

10 ENVIRONMENTAL AUDITS

Managing Trustees should consider the Methodist Conference 2009 report, *Hope in God's Future: Christian Discipleship in the Context of Climate Change*, and respond accordingly

<i>A list of issues that could be considered in an environmental audit (by no means an exhaustive list):</i>	Yes	No	Intend to do within the next 12 months
<p>1.0 Carbon footprint</p> <p>Have you worked out your carbon footprint?</p> <p>It can be an interesting exercise to work out your own 'carbon footprint', ie the amount of carbon dioxide (CO₂) you emit into the atmosphere annually (carbon dioxide being the primary problem in global warming).</p> <p>Full details including calculations can be found on www.carbonfootprint.co. Although this calculator is intended for you as an individual, rather than your church, you may find it helpful.</p> <p>The UK government aspires to reduce CO₂ emissions by 34% by 2020 – something in which we all need to play a part. 80% of CO₂ emissions are from industrialised countries.</p> <p>Are you trying to reduce the amount of your 'footprint'?</p>			

<i>A list of issues that could be considered in an environmental audit (by no means an exhaustive list):</i>	Yes	No	Intend to do within the next 12 months
<p>2.2 Investigate use of renewable energy (see information leaflet on renewable energy):</p> <ul style="list-style-type: none"> • Solar collectors to provide water heating (probably the best option) • Mico-generation (whereby electricity generated from renewable sources is fed back into the national grid, and you are reimbursed accordingly by the electricity company)? <p>Photovoltaic panels – see the Technical Guidance sheet for specific requirements – planning, lease documentation etc.</p>			
<p>2.3 Lighting Have you:</p> <ul style="list-style-type: none"> • Fitted energy-efficient lighting units where possible and explored the latest options? Energy-efficient lighting units are more expensive but last up to 8 times longer; use much less electricity (as little as 20% compared to traditional bulbs) and are available in a variety of designs. <p>Do you</p> <ul style="list-style-type: none"> • Ensure unnecessary lighting is switched off (use 'please switch off the lights' labels) • Use time-delay switches, or movement-sensitive sensors for lighting? 			
<p>2.4 Heating Have you:</p> <ul style="list-style-type: none"> • Ensured that room thermostats are properly adjusted, and are in suitable locations • Replaced outdated boilers (many older gas boilers are only 50% efficient or less; new condensing boilers are 80% - 90% efficient) • Fitted thermostatic radiator valves to all radiators 			

<i>A list of issues that could be considered in an environmental audit (by no means an exhaustive list):</i>	Yes	No	Intend to do within the next 12 months
<p>2.4 Heating continued</p> <ul style="list-style-type: none"> • Installed different heating zones to ensure that only parts of the church (eg a meeting room) need to be heated rather than the whole building • Installed more sophisticated heating controls, eg seven-day programmers and electronic programmers which are accurate to the minute (older programmers are sometimes accurate to only a couple of hours) • Ensured that your annual service contract includes comment/discussion about energy issues? 			
<p>2.5 Insulation</p> <p>Have you:</p> <ul style="list-style-type: none"> • Insulated all loft spaces, above accessible ceilings etc, with up to 200mm of insulation (take care: obtain advice from an architect or surveyor to ensure adequate ventilation to prevent condensation, check that electricity cables are suitable protected, etc) • Insulated hot and cold water pipes, where passing through unheated spaces • Fitted draught seals around all external doors and windows, also between heated and unheated rooms (ensure that seals do not make it difficult for elderly people and children to open doors) • Provided draught lobbies to entrance doors which are likely to be opened on a regular basis during the use of the building (to minimise heat loss) • Added insulation below suspended floors (but ensure adequate ventilation) • Installed cavity wall insulation; solid walls (generally those built before 1930) can have insulation added to the inside face, but this must be carefully designed to avoid condensation occurring (in housing, about 35% of the heat loss is through walls)? 			

