Lytchett Matravers Parish Council – Climate Emergency Working Group

Progress Report to F&GP, November 2019

# Meeting

* A meeting attended by members of the Parish Council (Councillors Carswell, Watts, and Barker) and residents was held on 30th October. Councillors Carswell and Watts described the background to setting up the Working Group, including the petition organised by children at the Primary School, the Declaration of a Climate Emergency by the Parish Council, and the intent to develop work streams focussed on the activities of the Parish Council, and on engagement with the Community.
* There followed a discussion of various ideas including recycling waste, the provision of Electric Vehicle Charging Points by the Parish Council, an energy efficiency audit of Parish Council Buildings, and how to engage with the Community at large. On this latter point, Councillors Carswell, Watts, and Barker described the Parish Council’s plans to include an article about the Climate Emergency in the next edition of the Lytchett Link, the proposed survey of residents, and the suggestion made by Councillor Colvey at the F&GP meeting on 9th October to invite a speaker on the Climate Emergency to the Annual Parish Meeting in 2020. Councillor Barker also suggested that a stall could be taken at the Village Fair in June 2020.
* The interaction with the Dorset Council and Low Carbon Dorset were discussed, including the briefing for Town and Parish Councils on 19th November.
* The ideas that came forward will be factored into an Action Plan to be developed by Councillors Carswell and Watts. This Action Plan will also take into account the results from the survey.
* It was agreed that a further meeting would be arranged early in 2020 once the results of the survey were known. At this meeting the results of the survey would be presented to those in attendance, as would the preliminary action plan (which is expected to evolve over time).

# Parish Council Work Stream

## Background Research

The following is a summary of a few key points identified from background research:

* Climate scientists have been warning that emissions of man made Greenhouse Gases into the atmosphere are a factor in Global Warming for some decades.
* In 1975 William Nordhaus (a Yale University economist) proposed that climate variations should be kept within the “normal range of climatic variation” which he suggested could be achieved by setting an upper limit of 2oC on the increase in temperature since preindustrial levels, which he believed to be linked to a doubling of CO2 levels in the atmosphere.
* The intent behind setting a limit of this kind was to avoid catastrophic disruptions to human civilisation and natural ecosystems.
* The EU adopted the 2oC limit in 1996, followed by the G8 in 2008, and the UN in 2010.
* Since 1975 there have been significant increases in scientific research into Global Warming and global and regional climates, yielding a far better understanding of the processes involved, and the rate of change. Observations of Global Warming and its impacts across many land regions and seasons have shown an acceleration beyond what was forecast, and the idea of a limit of 1oC was proposed in the 1980s, since it had been found that the likely risks grow substantially with temperatures above that level.
* The 2015 Paris Agreement adopted 2oC as the upper limit, with a desire to limit warming to 1.5oC.
* In 2016 the InterGovernmental Panel on Climate Change initiated a study of the impacts of Global Warming of 1.5oC above preindustrial levels, which yielded a report published in October 2018. One of the conclusions of this report was that Global Mean Surface Temperatures have already risen by approximately 1oC compared to preindustrial levels, and were forecast to reach an increase of 1.5oC between 2030 and 2052. The report went on to study the impacts of this level of warming on the global climate, and its effects on human civilisation and natural ecosystems.
* Apart from changes in the climate, one of the effects of Global Warming is an increase in sea levels, both as a result of the melting of glaciers and ice sheets and due to the expansion of ocean waters as they warm. Sea levels around the UK are measured by tide gauges. A tide gauge at Newlyn, in Cornwall, has been collecting sea level data continuously since 1915, longer than any other gauge in the South West. Data from this location shows that mean sea levels have risen by approximately 18cm over the last 100 years, a rise of about 1.8mm per year. Recent measurements show that the rate of rise is accelerating, and it is forecast that sea levels around the Dorset coast will rise by about 0.8m over the next 100 years.
* At the local level, the Poole Bay, Poole Harbour and Wareham Flood and Coastal Erosion Risk Management Strategy, issued by the Environment Agency in January 2014, forecast that 7,025 properties between Hengistbury Head and Sandbanks would be at risk from coastal erosion by 2110 if nothing is done to improve sea defences. The document also forecast the number of properties at risk of tidal flooding in the area covered is 772 now, increasing to 3,367 by 2110 if nothing is done to improve sea defences. About 75% of these properties are in Central Poole. The report also set out risks to low lying land around Poole Harbour, including land around Holes Bay, and at Ridge and Wareham.
* The Weymouth & Portland Council teamed with the Environment Agency to prepare the Weymouth Flood Defence Vision Document, issued in 2015. This states that there are approximately 340 properties now at risk of flooding in Weymouth. This includes the core retail centre, the seafront and other tidal waterside areas, and the retail park areas around Weymouth Station. As a result of climate change and sea level rise it is predicted that by the year 2065 the number of properties at risk of flooding could increase to over 1600 properties, and by 2115 this figure could rise to over 2150 properties.

