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| **NET CARBON ZERO CHECKLIST** | | | | | | |
| **NOTES:**   * ***Please use this checklist alongside the*** [***Net Carbon Zero guidance***](http://www.methodist.org.uk/property/netzero)*. It is a tool for reviewing the carbon emissions of your church building(s) and identifying actions that can be taken to help your church reduce its energy use and associated carbon emissions.  To view the guidance, please refer to* [*www.methodist.org.uk/property/netzero*](http://www.methodist.org.uk/property/netzero)*.* * ***To use this checklist tool****, complete the tick boxes in each section, before identifying which actions you will take as a church. The tool can be printed off or completed by clicking and typing into the form. We suggest you review progress towards implementing these actions at a church council meeting.* * ***If you require any support****, please contact your District Property Secretary or  the* [*Property Support team*](https://www.methodist.org.uk/for-churches/property/property-support/)*.* * ***Please note:*** *many of these suggestions require consent and it is recommended to seek advice as early as possible.  If the church is of historic or architectural interest, you will need to seek advice from a professional and the*[*Connexional Conservation Officer*](mailto:mailto@conservation@methodistchurch.org.uk) *before work commences.* | | | | | | |
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| **STEP 1 – ASSESS YOUR BUILDING** | | | | | | |
| The first step is assess the building in order to understand its performance and energy usage.  [**360 Carbon**](https://360carbon.org/en-gb/) is an online tool that can calculate the carbon footprint for the building. You will need:   1. Utility bills for the previous year 2. Floor area for the church 3. Average occupancy of the building | | Already done /  up to date | Not applicable | Not a priority right now | Explore further / get advice | Priority |
| **1.** | Have you calculated the carbon footprint for the building? |  |  |  |  |  |
| **Manses** | | | | | | |
| **2.** | Have you calculated the carbon footprint for a manse? |  |  |  |  |  |
| **3.** | Do you have a current Energy Performance Certificate (EPC)? |  |  |  |  |  |
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| **STEP 2 – TAKE FIRST STEPS** | | | | | | |
| These are actions that nearly all churches can benefit from, even those churches that might only be used only on a Sunday. They are relatively easy, with relatively fast pay back. They are a good place for churches to start when trying to move towards net zero. | | Already done /  up to date | Not applicable | Not a priority right now | Explore further / get advice | Priority |
| **The Building** | | | | | | |
| **1.** | Attend to maintenance issues as indicated from annual inspection and/or quinquennial inspection. |  |  |  |  |  |
| **2.** | Maintain the roof and gutters, to prevent damp entering the  building and warm air escaping. |  |  |  |  |  |
| **3.** | Create a plan for servicing and maintaining the boilers or electric heaters regularly. |  |  |  |  |  |
| **4.** | Fix any broken window panes\* and make sure opening  windows shut tightly, to reduce heat loss. |  |  |  |  |  |
| **5.** | Insulate around heating pipes to direct heat where you want  it; this may allow other sources of heat to be reduced in this  area. |  |  |  |  |  |
| **6.** | If draughts from doors are problematic, draught-proof the  gaps or put up a door-curtain.\* |  |  |  |  |  |
| **7.** | Consider using rugs/floor-coverings (with breathable  backings) and cushions on/around the pews/chairs. |  |  |  |  |  |
| **8.** | Create a plan for servicing and maintaining the boilers or electric heaters regularly. |  |  |  |  |  |
| **Heating and Lighting** | | | | | | |
| **9.** | Switch to 100% renewable electricity and ‘green’ gas. |  |  |  |  |  |
| **10.** | If your current appliances fail, then replace with A+++ appliances. |  |  |  |  |  |
| **11.** | Set a schedule and plan to service and maintain the boilers or electric heaters been regularly. |  |  |  |  |  |
| **12.** | Match heating settings better to usage, so you only run the  heating when necessary.\* |  |  |  |  |  |
| **13.** | If you have water-filled radiators, try turning off the heating  15 minutes before the service ends. |  |  |  |  |  |
| **14.** | Replace lightbulbs with LEDs, where simple replacement  is possible. |  |  |  |  |  |
| **15.** | Add timings or motion sensors so that the lighting will automatically switch off in areas that are unoccupied. |  |  |  |  |  |
| **16.** | Add labels for switches and put up signage to remind people to turn the lights off when not in use.\* |  |  |  |  |  |
| **17.** | Replace floodlights with new LED units. |  |  |  |  |  |
| **18.** | Make sure that windows and lights are clean. |  |  |  |  |  |
| **19.** | If you have radiators, add a glycol based ‘anti-freeze’ to your  radiator system and review your frost setting. |  |  |  |  |  |
| **20.** | If you have internet connection, install a HIVE- or NEST-type  heating controller, to better control heating |  |  |  |  |  |
| **People and Policies** | | | | | | |
| **21.** | Calculate your carbon footprint each year using [360 Carbon](https://360carbon.org/en-gb/), as part of your annual property checks and communicate the results to your circuit and district. |  |  |  |  |  |
| **22.** | Appoint an Net Carbon Zero Champion who tracks bills and encourages people to turn things off when not needed. |  |  |  |  |  |
| **23.** | Write an energy efficiency procurement policy; commit to  renewable electricity and A+++ rated appliances. |  |  |  |  |  |
| **24.** | Consider moving church council meetings elsewhere during cold months, rather than running the church heating. |  |  |  |  |  |
| **Manses** | | | | | | |
| **25.** | Attend to maintenance issues as indicated from annual inspection and/or quinquennial inspection. |  |  |  |  |  |
| **26.** | Maintain the roof and gutters, to prevent damp entering the  building and warm air escaping. |  |  |  |  |  |
| **27.** | Fix any broken windows and make sure opening  windows shut tightly, to reduce heat loss. |  |  |  |  |  |
| **28.** | Insulate around heating pipes to direct heat. |  |  |  |  |  |
| **29.** | Encourage the occupants to switch to 100% renewable electricity and ‘green’ gas. |  |  |  |  |  |
| **30.** | Match heating settings better to usage, so you only run the  heating when necessary. |  |  |  |  |  |
| **31.** | Replace lightbulbs with LEDs, where simple replacement  is possible. |  |  |  |  |  |
| **32.** | If you have internet connection, install a HIVE- or NEST-type  heating controller, to better control heating. |  |  |  |  |  |
| **33.** | If the current appliances fail, then replace with A+++ appliances. |  |  |  |  |  |

