Mission Investment Fund
Evangelical Lutheran Church in America
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Energy/Earthcare Checklist

This guide will help your congregation assess what you are already doing to save energy and protect the earth. It will also highlight areas where you can make changes or improvements. Changes that your congregation make will help care for Creation, and save energy and money. This guide is not a replacement for a full energy audit by a qualified professional however. A professional energy audit will utilize tools that can see air leaks and find spots that need insulation. But until a professional energy audit can be completed, a small group of people can use this guide to take many important steps toward energy conservation.

If you don't already have a Green Team, gather a team for this evaluation. You will want to involve leaders and people who know your congregational building well, along with office and building maintenance staff.

The guide is divided into two sections. The first part looks at heating and cooling systems, as well as recycling, purchasing, and embracing Creation Care at your church. The second part leads you through the grounds and building and asks you to evaluate your current situation. Check all the boxes that apply to your church, and be proud of what your congregation is already doing. Identify new energy-savings/earth friendly options that make sense for your church and begin to prioritize these initiatives. Many of these are free or low-cost improvements that can be done quickly. Others will require purchases and may need to phased over time, but there are many opportunities for rebates and discounts. Remember that many improvements will pay for themselves in energy savings; and investing in energy efficient and earth-friendly practices also provides an immediate return in building reliability, as well as improving the comfort and health of its occupants.

Your MIF Regional Manager can be a resource for you on these topics and provide information on MIF Investment and Loan opportunities. To locate the Regional Manager for your geographic areas, visit MIF's website www.mif.elca.org/locate-regional-manager.

SYSTEMS, RECYCLING, PURCHASING & EARTHCARE

HEATING AND COOLING SYSTEMS

Heating System Type:
Make/Model/Year:
AFUE rating (annual fuel utilization efficiency) if available:
ENERGY STAR rated (____ Yes ____No)
Comments:

Cooling System Type:
Make/Model/Year:
SEER rating (seasonal energy efficiency rating) if available:
ENERGY STAR rated (____ Yes ____No)
Comments:

*Installing and energy-efficient heating and AC equipment can result significant operational savings. Equipment must be properly sized after heating load of building has been reduced (weatherizing, energy efficient lighting upgrades, etc.)

	Comments
☐ boilers/furnace maintained on a scheduled basis	Schedule annual HVAC maintenance checks and stick to them.
☐ filters and heating/cooling coils maintained on a scheduled basis	This can reduce energy costs up to 5%.
☐ refrigeration condensers or coils clean, unclogged and/or functioning efficiently	
☐ air inlets or outlets clean and unobstructed	
☐ duct or pipe insulation present and intact	
☐ ENERGY STAR programmable thermostats	Programmable thermostat will optimize operation of system and improve comfort. Proper use can save 30% in monthly heating costs.
☐ thermostats safe from occupant manipulation	Lock or make inaccessible so occupants can not tamper with.
☐ thermostats appropriately located (away from extreme temp. fluxuations)	Should be in a central location away from areas subject to extreme temp. fluctuations.
☐ heat moderated throughout building to suit times and areas of use	Turn down heat in areas that are not being used, and at night. Limit meetings to certain nights/times to conserve energy.
☐ thermostat temp. raised for cooling in summer (at least 78)	Consider solar screens, ceiling fans and natural ventilation to reduce need for air conditioning.
☐ thermostat temp. lowered for heating in winter (68 degrees or lower)	Weatherize (weather strip, insulate, windows) for energy efficiency and comfort. Close blinds at night.
☐ Green Power purchasing	Consider purchasing green power from your local utility. Visit www.eere.energy.gov/greenpower for more information.

See reverse for additional comments

HEATING AND COOLING SYSTEMS **other areas of opportunity or concern:**

DOMESTIC HOT WATER

Water Heater Type:
Make/Model/Year:
EF (energy factor) if applicable:
ENERGY STAR rated (____ Yes ____No)
Comments:

Additional Water Heater:
Make/Model/Year:
EF (energy factor) if applicable:
ENERGY STAR rated (____ Yes ____No)
Comments:

	Comments
☐ decentralized/on-demand hot water heaters	Consider tankless or on-demand water heaters when it is time to replace old water heater.
☐ hot water temperature set no higher than 120° F	This helps to prevent scalds and save energy.
☐ insulated hot water heater (if more than 5 years old)	Wrap in an insulating blanket if not.
☐ 3' of insulated 'out' pipe	This applies to older and newer water heaters.
Other areas of opportunity or concern:	

