

Redeemer Creation Care Sustainable Stewardship Toolkit

Resource Stewardship

- Low Waste Swaps

Natural Environment Stewardship

- Compost
- Native Plants
- Healthy Soil

Water Stewardship

- Rain Barrels

Energy Stewardship

- Energy Audit
- Carbon Footprint Calculator



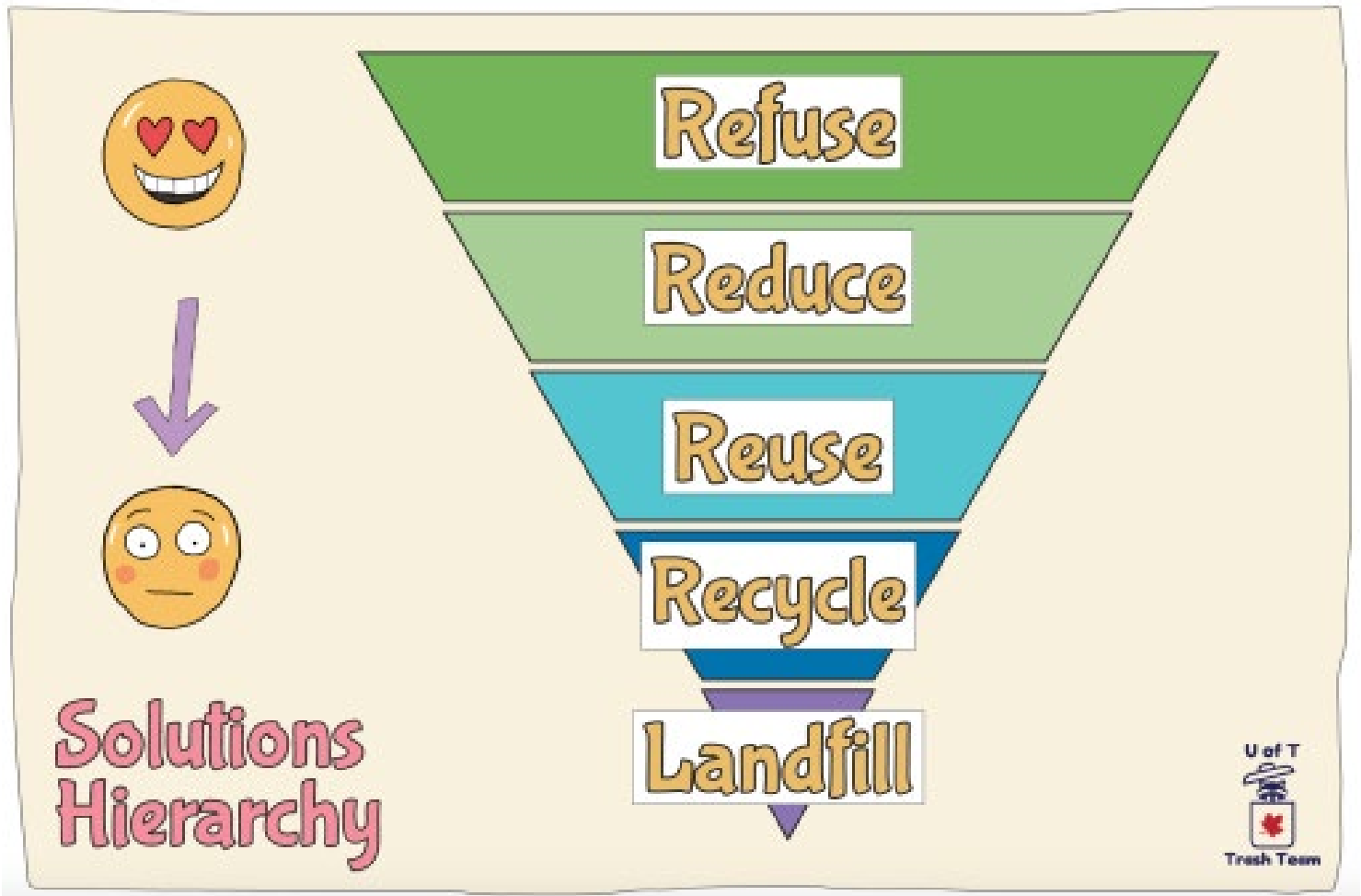
Resource Stewardship:

Low Waste Swaps

Item/Activity	Swap This 🙄	For That 😊
Cleaning	Paper towels	Cloth rag
Cleaning, Hygiene	Soap in Plastic packaging	Dry or Bar Soaps in cardboard packaging
Cleaning, Hygiene	Soap in Plastic packaging	Reuse container at a Refill Store for liquid Soup
Cleaning, hygiene, oils, dry goods, etc.	Single use plastic packaging	Reuse container at a Refill Store/station
Coffee Filters	Single use paper, plastic k-cups	Reusable cotton or synthetic filter
Drinking Containers	Buying water in bottles	Re-usable drinking containers
Electricity	Use a clothes dryer	Hang clothes to dry
Electricity	Leave electronics plugged In and on	Turn off & unplug small appliances, computers
Electricity	Use incandescent bulbs	Use LED light bulbs
Electricity/Water	Run partially full dishwasher & washer	Fill Dishwasher & Washing machine
Food Storage	Plastic wrap / ziploc bags	Reusable Beeswax paper or reusable flexible silicone packs
Food Waste	Putting in the garbage	Compost
Fruit and vegetable shopping	Put fruit and vegetables in a one-time use plastic bag	Put fruit and vegetables in a reusable bag

Item/Activity	Swap This 🙄	For That 😊
Groceries	Buy items in single use plastic containers	Buy dressing, condiments, salsas, honey, jam, etc in glass jars
Hygiene: Deodorant	Deodorant packaged in single use plastics	Deodorant in cardboard or refillable packaging
Hygiene: Toothpaste	Use toothpaste in single use plastic tubes	Use toothpaste tablets in refillable containers
Leaves	Putting them in the garbage	Compost leaves
Lights	Keeping them on all the time	Turn off when leaving the room
Pesticides, Water	Buy non-organic food & textiles	Buy organic food & textiles
Plastic Bags	Throwing out plastic bags	Clean and re-use
Restaurant Leftovers	Single use plastic / styrofoam container	Take your own reusable container
Rinsing	Letting water run	Turn off water
Shopping	One-time use plastic bags	Reusable bags for shopping
Snacks	Buying individual snacks	Buy large amounts of snacks and separate into smaller bags
Tissue Paper	Putting in the garbage	Compost
Toilet Paper, Water	Use toilet paper	Install a Washlet Bidet and use less toilet paper or use cloth
Watering Plants	Tap water	Collect rain water in barrels

Resource Stewardship



Resource Stewardship: Compost

Why Compost?

- Divert waste from landfills and reduce methane emissions
- Build healthy soil for water capacity, root penetration, and nutrients



BROWNS (CARBON)

- » Brown Leaves & Dry Grass
- » Dead Plants & Flowers
- » Corn Stalks
- » Straw & Pine Needles
- » Shredded Newspaper
- » Old Brush, Shrub, Trimmings, & Prunings
- » Sawdust & Wood Chips



GREENS (NITROGEN)*

- » Fruit Scraps
- » Vegetable Scraps
- » Coffee Grounds & Tea Bags
- » Old Bread & Pasta
- » Pizza Crusts
- » Green Grass & Green Plants
- » Manure From Animals (Herbivores Only: Cows, Horses, Rabbits, etc.)

Getting Started:

- Choose a convenient spot for 3'x3'x3' pile
- Start simple with leaves, dried grass, and vegetable and fruit scraps
- Use an Open Pile or Build or Purchase a bin:
 - Open Wire/Wood Bins
 - Closed Plastic, or Tumblers Bins
- Turn pile often
- Maintain moisture
- Target 3 parts Brown & 1 Part Green Material
- DO NOT include meat, dairy, diseased plants, weed seeds, animal waste

Other Resources

- Joan Burrows, Redeemer's "Compost Queen": joanburrow@me.com
- Hamilton County Resource: <https://hamiltoncountyresource.org/residents/composting/index.php>
- Civic Garden Center: <https://www.civiggardencenter.org/compost-pro>
- Queen City Commons (Redeemer Hosts a Bin!): <https://www.queencitycommons.com/>

Natural Environment Stewardship: Plant Native for Pollinators!

Why Plant Native?

- more likely to survive and thrive.
- easy to maintain, use less water and look gorgeous.
- provide food and shelter for butterflies, bees, birds and other wildlife.
- Natural space for urban wildlife
- safe resting spot for migrating animals.
- Save our local, natural beauty by stopping invasive plants.
- Support food chain, pollinate one-third of the world's crops
- Pollinator populations are declining.

