

# Church energy (electricity, oil, gas, and solar)

*Here you can find resources to help you cut the environmental impact of your church and church hall energy, by sourcing it from 'greener' tariffs or generating it on site yourself. This resource has been produced by Catherine Ross and Jo Chamberlain of The Church of England Environment Programme.*

## Climate-Focused Service

### Exploring the importance of where our energy comes from in theology

The source of all the energy we use is the sun. There are lots of ideas and themes around the sun that can be explored in a service or small group:

In Genesis 1.16 and Psalm 74.16 we see the sun set in its place to govern the day. It marks out the days and the seasons, setting things in their right time and place. There's a lot to be said for learning to work with God's rhythms, times and seasons. The Message translation of Matthew 11 28-30 captures it beautifully:

"Are you tired? Worn out? Burned out on religion? Come to me. Get away with me and you'll recover your life. I'll show you how to take a real rest. Walk with me and work with me—watch how I do it. Learn the unforced rhythms of grace. I won't lay anything heavy or ill-fitting on you. Keep company with me and you'll learn to live freely and lightly."

The sun gives us warmth and heat, as part of God's provision for our daily needs. In fact, as James 1:17 has it, every good and perfect gift is from above, coming down from the Father of the heavenly lights.

The absence of the sun, when it turns dark in an eclipse, is a sign of the end of days (Joel 2:10), when the light of God will be our eternal light Isaiah (60.19-20). Ultimately, the Bible points to God as the source of all things, the source even of the power of the sun.

And lastly, with our English words sun and son sounding the same, when we think about the rising sun, our thoughts are often brought back to the resurrection, the risen son. We talk about darkness being defeated, and many times in his gospel, John talks about walking with Jesus as walking in the light, and Jesus as the light of the world.

As Christians, we also have a responsibility to be the light of the world (Matthew 5:14). The actions we take to care for creation and tackle climate change stand as a witness to our faith. The verses in Matthew go on to say that our light should not be hidden. The implication is that these actions should not be hidden, so be bold and tell people in your community what your church has done. And if solar panels on the roof of your church turn out to be possible, think of them as a visible symbol of your witness in the world.

### Prayer:

A Scottish blessing

May the blessing of light be on you - light without and light within.

May the blessed sunlight shine on you like a great peat fire,  
so that stranger and friend may come and warm himself at it.

And may light shine out of the two eyes of you,  
like a candle set in the window of a house,

bidding the wanderer come in out of the storm.

And may the blessing of the rain be on you,  
may it beat upon your Spirit and wash it fair and clean,  
and leave there a shining pool where the blue of Heaven shines,  
and sometimes a star.

And may the blessing of the earth be on you,  
soft under your feet as you pass along the roads,  
soft under you as you lie out on it, tired at the end of day;  
and may it rest easy over you when, at last, you lie out under it.

May it rest so lightly over you that your soul may be out from under it quickly; up and off and on its way to God.

And now may the Lord bless you, and bless you kindly. Amen.

## Commit

The energy a church uses makes up the biggest part of its carbon footprint. What you do about it is one of the key steps in working towards the church greening schemes. Make sure you sign up to the scheme for your church:

- If you're in Scotland, check out [Eco Congregation Scotland](#).
- For churches in England and Wales we encourage you to join the [Eco Church](#) programme.
- If you're from a church in Ireland, try [Eco Congregation Ireland](#).
- For Catholic congregations, we suggest signing up to [Live Simply](#).

## Resources to help you commit to change as a community

The easiest step a church can take towards cutting its carbon footprint is switching to 100% renewable electricity. The recent report on our "Energy Footprint" showed that just switching to green electricity could cut the carbon footprint of the Church of England by a massive 22%.

Today, why not find out what tariff your church is on, and how 'green' it is?

### **A 100% renewable electricity tariff + electric heating = net zero carbon**

If your church is heated by electric heating (be it panel heaters, pew heater, suspended heaters, far infra red radiant heaters, or heat pumps) **and** if your electricity is from a 100% renewable tariff, then your church is very largely 'net zero carbon'. Whilst it's not quite that simple, it's not far wrong. Even if your heating is still oil or gas, then switching is beneficial, because at least the electricity which runs your lights, AV equipment, and kitchen appliances becomes net zero.

### **100% bio-methane 'green' gas + gas heating = net zero carbon**

Less wide-spread, and a little more confusing, is the whole subject of 'green gas'. There are a couple of providers who sell 100% bio-methane gas, and others which say they offer green gas but achieve this through providing standard mains gas (or a mixture) and purchasing carbon offsets. Currently, 100% bio-methane is quite expensive, and will be several times the cost of standard gas. However, if your church is willing to cover this additional cost, then switching to 100% biomethane to run your gas boiler will make your church heating 'net zero carbon'.