\* *If the church is of historic or architectural interest, you will need to seek advice from a professional and the*[*Connexional Conservation Officer*](mailto:mailto@conservation@methodistchurch.org.uk) *before works commence.*

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| **STEP 3 – MAKE A BIGGER IMPACT** | | | | | | |
| These are actions with a reasonably fast pay back for a church with medium energy usage, used a few times a week. Most actions cost more and require more time and thought. Some require some specialist advice and/or installers. They are often good next steps for those churches with the time and resources to move on further towards net zero. | | Already done /  up to date | Not applicable | Not a priority right now | Explore further / get advice | Priority |
| **The Building** | | | | | | |
| **1.** | If you have an uninsulated, easy-to-access roof void, consult with your Quinquennial Inspector about insulating the roof void(s).\* |  |  |  |  |  |
| **2.** | If you have problematic draughts from your doors, and a door curtain wouldn’t work, consider installing a secondary glazed door within your porch, or even a draught-lobby.\* |  |  |  |  |  |
| **3.** | Consider creating one or more smaller spaces for smaller events that can be heated separately.\* |  |  |  |  |  |
| **4.** | Consider fabric wall-hangings or panels, with an air gap behind, as a barrier between people and cold walls.\* |  |  |  |  |  |
| **Heating and Lighting** | | | | | | |
| **5.** | Learn how your building heats/cools and the link to comfort, by using data loggers with good guidance. |  |  |  |  |  |
| **6.** | Improve your heating zones and controls, so you only warm the areas you are using. |  |  |  |  |  |
| **7.** | Install TRVs on radiators in meeting rooms & offices, to allow you to control them individually. |  |  |  |  |  |
| **8.** | Consider under-pew electric heaters and/or infra-red radiant panel heaters.\* |  |  |  |  |  |
| **9.** | If you have radiators, install a magnetic sediment “sludge” filter to extend the life of the system. |  |  |  |  |  |
| **10.** | Consider thermal and/or motion sensors to automatically light the church when visitors come in, for security lights, and for kitchens and WCs. |  |  |  |  |  |
| **11.** | Install an energy-saving device such as [Savawatt](https://savawatt.co.uk/) on your fridge or other commercial appliances. |  |  |  |  |  |
| **12.** | Get your energy supplier to install a smart meter, to better measure the energy you use. |  |  |  |  |  |
| **People and Policies** | | | | | | |
| **13.** | Vary service times with the seasons, for example, in winter meet early afternoon when the building is warmer. |  |  |  |  |  |
| **Manses** | | | | | | |
| **14.** | If you have an uninsulated, easy-to-access roof void, consider insulating the roof void(s).\* |  |  |  |  |  |
| **15.** | Consider adding a door curtain to reduce draughts. |  |  |  |  |  |
| **16.** | Learn how the manse heats/cools and the link to comfort, by using data loggers with good guidance. |  |  |  |  |  |
| **17.** | Improve your heating zones and controls, so you only warm the areas you are using. |  |  |  |  |  |
| **18.** | If you have radiators, install a magnetic sediment “sludge” filter to extend the life of the system. |  |  |  |  |  |
| **19.** | Get your energy supplier to install a smart meter, to better measure the energy you use. |  |  |  |  |  |

