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You and your energy

WHY?

Energy is always in the news. And it costs us more than just our fuel bills. Carbon dioxide is a major cause of climate change and ocean acidification which also impacts on biodiversity.

Coal, oil and natural gas produce carbon dioxide when burned. In 2019 the world produced around 33 billion tonnes of carbon dioxide from human sources; up by 10 billion tonnes since 2000. 2020 saw a small drop of just 2 billion tonnes due to the Covid pandemic, this saving will be quickly lost as global economies recover. The main contributors are China (despite rapid growth in renewables), India, Europe and the USA. India has very low per capita carbon emissions, but large total emissions due to a population of 1.3 billion people. With increasing wealth, lifestyles will inevitably involve use of more fossil fuels and large increases in the associated emissions.

It's easy to be rendered inactive. We can point the finger at others or feel overwhelmed by the scale of the problem, or point to large populations elsewhere in the world. With a little thought though, we can reduce our energy consumption, reduce our personal carbon impact and save money, without any significant impact on our lifestyles. If you grew up under rationing, many of these adjustments will be second nature to you.

HOW?

CHANGING TECHNOLOGY, CHANGING IMPACT

As our lifestyles change, so do our carbon emissions and it's easy to miss what is happening. One area we may overlook is 'the Cloud'. Automatic backup makes it easy to store far more videos, photos and emails than we need. On 'the Cloud' it is someone else's problem. Would you really fill a room at home with photos and videos which are out of focus, duplicates or that you will never look at again?







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According to the *Financial Times* newspaper in May 2021 the carbon emissions from tech infrastructure and the data servers that enable cloud computing now exceed those of pre-Covid air travel. Microsoft and Google have set targets to be carbon neutral. You can help by regularly deleting things you don't want or need:

https://www.climatecare.org/resources/news/infographic-carbon-footprint-internet/

Watching, listening and leisure habits are changing too with music, films and games now primarily streamed. The Carbon Trust finds that streaming an hour of videos equates to boiling the kettle three times. Perhaps small on an individual level, it is the cumulative change in behaviour that means the economic value of streaming has doubled from 2016 to 2021 and is expected to triple by 2028 to \$224 billion per annum.

Pay attention to the impact of technology use in your lifestyle. You can, of course, also campaign for service providers to take action, invest in renewables and use more efficient technologies:

https://www.carbontrust.com/resources/carbon-impact-of-video-streaming

QUICK WINS AT HOME

The Energy Saving Trust suggests the typical home can save £270 per year, and associated carbon emissions, from some fairly simple, quick wins. Top of the list are using smart heating controls and turning down the thermostat.







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Perhaps most shockingly, 'switching off standby' is third on the list. How many things are left on standby each night, and worse, whilst you are away on holiday? TVs, broadband routers, computer monitors, printers, laptops, games consoles or smart speakers all consume small amounts of energy whilst on standby. Even chargers plugged in but not in use consume energy (and the life of the charger is shortened). <u>https://energysavingtrust.org.uk/hub/quick-tips-to-save-energy/</u>

Heating and hot water is an obvious target for savings:

- Turn down room thermostats or thermostatic valves on individual radiators on a room by room basis. Turn the heat off completely when the room is empty or if you are away on holiday (provided of course it's not going to be below freezing). Smart controls allow you to make similar changes through an app including when you are away from home.
- Don't overheat hot water cylinders and boilers by using their thermostat controls too.

https://energysavingtrust.org.uk/advice/thermostats-and-heating-controls/

KEEP THE HEAT IN AND THE COLD OUT

Insulate, reduce draughts and double glaze everywhere you think might be losing heat: the walls, the roof, the hot water tank, pipes and the loft hatch are first places are all candidates. It keeps the heat in during the winter and out during the summer. See the resources in the buildings section of the Eco Church app and the Energy Saving Trust:

https://energysavingtrust.org.uk/advice/roof-and-loft-insulation/

https://energysavingtrust.org.uk/advice/draught-proofing/







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WHAT ABOUT APPLIANCES?

Tumble dryers and high temperature washing are costly both financially and in carbon emissions. Dry clothes outside if possible. Can you wash your clothes less often or at a lower temperature?

Use the dishwasher on an 'eco' setting only and only when full.

Don't put more water in the kettle than you need – it is one of our most electricity intensive appliances.

Buy A+ rated when replacing, or buying new, electrical appliances:

https://energysavingtrust.org.uk/new-year-new-tv-how-to-choose-energy-efficientappliances/

SWITCH TO RENEWABLE ENERGY

By choosing a green energy provider and reducing domestic energy consumption, we can save both the planet and our pounds. Our 'Buying Greener Energy' paper aimed at churches is also useful for homes.

Read 'Lower Carbon Energy Options' from our buildings section to think about whether a renewable energy option might work for you at home. The Energy Saving Trust give an overview here too:

https://energysavingtrust.org.uk/energy_at-home/generating_renewable_energy/