Garden Design Considerations:

- Pollinators: Bees, wasps, butterflies, moths, hummingbirds
- Season: Spring, Summer, Fall Blooms
- Plant Diversity: Perennials, annuals, shrubs, trees, vines, prairie grasses
- Location: Sun or Shade



Resources for Planning and Plant Selection

- OSU: <https://u.osu.edu/plantbynumbers/>
- Cincinnati Nature Center: <https://www.cincynature.org/conservation/plant-native>
- Civic Garden Center: <https://www.civicgardencenter.org/conservation-at-home>

Natural Environment Stewardship: Actions to promote Healthy Soil

Healthy Soil =
Healthy Food =
Healthy People

- Buy/Grow Organic or Regenerative Organic
 - Start where you can and where your budget allows
- Compost food scraps
- Utilize low-till practices, cover crops, and crop rotation schedules
- Plant Native Plants
- Do not use synthetic pesticides or fertilizers
- Use organic additives: animal manure, liquid seaweed, fish emulsion, blood meal, etc
- Buy Local, Buy at Farmers Markets
- Support and Get Involved with
 - Organizations and policies that support Urban Ag and Farmers Markets like Civic Garden Center, Green Umbrella, and the Green Cincinnati Plan
 - local food banks and subsidized markets: Freestore, MEAC, CAIN
 - Voice your support of regenerative organic practices to legislatures when the Farm Bill and other bills are put forward

Water Stewardship: Rain Barrels

Why use rain barrels?

- Save Water! Save \$!
- Reuse for lawns, gardens, house plants, car wash
- Relieves load on aging sewer system
- Protect watersheds, prevent erosion

Where to Buy/Build?

- [Civic Garden Center](#) offers Rain Barrel Building [Classes](#)
- [DIY Earth Minded Kits](#) - <https://earthmindedrainbarrels.com/>
- [Hamilton Co S&W Conservation District](#) - <https://www.hamiltonswcd.org/rainbarrels.html>
- Big Box Stores

Earth Minded Kit + Heavy Duty Trash Can



Building and maintaining a Rain Barrel

- Downspout diverter - prevents overflow!
- Tubing for water transfer
- Hole Saws needed!
- Sealed Lid or mesh to block insects
- Sturdy container - opaque to prevent algae growth
- Drains & Hose attachments - Plan a route to your garden!
- Place on Pallets or bricks for weight displacement and height - gravity is key!
- Empty & Rinse 1x/yr - disconnect during freeze

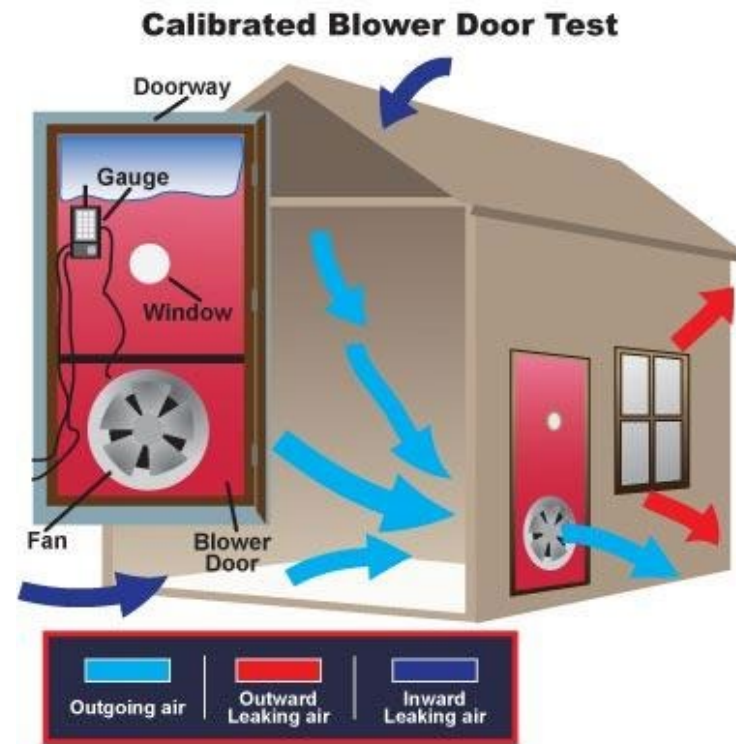
Energy Stewardship

Start with an Energy Audit - an inspection survey and an analysis of energy flows for energy conservation in a building
Process

