

How can we make a difference?

How Large is our Environmental Footprint?

How we care for the environment should be a part of all our everyday lives. One way to start thinking about our impact on the environment – our personal footprint – is to carry out an audit of our daily activities to see how we might reduce our effect.



**FOR
YOUR
WORLD**

One of the ways we can do that is by using a footprint calculator. Some of these can be quite complicated but the one produced by WWF is straightforward and will give you some idea about your personal impact.

<http://footprint.wwf.org.uk>



If you want something slightly more sophisticated, then you could use this carbon footprint calculator for individuals and households

<https://www.carbonfootprint.com/calculator.aspx>

When you have worked out your footprint, look at the suggestions below for ways in which you can reduce your environmental impact and care for God's world.

Also, this website provides 50 ideas for shrinking your carbon footprint:

<https://www.climatecare.org/resources/news/50-ideas-shrinking-your-carbon-footprint/>

How Can We Reduce Our Environmental Impact?

Saving Water Protects the Environment and Saves Us Money



By 2040, more than half of our summers are expected to be hotter than the 2003 heatwave, leading to more water shortages and potentially 50-80% less water in some rivers. The average person's daily water use of 140 litres needs to be cut to 100 litres in the next 20 years by more efficient water use in homes and gardens. Leakage from water company pipes needs to be cut by 50%.

Using water efficiently means that we can minimise the amount of water being taken out of our rivers and aquifers, especially as demands are rising. This protects our water resources and the wildlife that depend upon them. As water resources become scarcer, building new infrastructure for augmenting supply becomes increasingly expensive. If we save water that is otherwise wasted, we can offset the need for new infrastructures and reduce pressure on existing ones. Water use is also related to climate change. When we use water, we are using energy, mostly to heat the water. Heating water for use in our homes makes up about 4% the UK's total carbon dioxide emissions. Of course, reducing the amount of hot water you use (through more efficient showers, taps etc) has a significant impact on your personal carbon footprint.

So, what can you do to save water and save money? Here are three tips.

1. Installing simple devices such as water-efficient taps and showers will save both water and energy by minimising the use of heated water. An efficient shower head can reduce water use in a two-person household by 11,000 litres/year and energy costs by £22. Thames Water are giving away – yes, for free – water-saving gadgets. These include more efficient showerheads, tap inserts (that mix air and water saving a litre of water/minute), shower timers and cistern hippos. Go online at <https://watersavingdevices.thameswater.co.uk> and you can order all of these.
2. If you are not on a water meter you may be paying much more than you need for your water. In our home, we have recently had a water meter installed. I have estimated that we will reduce our annual water bill by about 50% - that's a huge saving. Look at this table and see which category you fall into, and compare the figure with what you are paying annually for your unmetered water.
3. Our Eco Church Survey in 2018 found that just over half of the congregation collect rainwater using water butts or grey water for watering the garden, but a third do not. Drainpipe diverter kits are easy to install and all the water you need for your fruit, veg and flowers will be free.

Typical usage	Number of occupants			
	1	2	3	4
Low				
Away from the house most of the day and only use the washing machine occasionally. Take short showers instead of baths.	£167	£229	£284	£337
Average				
Use washing machine and dishwasher most days and take showers with the occasional bath.	£207	£299	£381	£462
High				
Use water frequently throughout the day including daily baths or a power shower. Use washing machine every day and regularly use a sprinkler or hose.	£229	£337	£434	£530

Energy

The growth in the production of renewable energy is remarkable. 10 years ago no one would have believed that in 2020 wind sunlight, water and wood generated 42% of the UK's electricity compared to 41% from gas and coal. There have been periods when over 50% of electricity used in the UK came from renewable sources. What can you do to contribute to this amazing shift?

Renewable and Clean Energy

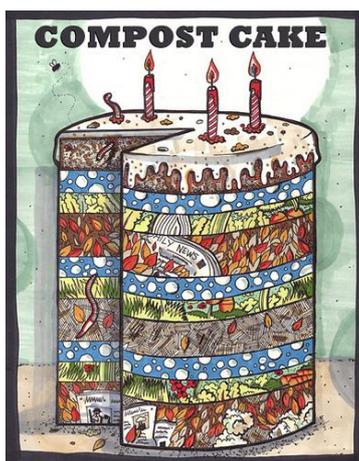
Does your energy supplier offer a 'Green tariff'? Many energy companies are now supplying 100% green electricity to customers as well as investing in new renewable generation. Some of the large suppliers are starting to offer green electricity as standard. And renewable tariffs are now dropping in price so you may only have to pay a little more to know that your electricity is coming from a renewable source which is not contributing greenhouse gases.

