

St. Aidan's Episcopal Church, Ann Arbor, MI Stewardship Audit

Introduction

Welcome to the Stewardship Section of the Audit process. This section provides you with the opportunity to learn about what you are already doing – and what opportunities exist – in the following areas:

- Energy
- Food
- Water
- Waste
- Toxins
- Grounds Maintenance
- Transportation

Taking the following steps will ensure the Stewardship Audit process is an effective one for your congregation:

- 1. Make sure your Team has both the Stewardship Audit and Stewardship Requirements documents in front of them when they work on the Audit.
- 2. Complete the Audit one section at a time. For instance, answer the questions **and** analyze the results for Energy before moving to Food. We've provided the audit in separate sections to make this easier.
- 3. For each section, read the Requirements for that topic to become familiar with the best practices, then answer the Audit questions, and finally, identify the priorities you will incorporate into your Action Plan.

NOTE: Many of the Audit questions focus on building operations, and will require you to obtain information from the Buildings and Grounds committee and/or from facilities maintenance staff.

If tackled all at once, this audit will take approximately 2-3 hours to complete, and we recommend that everyone helping with the audit be made aware of this beforehand. You may wish to split up the audit into its 7 sections and have subcommittees tackle each one; however, keep in mind that buildings and grounds personnel may not wish to be contacted separately by 7 different people, and that a more streamlined approach may be needed to make the process as efficient and sensitive as possible for those personnel.

Energy

Energy usage represents the largest negative environmental impact and the second highest fixed cost for religious institutions. As energy costs continue to increase, energy conservation practices offer an opportunity to make wise environmental decisions that are also good for your budget. The following questions are designed to help your institution understand your energy usage and identify areas for improvement.

1. Energy audits help to identify areas within your building where you can achieve better energy efficiency. Has your institution conducted an energy audit within the past five years to identify opportunities for energy conservation? **No.**

If yes, what aspects of energy usage/conservation did this audit address? For instance, temperature control, lighting, etc.

If not, are you aware of organizations through which you can conduct an audit in the coming year? Yes.

- 2. The first step towards better energy conservation is monitoring. Does your institution currently monitor energy usage through an excel spreadsheet, the Portfolio Manager tool through Energy Star, or some other means? Please describe. **No.**
- 3. Using programmable thermostats properly, particularly by programming temperature setbacks when the building is not in use, cuts energy costs significantly. Are programmable thermostats used to regulate temperature in your facilities? **Yes.** If yes:
 - Please list the level to which temperatures are set back/up when your facility is not in use, compared with operating temperature. For instance: in winter, setbacks to 55 degrees, with operating temperature of 68 degrees. Lounge and upper sanctuary 58 night and 66 day. Nursery and youth room 60 night and 70 day. Office and lower sanctuary 58 night and 68 day.
 - Is the thermostat programmed according to building usage? Yes.
 - Are program settings checked and adjusted (if necessary) at least once every 2 months? **Yes.**
- 4. How many heating/cooling zones does your building have, and are there ways to utilize these zones more efficiently? **3 zones. We do the best we can but each zone covers lots of area.**
- 5. Are meetings and events scheduled in accordance with energy-efficient building usage? For instance, are smaller meetings held in smaller rooms that use fewer lights and take less energy to heat/cool? Please describe. **Yes.**
- 6. Does your institution reduce electricity usage through any of the following lighting activities?
 - Compact fluorescent light bulbs (CFLs), which use ¼ of the energy of an incandescent light bulb Yes, have replaced virtually all incandescent bulbs with CFLs.

