

## **Appendix A – Climate Change Statement**

### **Climate Change Statement for Planning Applications**

#### **Part 1: Applicant details**

Name of applicant/agent	Richard Plant (on behalf of) Christ Church, New Mill
Site Address	Sude Hill, New Mill, Holmfirth, HD97ER
Description of Development	Installation of 62 solar panels on the roof of the church, plus 22 KWh battery storage fitted inside building.

#### **Part 2: Climate Change Mitigation measures**

Please respond to the following questions considering the measures set out in the Climate Change Guidance note:

Q1: What measures have been/will be taken to reduce the energy demand associated with your proposed development beyond the minimum required in Building Regulations? (See section 2)

The 62 solar panels will produce 27KW of renewable power, some of which will be used to power the church's basic electrical requirements (lighting, WIFI, kitchen appliances etc) and the remainder will be stored in a 22KWh battery system. Any excess power will be sold to the grid.

After installation of solar panels and batteries, the plan is to decommission the gas boiler which is @ 40 years old, and use the solar energy to power infra-red heaters that will heat the main church hall. The gallery room (1<sup>st</sup> floor meeting room) already had electric panel heaters which will also be powered by the solar/battery combination.

The plan is to make the church carbon net-zero on or before 2030 in line with the Church of England's NZC (Net Zero Carbon) plans.

In addition, the church has already installed loft insulation throughout the roof cavity to limit heat loss, as well as installing destratification fans on the ceiling which help recirculate warm air from down to the congregation below. These measures have already reduced our gas consumption (and carbon emissions) by 20%.

Recently the Church has been awarded the 'Eco-Church Silver award' for environmental and sustainability improvements achieved so far.

Q2: What measures have been/will be taken to limit the carbon consumed through the implementation and construction processes, e.g. by reusing existing on-site materials or sourcing materials locally? (See section 3)

The main activity will be on the roof where the original slate roof tiles will be retained during construction. As the building is listed, the fabric of the building will remain intact and therefore we do not anticipate any new materials other than the solar panels themselves, and the aluminium frames that they are mounted on.

The 3<sup>rd</sup> party solar installers who quoted for the work are all local to the West Yorkshire/Huddersfield area, thus reducing the distances travelled from their site to the church and supporting local business and employment and minimising fuel and emissions of their vehicles.

Q3: What measures have been/will be taken to utilise renewable or low carbon energy sources? (See section 4)

The Church is part of a local Parish buying group that source energy as a co-operative. The current energy supplier has provided confirmation that the electricity that the church purchases comes from renewable sources (Total Energies PLC). Evidence can be provided if required.

The church currently uses methane (natural gas) to power its boiler, but upon completion of the solar installation, we will begin our next phase of work to instal electric IR heater panels.

Q4: What measures have been/will be taken to ensure the building design and layout has been optimised to energy efficiency beyond the minimum requirements in Part L of the Building Regulations ? (See section 5)

As mentioned above, the church has undergone several improvements already to reduce its carbon emissions and make it more energy efficient, as follows:

- 1) Installation of three destratification fans (Airius) that circulate warm air from the ceiling level to the congregation below, thus reducing the amount of wasted energy from the gas boiler
- 2) installation of Wi-Fi enabled thermostats that can be regulated from a mobile App, allowing us to switch the boiler off or reduce the temperature of the building remotely.
- 3) installation of 420 sq. metres of 200mm rockwool loft insulation, designed to reduce heat loss through the wooden ceiling.
- 4) replacement of existing filament bulbs with LED lighting through the building.

Q5: What measures have been/will be taken to reduce potential impacts of flooding associated with your proposed development? (See section 6)

Not applicable to this project.

Q6: What measures have been/will be taken to reduce water stress associated with your proposed development? (e.g. Water retention and minimisation measures) (See sections 7 and 8)

Not applicable to this project

Q7: What measures have been/will be taken to provide biodiversity net gains? (See section 8)

Not applicable to this project.

Q8: What measures have been/will be taken to reduce air pollution associated with your proposed development? (See section 9)

Air pollution will reduce as the gas boiler is decommissioned in due course and replaced with infra-red heat panels powered by renewable energy, saving approximately 10.1 tonnes of CO2 per annum.