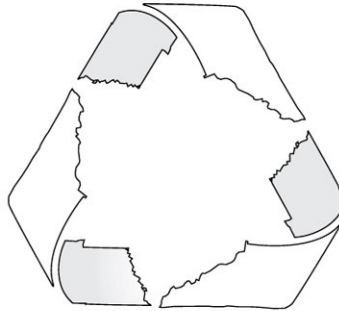


# Sustainable Tennessee Agenda 2010



SUSTAINABLE  
**TENNESSEE**

[www.SustainableTN.org](http://www.SustainableTN.org)

A project of the Tennessee Environmental Council  
& Tennessee Conservation Voters



SUSTAINABLE TENNESSEE AGENDA 2010  
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## OVERVIEW

From the majestic mountain vistas in the east, forested woodlands of the Cumberland Plateau and rolling green pastures of middle Tennessee to the fertile farmlands in the west, Tennessee is blessed with an astounding natural environment. Our pristine mountain waters and river systems boast seven of the eight most biologically diverse rivers in North America. These wondrous natural resources help keep Tennessee green and beautiful. Tennessee's natural resources form the backbone of our way of life, our economy, and the health of our communities. Presently, expanding populations, unplanned growth, deteriorating infrastructure, industrial processes and excessive extraction of natural resources increasingly threaten the sustainability of Tennessee.

The concept of sustainability can be defined simply as, "no waste". Waste is a measure of economic efficiency, and a simple metric Tennesseans can utilize to measure how sustainable our lifestyles and communities have become. We can monitor waste generated, or lack thereof, to track our progress toward sustainability as individuals, organizations and societies. Sustainability can also be defined in more complex terms that include economic criteria, natural resources and equity of access.

A sustainable strategy for Tennessee will position our state to simulate a growing Green Economy and Green Jobs sector. The Green Economy potentially represents an economic future like Tennessee has never seen before. It is a retooling of our failing infrastructure in a manner that promotes Tennessee heritage, our communities and our quality of Life. This strategy ensures that labor-intensive Green Collar Jobs are created locally and training programs are initiated so segments of the population currently unemployed or underemployed can benefit from stable well-paying opportunities.

Over the past two years, more than 800 Tennesseans and 230 organizations have worked to develop the Sustainable Tennessee Agenda 2010. In November 2009, over 150 individuals representing over 90 organizations and businesses throughout the state participated in the Sustainable Tennessee Summit. Leaders of statewide conservation groups, businesses and other agencies came together to discuss the action steps necessary to create sustainability for Tennessee. Emphasizing the need to conserve our natural infrastructure and promote safe, healthy communities, quality growth and sustainable energy, Summit attendees agreed on and finalized the Sustainable Tennessee Agenda 2010 ([www.sustainabletn.org](http://www.sustainabletn.org)).

These issues fall into five broad categories; 1) Legislative 2) Regulatory 3) Market-based 4) Education and 5) Research. They can be applied to many levels of organization from individuals, businesses, churches, schools, and government agencies and are meant to be readily implementable. It is imperative that we work together to implement the Sustainability Agenda to protect and re-vitalize our economy our communities and quality of life.

### SUSTAINABLE ENERGY

Becoming a leader in clean energy development will create jobs, reduce costs, and protect the welfare of Tennessee's citizens and environment. The State of Tennessee must promote energy conservation, energy efficiency and renewable energy development as a mechanism for meeting current and future energy demand while strengthen protections against the dangers of high-risk energy resources such as coal and nuclear. To accomplish this, Tennessee must develop a comprehensive state energy plan that meets the following criteria:

- 1) Adopts and enforces updated residential and commercial energy building codes
- 2) Establishes an energy leadership position to oversee the implementation of Tennessee's Lead by Example initiative, set goals for energy efficiency within state government and set a course of action to meet those goals.
  - Energy goals must be clear, measurable and attainable.
  - Energy goals should continue building momentum for the clean-energy economy.
- 3) Strengthens regulations governing the transport, storage and disposal of coal ash generated within Tennessee and bans the import of coal ash generated outside of Tennessee.
- 4) Strengthens regulations governing the transport, storage and disposal of radioactive waste generated in Tennessee and bans the import of radioactive waste generated outside of Tennessee.
- 5) Aggressively supports the growth of clean-energy markets and green jobs by:
  - We encourage all Tennesseans to conduct a home Energy evaluation ([www.energyright.com/savingenergy/evaluation.htm](http://www.energyright.com/savingenergy/evaluation.htm)) and act based on findings, to purchase at least one block of Green power at (<http://www.tva.gov/greenpower/switch/>) and participate in the TVA generation partners program ([www.GPSGenpartners.com](http://www.GPSGenpartners.com)).
  - Seeking out and committing funds for the creation of community-based partnerships to retrofit government, residential and private sector buildings for energy efficiency and renewable energy, and to place residents of underserved communities in the newly created jobs;
  - Expanding and creating Green Tech training programs in the public schools; community and technical colleges and the trade unions;
  - Encouraging the Tennessee Valley Authority to foster green collar jobs through conservation and renewable energy programs;
  - Initiating efforts such as a Clean Energy Jobs Corps and a statewide Green Jobs Corps to employ young adults in the clean energy markets as a pathway out of poverty.

