



The McMinn County Community Sustainability Plan

The McMinn County Community Sustainability Plan was developed to help businesses, industries, schools, institutions, and individual households become more sustainable and maximize the services in our area and also help tailor their individual plans to the needs of McMinn County. For those businesses that would like to obtain a Gold, Silver, or Bronze certificate issued by Keep McMinn Beautiful this plan will give you the resources to help you do well on your energy and waste audits.

The Energy and Waste Audit covers the following areas and is intended for businesses but is also a good thing for each household to look at in reducing energy, waste, and water usage:

Energy Use: Energy Conservation

The energy evaluation illustrates how small changes can make a real difference. We have seen as much as a 13% reduction in their electricity use through behavioral and no-cost changes such as turning off bathroom lights when not in use, turning off vending machine lights (a \$200 a year savings!), and consolidating office space onto one floor. Recommendations are provided for energy efficient upgrades to existing lighting that will save an additional \$2,000 a year.

Water Use: Water Conservation and Stormwater Management

The water evaluation shows that low-flow toilets may be an option, however, water-saving opportunities suggestions include installing .5 gal aerators on bathroom/kitchen faucets and shutting off water to unused areas. A broken irrigation system that remained turned off resulted in a 39% reduction in water use. Drought tolerant landscaping remains without irrigation.

Waste Reduction and Recycling: Waste Prevention and Purchasing

Through the waste evaluation, we learn that approximately 58% of the waste they generate is recyclable. Commercial recycling is cheaper than commercial waste service. Each business is unique in terms of the waste it generates. This is an opportunity to asses and streamlines your business' waste. Once categorized, we can target areas of reusing, reducing, and recycling.

Pollution Prevention: Landscaping and Transportation/Quality

The pollution prevention evaluation ensures businesses properly store all chemicals and hazardous substances in a secure location. Additional steps to use less toxic substances where feasible are recommended.

General:

- _ Train employees from day one to follow environmental practices

- Provide employees with written materials (via email)
- Advertise accomplishments through press releases
- Encourage other area businesses to Go Green
- Participate in local green events: i.e. tree plantings, cleanups, etc.

Waste Prevention:

- Do waste audit attached to this form to find problems or ways to recycle
- Reduce copying through use of electronic communication
- Have your printers default to 2 sided copying
- Use marketing materials that require no envelope
- Collect email addresses as an alternative to "snail mail"
- Recycle food waste either by composting, pig farmers or special collection
- Use concentrated cleaning products
- Use reusable towels, napkins, table cloths
- Use large soap dispensers instead of individual ones
- Use bulk condiments instead of individual (sugar packets, creamers, etc.)
- Collect ink jet cartridges and cell phones for recycling
- Repurpose office furniture and supplies
- Donate unneeded, good usable items to non-profit organizations

Purchasing:

- Purchase paper that is at least 30% post-consumer
- Use 100% recycled paper whenever possible
- Buy in bulk whenever possible
- Purchase locally or American made whenever possible
- Purchase green, safe cleaning supplies
- Purchase toilet tissue and paper towels made from 100% recycled paper
- Purchase reusable rather than disposable products

Energy Conservation:

- Have an Energy Audit of your building by TVA
- Turn off lights and electronic equipment when not in use
- Installed motion sensors and lighting controls
- Installed programmable thermostats to control heating and cooling
- Insulated hot water heaters and water pipes
- Purchase Energy Star equipment and appliances
- Check and repair leaks around windows and doors
- Replaced fluorescent tubes with energy efficient fixtures
- Replaced incandescent bulbs with CFLs or better yet, LEDs
- Installed energy efficient windows
- Installed solar panels
- External Shading
- Install White or light colored roof

Water Conservation:

- _ Check water bill for indications of leaks
- _ Check for plumbing leaks and repair immediately
- _ Clean outdoor areas with a broom, not water to avoid runoff
- _ Do not allow litter to accumulate
- _ Install energy efficient toilets
- _ Install waterless urinals
- _ Install high efficiency faucet aerators
- _ Install reminder signs in restrooms to conserve water
- _ Change window cleaning schedule to "as needed"

Stormwater Management:

- _ Check company vehicles for oil leaks
- _ Distribute educational material on stormwater pollution prevention to employees
- _ Keep dumpster area clean
- _ If there is an outdoor smoking area, provide butt containers
- _ Inspect Detention/Retention ponds regularly and maintain

Landscaping:

- _ Test irrigation system regularly to ensure proper coverage
- _ Installed a smart metering system
- _ Replace grass areas with water-efficient Native shrubs
- _ Use natural mulches to increase water retention and prevent erosion
- _ Remove weeds by hand....do not use herbicides
- _ Use permeable paving
- _ Installed a rain barrel or cistern to collect water for supplemental irrigation
- _ Installed a rain garden in an area where runoff occurs
- _ Do not use chemical fertilizers

Transportation/Air Quality:

- _ Replace company vehicles with energy efficient vehicles
- _ Maintain fleet efficiency through regular maintenance schedules
- _ Institute a no idling policy on your business property
- _ Utilize email, teleconferencing, and video conferencing to avoid unnecessary travel

Waste Audit:

Waste product/material	Estimated weight generated (lbs/week)	Weeks per Year	Estimated annual weight (lbs/year)	Source of Waste	Current Waste Reduction Activities	Estimated weight reduced (lbs/week)	Weeks per Year	Estimated annual weight reduced (lbs/year)	Waste Reduction Opportunities	
	0	52	0			0	52	0		
	0	52	0			0	52	0		
	0	52	0			0	52	0		
	0	52	0			0	52	0		
	0	52	0			0	52	0		
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	0	52	0			0	52	0		
	0	52	0			0	52	0		
	0	52	0			0	52	0		
		Total:	0 lbs				Total:	0 lbs		

Sustainable Transportation and Mobility in McMinn County-

Automobile is the preferred method for most citizens and businesses in McMinn County, but the multi-modal infrastructure is growing every year and new modes of transportation are becoming increasingly available. Automobiles are the least sustainable method of transportation, but below is a check list that businesses, and individuals can go through to make sure they are the most sustainable.

