CHURCH OF ST PETER & ST PAUL GREAT CASTERTON, Rutland (Grade I)

The Diocese of Peterborough

Case Study June 2024

SUMMARY OF WORKS: Replacement of existing oil-fired heating system with a new environmentally sustainable air source heat pump



When their old oil-fired heating system started to fail, with blocked pipework leading to inefficient distribution of heat, the PCC set about looking at alternatives. Some of the old heating equipment was beyond repair. Initially a newly designed gas system was proposed, but after reviewing their ecology and environment philosophy and mindful of the Church of England's target to become carbon neutral by 2030, an air source system was chosen. The church had already achieved their Bronze Eco Church Award, and cost comparisons between gas and air source made the latter a viable option.

Changing from one heat source to another may seem daunting, but the PCC ensured a smooth path by first carefully researching the various systems and heating types available. The church architect ensured the impact of installing the new equipment was sympathetic to the listed building, and a good heating engineer familiar with air source systems, and the ability to manage works on site, was chosen. A small but dedicated working party was set up to include exploring and applying for grants to help pay for the work.

Fundraising for such a system can be expensive and a planned approach was needed. Many local fundraising events were held, and generous donations were given. This demonstrated to the grant funders how much the wider community valued the work of the church and successful bids were made to Benefact Trust, Rutland Historic Churches Preservation Trust, Garfield Weston Foundation and Great Casterton Parish Council. In addition, a loan was arranged through the diocese Church Major Works Fund. A healthy contingency permitted unforeseen works to be addressed, such as hidden masonry defects.

The Result

After much planning and considerable effort, the church now has a clean and very efficient heating system which provides a warm and comfortable church. This is much appreciated by the congregation and other users of the building! A period of adjustments allowed for optimum running conditions to be achieved. The 'plant room' is cleaner and tidier, with less space taken up by the heating equipment, and the external heat pumps adjacent the tower are suitably screened to allow plenty of airflow. The PCC is willing to share their experience with any other interested churches to help achieve a reduction in carbon emissions.







For more information about Great Casterton church, see 'A Church Near You'.