LIGHTING	**Comments**
☐ in general, fluorescent or LED lamps used instead of incandescents (see individual rooms for details)	
☐ LED exit signs	Verify exit sign requirements before purchasing new signs.
☐ T12 fluorescents retrofitted to T8 (Indicate specific areas of opportunity in Room notes)	
☐ members encouraged to turn off lights in unoccupied areas (stickers on switch plates, reminders in bulletins, etc.)	
☐ clean lamps and fixtures	Dust buildup reduces reflectivity and effectiveness.
Other areas of opportunity or concern:	

INDOOR AIR QUALITY	**Comments**
☐ Church as been tested for asbestos, lead, formaldehyde, radon (note any issues of mold, mildew, bacteria, and dust mites)	
☐ Church seeks to avoid volatile organic compounds (VOC) from cleaning products, carpets, and paints	
☐ option to open windows for air circulation	
Other areas of opportunity or concern:	

GOODS AND SERVICES	**Comments**
☐ office supplies and cleaning products purchased in bulk to reduce packaging	
☐ foods and refreshments purchased sustainably (as locally and organic as possible)	
☐ furniture, fixtures, textiles, and printing purchased sustainably (as locally and organic as possible)	
☐ sustainable construction and renovation practices	Contractor uses sustainable building products & practices, recycles waste, etc.
☐ eco-friendly cleaning products (petroleum-free, chemical sensitive)	
☐ post-consumer content paper products	
☐ purchase wood products (furniture, flooring, altar) made from FSC certified wood or rapidly renewable materials (wheat board, bamboo)	
Other areas of opportunity or concern:	

RECYCLING/WASTE	**Comments**
☐ recycling available for paper, plastic, glass, and metal (ideally in every room)	
☐ batteries safely disposed of	www.earth911.com/
☐ recycling information provided to members for home use. (including toxic disposal)	
☐ special recycling center or event for 'specialty items' (cell phones, printer cartridges, eye glasses, gym shoes, etc.)	Visit www.earth911.com/ for a zip code data base of special materials recycling.
☐ Annual yard sale for members to recycle by finding new uses for old/used items.	
Other areas of opportunity or concern:	

CHURCH LIFE	**Comments**
☐ congregation Green Team	www.lutheransrestoringcreation.org
☐ member of your state's *Interfaith Power and Light* organization	www.interfaithpowerandlight.org
☐ member of *ENERGY STAR for Congregations*	www.energystar.gov/index.cfm?c=small_business.sb_congregations
☐ environmental issues integrated into the youth curriculum	www.lutheransrestoringcreation.org
☐ environmental issues integrated into worship	see above
☐ Earth Sunday celebrations	see above
Other areas of opportunity or concern:	

SPECIFIC AREAS AND ROOMS OF THE CHURCH

OUTSIDE THE CHURCH	Comments
☐ ground slopes away from building	This will help prevent water seepage into building.
☐ limited or no pesticides, herbicides, and toxic fertilizer use	
☐ native plants and grasses	
☐ vegetable garden/community garden	
☐ compost	
☐ manual gardening tools & mowers	Gas powered landscape equip. (mowers, trimmers, blowers) account for over 5% of urban air pollution.
☐ mulching mower	According to EPA, yard waste, which is mostly grass clippings, comprise 20% of municipal solid waste collected.
☐ drip irrigation	
☐ watering during droughts is avoided	
☐ down spouts located to distribute water and promote proper absorption	
☐ bare areas plant covered or mulched	
☐ rain barrels	
☐ other storm water collection or management systems (rain garden, bio swale, green roof)	
☐ efficient lighting	
☐ lighting on sensors or timers	
☐ outdoor lighting levels stay within adequate boundaries (not excessive)	
☐ good use of land (sharing it, promoting animal habitats, etc.)	Consider community garden, native plants, replacing up un-used paving with planting, etc.

