

# Monk Fryston and Hillam Sustainability Project



Update no 5 June 2021

# **Both Short and Long-Term Gains are made!**

In April's update (no 4) we reported that we had just started generating electricity after installing solar panels at the Community Centre, but were mystified by the spikes in electricity usage and having been made aware of them via the online app we promised to investigate them. As you will read below, we have had some success and the hardware installation is providing substantial immediate and long-term benefits.

Likewise, despite the Pandemic, we are delighted to report that the school is having some fabulous success as it strives to achieve Green Flag status. The easiest way to make a difference is to install a new piece of equipment and the hardest way is to get people to do something different – to change their behaviour and make a very long-term difference. Let's start with the difficult stuff first; the school whose hard work is being deservedly recognised and will be proudly remembered for many years to come.

## **Eco Schools Green Flag Award**

Headteacher, Rick Weights provides a flavour of the work the pupils have been undertaking and you will be able to read his full article in the Project Booklet which will be distributed to your door during July.



'Monk Fryston CE Primary School is keen to achieve the Green Flag Award, which will recognise the environmental work that our pupils undertake. Eco-Schools, a charity founded in 1994 operates in 67 countries, provides a simple, seven-step framework that guides, empowers and motivates pupils to drive change and improve environmental awareness in their school, local community and beyond'.

'After completing the seven-step process, our school can then apply for Eco-Schools Green Flag accreditation, which recognises, rewards and celebrates the environmental achievements of our young people'.

'In September 2020, we appointed an Eco-Committee of Eco Warriors from our pupils in Year 4 and Year 6. The challenges of Covid-19 restrictions meant that the children weren't able to work together in person, and many of their activities have had to be done separately but co-ordinated with adult support'.

'The Eco Warriors initially conducted a detailed environmental review of the provision in school in 10 areas: biodiversity, energy, global citizenship, healthy living, litter, marine, school grounds, transport, waste and water. This recognised several successful strategies that are already working well, and enabled the team to focus upon three areas for further improvement: litter, waste and transport.'

The Eco warriors have worked through the pandemic, at home and in school and together with their fellow pupils and staff over the past few months have received some very deserved recognition: -



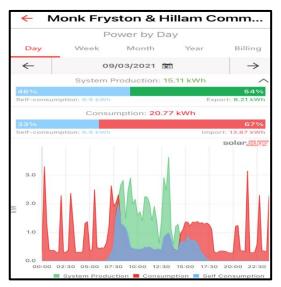
• At the end of winter term, the progress made allowed Eco Warriors to apply for the Bronze Eco-Schools Award which we were proud to achieve in April 2021.

- In order to reduce the effects of transport on the area around school, they ran a 2-week challenge to bike, scoot or walk to school as part of the Sustrans 'Big Pedal' event. This was brilliantly supported, and initially Monk Fryston School was 52<sup>nd</sup> in the whole of GB & Ireland for the number of pupils coming to school in a healthy way. Although other schools overtook us during the event, we were very proud to be placed 121<sup>st</sup> overall at the end. This is incredible for a rural primary school.
- The Eco Warriors investigated the environmental links in the school's planned curriculum, and listed all the opportunities for each year. They developed their understanding of the breadth of activities undertaken and are very proud to achieve Silver Eco-Schools Award in May.
- Over 13,000 children took part in the Better Energy School Awards and the school was very pleased to receive the following note 'I am delighted to inform you that Monk Fryston Church of England Voluntary Controlled Primary School's project, "Our World in Lockdown" was Highly Commended in the Totally Clued-up category for schools in your region. Many congratulations to you and all of the children and staff who were involved in the project!



Some members of the Year 4 eco warriors are currently learning to use the Thermal Camera and we are pleased to report that the school remains on track to achieve Green Flag status by the end of the school year. Then the hard work will really start – to retain the status!

### Solar Panels, smart meter and batteries and detective work



Do you remember the graph (on the left) we showed in the last update? We were so proud that we had started to generate our own electricity and amazed at the detail of information that the app provided.

However, we were equally puzzled by the spikes – what was causing them?

In true volunteer and committee style we assembled a working group of our most knowledgeable members and took advice from the installation company. Several causes were suggested. Could it be the fridge-freezer cutting in and out because of poor seals; could it be the

compressor on the same fridge showing signs of age? Could it be the

sewage pump tripping in and out because of a potential constant flow of water into the sewage pit? Could it be something to do with heating system pumps?

Investigating any of these required (volunteer) time and doing it at the right time – School holidays or when the Centre wasn't being used and we couldn't risk turning something off in case it didn't start again – the law of unforeseen consequences looms large – as does the saying don't try to fix something when it's not broken!

Time moved on and in mid-May a major event occurred – the long-awaited electrical storage battery arrived and after we had fitted it, we saw an immediate benefit; we suddenly self- generated over 90% of the electricity we were using. But the spikes were still there!





As the days grew warmer, we started the process of systematically turning off items which were the potential causes of the energy consumption spikes. In the end an immersion heater switch linked to a pump was causing the spikes. One flick of this switch and the mystery was resolved and our power consumption dropped immediately.

Without the app information, we did not know of this problem; now we need a gas smart meter too, to check if we have solved the hot water- pump supply problem completely as we may now be burning gas instead.

Nevertheless, the graph shows that on a relatively dull and wet day when we produced only 16kwh of electricity we had enough 'juice' to supply the centre which was used almost continuously from 7am to 9.30pm! We wonder how we will get on in the dark months of the year? But for now it's a brilliant short and long term outcome!

### What else is happening?

- 1. The next thing you will see is a booklet outlining the Project Feasibility Report and updates of what we have been doing over the past year. This will be delivered to every house in Monk Fryston and Hillam.
- 2. The Community Centre website now has a section dedicated to the project, our embryonic *Sustainability Information and Energy Advice Centre* where you can find the full Interim and Final Feasibility study reports www.mfhcc.com/sustainability-project/news-about-us/
- 3. The 5 Project Partners (school, church, cricket club, football club and community centre) are now gathering information before applying for further grants to implement the Feasibility Study recommendations.
- 4. We have been invited to join another local project *Just Transition Selby* which is one of two national studies into the impact of decarbonisation on communities.
- 5. We have offered to share our information and learning with Community First Yorkshire, the umbrella organisation for village halls, and its 270 member organisations.
- 6. Pandemic permitting, we are hoping to hold a face-to-face event to showcase what has been achieved so far and allow anyone interested to meet up, see and examine our Solar PV installation and interrogate the data, learn about what we are trying to do and our ongoing plans plus hear your views and ideas.
- 7. Meanwhile, if you do have any feedback or require any further information please contact me, Ray Newton on 01977 682084 or 07706 795334 or via <a href="https://www.mfhcc.com/sustainability-project/news-about-us/contact-us/">www.mfhcc.com/sustainability-project/news-about-us/contact-us/</a>

Thank you for your support.

The Steering Group and Project Partners