- 6) Supports the legislative initiatives recommended by the Governor's Task Force on Energy Policy by:
  - Designing and implementing a public information campaign on energy saving practices;
  - Mandating energy labeling requirements for homes, rental units, and commercially leased spaces;
  - Developing programs to incentivize energy efficiency retrofits and renewable energy development;
  - Developing programs to reduce vehicle miles traveled;
  - Encouraging and assisting in the use of sustainability plans (such as Cool Cities and Cool Counties) and Smart Growth practices in communities across Tennessee.
- 7) Reinstates, defines, and assigns authority for mandatory energy impact assessments on all new proposed legislation to ensure new laws do not lead to the unintended waste of energy resources.
- 8) Requires TDOT to revise its 25-year plan and 10-year investment plan to demonstrate a reduction in vehicle miles traveled and greenhouse gas emissions for all new TDOT projects and to allocate highway funds for mass transit and other low-carbon mobility options for both passengers and freight.
- 9) Tennessee must institute rate restructuring for natural gas, which is required for federal Recovery Act funding and could act as model for sustainable energy in the Southeastern U.S.
- 10) The State of Tennessee should support international agreements on global warming mitigation, especially as it will assist Tennessee in improving its economy and grow jobs for the future.
- 11) The citizens of Tennesseans should contribute to these goals by committing to use mass transit, bike or walk to work and for pleasure, and carpool as much as is practical in the spirit of modeling and supporting their elected leaders in making these necessary and hard choices.

#### AIR

A healthy life in Tennessee requires clean air for all to breathe. Today many areas of our state do not meet minimum EPA standards impacting quality of life and health care cost.

- 1) The state Air Pollution Control Board and the Legislature must work together to implement a state wide ban on open burning to clear land for development or road construction, thereby reducing dangerous small particle air pollution. This will also reduce the levels of the air toxic acrolein, which affects our ability to breathe.
- 2) The Tennessee Department of Environment and Conservation (TDEC) needs to cooperate with the State Health Department to quantify the excess health costs associated with non-attainment of air quality standards.
- 3) TDEC needs to provide technical grant writing assistance to local entities seeking funding for clean air initiatives.

- 4) To achieve reduction of ozone and small particle pollution, the reduced speed limits enacted in non-attainment areas need to be rigorously enforced.

## WATER

Tennesseans need and deserve clean drinking water. Protecting Tennessee's lakes, rivers and streams will ensure healthy communities and wildlife, sustainable economic development, and world-class tourism and recreational opportunities.

### SILTATION

- 1) In order to adequately enforce the storm water siltation control and post-construction impacts, the State of Tennessee must require enforcement of state residential and commercial building codes, particularly storm water regulations, and provide a funding or incentive mechanism for the permitting and inspection program operated by local governments.
- 2) In permitting decisions, the Tennessee Department of Environment and Conservation (TDEC) must follow the Anti-Degradation provisions of the Clean Water Act.

### HEADWATER STREAMS

- 1) The State of Tennessee must defend the protection of headwater and ephemeral streams by affirmative regulatory and legislative action to improve our state's water quality and water quantity.
- 2) The Tennessee Water Quality Control Board and state regulators must maintain the authority of TDEC to enforce the rules protecting waters of the state and secure protection of water quality and water quantity through maintaining the current definition of waters.
- 3) TDEC must manage their fee and fine structure in a way that pays for adequate permit compliance review and enforcement of water quality laws. Permit applicants should bear the costs of this program through adequate fees, and fine all wrongdoers regardless of who they are or whom they know!
- 4) The State of Tennessee must manage its water resources in a way that protects and respects the multiple uses of waters, and must institute water conservation measures as necessary to continue to maintain that balance.

### WATER AND LONG RANGE PLANNING FOR SMART GROWTH

- 1) The State of Tennessee must develop comprehensive plans to manage water resources at the state and regional levels.
- 2) The State should develop an agenda for water conservation efficiency, and must implement the work done on Flow Research (maintaining in stream flows).

