be found at:

www.lightvalleysolar.co.uk
Enquires: info@lightvalleysolar.co.uk
08082814784
(Mon to Friday 9am - 5pm) + voicemail service Monday

Light Valley Solar

The Proposed Solar Farms





Other Local Developments

Monk Fryston and Hillam are located near to the national infrastructure which is being upgraded at Rawfield Lane. We are also very close to other power infrastructure which provided High Voltage cable connections to now closed coal mines in West Yorkshire, Selby coalfield and Power Stations. These cables and sites are now being used by a new wave of generators to link to the grid.

Below are details of what we are aware of in our locality:

Ferrybridge - (on the site Ferrybridge C Power station)
Enfinium - 2 Energy from waste incinerators (the UK's largest operational site)
SSE - Are building a 15MW Battery Farm
SSE - Have plans to build the country's first Hydrogen ready power station

West of the A1

Hook Moor Wind Farm - Operational since 2016
Barnsdale Solar Farm - under construction
Allerton Bywater Battery Farm - A proposed development by Harmony Energy

Around Drax

Rusholme Wind and Battery Farm - Operational since 2015
Lakeside Energy Park Battery Farm - Now operational 2024
Camela Lane Solar Farm - Approved in 2022
Camblesforth and Wade House Lane Solar Farm Drax - Approved

Proposed Developments

Helios Solar and Battery Farm (Enso Energy), Nr Camblesforth and Carlton - 190MW solar farm and onsite Battery farm
Port Jackson Farm Solar and Battery Farm Camblesforth - 50MW
In addition, 2 further recent proposals at Carlton and Camblesforth
SSE Eggborough - (on the former PS site)
SSE - Proposal to build a 550MW Battery Storage Farm

Pelagic Energy

Pelagic Energy applied and after being rejected by Selby District Council obtained planning permission following an appeal to the National Planning Inspectorate.

The Inspector reduced the application after rejecting the application for double stacked Battery Energy storage containers and allowing only individual containers. The site is now being developed and will have 57 MW electricity storage capacity.

Contact details:

Email: info@pelagicenergy.com
Telephone: +44 (0)203 918 138
Contact: Pelagic Energy

Next Steps...

We hope you can see that over the past 5 years our Project Partners have moved a long way to achieving the collective goal of making our community buildings carbon neutral over that time.

We will continue to search for funds to achieve our objectives and remain committed to sharing our experiences, acquired learning and knowledge, and report regularly on the performance of the renewable energy technologies we have installed.

We hope you have found this booklet interesting and informative.

Please visit the new Community Association website in 2025 to find more information about the project and use the contact address if you wish to receive our Project Updates.

Finally, once again we wish to say thank you to everyone who has supported the Project, particularly the Funders who have provided grants 'cos they believed in what we were and are trying to do.

'None of us will get to net zero without all of us getting to net zero. Ensuring every sector has a clear plan for delivering this non-negotiable target is key'

Want to know more? Have some feedback to give?

If you have questions about anything in this booklet, want to get involved with the project or simply give feedback – please contact:

Ray Newton, Project Manager on *01977 682084* or *07706 795334*
or email via the contact page at *https://www.mfhcc.com/booking/*