## Actions to Reduce the Impacts of Global Warming and its Effects

The UK Committee on Climate Change have developed a set of actions for people to take to reduce their Greenhouse Gas emissions, which are required to reduce UK emissions to net-zero by 2050. These are as follows:

The way you travel

* Choose to walk and cycle or take public transport in preference to a car.
* Make your next car an electric one, and then charge it 'smartly'.
* Minimise flying, especially long-haul, where possible.

In your home

* Improve the energy efficiency of your home (or ask your landlord to) through draught-proofing, improved insulation, choosing LED light-bulbs and appliances with high efficiency ratings.
* Set thermostats no higher than 19°C and the water temperature in heating systems no higher than 55°C.
* Consider switching to a low-carbon heating system such as a heat pump, especially if you live off the gas grid.

What you eat and buy

* Eat a healthy diet, for example with less beef, lamb and dairy.
* Eliminate food waste as far as possible and make sure that you use separate food waste collections if available. Reduce, reuse and recycle your other waste too.
* Use only peat-free compost.
* Choose good quality products that will last, use them for longer and try to repair before you replace.
* Share rather than buy items like power tools that you don't use frequently. If you don't/won't use your car regularly then consider joining a car club instead.

Look for changes that you can make in your workplace or school to reduce emissions and support your colleagues to make changes too.

Talk about your experiences and help to raise awareness of the need to act. Consider the wider impacts of your actions (e.g. through your pension or ISA and via the companies you buy from).

## Reducing the Carbon Footprint of Parish Council Operations

The UK Government’s Clean Growth Strategy set a target to upgrade as many houses as possible to EPC Band C by 2035. It is recommended that the Parish Council adopt this target for the buildings it owns, to demonstrate leadership on the Climate Emergency.

### Energy Efficiency Audit of the Sports Pavilion

An audit of the Sports Pavilion has been carried out. The EPC Rating is 49E, with estimated CO2 emissions of 6.4 tonnes/year. This compares with an average EPC Rating of band D for households with CO2 emissions of about 8 tonnes/year.

Improvement Options

Low Cost

* Insulate the Cavity Walls
* Insulate the loft with 400mm mineral/glass wool throughout (currently 100mm over 75% of the roof)
* Install Thermostatic Valves on all Radiators (currently on ~50% of radiators)
* Consider replacement of current radiators with more efficient modern units

Higher Cost

* Install PV Panels on South Facing Roof (capacity up to approximately 13.5kW)
* Install PV diverter to heat hot water from PV Panels via immersion heaters
* Install Air Source or Ground Source Heat Pump at the end of life of the Gas Boiler

### Energy Efficiency Audit of the Youth Hut

An audit of the Youth Hut has been carried out. The EPC Rating is 6G.

Improvement Options

Low cost:

* Upgrade insulation in the roof space at the north end (with flat ceiling) – from 100mm current to 400mm
* Change all lights to low energy - main room lighting is fluorescent, with halogen spot lights in other areas are halogen
* Switch to green energy supplier
* Possible switch to Economy 10 electricity tariff to save cost (and boost EPC rating :), benefitting from cheaper electricity during hours 8pm-10pm & 1pm-4pm (and 12am-5am)

Medium cost:

* Increase insulation in walls & sloping ceilings by dry-lining with insulated plasterboard
* Replace windows with double-glazed units
* Fit thermally efficient doors

Higher cost:

* Install PV panels on south facing roof - up to 10kW possible
* Install PV diverter to heat hot water from PV Panels via immersion heater
* Install Air Source Heat Pump on Economy 10 electricity tariff

# Community Engagement Work Stream

## Survey

A draft of the Climate Emergency Survey to be loaded onto the Parish Council website has been prepared.

## Article for Lytchett Link

A first draft of the article is in hand at the time of writing, with a target date of 11th November.

# Recommendations

At the F&GP meeting on 9th October 2019 the Parish Council approved a motion to “***to declare a climate emergency to ensure that climate change is at the centre of all decisions made by the Parish Council for the village***”. To honour this commitment, we recommend that the following statement is added at the top of the agendas for Parish Council meetings:

“ALL Council decisions must give due consideration to their impact on the community’s carbon footprint.”

# Next Steps

Costings will be obtained for the various options to reduce the carbon footprint of Parish Council buildings. Other aspects of Parish Council operations will be reviewed.

The survey will be finalised and posted onto the Parish Council website.

Councillor Watts will attend the Briefing for Town & Parish Councils on 19th November.

The various actions identified will be brought together into a Parish Council Action Plan.

Councillor Carswell

Councillor Watts