- T-8 or T-5 tubular fluorescent lighting, which use ¹/₄ less energy than T12 bulbs **Replacing T-12 fixtures with T-8 as they fail. 2 fixtures so far.**
- Light sensors in areas where lights are often left on Yes for external lights.
- LED Emergency Exit signs, which use 2 watts in total as compared with two 15 watt incandescent bulbs Yes and also have glow in the dark exit signs that use no power. Recently replaced, rewired, and updated all exit lights.
- Additional energy-efficient lighting (please describe): Sign, landscape, and parking lot lights are on timers and/or daylight sensors. Parking lot lights use halogen bulbs.
- 7. Energy Star appliances use 10-50% less energy and water than their conventional counterparts. Does your institution have an Energy Star purchasing policy in place for new appliances? **No, but we always buy Energy Star appliances.**
- 8. A common myth is that it takes more energy to turn electronic equipment off and on than it does to keep it running all the time. In fact, turning equipment off not only saves energy, but also maintains the health of the appliance. Does your institution shut off all electronic appliances, including computers, overnight? **Yes.**
- 9. When computers, copiers and other equipment are used intermittently throughout the day, does your institution use 'standby' or 'energy saver' mode to save energy? *Note: this setting must be triggered manually or programmed in order to take effect even if the appliance is labeled as an energy saver model.* Yes.
- 10. Refrigerators made before 2001 use more energy than refrigerators made afterwards. Does your institution use refrigerators that were made before 2001? **No.**
- 11. Religious institutions often have more than one refrigerator, each of which is only partially filled. Consolidating and turning off excess refrigerators can save significant energy. Are one or more refrigerators/freezers kept on all the time but not kept full? Are there opportunities to consolidate the contents of two or more refrigerators into one unit? Please describe. We have 2 refrigerators purchased within the last year replacing older units. We did an efficiency analysis and decided to upgrade even though the older units were still working fine. We considered consolidating to one but that was determined to be infeasible. We also have two mini-fridges.
- 12. A suitable hot water setting, particularly for institutions that do not use water frequently, is 110 degrees F. Heaters set higher than 120 degrees waste significant amounts of energy. At what temperature is your hot water heater set? The water heater is set pretty high due to the long travel distance to sinks.
- 13. The typical house of worship has enough air leaks to equal several open windows. Are there areas of the building in need of insulation or weather-stripping such as around doors, and around/in between windows? Please describe. We have upgraded weather-stripping in the past but there are some doors that need attention again. Windows are mostly old single-pane metal-frame but are in pretty good shape.
- 14. Leaving air conditioning units in windows as the weather gets colder represents a significant air leak. Are air conditioning window units left in the windows during winter? We remove window air conditioners each year.

- 15. Does your institution use/purchase renewable energy? Please describe. No.
- 16. Does your institution encourage members to conserve energy? If yes, please describe these activities. Yes. Conservation is a major theme in everything we do. It has been covered in sermons and in Christian Education.

In completing this area of the Audit, please record the 5-6 top ideas or priorities for action which you identified:

a. Weather-stripping for doors.

b. Improve windows by adding insulating blinds or replacing single-pane glass with dou ble-pane.

c. Continue replacing flourescent fixtures with more efficient fixtures.

d. Encourage members to utilize shades to keep out the sun in summer and to keep in the heat in winter.

- e. Investigate use of room air conditioning units in order to improve efficiency.
- f. Increase education and encouragement on energy conservation.

Food

Scientists have agreed that food choices are among the most important environmental choices made by the average US/Canadian citizen. From vegetarian meals to Fair Trade coffee to organic produce, there are many ways to purchase food that both delights the palate and is good for your conscience. The following questions are designed to help your institution understand your food consumption and identify areas for improvement.

