

Neutral Citation Number: [2023] ECC Car 2

Application Ref: 2022-080264

**IN THE CONSISTORY COURT OF THE DIOCESE OF CARLISLE
IN THE MATTER OF ALL SAINTS' CHURCH, SCOTBY**

Deputy Chancellor Richard Lander

Determined on the papers and without a hearing

JUDGMENT
Delivered 5 July 2023

Introduction

1. A Petition was presented to the Court on 5 April 2023 by Rev Isaac Sartaj Lawrence, the Incumbent of the Parish of Scotby and Cotehill with Cumwhinton, and David Eric Johnson, from the Fabric Committee.
2. By the Petition, the Petitioners seek a faculty for the installation of a new gas boiler at All Saints' Church, Scotby, after the existing boiler was condemned in October 2022. The proposed works also include miscellaneous updates and improvements to the heating system and the boiler room.
3. Whilst I was preparing this judgment, I was made aware that there was a degree of urgency. The Petitioners were keen to arrange for the proposed work to be carried out before the winter and wanted to instruct the contractor as soon as possible. In those circumstances, I instructed the registry to issue the faculty on 30 June 2023, with my reasons to follow in this judgment.
4. The only issue concerns the type of heating system to be installed.

5. The DAC does not support the proposal to instal a new gas boiler, for reasons which stem from the Church of England’s commitment to Net Zero Carbon. The view of the committee was that the Fabric Committee of the DCC had fully not considered all alternatives to fossil fuel and would, in particular, like to see a further exploration of air source heat pumps.
6. Otherwise there is no opposition to the proposal.
7. Notwithstanding that the proposal has not been supported by the DAC, the Petitioners have informed the Registry that they wish to proceed with the Petition.
8. I have carefully considered the documents provided to me. The key points for the purposes of this judgment are set out in the following documents:
 - (1) Updated Statement of Need uploaded on 5 April 2023 (“the Statement of Need”);
 - (2) Report of the DAC Site Visit to the Church on 25 January 2023 (“the Site Visit Report”);
 - (3) Notification of DAC Advice dated 5 April 2023, following a meeting of the DAC on 2 March 2023 (“the Notification of Advice”);
 - (4) Petitioners’ Response to the Notification of Advice dated 5 April 2023 (“the Response”).
9. It is clear to me that a great deal of care and attention has gone into the preparation of the documents for this application, both from the Petitioner and the DAC. This has helped to focus the issues and has assisted me greatly in the preparation of this judgment.

The Key Facts

The Church

10. The Church was consecrated in 1855 and is Grade II listed. It is a small to medium sized church with a seating capacity of between 120 and 150, in fixed pews. The DAC has confirmed that none of the proposals would have any effect on the character of the Church as a building of special architectural or historic interest, and I am satisfied that this is correct.

11. Scotby is a village a short distance to the east of Carlisle. The Church is not situated within a national park or a conservation area.
12. There is a need for heating in the Church for about 40 days a year, to cater for Sunday services as well as other occasional events such as weddings, baptisms, funerals and community events.

The existing heating system

13. The existing heating system consists of a gas boiler installed in the 1980s, using a single pipe system. There is a single loop of 75mm cast iron pipe which provides the main heat source, together with a panel radiator at the back of the church.
14. The boiler is over 35 years old and the particular model has not been manufactured since 1995.
15. Single pipe systems are generally regarded as unsatisfactory because the radiators and pipes further along the loop from the boiler do not achieve the same temperatures as those at the start. Most modern heating systems use a two pipe system, with flow and return pipes on each radiator. A two pipe system is more efficient; it provides a better balance for the system as a whole and reduces heat loss.
16. That said, the Petitioners have indicated that there were few complaints about the previous heating system while it was working.
17. In October 2022 a gas engineer attended to give the boiler its annual service. The engineer discovered that flue gasses were escaping, and noted various other defects. Investigations revealed that the boiler could not be brought back into service without considerable difficulty and expense. Even then, there could be no guarantee that it would last long, because of difficulties in obtaining parts. In any event, retention of the existing old boiler would probably present the worst-case scenario in terms of net zero ambitions.
18. In those circumstances the boiler was shut off and condemned. Church services were moved to the nearby village hall. Attendances have decreased since then and the Petitioners are keen that services can move back to a heated church as soon as possible.