Efficient Use of Energy

When you buy new household appliances (if you can't get them second-hand, of course), have a look at the energy and water ratings to make sure they're as efficient as possible. This is fairly easy now, as all products have to state their ratings. Try to buy electrical goods that are rated A or A+.

In the survey of the congregation of Holy Trinity and St Mary's churches we found that nearly 60% of the congregation use a mix of low energy and LED bulbs in their homes; 15% use all LED bulbs. When you next replace your lightbulbs, consider LED bulbs. Lighting accounts for 15 per cent of a typical household's electricity bill. While the upfront cost of LED bulbs is higher, they will last much longer than a standard bulb and use 90% less energy. One 50W halogen bulb will use 91.25kWh/year (electricity cost £13.69/yr), compared with a same-output 5W LED bulb which will use 9.13 kWh (electricity cost £1.37/yr).

Compost is the Chocolate Cake of the Garden



By enlisting help from busy many legged creatures like vegan millipedes and carnivorous centipede to eat your rubbish, you create dark brown, crumbly, rich food for your flowers and vegetables.

Any size compost bin or heap is good. Information about different types of compost bins, and how and where to compost can be found at www.recycleforsurrey.org.uk. This site will also take you through to another website (<https://getcomposting.com>) from whom you can buy a compost bin for as little as £13 including delivery. If you have plenty of room you can use pallets, or you can start small with a plant pot with holes in the bottom, or a heap, just so long as the many legged creatures can climb in, and there is an old cover on the top.

Ingredients

Nitrogen rich greens: vegetable peelings, grass mowing, coffee grounds, plant debris.

Carbon rich browns: crushed Amazon boxes, broken twigs, wood ash & egg shells.

Recipe

Mix greens and browns well. Your compost cake needs free access to the soil at the base, a layer of broken twigs to retain air, then add what is available, as it suits you. Cover your mixture with a bit of old carpet, cardboard or doormat to assist it to warm up. Leave it to bake gently for six months. While it cooks you can start another heap if you like. Please don't put in meat, fish or dairy scraps - they can go in the food waste caddy supplied by Guildford BC - as they may attract rats. Also avoid any plant material that may have been treated with a herbicide or insecticide.



If you are lucky, and live on the chalk, you may get legless lizards, called Slow-Worms, *Anguis fragilis*, to help you. They may live for up to 30 years, eating slugs and snails all the time. The carpet at the top protects them from predators such as cats or foxes.

Making compost is not an exact science, every web-site gives different advice, as do cake recipes, so you will find what suits you. You cannot lose as a composter: you save waste, save money and gain growing material for your plants.

Anne Wright (Holy Trinity Eco Group)

How Eco-Friendly is your Diet?

In the UK the food we eat – growing, producing and importing it – has a massive impact around the world and is responsible for 30% of our CO2 emissions. Large-scale production and distribution processes destroy fragile ecosystems and contribute to climate change.

If you want to reduce your impact on the environment and improve your health, changing the way you eat is relatively easy and something you can do every day.

Use your Loaf!

Follow the LOAF Principles. These have been promoted by Christian Ecology Link (<http://www.christian-ecology.org.uk/loaf-principles.htm>). Loaf stands for

- **Locally produced**
- **Organically grown**
- **Animal friendly**
- **Fairly traded.**

Minimise Waste

Everything you buy has a footprint, so try to choose products that have been sustainably sourced. Look for things with minimal packaging to reduce the amount of waste you're sending to landfill. All Saints Church, Onslow Village has produced an excellent list of shops in Guildford and the surrounding area where you can take empty containers and bottles and refill them with shampoo, cleaning liquids, pasta, pulses, dried fruits, oats, etc.

<https://allsaintschurchgfd.org.uk/news/eco-news/where-to-refill/>

Think Seasons

Look for seasonal produce and don't expect to buy strawberries in the middle of winter. If it's from the UK try to buy locally or – better yet – straight from the farm. Seasonal produce is often tastier and cheaper than alternatives, but it's also more likely to have been grown in a non-intensive way in natural sunlight.