- Energy Bill Review
- Visual Inspection of building and mechanical systems
- Diagnostic tests to assess building energy performance
 - IR cameras, blower door tests

Common Recommendations

1. Seal Air leaks and Add Insulation
2. Seal Ductwork
3. Improve/Upgrade HVAC, Lighting (LEDs), Appliances, and Water Heater
4. Replace Windows
5. Install Renewable Energy



Other Resources

- Rewiring America - <https://www.rewiringamerica.org/>
- Energy Star - <https://www.energystar.gov/>
- City of Cincinnati OES: <https://www.cincinnati-oh.gov/oes/buildings-and-energy/>

Energy & Resource Stewardship: Carbon Footprint Calculator

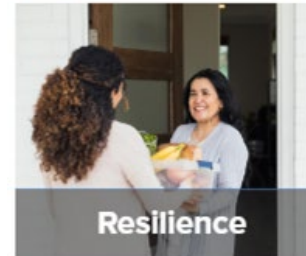
Calculators work by:

- Entering info on your Appliances, Heating/Cooling, Utilities, Food, and Transportation
- Estimating your carbon footprint - Average US resident produces 10 tons/yr
- Then recommending actions



Calculator options:

- SustainIslandHome.org - The Episcopal Church recommended
- <https://coolclimate.berkeley.edu/calculator> - UC Berkeley's CoolClimate Network research consortium



Local Advocacy Orgs for Clean Air And Water

- Greater Cincinnati
 - [Mill Creek Alliance](#) - Habitat Restoration and Citizen Water Monitoring
 - Communities United For Justice ([CUFA](#)) - Sewer justice
 - [Faith Communities Go Green](#) - eccumenical coalition for faith based 'green teams' - advocacy working group
 - [Groundwork Ohio River Valley](#) - youth green workforce, citizen air monitoring
- Ohio
 - [Ohio Environmental Council](#) (OEC) - State and Local Environmental Policy Focus
 - [Buckeye Environmental Network](#) - Protecting Forests and Communities, opposing radioactive brine spreading for de-icing
 - [Save Ohio Parks](#) - protecting our public parks/land from destruction/pollution by oil & gas industry
- Elsewhere
 - [Beyond Plastics](#) - holds corporations accountable for their waste and reduce plastic pollution, plastic pollution reports, advocacy tool kits
 - [EarthJustice](#) - nonprofit public interest environmental law organizatio
- Additional Resources
 - [Fracktracker](#) - Mapping out the Fracking Industry wells, pipelines, and facilities
 - [Grist](#) - Independent Digital Media Org for stories on Climate Solutions and Environmental Justice

TEC Resolutions for Environmental Stewardship

- Study facility energy use and efficiency ([Resolution 2018-A213](#))
- Strive to combat climate change through sustainable living choices, encourages use of web tools to track carbon use ([Resolution 2018-C008](#))
- Create emergency preparedness and response plans for natural disasters ([Resolution 2018-D007](#))
- Use church-owned land for conservation projects to mitigate climate change ([Resolution 2018-D053](#))
- Oppose environmental racism which is expressed in the location of harmful industries in low-income neighborhoods ([Resolution 2015-C013](#))
- Supports *The Genesis Covenant* to reduce greenhouse gas emissions from every Church facility by a minimum of 50% within ten years ([Resolution 2009-C070](#))
- Urges the US government to commit to lower the output of atmospheric carbon by 80% by 2050 ([Resolution 2009-D031](#))
- Acknowledge historic commitment to environmental stewardship and endorse Interfaith Power and Light ([Resolution 2006-C018](#))
- Encourages the Church at all levels to become active stewards of water resources through conservation efforts and stewardship steps ([Resolution 2003-D046](#))
- Urge the congregation to initiate a plan that reduces the use of toxic chemicals in the management of Church buildings and grounds ([Resolution 2003-C026](#))
- Encourage consideration of the environment when choosing electric energy suppliers ([Resolution 2000-A048](#))
- Adopt practical, environmentally sound, and energy-efficient lifestyle behavior ([Resolution 1997-A041](#))
- Avoid contributing to environmental deterioration in their use of vehicles, buildings, and properties; and publicly opposes those whose plans and actions threaten the environment ([Resolution 1973-B106](#))