The proposed replacement

19. The proposed replacement for the condemned boiler is a modern gas boiler. The Petitioners have obtained a quotation from a reputable contractor for the replacement boiler and associated works in the sum of £22,490. This gas boiler would work with the existing pipework in the church. It would also be capable of using hydrogen as and when that becomes commercially available for this type of use.
20. At some point the church would wish to upgrade the heating system to a two pipe system, as and when it could afford this. The Site Visit Report indicates that the cost of this would be about £24,000.

The legal framework

The role of the Court

21. In February 2020 General Synod voted for the whole of the Church of England to achieve the position of net zero carbon by 2030. The vote recognised that the global climate emergency is a crisis for God's creation and requires urgent action on the part of the church. It was recognised at the time that this was an ambitious target and would require significant effort.
22. Heating is the major source of carbon emissions in most churches, including this one. The Church Buildings Council guidance, which I shall discuss below, indicates that heating is responsible for 80% of the Church of England's carbon emissions. It follows that the most significant net zero decisions that churches will need to make concern their heating systems. The need to make such decisions becomes particularly urgent where, as here, the existing system has failed and there is a need to choose a new system, likely to remain in place until long after 2030.
23. There have been a number of judgments in other Dioceses concerning applications for faculties to replace failed fossil fuel boilers with new fossil fuel boilers. In particular, I have been assisted by the judgments in *Re St. Mark's, Mitcham* [2020] ECC Swk 5 and *Re St. Mary, Oxted* [2021] ECC Swk 1 (both Petchey Ch.), *Re St. Thomas & St. Luke, Dudley* [2021] ECC Wor. 2 (Humphreys Ch.), *Re St. Peter's, Walsall* [2021] ECC Lic 4 (Eyre Ch.) and *In The Matter of Dedham, St. Mary The Virgin* [2022] ECC Chd 2 (Hopkins Ch.).

24. All of these decisions pre-date the changes to the Faculty Jurisdiction Rules 2015, which came into force on 1 July 2022. Prior to that the Rules made no specific mention of the net zero policy or guidance, and there was some debate as to the correct approach to be taken by the Court.
25. The issue was whether the Court should take what might be described as a “hands-off” approach, leaving to petitioners the judgment as to how the matter of carbon neutrality was to be addressed (see for instance *Oxted* at [6]) or a more interventionist approach, allowing the Court to consider the environmental implications of a proposal, whether or not the Petitioners had already done so (see for instance *Dudley* at [39]).
26. In my judgment this can no longer be a matter for debate following the amendments to the Rules. So far as relevant to faculty applications, these provide as follows:
- (1) Rule 2.2 defines “*net zero guidance*” as:
- “guidance issued by the Church Buildings Council under section 55 of the Dioceses, Pastoral and Mission Measure 2007 on reducing carbon emissions”;*
- (2) Rule 4.2(2)(b) provides that at the initial stage of consultation with the DAC intending applicants must submit:
- “any advice or other material relating to the environmental implications of the works or proposals including, in the case of matters to which net zero guidance applies, an explanation of how the intending applicants, in formulating the proposals, have had due regard to that guidance”;*
- (3) Rule 4.9(7A) states that when the DAC provides its advice, this must
- “include a statement of—*
- (a) whether, in its opinion, the explanation under rule 4.2(2)(b) is adequate, and*
- (b) if its opinion is that the explanation is not adequate, its reasons for that opinion.”*

- (4) Rule 5.5(3)(e) provides that the same material as is mentioned in rule 4.2(2)(b) must be submitted with the petition;
- (5) The specimen DAC Notification of Advice (Schedule 3, Form 2) requires the DAC to indicate whether or not the explanation as to how the Petitioners have had regard to net zero guidance is adequate, in its opinion. It provides as follows:

“The works or proposals involve matters to which net zero guidance applies (that is, guidance issued by the Church Buildings Council under section 55 of the Dioceses, Pastoral and Mission Measure 2007 on reducing carbon emissions). In the opinion of the Committee, your explanation of how, in formulating the works or proposals, you have had due regard to net zero guidance is / is not adequate.