This is a difficult issue, and the fact is that many developing countries rely on export markets for their livelihoods, so if you buy food from overseas, try and support schemes look for the Fairtrade label. During the spring 'food gap', when freshness is scarce and expensive, you may have to source from southern Europe - but 'thus far shall you go and no farther',.

Waste

- Compost. Any natural fibre (cotton, wool, linen) will break down very well. If a garment or rag is really too tatty even for the recycling bin at Tesco's, bung it on the compost. Shredded newspaper is also excellent.
- There is practically no excuse for any sort of cloth to end up in landfill. We read a lot about fast fashion – things being worn once or twice and then thrown away. There are charity shops galore for such items, or the above-mentioned Tesco bin or the compost! Some lingerie shops now send old bras out to developing countries for reuse. Maybe we ought to introduce jumble sales again too.
- It is mainly domestic, farmed meat that produces the carbon and methane problems. Venison, rabbit, pigeon and even squirrel are all lean and very healthy meats for those that can access them.
- We now produce more of our electricity in UK from natural means than from traditional power stations. Great news, but it can be more. While being aware of slick salesmen, consider fitting solar panels.
- Perhaps a more major domestic upheaval, but if you're having new plumbing fitted, or adding an extension, consider a system which uses grey water. This means that all wastewater (with the exception of the toilet and washing up) goes into a separate tank and is then reused to flush lavatories or water the garden. On a simpler note, if you're a bath rather than a shower person, siphon it out of the window and into a water butt for the garden.
- Hybrid (or fully electric) cars have come on by leaps and bounds recently. Next car change, look at one of those options.

With the tip at Slyfield now charging very high prices, consider how stuff can be upcycled. Shred garden waste, reuse wood, pass broken furniture on to a local carpenter or turner. Also – compared with the fossil fuel used in a car journey to the tip – what is wrong with the occasional bonfire -

<https://www.guildford.gov.uk/article/18341/Bonfires-and-smoke> . The ash will benefit the ground too.

Anthony Jacques

Travel Smart

We can't all walk to work, but there are other ways to travel more efficiently. If you can't walk or cycle, can you car-pool? You'll save money that way, too.

If you need to drive, do it efficiently. Around 25% of a car's total emissions are produced when making it, and the other 75% when you drive it, so if you buy a used car you're automatically creating fewer emissions than if you buy new. If you are buying a car, look for one with low emissions – and if you're able to buy an electric car, even better!

Even small things like making sure your tyre pressure's right will save on fuel consumption, too.

We have installed cycle racks outside the church. How about cycling to church next time?

Investing Ethically

The Church of England's specific policies in respect of climate change can be found in this document <https://www.churchofengland.org/sites/default/files/2017-11/Climate%20Change%20Policy%20.pdf>

In this document it states:

Climate change is an urgent ethical issue, and it calls for an urgent response from all parts of society. The responsibility to consider our relationship with God, and to take action in response to climate change, applies to all of us, individually, institutionally, nationally and internationally.

As individuals we each have a personal responsibility to live more sustainable and equitable lives and to challenge ourselves about our patterns of consumption, our direct and indirect use of fossil fuels, and the level of our solidarity with and support for others, particularly the poorest and weakest, including as reflected in national and international governance measures.

As regards the Church of England's National Investing Bodies, they have a responsibility to ensure that their investments are managed in a manner that is aligned with the Church's witness and mission, and to engage as institutional investors with others with a view to persuading them of the need for change.

The actions of the companies in which we invest can affect the quality of the water we drink, the air we breathe, and the food we eat. So how and where we invest our money – whether it is a small or large amount – is important. The money we invest in companies tells the world what kind of firms and activities we approve of and what companies we think are doing business 'the right way'.

For many years now, investors have not invested in companies that produced tobacco, arms and alcohol. Increasingly there has been a move to support disinvestment in carbon-generating industries.

Each person's circumstances will be different, and it is always important to seek advice from reliable sources before making investments. Most of the Parish's investments are guided by the Church of England's investment policies. These, in turn, are informed by the Ethical Investment Advisory Group, which advises the Church Commissioners, and the Church of England Pensions Board amongst others.

The Church Commissioners for England are members of the PRI (Principles for Responsible Investment) Leaders Group. The PRI Group have produced a useful guide to responsible investing. It is called *The investor guide to climate collaboration: From COP26 to net zero*. It can be downloaded from here: <https://www.unpri.org/climate-change/the-investor-guide-to-climate-collaboration-from-cop26-to-net-zero/7236.article>