- 1. Serving fruits and vegetables at refreshment hour encourages members to eat more healthfully. Does your institution serve fruits and vegetables at every meal and refreshment hour? Are those items organic and/or local? Please describe. Yes but not necessarily organic or local.
- 2. Eating less meat is the single-biggest choice individuals can make to reduce their food carbon footprint.
 - a. Does your institution serve at least one vegetarian or vegan option at every meal and event? This option should be a full meal, and include more than just a salad bar. **Yes.**
 - b. Are there any events your institution holds that offer entirely vegetarian or vegan food options? If not, are there events where this might be a feasible decision? **Occasionally.**

- c. Are there opportunities to use vegetarian ingredients/foods in place of meat-based ingredients/foods during particular meals? Please describe. Yes, but most of our food is pot-luck so it depends on the cook. We do have quite a few vegetarians as members.
- 3. Pesticides are harmful for human health and the environment—eating organically supports sustainable agriculture. Fair Trade certification ensures that workers were given living wages and promotes sustainable production. Does your institution serve organic, Fair-trade, bird-friendly coffee and Fair-trade organic tea and hot chocolate at all events and services? We have been serving fair-trade coffee for many years.
- 4. Does your institution serve organic and/or local food at events and meals? Please describe. Yes, when possible, but most of our food is pot-luck so it depends on the cook.
- 5. Community Supported Agriculture (CSA) is a way for consumers to buy local, seasonal food directly from the farmer, by purchasing a 'share' of the farm at the beginning of the season and picking up a box of produce each week at a specific location. By religious institutions acting as a drop-off point for a CSA, it allows members of the congregation and the local community to have access to local, seasonal, and organic foods more easily. Does your institution act as a drop-off point for a community-supported farm (CSA)? **No.**
- 6. Farmers' markets and farm stands provide a great venue for local farmers and artisans to sell their goods, and provide the community easy access to local and seasonal produce. Does your institution host a farmers' market or farm stand selling local and/or organic produce to members and/or the wider community? Please describe. **No.**
- 7. Does your institution encourage members to consume vegetarian, local or organic foods? Please describe these educational activities. **Sometimes.**

In completing this area of the Audit, please record the 5-6 top ideas or priorities for action which you identified:

a. Consider creating a congregational cookbook which would emphasize vegetarian and local foods.

- b. Consider becoming a CSA drop-off point.
- c. Consider hosting a community garden.
- d. Continue to support the community garden at the supportive housing building next door.
- e. Serve more local-sourced foods.
- f. Ensure vegetarian options at potlucks.

Water

Water is central to all religions, symbolizing renewal and cleansing. Life cannot exist without water. However, water shortages, drought and water contamination are very real issues facing communities throughout the world. The decisions we make each and every day determine if our water resources will remain plentiful and clean for generations to come. The following questions are designed to help your institution understand your water management and identify areas for improvement.

- 1. Has your institution implemented any of the following water conservation practices?
 - Faucet-flow restrictors or aerators that are rated at 1.5 gallons per minute or less and are EPA *Water Sense* certified. Faucet-flow restrictors reduce the amount of water used while maintaining water pressure. **No.**
 - Low-flow showerheads rated at 2 gpm or less and are EPA *Water Sense* certified. These reduce the amount of water used while maintaining water pressure. **No showers.**
 - Use of your institution's dishwasher, utilizing the water saver function and drying dishes on the "cool dry" option. **Yes.**
 - Low-flow toilets, the use of toilet tank water flow restrictors, or waterless urinals that are EPA *Water Sense* certified. **No.**
- 2. Bottled water requires a lot of energy to produce and transport, and often limits the water rights and access to water resources in communities where bottled water companies are tapping the resource. Does your institution serve individual water bottles for events and meals? **No.**
- 3. Does your institution educate members about water conservation practices? Please describe. **Not much.**
- 4. The health of local watersheds is vital to maintain clean and abundant water supplies. Does your institution undertake any activities with members to protect the local watershed? Please describe. We built and maintain a stream bed with rocks to prevent erosion and a retention basin with native plants. Most of our parking surface is permeable.

In completing this area of the Audit, please record the 2-3 top ideas or priorities for action which you identified:

a. Consider a downspout water barrel for watering gardens.

b. Replace toilets with low-flow toilets and urinal with a waterless urinal. (need to verify that our sewer system can handle low-flow toilets)

c. Provide water conservation education.

Waste

In nature, what is considered waste by one animal or plant helps another to survive. By handling our waste more responsibly, we create less harm and support environmental health. The following questions are designed to help your institution understand your waste management practices and identify areas for improvement.

