

Creation Matters

Newsletter of the Southampton Eco District

Energy tracking at Romsey Methodist Church.

Adrian Frost, of Climate Stewards UK, gave us a pathway towards Carbon Net Zero at our Creation Mondays webinar in December. He explained how the 360°Carbon

[Climate Stewards](#)

The slide features a dark green background with a faint globe graphic. The title 'What next?' is in white. A list of six items, each preceded by a checkmark, is shown in yellow text. In the top right corner, there is a small video inset showing a man speaking. The bottom right corner contains the 'Climate Stewards' logo and a timestamp '2023-12-11 19:50:24'.

- ✓ Carbon footprint audit
- ✓ Environmental policy
- ✓ Environmental action plan with targets
- ✓ Energy Audit
- ✓ Monitoring reductions year on year
- ✓ Communication & advocacy

[360oCarbon](#)

[SDMC on YouTube](#)

website can be used to help churches estimate their carbon footprint, suggesting that progress is monitored on an annual basis. Adrian's talk is available on the Southampton District's [YouTube](#) channel.



A Rocha UK's Eco Church

Active Hope

Salisbury Methodist Church

Salisbury Methodist Church (SMc) have taken many steps over recent years to improve their energy efficiency and to follow the overall Eco Church pathway. This led to a Silver award in autumn 2023.

One step has been the replacement of inefficient filament bulbs by lighting using LED panels;

this can reduce the energy required by about 90%

SMc's energy has been greened for some time with the early installation of 36 solar panels on the south facing roof of the hall. The favourable Feed-in Tariff (FIT) has come to an end, and the income from exported energy will be under the Smart Export Guarantee (SEG). These differ between suppliers, with rates varying for 1 through 4 to 15p/kWh.

So in the future, the present solar generation, and any extension does point to energy storage options, typically a lithium ion or lithium iron phosphate battery.



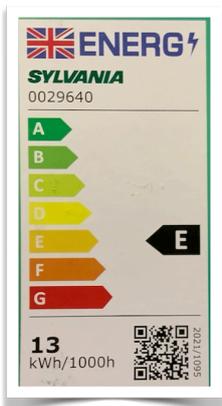
Installation of LED panels.

The phasing out of inefficient lighting, methods, like incandescent filament bulbs and fluorescent tubes, is continuing with regulations for new products likely to require 120 lumens/watt (lm/W) shortly and 140lm/W by 2027. An incandescent 100 W bulb provides ~15lm/W.

Labelling is on a scale of A (very efficient) to G. LED bulbs I bought in December were classified as E rated providing 117lm/W and is within the allowance for domestic lighting.



Solar energy from panels can only be used if the demand is simultaneous to the generation. Much consumption though is when it is dark and/or cloudy and so storage is essential to be able to use the energy on-site. In terms of greenness the energy is generated and whether the user of it is a church of any grid user is less important. In terms of church sustainability, it is important to understand the energy use to assess whether the battery installation would be afford a significant gain.



Recent developments at Sec



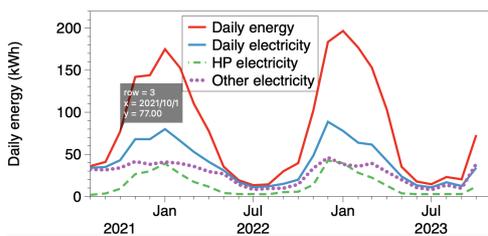
A condensing boiler captures much of the heat in the exhaust gas from a boiler and improves the efficiency by ~11%. Gas boilers can thus reach over 90% efficiency.

The gas central heating (100 kW power rating) dated from 1992 has now been replaced by one by which the gas consumption can be matched to the current demand. It is also a condensing system capable of an efficiency of over 90%. In other words, about 110% of the energy demand for heat is required to provide it.

Improvements on this are underway with the installation of a 12 kW air source heat pump (ASHP) installed outside the church building. Heat pumps squeeze heat from the outside air into a building like a reversed refrigerator. Electricity is needed to transfer the heat but that is only a fraction of the energy delivered. About 30% of the energy desired for heating is required to drive the heat pump.



An all-electric house with an ASHP



Heat pumps will not suit every location and building use, but they deserve serious consideration. As this domestic example shows, an ASHP can greatly reduce the energy required to provide space heating and hot water. Savings on other electricity uses, such as lighting, fridges, food and drinks preparation and audio-visuals will need other developments.

My thanks are to **Doug Buttiner**, for the news from Salisbury Methodist Church.

What's going on?

Creation Mondays

Creation Mondays webinars

Creation Monday webinars are scheduled on Monday evenings from 7 pm to 9 pm. The program is available on Eventbrite. Please book in advance to receive details of the appropriate link on Zoom. There is plenty of time for small group discussions following the main address

Evangelism & Growth

Holly Adams

The next webinar is to be given on Monday, January 22 by Holly Adams who is the Evangelism and Contemporary Culture Officer of the Evangelism and Growth team of the Methodist Church. Holly's presentation is entitled: *'Integrating Creation Care and Evangelism: Good news for people and the planet'*

This webinar will help us understand what people are expecting of us as Christians, and how we can talk about evangelism and climate issues with integrity.

What has been achieved at COP28?

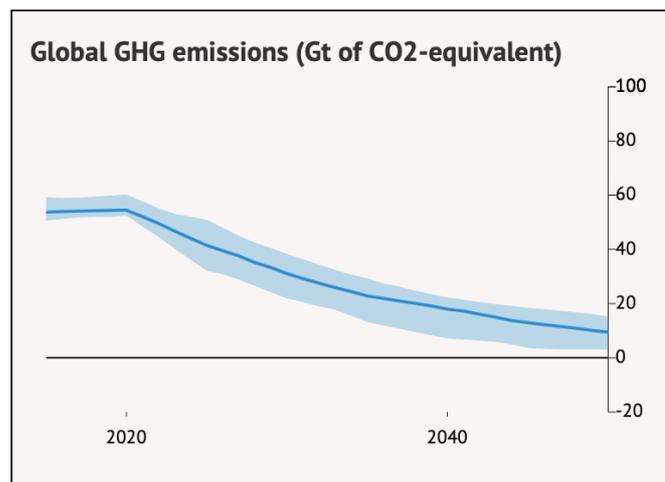
COP28 has just ended, and the consensus of all countries was to move away from the use of fossil fuels, and keep the target of a global temperature rise of 1.5°C from pre-industrial levels by 2100. Carbon Brief have since published estimates of how fast the world needs to reduce greenhouse gas emissions to achieve that. A dramatic, immediate reduction is necessary, and even then it will involve an overshoot to -1.57°C by 2040, returning to below 1.5°C from 2060. We need to get our skates on!!!



Creation Matters is the newsletter of the Southampton **Eco District group:**

To order your own copy and to provide news items contact

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John Evans, Eco District champion