\* *If the church is of historic or architectural interest, you will need to seek advice from a professional and the*[*Connexional Conservation Officer*](mailto:mailto@conservation@methodistchurch.org.uk) *before works commence.*

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| **STEP 4 – DOWN TO NET ZERO** | | | | | | |
| These are bigger, more complex, projects, which only busy churches with high energy use are likely to consider. They could reduce energy use significantly, but require substantial work (which itself has a carbon cost) and have a longer payback. They all require professional advice and Consent. | | Already done /  up to date | Not applicable | Not a priority right now | Explore further / get advice | Priority |
| **The Building** | | | | | | |
| **1.** | Draught-proof windows.\* |  |  |  |  |  |
| **2.** | If you have an open tower void, insulate or draught-proof the tower ceiling.\* |  |  |  |  |  |
| **3.** | Double-glaze or secondary-glaze suitable windows in well-used areas such offices, vestries and halls.\* |  |  |  |  |  |
| **4.** | Internally insulate walls in well-used areas such offices, vestries and halls.\* |  |  |  |  |  |
| **5.** | If you have pew platforms, consider insulating under the wooden platform with breathable materials.\* |  |  |  |  |  |
| **6.** | Reinstate ceilings, and insulate above.\* |  |  |  |  |  |
| **7.** | If you are reroofing anyway, then insulate the roof, if appropriate for your roof.\* |  |  |  |  |  |
| **8.** | If you have an uninsulated wall with a cavity (typically build 1940 onwards), then insulate the cavity.\* |  |  |  |  |  |
| **9.** | If the building is regularly used & suitable, such as a church hall, consider appropriate external insulation or render, appropriate for the age and nature of the building.\* |  |  |  |  |  |
| **Heating and Lighting** | | | | | | |
| **10.** | Install a new LED lighting system, including all harder-to-reach lights, new fittings & controls.\* |  |  |  |  |  |
| **11.** | Install solar PV, if you have an appropriate roof and use sufficient daytime electricity in the summer.\* |  |  |  |  |  |
| **12.** | If there’s no alternative that does not run on fossil-fuels, then replace an old gas boiler or an oil boiler with a new efficient gas boiler.\* |  |  |  |  |  |
| **13.** | If yours is a well-used church which you want to keep warm throughout the week, then consider an air or ground source heat pump.\* |  |  |  |  |  |
| **14.** | If you are doing a major reordering or lifting the floor anyway, and yours is a very regularly used church, then consider under-floor heating. \* |  |  |  |  |  |
| **Church Grounds** | | | | | | |
| **15.** | If you have car parking that is sufficiently used, EV charging points for electric cars can work out cost neutral or earn a small amount of income for the church. |  |  |  |  |  |
| **Manses** | | | | | | |
| **16.** | Consider selling the manse for a more energy efficient manse. |  |  |  |  |  |
| **17.** | Draught-proof windows and doors. |  |  |  |  |  |
| **18.** | Double-glaze or secondary-glaze suitable windows. |  |  |  |  |  |
| **19.** | Internally insulate walls. |  |  |  |  |  |
| **20.** | If you are reroofing anyway, then insulate the roof, if appropriate for your roof.\* |  |  |  |  |  |
| **21.** | If you have an uninsulated wall with a cavity (typically build 1940 onwards), then insulate the cavity. |  |  |  |  |  |
| **22.** | Consider appropriate external insulation or render, appropriate for the age and nature of the building. |  |  |  |  |  |
| **23.** | Install a new LED lighting system and new fittings & controls. |  |  |  |  |  |
| **24.** | Install solar PV, if you have an appropriate roof and use sufficient daytime electricity in the summer. |  |  |  |  |  |
| **25.** | If there’s no alternative that does not run on fossil-fuels, then replace an old gas boiler or an oil boiler with a new efficient gas boiler. |  |  |  |  |  |
| **26.** | If you have a driveway consider installing a EV charging point for electric cars. |  |  |  |  |  |

\* *If the church is of historic or architectural interest, you will need to seek advice from a professional and the*[*Connexional Conservation Officer*](mailto:mailto@conservation@methodistchurch.org.uk) *before works commence.*

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| **27.** | **Further Comments** |
|  | *Please use this section for any additional comments not covered in the pro-forma* |
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