- 1. Waste audits provide a great way to analyze what your institution is throwing out, and offer an effective visual lesson for members. Put simply, a waste audit is where you collect bags of trash from different parts of the building, with each bag labeled, and dump out the contents on tarps. Members sort through the trash in order to identify waste problems, such as office paper not being recycled (more information about waste audits can be found on the GreenFaith website). Has your institution conducted a waste audit within the past three years to assess recycling rates and examine the waste stream? Please describe. No.
- 2. Does your institution recycle or reuse the following items? Please describe activities for each.
 - Plastic Yes.
 - Glass Yes.
 - Paper Yes.
 - Batteries, printer cartridges and other miscellaneous items Yes.
 - Electronics Yes.
 - Clothing or other reusable items Lost and found items taken to Salvation Army.
- 3. Are any of the following activities in place to improve recycling rates?
 - Waste receptacles always clustered together—paper, can/bottle and trash bins placed together in every trash collection location. Studies have shown that clustering bins in this manner can improve recycling rates by 30% or more. **Yes.**
 - Signs located above each waste disposal bin to designate what items should be deposited in each bin. For instance, the paper bin would have a sign that says 'Paper'. Signs help members to better understand how to recycle properly, and can significantly improve recycling rates. **Yes.**
 - Each waste disposal bin has a lid appropriate for the type of refuse that goes inside. For instance, a can/bottle bin would have a lid with a circular hole in it. These lids act as another visual cue for members of the community to recycle properly. **No.**

- 4. Has your institution implemented any of the following waste reduction practices? If yes, please describe how often or in what context (e.g. all the time, or only for small events). If no, please describe why (e.g. finances, time commitment, internal resistance):
 - Zero-waste events. Zero-waste events produce no real waste—reusable dinnerware is used, and any waste produced is compostable. **No.**
 - Mugs and glasses replace throw-away cups at meals and events. Even with the water needed to wash them, reusable dinnerware is better for the environment than disposable dinnerware. **Yes.**
 - China plates replace disposable plates at meals and at events. Yes.
 - Reusable flatware is used at meals and at events. Flatware takes very little room in a dishwasher, so is often a great first step towards reusable dinnerware. **Yes.**
- 5. Not all disposable dinnerware is created the same: Styrofoam never breaks down in a landfill, while paper takes several months to break down and bio-compostable dinnerware can be composted. If disposable dinnerware is used, what type is it? For instance: plastic, Styrofoam, paper, or bio-compostable. Please describe. **Paper.**
- 6. Composting provides a great way to reduce your waste stream, by creating rich soil from food waste. Composting can even be done indoors or in urban environments, with no smell and no problems. Does your institution compost its food waste? If not, please describe any barriers. **No.**
- 7. Up to 40% of the typical house of worship's waste stream is paper. Has your institution implemented any of the following paper waste reduction practices?
 - A double-sided printing policy **Yes.**
 - Paper reuse bins in each office **Yes.**
 - A printer tray designated for used paper (where one side is still suitable for printing purposes)? **No.**
- 8. Recycled content paper takes less energy and water to produce than paper made from virgin materials. Does your institution purchase recycled-content paper? If yes, what percentage of post-consumer recycled content does the paper contain (e.g. 30% or 100%)? Is the paper Forest Stewardship Council certified? We use 30%.
- 9. Has your institution educated members about waste reduction? Please describe these activities. **Not formally.**
- 10. Does your institution provide the opportunity for members to recycle miscellaneous items, such as cell phones, electronics or clothing? Please describe. We occasionally host a garage sale.

In completing this area of the Audit, please record the 2-3 top ideas or priorities for action which you identified:

a. Encourage other users of the building (12-step groups) to stop using styrofoam cups.

b. Continue to encourage all users of the building to take advantage of Ann Arbor's single stream recycling.

c. Even though we don't use much paper goods, we should investigate using recycled products.

d. Communicate about other recycling opportunities in Ann Arbor (computers, cell phones, electronics, etc.).

e. Find and communicate about refurbishing agents for computers and other re-usable items.