If you decide to look at a company that claims to have carbon-neutral gas through offsetting, we'd advise checking carefully what form of offsetting they use.

### **But how green is green?**

It can be very tricky to work out how 'green' any particular tariff is. You might want to consider:

- Whether a company's tariffs are *all* renewable, and if not how great a proportion is renewable;
- Whether they rely on offsetting to become 100% renewable;
- Whether any is generated from nuclear power;
- Whether the company has its own generation and how much, or is purchasing Renewable Energy Guarantees of Origin (REGOs) from others;
- Whether the electricity is all UK generated;
- Whether the company is wholly or partly owned, or benefits from, investments by a fossil fuel major.
- Whether the company itself invests in new renewable capacity.
- Whether the company has committed to building no new fossil fuel power stations.

It can be hard to tell the answers without research.

Whilst it is a few months old, this article from Which? magazine is a very useful read, and you can scroll down to the comparison table: <https://www.which.co.uk/news/2019/09/how-green-is-your-energy-tariff/>

The Ethical Consumer magazine rated electricity companies and identified the things which companies can do which they consider makes a meaningful difference. These are building renewables themselves, buying renewable electricity through 'power purchase agreements' (PPAs), which give generators security, and committing to not building any more fossil fuelled plants. The companies that passed these tests when they last did their ratings were Ecotricity, Good Energy and Green Energy UK. To read the detailed ratings, you need to subscribe to the magazine, however [the main article still gives a very useful overview](#).

### **How to switch?**

Some denominations, such as the Church of Scotland, run their own central energy procurement schemes with a green tariff. Contact your head office to find out.

Church of England and Church in Wales churches can easily switch to 100% UK renewable electricity through the Energy Basket from Parish Buying, and can ask for a quote at the same time for green gas.

<https://www.parishbuying.org.uk/categories/energy/energy-basket> Joint procurement is likely to give you a better price than procuring direct.

You can be confident the electricity procured through the Energy Basket is all 100% UK renewables with no nuclear in the mix. The energy company providing it is Total Oil and Gas. If this is of concern to your church, you can instead ask Parish Buying for your quotation to include options from a specialist electricity company that is fully renewable in *all* its activities.

If your denomination doesn't offer a central green tariff, any church can switch via [Church Buying](#), which uses energy suppliers that only put electricity into the national grid from 100% green sources.

## What about generating your own electricity through solar panels?

Many churches have south-facing, unshaded, pitched roofs; ideally oriented for solar panels. If you look at the renewables map on the Church of England Church Heritage record you can see how many have already installed solar panels:

<https://facultyonline.churchofengland.org/renewables?grade=&type=%27Solar%20PV%20Panels%27&typeString=Solar%20PV%20Panels=1&dateFrom=&dateString=&dateTo=&diocese=>

However, many churches are also listed buildings, requiring planning permission, and with historic roofs and fabric. Church roofs can be expensive and difficult to access. There are therefore some real constraints to consider. Whether panels are suitable and get permission is always on a case-by-case basis. You should always tackle the basics first; maintenance, reducing heat loss, and making your systems more efficient.

## Where to start with solar panels?

Get informed by watching the Church of England webinar on church solar:

<https://www.churchofengland.org/about/policy-and-thinking/our-views/environment-and-climate-change/webinars-getting-net-zero-carbon>

And read the Historic England guidance: <https://historicengland.org.uk/images-books/publications/eehb-solar-electric/heag173-eehb-solar-electric-photovoltaics/>

A great place to start is to ask for a free desk-top assessment from a local solar installer. Church of England and Church in Wales churches can join a pilot on Parish Buying.

<https://www.parishbuying.org.uk/categories/net-zero-2030/solar-pv>

Always choose an accredited installers from the MCS directory: <https://mcscertified.com/find-an-installer/> Also, early on, contact your local DAC (or other permission-giving body for other denominations) and ask if they can give you an early view on the suitability of your church for solar panels.

Think carefully about the best place for solar panels. What about your church hall, or your local school? If your church is listed, or in a conservation area, you will need both planning permission and faculty, so evaluate a range of options for location and design, to help you make the case that the benefit outweighs the harm.

## Call:

Speak up and sign the [Climate Coalition's Time is Now declaration](#), as a church or as an individual. The first thing it calls for is a clean energy revolution.

And then - make the switch. The most important thing your church can do when it comes to energy is to use renewable energy. So our call for action is simple: Make the switch.

If you want to take it further, encourage everyone in your congregation to switch too. Could you run a switching day, like St. John's church in Hoxton?

<https://www.compassionatecommunitieslondon.org.uk/conversations/switch-days>