<i>A list of issues that could be considered in an environmental audit (by no means an exhaustive list):</i>	Yes	No	Intend to do within the next 12 months
<p>2.6 Double glazing: Have you considered double-glazing, having regard to the following:</p> <ul style="list-style-type: none"> • Unless your church is used for several hours every day, double-glazing is unlikely to be cost effective • Double-glazing will reduce draughts, but is unlikely to save any appreciable energy • UPVC is not an environmentally suitable material (see below-timber is better) • Most double-glazing frames need very careful design to be visually suitable for churches • Most double-glazing units last only 15 to 20 years, after which expensive renewal will probably be required? 			
<p>2.7 Bulk Energy Purchase</p> <p>Have you considered negotiating bulk energy purchase, which can result in considerable savings?</p>			

<i>A list of issues that could be considered in an environmental audit (by no means an exhaustive list):</i>	Yes	No	Intend to do within the next 12 months
<p>3.0 Building Work (the building industry is responsible for around 40% of total UK CO2 emissions) Check with your architect or surveyor:</p> <ul style="list-style-type: none"> • To ensure that the design brief includes for an energy and environmental audit • To ensure that materials are from a sustainable source where possible: several products – eg timber – are now marked with approved schemes • To use materials from a local source, and which support local industry • To avoid materials that require energy-intensive industrial production, eg aluminium and steel • To try and avoid situations where the use of sustainable materials (eg timber) involves the consumption of energy by having to be transported over long distances). • To use recycled materials where possible • To use water-based paints (now usually also suitable for external use) • To try and avoid chemical treatments for woodworm, dry rot and damp-proof courses (alternative solutions are often now available). 			
<p>4.0 Fair-trade products Do you use fairly traded food and other products? (The Fairtrade Foundation, Traidcraft and Tearcraft often have local reps who can come and talk to a local church)</p>			

<i>A list of issues that could be considered in an environmental audit (by no means an exhaustive list):</i>	Yes	No	Intend to do within the next 12 months
5.0 Cleaning materials Many cleaning materials contain dangerous chemicals – do you try and use ‘green’ products?			
6.0 Fridges, freezers and dishwashers Recent models are much more energy-efficient than older ones – have you checked their energy rating? Remember that proprietary drink-vending machines can have a high electricity consumption. Avoid if possible.			
7.0 Waste and Recycling Do you: <ul style="list-style-type: none"> • Recycle as much glass, paper and plastic as possible? • Use recycled paper? • Use electronic communication (eg emails) rather than letters and envelopes • Reuse plastic bags when possible – avoid being given new ones while shopping • Avoid disposable cups and plates etc (for ensure they are recycled) • Try to compost vegetable waste • Avoid care journeys to recycling sites • Use rainwater from downpipes for watering soft landscaping; avoiding mains water where possible • Use rainwater harvesting for flushing WCs? Remember that water from wash basins etc can sometimes be recycled and used as ‘grey’ water for flushing WCs.			

<i>A list of issues that could be considered in an environmental audit (by no means an exhaustive list):</i>	Yes	No	Intend to do within the next 12 months
<p>8.0 External areas (churchyards etc) Do you have an ecological policy for these areas, eg:</p> <ul style="list-style-type: none"> • No use of pesticides • Encourage wildlife, etc • Have a compost area (see also 'waste' section earlier) 			
<p>9.0 Communication and PR Many people are now concerned about climate change and environmental issues – do you publicise what you do to help the environment? Do you put information in your church magazine, discuss issues in junior church, and contact the local newspaper.</p>			
<p>10.0 Transport This is one of the most difficult areas to tackle, particularly for older people and in rural areas.</p> <ul style="list-style-type: none"> • Do you try and: • Avoid the use of cars – or share car journeys • Travel by public transport or cycle – even better, walk • Avoid or rearrange meetings where people have to travel by car from a wide area? <p>Transport is the only sector of the UK economy where CO2 emissions have risen over the last 15 years; the average emission per car per year is nearly 2 tonnes of CO2.</p>			

Please remember that building work at your church may require formal consent from your District and/or Support Services in Manchester. If your church is a listed building, any alteration to the building or fittings will require formal consent. If your church is in a conservation area, any change to the exterior will require consent. Most of the work will also require building regulations consent from your local authority. External changes may also need planning permission.

References

Methodist Church: www.methodist.org.uk (type 'environmental policy' in search box to see the *Environmental Policy for the Methodist Church*)

Church of England: [www.churchcare.co.uk/shrinking-the-](http://www.churchcare.co.uk/shrinking-the-footprint)

footprint Operation Noah website: www.christian-ecology.org.uk/noah/

Methodist/United Reformed Church Environment Network (Creation Challenge): www.creationchallenge.org.uk

Eco-congregation: www.ecocongregation.org (particularly module 7: *Greening the cornerstone*)

Dept of Trade & Industry (dti)

Low Carbon Buildings grant programme: tel helpline: 0800 915 7722
www.lowcarbonbuildings.org.uk

Organisations able to offer help on obtaining the best energy tariff