

**DAC Guidance Note**

**Installation of Solar Panels**

February 2025

**Introduction**

The installation of solar panels can be a great asset to your church, helping you to lower your bills and carbon footprint. However, they are not for everyone and as such you will need to consider certain things to see if they are applicable to your situation and building and ensure you get the maximum benefit from them.

This is especially important as solar panels are not free from sin, so to speak. They have complications beyond whether they fit and work, that PCCs need to consider. For example, solar panels have a level of embodied carbon in their manufacture and can be difficult to recycle. Some last longer than others, and a recent academic study has found that the majority of solar panels have links to forced labour in China[[1]](#footnote-1). All that considered it is imperative that as a church you can maximise the benefits of any installation.

Below are some considerations to undertake when seeking to get to grips with whether solar panels are right for you and possible within the faculty jurisdiction rules and local planning authority permission. Please note that this guidance note is not a comprehensive document covering every scenario, nor does it supersede the guidance produced by the Church Buildings Council or others. It has been produced to distil the main points for consideration and to give you the starting point in which to learn more and develop your proposals further.

**Working out when solar panels are right for you.**

The first consideration for solar panel installation is the use profile of the church building. Profiling your church activity involves looking at what energy you use in your church and when. The aim is to ensure that you use most of the electricity you generate. That way you get the most out of your panels, something we would call ‘benefit’. There is no point producing energy to simply put it into the grid, unless you can achieve a good feed in tariff that will give the church an income. Remembering there is a human and environmental cost to them, you need to demonstrate you are going to get the most out of them.

Once you can show you will use most of the energy you generate, the next consideration is where the panels are going and suitability. This comes in two parts. The first is the visual impact of the panels. Who is going to see the panels, will they be shielded by a valley roof or parapets? The less they are seen or be able to be seen the better. Although attitudes to solar panels on listed buildings have been relaxed lately visual impact is still considered in the application. Take some pictures from different angles, near and far to gauge if they will be seen. The pictures you take will form a part of any application you make. Once you are happy the visual impact will be minimised, you need to consider what the condition of the roof is in. You should be able to find this in your quinquennial report. You do not want to be replacing the roof halfway through the lifetime of the solar panels. Equally if your roof needs replacing in the next few years, you may wish to prepare an application and save time and money by doing both at the same time.

With these points complete, now is the time to seek early DAC advice and speak to your local planning authority. Any faculty application will hinge on there being a granted planning application. This is because solar panels are considered ‘external development’ by secular authorities and are not included in Ecclesiastical Exemption. Not all solar panels need planning permission depending on the visual impact, however many do, so it is best to ask. If early advice to the faculty and planning permission is favourable you can now start to speak to installers with confidence.

**Top tips to look out for.**

The single largest thing that can hinder a solar panel application is a negative visual impact in a sensitive place such as a conservation area etc. as this would lead to planning permission being denied and no faculty forthcoming. So, it is always best to do what you can to lower the preparatory costs until you can be reasonably confident you are likely to get permission. If your roof is in a poor condition or is not strong enough to support the panels, then you will not be able to fit the solar panels. Most companies will do a structural assessment, and if not can recommend someone who can. These things can cost so better to know if they are possible before spending hard earned money. The key however, to any application, both secular and ecclesiastical is any impact to significance will need to be outweighed by the benefit to get approval. So, showing how you will benefit is key. This was our first step and most important.

**Key considerations.**

Assuming that all the above works out well, there are things to consider as you compile an application. As noted above solar panels are not guilt free or maintenance free installations. They will need regular cleaning because bird droppings and dirt will degrade their efficiency. Access for cleaning is therefore important, so please consider how are they going to be cleaned regularly and safely. These things need to be considered right at the start of the application so, if you need to install safety fixings, access ladders etc. you can include them in the application.

Birds, squirrels etc. like to get under panels to nest and may chew cables etc. Please speak with the contractor about what kinds of protection can be installed to protect the wiring and stop animals getting under. As the panels are electrical in nature they will need to be electrically inspected on a regular basis. The most common cause of fires in churches are caused by electrical issues. Do you know who is going to test the panels and wiring and can they get access? Speaking about this at the design stage will help you make choices that will help further down the line.

One of the advantages of solar panels is that excess electricity can be fed into the national grid with a price paid to the owner, but before that can happen you must ensure you have the right connection and infrastructure. Not all churches can feed into the grid so speaking with your contractor and electricity company early on is important. Feed-in tariffs have come down in price considerably in recent years as electricity companies and the Government sought to cut down on incentives the more popular solar panels became. This means solar panels are unlikely to be an investment that will generate significant income. More reason to ensure you get the benefit. There are some good tariffs around, so it is best to look at what is on the market and what the best deal is. You will also need a volunteer to be able to regularly view and submit meter readings to the electricity company.

Given the increased risks of solar panels their inclusion is likely to impact your insurance. It is best to speak with your insurer early to understand what the implications are. They might set certain conditions to do with maintenance to maintain cover. This is especially the case with the inverters which can be prone to damage and fire during electrical storms. The installation will also have implications for your quinquennial inspection. The inspector needs to include them in their report and their inclusion will make it harder to assess the condition of the roof. Remember to speak with your inspector and discuss the matter before the next inspection comes around.

The church buildings team and DAC are seeing an increase in proposals for battery storage coupled with solar panels. Similar considerations need to be made around the use of the church and whether you would benefit from batteries. Will the cost justify the benefit? Like solar panels they are not guilt free, maintenance free, installations. They come with embodied carbon, can be hard to recycle at the end of their life and need regular maintenance. The digging of lithium iron in countries with low regulations can be devastating for the environment[[2]](#footnote-2), so please consider if this is something your church will be happy with. They also come with a fire risk so speaking with your insurer, contractor, and local fire brigade early in the design stage is crucial. If you are unsure about whether batteries are right for you, you could design the system to be open to accepting them at a later date.

**Conclusion.**

Finally, solar panels applied correctly and maintained properly can be a real asset to a church and help reduce its climate impact, but they are not for everyone. Each church and situation are different so understanding your situation, the harms, and what you stand to benefit is the most important part of any consideration when thinking about solar panels. The best investment you can do before making an application, is in yourself to become the ‘informed customer’. There is a range of help and guidance out there from Ecclesiastical Insurance, The Church Buildings Council, and the Diocesan Advisory Committee. Whilst not church specific the guidance notes from Historic England are also good places to become informed.

Please remember that the Church Buildings Team is there to help you throughout the whole process so please do contact us at DAC@salisbury.anglican.org

1. Murphy, L., Elima, N. (2021) In Broad Daylight. Uyghur Forced Labour and Global Solar Supply Chains. [online] Available from: https://acrobat.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3Ad360ffab-40cc-4d83-8b8b-a8bd503286a3&viewer%21megaVerb=group-discover. [Accessed 2 February 2025]. [↑](#footnote-ref-1)
2. Krishnan, R., Gopan, G. (2024) A Comprehensive Review of Lithium Extraction: From Historical Perspectives to Emerging Technologies, Storage, and Environmental Considerations’. Cleaner Engineering and Technology [online] 20, pp. 1-15. [Accessed 12 December 2024]. [↑](#footnote-ref-2)