Toxics Reduction

Most chemicals used in consumer products have not been thoroughly tested for their effects on human health. Other chemicals – such as those found in many common cleaning products – have been shown to create negative health impacts on people. Thankfully, there are many 'green' options that can take the place of these products without sacrificing quality or effectiveness. The following questions will help your institution understand your toxics management and identify areas for improvement.

- 1. Integrated Pest Management (IPM) is a form of pest control where prevention and leasttoxic methods are used instead of the routine spraying of pesticides. IPM requires monitoring and other procedures that should be written into a policy to ensure it is carried out properly.
 - a. Has your institution written an Integrated Pest Management policy for indoor pest control? **No. We do not do any pest control.**
 - b. If a policy has been written but not yet implemented, what are the next steps your institution will take to move it towards implementation? We do not do any pest control.
 - c. Has an IPM coordinator been designated? This could simply be a facilities person in charge of the IPM plan and activities. **No.**
 - d. Does your institution use a pest management vendor? If so, does that vendor use IPM practices for your building, and have you seen the company's written policy on this topic? Please describe. **No.**
- 2. Common cleaning products contain chemicals that are harmful to human health and the environment. Green cleaners are safer and equally as effective, but green cleaning requires procedures to ensure that the safest cleaner is chosen, and that the product is used correctly. These questions will help you clearly assess and define green cleaning within your institution:

- a. Does your institution use commercial cleaners (e.g. purchased through a vendor) or household cleaners (e.g. Windex) to clean the facility, or both? **Commercial**.
- b. If commercial cleaners are used, are they *Green Seal, Ecologo* or *Design for the Environment* certified? **Note:** Commercial cleaning products that do not have one of these 3 certifications are not truly green. **No.**
- c. If green cleaners are used, has staff been trained on how to use them? For instance, green cleaners are often more concentrated, and require special procedures to ensure they are used correctly.
- d. If you do not currently use green cleaners, why not? Has there been any resistance to this idea in the past? Please describe. Have not investigated green products. No resistance.
- e. If household cleaners are used, are they conventional or 'green'? If you believe them to be 'green', do they fulfill the following characteristics? **Conventional.**
 - i. All ingredients are listed on the label, not just active ingredients
 - ii. The product uses vegetable based ingredients (often termed surfactants), such as vegetable oil or coconut
 - iii. The product **does not** contain artificial fragrance, labeled as 'fragrance' on the label. It either contains no fragrance or only essential oils.
- f. Mats placed in the entryways of buildings capture dirt and contaminants before they enter the facility, reducing the need for cleaning chemicals. Does your institution use wipe-off mats in all entryways? **Yes.**
- g. Has your institution implemented any other green cleaning steps, such as using microfiber clothes or HEPA filter vacuums? **Yes.**
- 3. If your institution has reduced the use of toxins through green cleaning or IPM, have members been made aware of these changes? Please describe. **No.**
- 4. Have members been educated about green cleaning or natural pest management for their homes? Please describe. **No.**

In completing this area of the Audit, please record the 2-3 top ideas or priorities for action which you identified:

a. Investigate green cleaning supplies.

b. Investigate and make a commitment to use environmentally friendly pest control even though we only use pest control service very rarely on an as-needed basis.

c. Provide education about green cleaning supplies.

Grounds Maintenance

The grounds surrounding your building are one of the first things that members see when visiting your congregation. What message does your landscape convey? Is the community welcomed with pesticide warning flags on the lawn, or invited to experience nature with gardens and native plants? Every decision you make on the grounds sets an example for the community, and has an immediate effect on the surrounding soil, water and air. The following questions are designed to help your institution understand your grounds maintenance practices and identify areas for improvement.