- Eliminate unnecessary Trips by making a list of all your trips in a week and find ways to reduce your trips.
- Buy local. See if you can purchase some goods closer to home than further away. This is also good for our local economy.
- Use car pools to work, church, and social activities
- Buy alternative fuel vehicles or vehicles with Higher MPG to reduce fuel consumption
- Find ways to reduce trips by walking and use your local sidewalks and bikeways.

__ Bicycle

__ Use mass transit when available. Currently SETHRA routes are increasing in our area. Call 423 745-8095

__ When driving we all try and find the closest parking space to our destination, but taking a few minutes to park further away and walk the last few blocks often saves fuel, reduces congestion in popular places, and increases our health.

Sustainable Waste Handling in McMinn County-

McMinn County is blessed with various ways of reducing our waste and in recycling waste. Each household and business should explore all avenues of waste reduction, reuse, and recycling before landfilling. The Waste Audit above was tailored for most Industries, but homeowners should also look at the items below when developing a Sustainable Waste Handling Plan for their home or small business.

__ Over 80% of what we throw away is recyclable at the Recycling Center located at 118 Rocky Mount Road in Athens, TN and you should bring the following items to that Center including motor oils, cooking oils, antifreeze, electronics, metals, aluminum cans, plastic containers, paper, cardboard, glass bottles, and batteries.

__ Reduce waste by buying smart. Look at reducing packaging by buying items that are in bulk or require less packaging.

__ Use reusable bags instead of relying on the plastic or paper bags supplied by stores.

__ Grow your own. To learn more about Community Gardens, square foot gardening please contact the McMinn County Garden Board through the YMCA at 423 745-4904

__ Safely Store Hazardous Waste and take to the yearly Household Hazardous Waste Events held through the State. <http://www.tn.gov/environment/solid-waste/docs/hazcoll.pdf>

__ Avoid cutting grass too short so that clippings can be left in place. If you have extra clippings compost and use for fertilizer.

__ Avoid using pesticides, herbicides and chemical fertilizers, but if you must store correctly, use correctly, and dispose of unused products at the Household Hazardous Waste Event.

__ Compost leaves, food waste, and other organic matter instead of throwing away. If you live in Athens and use the leaf collection service it is composted for you and available for use by going to Public Works with a pick up or trailer on Fridays between 2:45 p.m. and 3:15 p.m.

__ Never mow grass into a street, but always back toward the yard to avoid them going down the drain and polluting the streams.

Sustainable Storm water Practices in McMinn County-

__ If you live on a creek avoid mowing right up to the bank and try and keep a natural buffer of at least 50 feet so that the trees and vegetation can grow to hold in soils and provide shade to streams to keep them cool. The colder the water the higher the oxygen levels. The same buffers should be maintained around wetlands.

If you have livestock fence them out from entering the creeks or streams and never dump anything into a stream or place equipment into a stream.

Consider a rain garden/rain barrel on your property and connect roof drains towards these gardens to reduce flooding and treat pollutants. If you need more information please contact Athens Public Works at 423 744-2746. If you live in Athens Public Works will help you with a rain garden design.

Plant a tree. Mature trees increase property values and if positioned correctly will reduce heating and cooling cost with evergreens on the north side of your property and deciduous on the south side. Trees also absorb and evaporate a great deal of water and prevent flooding.

Never wash your car on a paved or concrete surface. Always in your yard or at a car wash. Also never dump potable water or chemicals down storm water drains, which lead directly to our streams.

Keep trash bagged and stored away from animals or pest that could cause litter.

If transporting items in pickups make sure they are tarped and secured to avoid litter.

Sustainable Health in McMinn County-

One of the biggest problems in McMinn County is obesity and diabetes. Our youth have an obesity rate of close to 50%. To sustain our work force we need to eat better and exercise more. Including more fruits and vegetables in our diets, avoiding junk foods and fast foods, and finding ways to get in more exercise and play in our daily lives need to be the goals of all McMinn County citizens. Here is a check list to improve health.

Walk to school or work

Walk or do something active during breaks

Schedule an Hour of Play or a leisurely walk in nature to reduce stress levels. There are typically good places to walk along the city sidewalks, or at the local school yards, also check out Regional Park, The Eagle Trail, Rails to Trails, Veterans Park, and The EG Fisher Library Wetlands, Heritage Park, TWC Community Orchard, and other natural areas near you.

Join a gym

Avoid fast food

Avoid all sugary drinks

Make sure you have your doctor and dentistry wellness visits each year

Do something each day to stimulate your brain and keep you sharp. Read a book or learn something new.

Avoid overuse of medication particularly pain medications that lead to addictions.

Volunteer and be active in your community and make new friends.

This sustainability guide is a living document. Please forward any suggestions, changes, or improvements to Keep McMinn Beautiful at keepmcminnbeautiful@gmail.com