

Solar power consultation

Burnham Parish Council is working with renewable energy consultants, *Carbon Smart*, to look at ways the Council can utilise renewable energy to save money and reduce our carbon footprint.

The feasibility study, entirely funded through the government's *Rural Community Energy Fund*, recommends installing solar arrays on the south-facing roofs of Burnham Park Hall and the pavilion at the George Pitcher Memorial Ground.

Annual figures

£8,600
cost saving

40,000 kWh
electricity
produced

Equivalent to
18.5 tonnes of
CO₂

Equivalent to
energy usage of
21 homes

The project will be funded through a loan from central government. The repayments will be funded by the savings in electricity costs, meaning that council tax will **not** need to rise to pay for it. The scheme will pay for itself in 6 years.

To find out more about the proposals, visit www.burnhamparish.gov.uk or visit the display on the mezzanine at Burnham Park Hall.

We would like your views on the proposals. To give your views, or to discuss further, please contact the Parish Clerk, Sheridan Jacklin-Edward, on (01628) 550385 / clerk@burnhamparish.gov.uk. CLOSING DATE: SUNDAY 25th FEBRUARY 2018

Drop-in surgery

Would you like to use renewable energy in your home? *Carbon Smart* will be holding a **FREE** drop-in surgery for anyone interested in renewable energy for their home or business (and no, they won't be trying to sell you anything). They can tell you what options may be available, what money it could save you, and what funding might be out there.

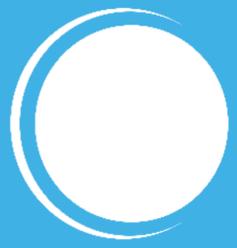
This is also your opportunity to discuss in person the consultation proposals.