- 1. If your institution uses a lawn care company, does the company use natural practices such as Integrated Pest Management and applications of non-petroleum based fertilizers? Please describe. **Decided not to use a lawn care company this year.**
- Does your institution use water reduction/conservation landscaping practices, such as rain gardens, rain water collection barrels, xeriscaping, drip-irrigation in place of sprinklers, or other activities? Please describe. We do not have sprinklers. Only water flower beds as needed. Plant mostly native plants that are drought resistant.
- 3. Does your institution implement any of the following activities to preserve and promote natural habitat?
 - Botanical gardens No.
 - Bird feeders No.
 - Bird boxes Yes.
 - Creation of a National Wildlife Federation 'Wildlife Habitat' Yes.
 - Butterfly gardens No.
 - Other? Have improved our wooded area to encourage use by creating walking paths and adding signs.
- 4. Native plants, or those plants that are originally/historically from your region (e.g. not an exotic species) thrive well without water or fertilizer applications, and provide necessary habitat and food for native wildlife. Does your institution use native species for trees, shrubs and ornamentals planted on the grounds? We have been removing non-native plants and planting native plants including fruit-bearing native trees and shrubs that provide food for birds and other wildlife.
- 5. Fruit and vegetable gardens on your grounds can help to educate congregants about the importance of growing their own food. Does your institution have a fruit/vegetable garden on the grounds, in container gardens, or in window boxes? Please describe. **No.**
- 6. If your institution does not have land around it, have you implemented other creative projects to promote and engage in sustainable landscaping, such as a rooftop garden, community garden, green roof or other project? Please describe. We are working on

accepting a donation of natural lakefront property from one of our members to be used for spiritual retreats and nature education.

- 7. Leaking underground tanks can contaminate soil and water over time. Does your institution have leaking underground tanks? If yes, have these been remediated? No underground tanks.
- 8. Have members of your institution been educated about natural grounds maintenance practices through events or activities? Please describe. Yes. Multiple grounds beautification days each year. Annual celeberation of our natural habitat. Have worked with the Stewardship Council on removing non-native species. Have worked with the Natural Areas Preservation division of the Ann Arbor Parks Department.

In completing this area of the Audit, please record the 2-3 top ideas or priorities for action which you identified:

- a. Continue removal of invasive species and planting of native plants.
- b. Protect new native plantings.
- c. Continue working on land acquisition and start stewardship efforts after it is acquired.
- d. Improve animal habitat including adding bee houses.

Transportation

Transportation represents one of the largest negative environmental impacts we make as individuals. Driving is a habit, and changing our practices requires education and support. Religious institutions are a perfect venue for promoting and supporting sustainable transportation. The following questions are designed to help your institution understand your transportation practices and identify areas for improvement.

1. Does your institution encourage car-pooling, walking or bicycling to services and events? Please describe. **Yes.**

If you feel as if walking or bicycling to service is unsafe, has your institution made any efforts to educate the community about safe routes, walking/biking in a group, or other methods? **No.**

- 2. Does your institution provide bike racks? Yes.
- 3. Does your institution encourage its members to purchase high-mileage cars, use public transport, or undertake other sustainable transportation practices? Please describe. **Informally**.
- 4. Idling for more than 10 seconds uses more fuel than turning the car off and on, and idling produces significant amounts of pollution. Has your institution taken steps to become an idle-free zone? Please describe. **No.**

In completing this area of the Audit, please record the 2-3 top ideas or priorities for action which you identified:

a. Do more to encourage carpooling and other transportation options.

b. Remind people not to idle in the driveway.

c.

Congratulations! You've completed the questions in the Stewardship section of the Audit! As you review your responses to the questions, we suggest that you begin to identify the different activities you want to include in your Action Plan.

Other Notes

Replaced old boilers with high-efficiency boilers in 2007. Added blown-in insulation to the attic many years ago. Installed exhaust fan in the attic many years ago. Use it as necessary during hot weather. Recently installed water-conserving toilets