[and the Committee’s reasons for the opinion that your explanation is not adequate are:]”

27. In my judgment, the purpose of requiring the Petitioners to explain how they have had “due regard” to the guidance, and of requiring the DAC to set out its opinion on that explanation, is clearly to enable, and indeed to require, the Chancellor to make a decision on whether they have actually had due regard to the guidance.
28. For many non-lawyers the phrase “due regard” may be a little confusing. It is not immediately clear whether it refers to the process (has the point been considered?) or the outcome (is the decision a correct one?). There is no explanation as to what the phrase means in the Rules, or indeed in the CBC guidance. This is perhaps unfortunate, bearing in mind that most petitioners are not lawyers.
29. The same issue of interpretation arose in the context of the Safeguarding and Clergy Discipline Measure 2016. This imposes a legal duty on the clergy, readers and lay workers, churchwardens and parochial church councils to “*have due regard to guidance issued by the House of Bishops on matters relating to the safeguarding of children and vulnerable adults*”. In *Anglican Church Case Studies: Chichester/Peter Ball Investigation Report*, the Independent Inquiry into Child Sexual Abuse observed that the legal term “have due regard” was not well understood and that there was a need for greater clarity on the nature of the obligation.

30. This led to the publication of a Note by the Church of England Legal Office which seeks to clarify the position in the context of safeguarding. It contains the following explanation:

“What does ‘due regard’ mean?”

Where legislation – whether an Act of Parliament or a Church Measure – imposes a duty on a person to “have due regard” to guidance of this sort, the law understands that duty in a particular way. The legal duty to have due regard means that the person to whom the guidance is directed is not free to follow the guidance or not as he or she chooses. As a matter of law, the guidance should be given great weight and must be followed unless there are ‘cogent reasons’ for not doing so [...].”

31. Whilst I am not entirely convinced that the duty is always understood in this way outside that immediate context, I consider that the Note provides a helpful and adequate explanation of the phrase for present purposes. I propose to adopt it as the correct definition of the phrase in the context of net zero guidance.
32. To draw these points together, I consider that the proper role of the Court, in deciding whether petitioners have had due regard to the net zero guidance, is to determine whether the guidance has been followed or, if not, whether the petitioners have established any cogent reasons for not following the guidance.

The net zero guidance

33. For ease of reference the net zero guidance can currently be found here:

<https://www.churchofengland.org/resources/churchcare/net-zero-carbon-church>

34. The website suggests that the guidance to which due regard must be given includes the general document entitled “*A practical path to “net zero carbon” for our churches*” and a collection of documents specific to the question being considered in each case. In the context of heating, the three documents which are relevant are “*Heating Principles*”, “*Heating Checklist*” and “*Heating Options Appraisals*”.
35. The first document, entitled “*A practical path to “net zero carbon” for our churches*”, sets out five steps. In broad terms, this starts with what might be described as “easy

wins”, such as the use of LED lightbulbs, and then progresses to more substantial work. The fourth step is of particular relevance to this case, as it includes the following:

“Heating and lighting:

- D4. If there’s no alternative that does not run on fossil-fuels, then replace an old gas boiler or an oil boiler with a new efficient gas boiler.*
- D5. If yours is a well-used church which you want to keep warm throughout the week, then consider an air or ground source heat pump. Ground source heat pumps are more expensive and invasive to install than air source heat pumps, but run more efficiently once installed, depending on ground conditions.*
- D6. If you are doing a major reordering or lifting the floor anyway, and yours is a very regularly used church, then consider under-floor heating. This can work well in combination with a heat pump (above).”*

36. The second document, entitled “Heating Principles” is a longer document, and it is not possible to set out all the points it makes in this judgment. However, by way of brief summary it includes reference to the following:

- (1) The need to balance five things:
 - comfort;
 - historic fabric;
 - affordability;
 - feasibility and appetite for change;
 - cutting greenhouse gas emissions.
- (2) The need to consider how, and how often, the space is used;
- (3) For the majority of churches, keeping people rather than spaces warm;
- (4) Acknowledging where we are (for instance with gas boilers) but moving to where we need to be, with net zero churches;
- (5) Acknowledging that getting to this point will take time. The document contains the following statement:

“The progress will be limited by the affordability of the equipment, the price of electricity vs gas, the existing supplies and electricians of the church, its listing, and many other factors. An options appraisal of some kind is vital. For some churches, having fully assessed their options, there may currently be no feasible solution other than replacing gas-with-gas or even, in exceptional cases, oil-with-oil, but they can try to be ready for a future retrofit when technology and the grid has progressed.”