Thursday 22nd February 2018

2pm to 8pm

Burnham Park Hall

Any enquiries: (01628) 550385



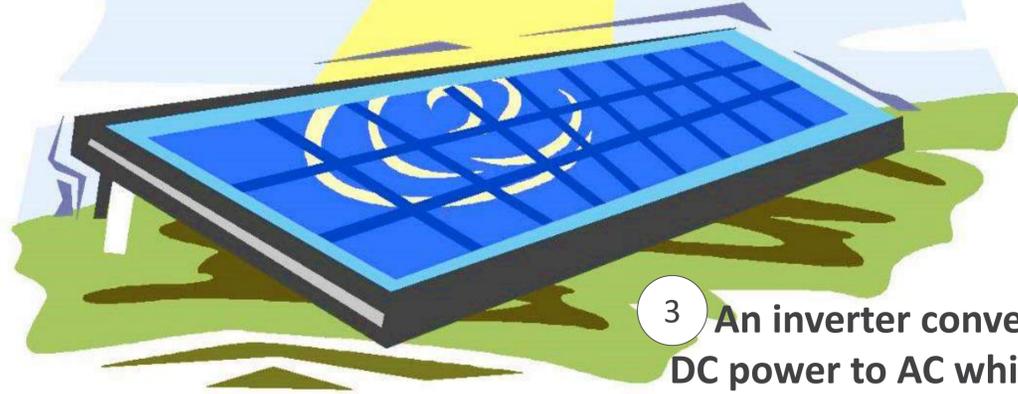
Solar power for Burnham Parish Council

1 In an hour there is enough sunlight to meet the Earth's energy demand for a year



2 Solar photovoltaic panels capture the sunlight and convert it to direct current (DC) electricity

3 An inverter converts the DC power to AC which can be used on site



Solar savings

Annual electricity saving for the Council

£8,600

Annual reduction in greenhouse gas emissions

18.5 tCO₂e

Equivalent to annual electricity usage of

21 homes



Feasibility study funded by the Rural Community Energy Fund



Helen Troup
Senior Consultant



Dan Murray
Senior Consultant

www.carbonsmart.co.uk/



30 kWp

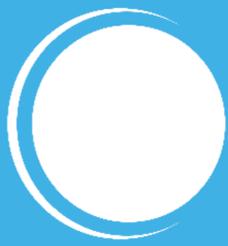
solar array at Burnham Park Hall



19.6kWp

solar array at the Pavilion at George Pitcher Memorial Ground





Burnham Park Hall

Solar array layout

Annual savings on electricity for the Hall
£5,370



30 kWp system at Burnham Park Hall

£37,500 initial investment costs, with a payback of 5.8 years

Solar savings

Electricity produced by solar array per year

25,440 kWh

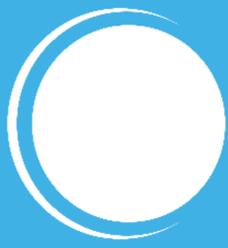
10% of electricity use at the Hall

11.2 tCO₂e

saved each year

Equivalent to annual electricity usage of **13 homes**

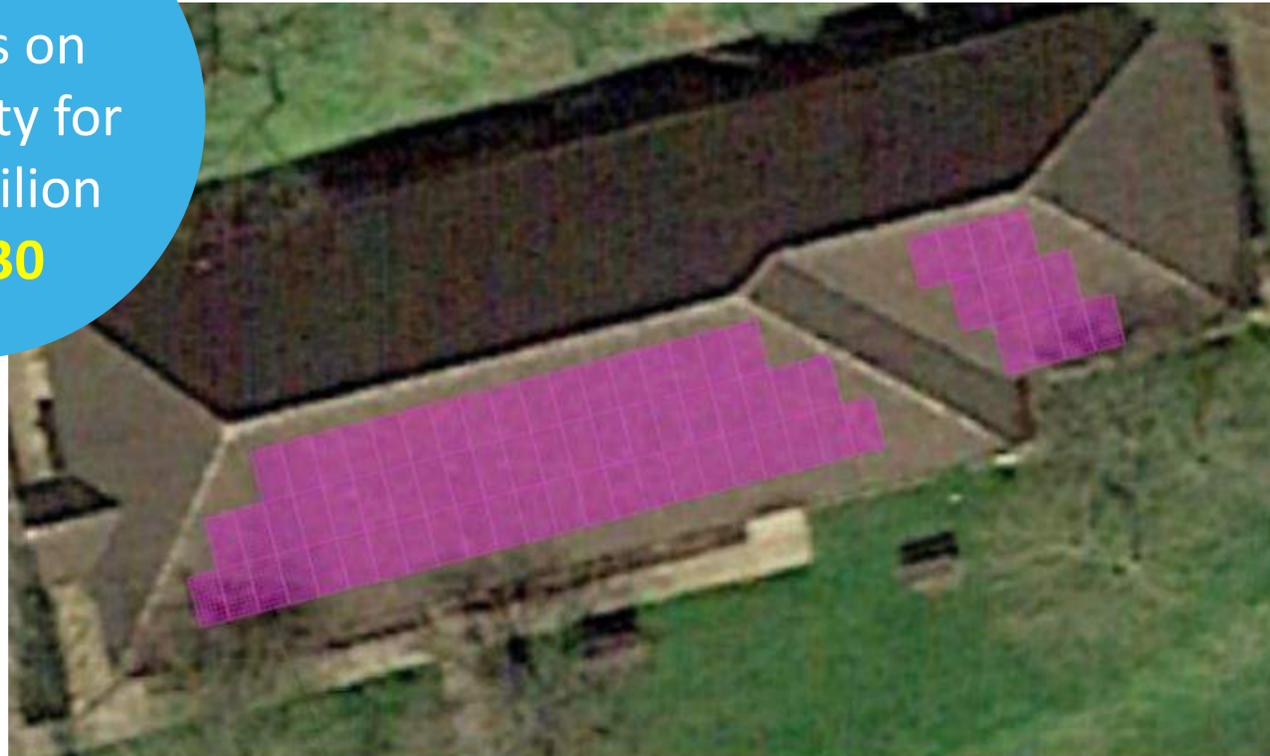




George Pitcher Memorial Ground

Solar array layout

Annual savings on electricity for the Pavilion
£3,230



19.6 kWp system at the Pavilion

£24,500 initial investment costs, with a payback of 5.3 years

Solar savings

Electricity produced by solar array per year

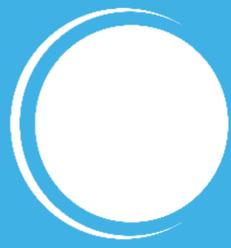
16,730 kWh

34% of electricity use at the Pavilion

7.3 tCO₂e

saved each year

Equivalent to annual electricity usage of **8 homes**



Frequently asked questions: solar power

How long do panels last?

Panels typically last for 25 years, and can last as long as 35-40 years if properly maintained. The inverter has a shorter operational lifespan, and may need to be replaced after around 10 years. We will secure appropriate warranties for the equipment.

Does their efficiency change over time?

Studies of panels in use show that the efficiency decreases by less than 1% per year. Panels can accumulate dirt and leaves which can affect performance; we anticipate cleaning the panels as part of their ongoing maintenance.

What happens when it's cloudy?

Solar panel technology allows electricity to be generated in both direct sunlight, and “diffuse” light, for example when it is cloudy, or from light reflected from buildings. Our calculations of the amount of energy produced are based on real weather data, so takes account of cloudy days, and the variation in daylight hours through the year.

Is there government support for renewables?

Yes – we will claim the feed-in tariff (FiT) and some export tariff payments on these systems. The FiT is paid per unit of energy produced, and the rate we get per unit is fixed for 20 years. Export payments will be assumed to be 50% of all the energy generated, also paid for 20 years.

Will wildlife be affected?

No – all wiring will be safely channelled, protected from wildlife, and fitted with compliant electrical safeguards.