See reverse for additional comments

O U T S I D E T H E C H U R C H **other areas of opportunity or concern:**

PARKING & TRANSPORTATION	**Comments**
☐ spaces in the parking area for trees and ground absorption	
☐ shade trees in parking for heat island reduction	
☐ areas of pervious paving	
☐ ride board or ride sharing program	
☐ information on public transportation made available	
☐ bike racks	Build a culture for biking by installing racks and hold 'bike to worship' days.
☐ walking to church encouraged	
☐ preferred parking for carpools and fuel-efficient cars	
☐ 'no-idling' signs	
☐ car-free Sundays	
Other areas of opportunity or concern:	

BUILDING ENVELOPE	**Comments**
☐ windows and doors properly aligned and operational	
☐ weather-stripping and caulking in place and intact on windows	Stopping air infiltration is a simple task that can lower your heating and cooling bills. It may also reduce your heating load.
☐ weather-stripping and caulking in place and intact on doors	see above
☐ weather-stripping and caulking in place and intact (conduits, piping, joints, or other areas of infiltration)	see above
☐ insulated/double-pane windows	Consider character appropriate Energy Star label windows. Seal, repair and add storms if replacement not an option.
☐ ceiling insulation (include type and R-value if known)	Ceiling insulation is very critical to energy conservation. Exceed minimum R-value (per local code) if possible.
☐ wall insulation (include type and R-value if known)	Insulate wall cavity if accessible. Exceed minimum R-value (per local code) if possible.
☐ basement insulation (include type and R-value if known)	
☐ cover for through the wall cooling units when not in use	Insulated AC covers can control drafts and keep heat in, improving comfort and energy savings. They can be made or purchased.
☐ shade trees, canopies, or overhangs to block southern sun in cooling season	Controlling direct sunlight through windows can reduce cooling and heating costs. It is best to control sunlight before it enters building.
☐ roof free of visible damage	Roof damage can lead to other building problems including water and air infiltration. Consider insulation upgrade when repairing or replacing roof.
Other areas of opportunity or concern:	

KITCHEN	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ high-efficiency or ENERGY STAR refrigerator	
☐ high-efficiency or ENERGY STAR freezer	
☐ high-efficiency or ENERGY STAR stove	
☐ high-efficiency or ENERGY STAR dishwasher	
☐ other high-efficiency equipment	
☐ freezer free of icy build-up	
☐ refrigerator/freezer condensers or coils are clean, unclogged and functional	
☐ refrigerator temperature set correctly (adequately cool, but no colder than necessary)	
☐ adequate refrigerator door seal	
☐ freezers and refrigerators kept full	Fill extra space with jugs of water for increased efficiency.
☐ kitchen equipment used efficiently (exhaust hood fans & coffee makers off when finished using)	Cook with lids on, use microwave for small amts. of food, only pre-heat for baked goods.
☐ stove, microwave, and coffee maker unplugged when not in use	
☐ signs/reminders to avoid running water unnecessarily	
☐ eco-friendly dishwashing detergent and cleaners	
☐ dishwasher run only when full	

See reverse for additional comments

K I T C H E N other areas of opportunity or concern:

TOILET ROOM **Name/Number:**	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ occupancy sensor light switches	
☐ clean and efficient exhaust fans	Consider wiring exhaust fans to operate automatically when lights are on.
☐ leak-free faucets and toilets	
☐ signs/reminders to avoid running water unnecessarily	
☐ low-flow aerators on faucets	Installing low-flow aerator on one faucet could save up to two gallons of water per minute.
☐ hand-motion sensor faucets	
☐ dual-flush toilets	These can save 10-20 thousand gallons of water per yr/per toilet. Retrofits are available for existing toilets for similar savings.
Other areas of opportunity or concern:	

TOILET ROOM **Name/Number:**	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ occupancy sensor light switches	
☐ clean and efficient exhaust fans	Consider wiring exhaust fans to operate automatically when lights are on.
☐ leak-free faucets and toilets	
☐ signs/reminders to avoid running water unnecessarily	
☐ low-flow aerators on faucets	Installing low-flow aerator on one faucet could save up to two gallons of water per minute.
☐ hand-motion sensor faucets	
☐ dual-flush toilets	These can save 10-20 thousand gallons of water per yr/per toilet. Retrofits are available for existing toilets for similar savings.
other areas of opportunity or concern:	

MAINTENANCE ROOM	**Comments**
☐ CFL or LED lamps	
☐ biodegradable plastic garbage bags	
☐ eco-safe cleansers for restrooms, kitchen, windows, and other surfaces	
☐ eco-safe cleaners/shampoos for carpets, tile floors, hardwoods floors	
☐ eco-safe waxing products for floors	
☐ eco-safe detergents for washing cloth napkins, towels, and paraments	
Other areas of opportunity or concern:	

H A L L W A Y S	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ well functioning water fountains (no leaks, not running continuously)	
☐ entrance mats at all entrances	
☐ entrance mats regularly cleaned and maintained	
Other areas of opportunity or concern:	