- (6) Churches needing to have at least carefully considered the option of moving away from fossil fuel boilers;
 - (7) The need for consultation.
37. The third document is the “Heating Checklist” which contains a number of questions to be considered by churches to evaluate their heating needs.
38. The final document is entitled “Heating Options Appraisal” and is a tool for assisting churches in deciding the most appropriate heating system for them.
39. In reality, the principal guidance is contained in the Heating Principles document, and the other documents are a useful tool assisting and enabling churches to put these principles into practice, and to demonstrate that the principles have been properly considered.

The five key points from the net zero guidance

40. In my judgment, there are five key points that can be distilled from the guidance, which accord entirely with reality and common sense. In my judgment these are the points which generally need to be considered in an application of this nature.
41. The first is that churches need to be properly heated. A cold church is unwelcoming. This is likely to deter people from attending and detract significantly from the ministry of the church. This is particularly the case in a part of the country with an ageing population, it being well known that older people tend to feel the cold more than younger people.

42. The second is that in assessing whether a church building is properly heated, it is necessary to consider the proposed and likely uses for the building. For instance, if the only proposed use is for formal Sunday services then the function of the heating system might be limited to keeping people warm in the pews. If, however, the building is to be used for more informal services such as Messy Church, or for wider community use, it may well be that some or all of the space will need to be heated.
43. The third is that any proposed heating system must be affordable. A requirement for a heating system that is not affordable is unworkable, because the church will not be able to instal such a system. In a typical case where the existing heating system has failed this will leave the church with no heating at all, and may lead to its closure. This point is clearly recognised in the guidance, to the extent that it acknowledges, with a degree of realism, that there will sometimes be little option other than to replace a fossil fuel burning boiler with another fossil fuel burning boiler.
44. The fourth is that the list of types of heating system available for churches is finite. In most cases it should be fairly easy to place these types of system, at least roughly, in order of merit, in terms of achieving the net zero target. A proper appraisal will generally involve considering each type of system in turn in order to evaluate whether it is an appropriate option for the particular church, with a view to finding the highest placed system in the list which meets the needs of the church.
45. The fifth is that once there has been a determination as to the appropriate type of heating system or, more specifically, whether the proposed system is appropriate, it is necessary to consider whether any conditions should be imposed when granting the faculty. In particular, it is necessary to consider the ways in which any carbon emissions from such a system may be offset, however imperfectly, by other methods.

Discussion

The types of heating system available

46. The Petitioners have given consideration to a number of different types of heating system. This is set out in the Statement of Need and further explained in the Response.

47. On the basis of the evidence provided by the Petitioners in these documents, it is possible to list these types of system in order of desirability, purely from the perspective of reducing carbon emissions. The hierarchy is as follows:
- (1) Air source and ground source heat pumps. These systems are powered by electricity but consume only about a quarter of the electricity consumed by traditional electric systems. This is because they harness heat from the ground or the air. It is generally possible, by using a green tariff, to purchase electricity which has been generated using renewable sources of energy for this and other types of electric heating;
 - (2) Heating systems which target the heat rather than heat the space, such as under floor electric heating systems. Such systems might enable the area where members of the congregation are sitting during services to be heated, without the need to fully heat the space in the church. As a result, electricity consumption would be less than that required for a traditional electric system;
 - (3) Traditional electric heating systems. Such a system would heat the space in the church, in the same way as the existing gas fired heating system used to do;
 - (4) Gas fired heating systems. Since these systems necessarily involve the burning of fossil fuel they are far from ideal from a net zero perspective. That may improve to an extent if and when hydrogen becomes available as a fuel source, but that may be some way off.
48. To complete the picture I should perhaps also mention that in the Response the Petitioners made brief reference to an oil fired system, an LPG fired system and a biomass system. The first two also involve the burning of fossil fuels, and provide no obvious advantages over the piped gas supply which is available. A biomass system would be invasive to install and labour intensive to operate; it would be wholly unsuitable for this church. None of these types of system requires further discussion in this case.