## LAND AND WATER: IMPACTS FROM RESOURCE EXTRACTION

"Tennesseans should insist on mining practices that do not damage water quality, and prohibit the dumping of mining waste near headwater areas or small streams," Tennessee's Water Blueprint, <http://www.tennesseeswaterblueprint.org>.

- 1) The State of Tennessee must require that resource extraction ensures that the rights of the surface owner are recognized and that compensation is provided, if necessary.
- 2) Such regulations must also ensure that reclamation of the site must occur after cessation of extraction operations to a minimum standard of permanent stabilization, without exception.
- 3) Tennessee is experiencing renewed interest in gas exploration on the Cumberland Plateau. The hydro-fracturing technique of natural gas extraction may cause damage to already fragile water systems. Wise leadership dictates that this process needs careful scrutiny with the health and integrity of our waters to be the paramount goal.
- 4) The State of Tennessee must protect its mountains and streams from the devastation of mountaintop surface coal mining. EPA estimates that as much as 1200 miles of streams have been destroyed by mountaintop removal coal mining.

## LAND AND NATURAL GREEN INFRASTRUCTURE

Tennessee is blessed with an abundance of free-flowing rivers, mountains, deep lush forests and beautiful farmland, and urban greenspaces protecting clean water and air. Conserving Tennessee's rivers, woods, and wildlife will ensure the health of communities, provide outdoor recreation and protect the environment and the economy for the benefit of Tennesseans now and in the future.

- 1) In 2010, the State must fully restore the Real Estate Transfer Fund by budget amendment (or other) to Forever Green Tennessee. The economic benefits are significant. For example:
  - Over the last 20 years, these funds have conserved key agriculture lands, wetlands, and forests important for wildlife, drinking water, for carbon sequestration, and new state parks - all vital to our tourism industry and local parks and greenways, which make our economy more vibrant and enhance our quality of life. Tennessee's second largest industry is tourism (181,000 jobs and \$13.4 billion to our economy) and the largest tourist attractions in Tennessee are the wonderful and diverse parklands.
  - 10,000 acres of wetland produces \$79 million worth of flood control, drinking water filtration, groundwater replenishment, etc. for citizens each year.
  - Investing in conservation of these lands and in local greenways, parks, and farm improvement projects will restore and grow our economy and protect our environment.

- These funds leverage federal grants. Tennessee must make sure that it gets its fair share of Federal funding that requires a state or local match component.
- 2) The State must protect its mountains, streams and vistas from the destruction of mountain top removal coal mining techniques.
    - The productive ecosystems and scenery are priceless to the citizens of Tennessee and the tourist industry of the state, and must be preserved forever.
  - 3) The State of Tennessee must create a comprehensive land use plan that would include Green infrastructure concepts through a public process in order to conserve working farms and forests, wildlife habitat, river corridors for water quality and quantity, and to direct growth to less environmentally-critical lands.
    - The State should develop a Green infrastructure plan that inventories Green assets, such as natural areas, parks, forests, farms, streams and wetlands.
    - Identify opportunities for their protection and/or restoration through a coordinated strategy to channel development and redevelopment to the most appropriate locations. Experts in relevant disciplines, such as ecologists, soil scientists, community planners, and aquatic biologists, should be enlisted to provide input.
  - 4) The State must develop a long-range plan with funding for easements, acquisitions and management in an effort to conserve the natural heritage of Tennessee.
  - 5) Cities and counties should develop, enhance and implement tree ordinances and set tree canopy goals.
    - Trees and tree canopy are directly related to property values, energy savings, air quality and clean water.
    - Tree ordinances and canopy goals should be a part of a city's comprehensive land use and transportation plan.
  - 6) Tennesseans should be encouraged to plant and care for one native tree in the fall of each year. Planting a deciduous tree on the east, south or west of the home will save on cooling cost during the summer. Planting a row of evergreens on the north will block the cold north wind.
  - 7) The State must stop the spread of exotic invasive pest and plants in Tennessee and invest in natural landscaping and land conservation.
    - Exotic species are the second greatest threat to our natural world, according to Harvard biologist, E.O. Wilson.
    - Native and wild species offer benefits including soil enrichment, water filtration, and bio-diverse resources.
    - Protecting our natural biological diversity will also protect our economy by conserving our potential for new medicines, by protecting crop pollinators, timber, soil-restoring vegetation, petroleum substitutes and other products.
  - 8) The State must require that rock-harvesting operations affecting over one acre be covered by mining regulations specific to that type of mining.
  - 9) The State should not permit gas wells that use horizontal drilling and hydro-fracturing to release gas from tight sand and shale formations.