OFFICE	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ task lighting	
☐ daylight used effectively (i.e. work stations are close to windows)	Turn down/off lights when it is sunny.
☐ electronic devices and office equipment turned off and unplugged when not in use(computers/ printers/ coffee makers/ microwaves)	The energy appliances use when they are plugged in but not turned on (phantom load) accounts for 6% of energy used in US.
☐ ENERGY STAR appliances and equipment (copier, printers, computers, other)	
☐ use post-consumer recycled, chlorine-free office paper and envelopes (or FSC certified paper, Forest Stewardship Council)	
☐ paper-use guidelines to limit use and encourage efficient use/reuse (double sided copies, scrap paper for re-use, etc.)	
☐ office paper is recycled (after use of both sides)	
☐ newsprint and other paper is recycled	
☐ soy-based ink, refilled/recycled ink and toner cartridges	
☐ proper disposal of ink cartridges, batteries, computers, printers, copiers	
☐ junk mail reduction efforts & limit mailings	
☐ serve fair trade coffee & tea	
☐ provide healthy snacks	
☐ encourage re-usable mugs and water bottles	
☐ plants in office for beauty and air	

See reverse for additional comments

O F F I C E other areas of opportunity or concern:

NARTHEX/GATHERING	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ equipment (TVs, sound systems, computers) turned off when not in use	
☐ serve Fair Trade coffee and tea	
☐ healthy/organic/locally grown food items	
☐ provide reusable mugs/mug rack	Encourage people to bring their own plates, cups & utensils to meals.
☐ biodegradable plastic utensils & eco-friendly plates when disposables are required	
Other areas of opportunity or concern:	

SANCTUARY	**Comments**
☐ CFLs used where possible/applicable	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ equipment (TVs, sound systems, computers) turned off when not in use	
☐ energy efficient ceiling fans with reverse motion option	
☐ decorative lighting used sparingly and/or controlled optimally	
☐ living flowers or plants on the altar to be kept or planted later	
☐ beeswax candles rather than (oil-based) paraffin wax candles.	
☐ local wine for communion	
☐ provide communion bread of whole grain, organic and locally grown.	
☐ fair trade palm fronds for Palm Sunday.	
☐ limit or eliminate use of paper for bulletins (re-use where possible)	
☐ green decorations for holidays.	
☐ worship outside in nature	
Other areas of opportunity or concern:	

CLASSROOM **Name/Number:**	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ equipment (TVs, sound systems, computers) turned off when not in use	
☐ natural light	
☐ recycled paper and scrap used for art projects	
☐ recycling bins in classrooms	
☐ limited & double sided photocopying	
☐ healthy food for snacks and meals	
Other areas of opportunity or concern:	

CLASSROOM **Name/Number:**	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ equipment (TVs, sound systems, computers) turned off when not in use	
☐ natural light	
☐ recycled paper and scrap used for art projects	
☐ recycling bins in classrooms	
☐ limited & double sided photocopying	
☐ healthy food for snacks and meals	
Other areas of opportunity or concern:	

SOCIAL HALL	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ equipment (TVs, sound systems, computers) turned off when not in use	
☐ energy efficient ceiling fans with reverse motion option	
☐ healthy/ organic/ locally grown food items for snacks and meals	
☐ biodegradable plastic utensils & eco-friendly plates when disposables are required	
☐ fair-trade coffee & tea	
☐ share leftover food and compost food waste	
☐ post-consumer paper napkins and towels	
☐ reduce or eliminate styrofoam, plastic cups, and other disposable products	
☐ provide mug rack.	Encourage people to bring their own plates, cups & utensils to meals.
☐ provide ceramic plates and cups, glasses, and stainless-steel utensils	
Other areas of opportunity or concern:	

ADDITIONAL ROOM **Name/Number:**	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ equipment (TVs, sound systems, computers) turned off when not in use	
☐ natural light	
☐ recycling bins	
Other areas of opportunity or concern:	

ADDITIONAL ROOM **Name/Number:**	**Comments**
☐ CFL or LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ equipment (TVs, sound systems, computers) turned off when not in use	
☐ natural light	
☐ recycling bins	
Other areas of opportunity or concern:	

ADDITIONAL ROOM **Name/Number:**	**Comments**
☐ LED lamps	
☐ adequate shading to prevent unwanted solar heat gain if applicable.	
☐ equipment (TVs, sound systems, computers) turned off when not in use	
☐ natural light	
☐ recycling bins	
Other areas of opportunity or concern:	