The proposed uses for the church building

49. In the Statement of Need the Petitioners have indicated, and I accept, that there is a need to heat not only the immediate area of the pews but also the area towards the rear of the church.
50. On Sundays this area is used to provide a space for toddlers and children to play during services. It is then used after services, with members of the congregation spending up to an hour there enjoying tea, coffee and fellowship.
51. At other times this area is used as a space for prayer days. It is also used when there are also school visits, weddings and/or funerals.
52. I also note that the use made of the church building is not particularly intensive, hence the need to heat it on only about 40 days a year. As a matter of common sense, there will be less carbon emissions from a church which is only heated on 40 days than a church which is heated on a more regular basis.

Affordability

53. The church is not particularly wealthy; the Statement of Needs indicates that it has been unable to meet its parish share, with a shortfall of approximately £30,000.
54. As I have already stated, the cost of the proposed gas boiler and associated works would be less than £25,000. The church has these monies available for the work. However, the Site Visit report notes that the church has barely enough funds to replace the boiler (which I assume includes the associated works) and that any attempt to raise more money would cause delay, extending the time when the church building could not be used. I have already mentioned that attendance has dropped since services have moved away from the church building, so further delay is quite understandably a matter of concern for the Petitioners.

Consideration of the options

55. The Statement of Need and the Response set out, in some considerable detail, the consideration that has been given by the Petitioners to the various types of heating

system which would be more advantageous than a gas boiler, in terms of achieving the net zero ambition.

56. I shall deal separately, and in more detail, with the question of whether the Petitioners have given adequate consideration to the possibility of using an air source heat pump, since this is the particular point raised by the DAC.
57. Ground source heat pumps involve significant excavation works, which can lead to particular problems when disturbing the ground in churchyards and/or close to listed buildings. I am satisfied that the Petitioners have given proper consideration to a ground source heat pump, but have correctly concluded that this is not a viable option.
58. For electric heating systems, or at least those which do not rely on heat pumps, the existing power supply to the church is insufficient. Enquiries were made of Electricity North West as to the cost of upgrading the supply so that it would be sufficient to operate a traditional electric heating system. The company quoted approximately £65,000 to upgrade the supply to provide approximately 70kVA, which I understand to be about 7 times the capacity of the existing supply. This would involve changing the supply to three phase and excavating about 270m of public highway in order to connect to the network at a point where the load would be available.
59. The Petitioners considered and rejected both under pew heating systems and traditional electric space heating systems. I am satisfied that they gave proper consideration to both types of system and correctly concluded that they were not viable options.
60. In relation to under pew systems, the Petitioners concluded that these would not work on their own because they would not provide heat to the area at the rear of the church. There is also an affordability issue arising from the need to upgrade the supply.
61. As for a traditional electric system, either on its own or in conjunction with an under pew system, this would provide adequate heat, but it would be unaffordable for this church. The Petitioners calculated that the cost of the supply upgrade and the electric heating system itself would be in the region of £100,000. Running costs would, on current rates, be about twice the cost of gas, namely £8,000 per annum as opposed to £4,000.

62. I am satisfied that an electric heating system would not work and/or would not be affordable for the church.
63. It is in those circumstances that the Petitioners have concluded that the only viable replacement for the gas boiler is another gas boiler, albeit that such a boiler is likely to be more efficient than the old one and will be capable of being converted to use hydrogen should this become available.

Has the Fabric Committee of the church properly explored the option of air source heat pumps?

64. This is the specific point put forward by the DAC as the reason for not recommending that the faculty be granted. The view expressed by the DAC in the Notification of Advice is that the Fabric Committee of the church had not fully explored the option of air source heat pumps, in relation to the cost and the current electrical supply.
65. Whilst I give considerable weight to any advice from the DAC, in my judgment the church has explored the option sufficiently. To be fair to the DAC, some of the explanations have been clarified since the Notification of Advice, but the Petitioners' position has been consistent throughout. I consider that the church has given due regard to the guidance and reached a conclusion which is correct in the circumstances. I say this for the following reasons:
- (1) It has analysed options with the assistance of a retired engineer from the church, whose qualifications include membership of the Energy Institute;
 - (2) It has consulted with White, Young and Green, international consulting engineers;
 - (3) It has produced a carefully considered and detailed analysis of the various types of heating systems including air source heat pumps;
 - (4) That analysis includes a well-reasoned discussion as to why the heat pump option would be inappropriate for the church.
66. The Petitioners' reasons, which I accept, as to why an air source heat pump would not be suitable are as follows:

- (1) A heat pump system would not work well with the current large diameter pipework configuration. The reason for this is that this type of system does not heat the water to the same temperature as a gas boiler, thereby reducing the output of the system. The flow temperature from an air source heat pump is a maximum of 50 degrees, with the optimum temperature being between 35 and 45 degrees. This compares with a flow temperature for gas boilers of between 70 and 80 degrees. This is why heat pump systems lend themselves best to underfloor heating systems in well insulated buildings (which the church is not). The opinion of the consulting engineers is that radiators work best at 65-70 degrees;
- (2) In those circumstances a heat pump system on its own would be inadequate and it would have to be supplemented by some other form of heating, which would be costly;
- (3) Alternatively, the pipework system would have to be reconfigured entirely so as to make it unsuitable, which would involve costly modifications to the pews;
- (4) Whilst a heat pump system would only use about 25% of the electricity consumed by a traditional system, this alone would require an upgrade to the existing supply; this has been confirmed by the consulting engineer. This particular point has been questioned by the DAC. However, the point may be academic because the additional electrical heating necessary to supplement the heat pump system would increase the loading;
- (5) In total the costs of installing an air source heat pump and upgrading the supply would be in excess of £100,000. This does not take into account alterations to the pipework or supplementary heating systems. The church cannot afford this sum.

Conclusion on heating system

67. In the light of the above, I consider that the Petitioners have had due regard to the guidance. Indeed, they have followed the guidance and carried out a thorough appraisal of the options available to them. It is not therefore necessary to consider whether the Petitioners have shown cogent reasons for not following the guidance.

68. The conclusion of the Petitioners that a replacement gas boiler is the only viable option seems to me to be correct on the basis of the available evidence. The rather unfortunate reality is that it is the only affordable option which meets the needs of the church.

Conditions

69. The fifth of the key points I have discussed above is the need to consider ways in which the carbon emissions from a heating system which is not in itself carbon neutral may be offset.
70. In its Carbon Net Zero Parish Plan completed in February 2023 the PCC has indicated that at the point of contract renewal it will switch to a green gas tariff, dependent on stabilisation of the energy markets. The Response shows less commitment, indicating that if and when a green gas tariff becomes available then the church will actively investigate changing to it. Nevertheless, it is clear that the church is prepared, in principle, to pay a little more for its gas in order to assist the wider Church of England in achieving its net zero ambitions.
71. Unless something changes, many individual churches will not have sufficient funds to replace fossil fuel boiler systems with other forms of heating by 2030. Many churches will probably still have the fossil fuel boilers which are in use today, or newer fossil fuel boilers for which permission has been given. Unless something is done to reduce the net emissions from these boilers then it is difficult to see how the net zero ambition can be achieved, bearing in mind that heating currently gives rise to 80% of the emissions.
72. With that in mind I consider that when giving permission for a new fossil fuel burning boiler it is necessary to adopt a robust approach when considering conditions. If this, or indeed any, church is to continue to operate a gas boiler then in my judgment the starting point, when considering conditions, ought to be that it should take steps to mitigate the effect of that.
73. I accept that the energy markets have been unstable since the invasion of Ukraine, and that green gas may not be consistently available at an affordable price, or indeed at all. It is also well known that many green tariffs do not involve the sale of 100% of the gas from renewable sources.

74. However, it is equally well known that there are many reputable organisations that offer carbon offset schemes, enabling those who use fossil fuels to offset the emissions thereby created. Whilst this may be second best to avoiding the emissions in the first place, it is clearly better than nothing.
75. For these reasons I propose to order that it will be a condition of the faculty that the church either switches to a green gas tariff or enters into a separate arrangement with a carbon offsetting scheme to offset the carbon emissions from all non-renewable gas used.

Conclusion

76. I propose to grant the faculty subject to the condition with regard to the use of a green gas tariff and/or offsetting and a further condition that the Petitioners shall satisfy themselves that the contractor has adequate public liability and employer's insurance before work commences.

RICHARD LANDER
Deputy Chancellor
5 July 2023