- The long-term consequences to the environment and human health are unknown at this time with respects to horizontal drilling and high-pressure hydro-fracturing techniques, and so caution is required to ensure the well being of us all.
  - Contamination of water, soil and air will likely occur by the toxic chemicals used in drilling and fracturing.
  - The environmental and human health cost will harm the economy via negative effects on residential property values, state tourism, agriculture, forestry, and possibly businesses' decisions regarding relocation to the state.
  - The infrastructure costs of building and repairing roads, water treatment facilities, and other public services far exceed any economic benefit to local communities.
- 10) The State must develop a comprehensive, but flexible plan to conserve valuable agricultural land for future generations.
- 11) The State must develop a comprehensive, but flexible strategic plan for Community Food Security by:
- Ensuring safety of all Tennessee grown food products.
  - Supporting local and regional, family-scale sustainable food production.
  - Promoting Tennessee's bounty of regionally produced products. See for example [www.picktnproducts.org](http://www.picktnproducts.org) or [www.localGoods.org](http://www.localGoods.org). This will create local Green Collar jobs and enhance food security.
  - Ensuring fair wages and decent working conditions for farmer and food system workers which will promote social justice and more equitable access to resources.

## SOLID WASTE AND RECYCLING

The 1991 Solid Waste Act (T.C.A. 211-201-101) was preceded by a three-year statutory planning effort. Nineteen years later, Tennessee is the only state that allows land filled construction waste to count as recycled material. Tennessee is a national leader in per-capita waste generation and utilization of local landfills with said waste.

- 1) The State must develop comprehensive solid waste reform including waste reduction, reuse and recycling goals, objectives, and implementation targets.
- 2) Tennesseans should set 100% recycling targets based on availability of local markets.
- 3) The State should address licensing requirements that allow or ban nuclear waste in municipal landfills.
- 4) The State must remove loopholes that allow land filled construction and demolition (C/D) waste to be counted towards recycling goal.
  - 75% of C/D waste is reusable or recyclable
  - Commercial C/D waste reuse and recycling businesses already exist.
- 5) Tennessee should pass legislation requiring beverage container recycling. This will benefit the economy, create jobs and clean road sides.

- 6) Tennessee should promote institutional composting through local based incentive programs.
- 7) The State must fund and identify funding (from business, foundations, government agencies and other entities) for research to develop implementation models demonstrating:
  - How to divert waste from transfer stations and landfills.
  - How to remediate ground water pollution at landfills.
  - How municipal and institutional composting programs can work.
- 8) The legislature must Direct TDEC to incorporate the above best practices into regulations required by SB 2267/HB 2289 [year 2007].

## QUALITY GROWTH

Tennessee's unique communities and beautiful landscapes produce a high quality of life and economic vitality. Quality Growth and Sustainable Development will support growth and development efforts while protecting the future of Tennesseans' natural and cultural heritage, economy, and quality of life. These efforts will also support related state, regional and local initiatives such as regional planning for mass transit, sustainable infrastructure investments, and open space and natural resource conservation.

- 1) Tennessee Pollution Prevention Partnership (TP3)- We encourage all Tennesseans to become members and encourage cities, county governments and local Chambers of Commerce to use TP3 as a framework for business recruitment (<http://www.state.tn.us/environment/ea/tp3/>).
- 2) The State must enhance Public Chapter 1101, the Comprehensive Growth Plan Act, to require long range comprehensive planning in support of sustainable growth and development, livability, economic vitality and environmental quality. At a minimum:
  - A Comprehensive land use plan must include a public process.
  - A comprehensive land use plan must inventory and have a mechanism to identify opportunities for Green asset conservation and/or restoration. Green assets include working farms and forests, wildlife habitat, and river corridors.
  - A comprehensive land use plan must establish regional planning for commuter mass transit.
  - A comprehensive land use plan must incentivize and direct growth to areas with existing infrastructure.
  - A comprehensive land use plan must involve experts in relevant disciplines, including ecologists, soil scientists, community planners and aquatic biologists to provide input.
  - Other state laws, regulations and policies dealing with zoning, subdivision regulations, infrastructure design and funding, and capital budgeting should also be evaluated and updated to support implementation of quality growth principles, comprehensive planning and sustainable design and development.

- New actions by local governments and state-level departments will be necessary to accomplish these recommendations.
- 3) Growth planning under PC 1101 and comprehensive planning under Title 13, Tenn. Code Annotated should be fully integrated.
  - 4) New state, regional and local incentives and/or requirements for quality growth, comprehensive planning, infrastructure design and funding, and sustainable design and development projects, should also be researched and implemented as part of a comprehensive approach to re-frame Tennessee's growth and development decisions, patterns and investments.
  - 5) The State should build on the "Quality Growth Toolbox," developed and piloted by Cumberland Region Tomorrow, and encourage all regions of the state to adopt similar principles of effective comprehensive planning to apply the planning concepts and make appropriate changes to city or county local zoning ordinances that promote best practices to get quality growth. This is vital at this time in the history of our state.
    - Application of updated community development and planning concepts, sustainable design and development strategies, and focused tools and incentives will allow local governments to make appropriate changes to city or county local regulations and zoning laws that promote new, best practices to get quality growth outcomes.

## GREEN COLLAR JOBS STRATEGY

A sustainable development strategy will position Tennessee to simulate a growing economy and Green Jobs sector. Of particular importance is that this strategy ensures that labor-intensive Green Collar Jobs are created locally and that training programs are initiated so that segments of the population currently unemployed or underemployed can benefit from stable well-paying employment. A Green Collar Jobs strategy will include:

- 1) Nourishing the growing renewable energy sector in Tennessee industry and agriculture in a manner that ensures that local residents are placed in newly created jobs.
- 2) Obtaining and lobbying for increased government stimulus money to create community-based partnerships to retrofit government, residential and private sector buildings for weatherization, energy efficiency and renewable energy, and to place residents of underserved communities in the newly created jobs.
- 3) Expand and create Green Tech training programs in the public schools, Community and Technical Colleges and the trade unions. Also expand and create workforce development programs through community-based nonprofits to train and place residents who experience barriers to employment.
- 4) Encourage the Tennessee Valley Authority to foster Green Collar Jobs through conservation and renewable energy programs.
- 5) Initiate efforts such as a Clean Energy Jobs Corps and a statewide Green Jobs Corps to employ young adults as a pathway-out-of-poverty. Continue efforts to support the

“Greening” of commerce so that sustainable practices that protect the environment and create decent jobs are integrated into all levels of business.

- 6) Green Opportunities Tennessee - Establish a statewide Green Jobs program aimed at at-risk youth, based on the Asheville, NC Green Opportunities model and other models being implemented around the country.
- 7) Green Tech - Establish a Green vocational tech program in Nashville high schools and junior colleges. This would include Green building construction, weatherization and retrofitting skills and could lead to a pre-apprenticeship program in the unions.
- 8) Explore the possibility of establishing an initiative based on the Portland, Oregon model that will weatherize 100,000 homes over 5 years and create 10,000 jobs, a certain percentage of which will go to low-income people and women. See for example: <http://data.tennessean.com/v2/bin/pluckTools/display/groupblog>.

## EDUCATION

The State of Tennessee must develop a coordinated and comprehensive statewide plan to educate Tennesseans of all ages about the importance of interactions with and conservation of the natural world, the impact of humans on natural systems, and the individual actions and choices necessary for a sustainable future.

- 1) All schools, including public, private, K-12, community colleges and universities should pledge and participate in the Tennessee Green Schools Program ([www.tp3.org](http://www.tp3.org)).
- 2) Tennessee should require public and private K-12 school curricula to include Project CENTS ([www.tn.gov/education/projectcents](http://www.tn.gov/education/projectcents)), Project Wild, Project Wild Aquatic and/or Project WET ([www.tn.gov/education/projectcents](http://www.tn.gov/education/projectcents)).
  - Free in-service opportunities are available for Tennessee Teachers in these curricula.
  - These curricula are generally multi-disciplinary and include experience based education techniques.
  - These curricula promote the ideal and many benefits of “No Child left inside.”
- 3) Parent organizations should host “No Child Left inside Forums” to promote the benefits of children’s exposure to the natural world.
- 4) Institutions of higher learning and local county and municipal governments should foster and promote local environmental sustainability projects, working with networks of student and environmental organizations statewide.

## FAIRNESS AND BALANCE IN COMPOSITION OF ADMINISTRATIVE BOARDS

Currently, administrative boards adopting environmental regulations, and presiding over environmental litigation are not balanced, with overwhelming influence from industry, municipalities, and other polluters.

- 1) The State of Tennessee must ensure the composition of its administrative boards, including the Air Pollution Control Board, the Water Quality Control Board, and the Solid Waste Control Board are fair and balanced, with representation from citizen and environmental and conservation organizations as well as industry.
  - At least two community environmental health advocates should be added to each board.