

Tennessee State Energy Policy Council White Paper

Mandate, Vision, and Steps Forward

January 15, 2020

Introduction

The Tennessee State Energy Policy Council (SEPC) was established by the General Assembly in 2017 with the passage of Tenn. Code Ann. § 68-204-101 *et. seq.* The task of the SEPC, described more fully below, is to develop recommendations for an energy plan for Tennessee and an annual report that can inform the Governor, General Assembly, and the public about ongoing political, social, technological and economic drivers that might affect Tennessee and its residents both today and in the future. This 2019 White Paper provides a framework for external audiences, including the public and policymakers, to understand the purpose, structure and intent of the SEPC.¹ It also provides a consensus building framework to guide the SEPC's path forward. The SEPC's initial recommendations are also included in this document.

The SEPC's Legislated Mandate

Tennessee is one of only eight states without an energy plan (<https://naseo.org/stateenergyplans>). Some of these plans are very detailed, while others provide only broad goals and objectives. Generally, the intent of state plans is to help coordinate policy, develop policy that has a public interest, and provide certainty to those who are engaged directly or indirectly with the state energy sector.² This has become more important as local governments in Tennessee and other neighboring states work to improve the lives of their residents through energy and environmental initiatives. An energy plan and its components can also help mitigate the effect of externalities resulting from energy related activities on people, businesses, and the environment.

The enabling legislation defines the role and structure of the SEPC for Tennessee and how it can support state energy planning. Essential tasks include:

- Provide advice and recommendations to the Governor and General Assembly regarding state energy resources, energy-use management, and energy exploration, development and production, while preserving natural resources, cultural heritage and quality of life in Tennessee.
- Develop an *annual report* assessing the state's energy sector, including opportunities and constraints.
- Develop an ongoing *comprehensive state energy plan* that provides recommendations to the Governor and the General Assembly, including legislation, regulatory guidance and

¹ White Paper 19:1 is available on the State Energy Policy website, along with other information including enabling legislation. See <https://comptroller.tn.gov/boards/sepc.html>

² The National Association of State Energy Officials provides useful guidance on the development of state energy plans. See https://naseo.org/Data/Sites/1/sepguidelines_2018_final.pdf

implementation and modification of energy policy, plans and programs. The annual report must educate and inform the public on energy-related matters and help guide any changes or refinements to the comprehensive plan.

- Undertake an ongoing review of energy related issues, inform the public, and engage with federal government agencies to identify energy-related opportunities.

The membership of the SEPC includes persons from 14 important statewide constituencies, including both the public and private sectors (<https://comptroller.tn.gov/boards/sepc-council-information/council-members.html>). The Howard H. Baker Jr. Center for Public Policy at the University of Tennessee is identified in the enabling legislation as a resource to provide research support, including development of the annual report in cooperation with the Council and its members.

The SEPC is mandated to hold quarterly meetings that are open to the public to ensure accountability and provide the opportunity for citizen oversight and engagement. The SEPC's first meeting was in December of 2018 and met four times in 2019. In addition, a number of informational webinars have been held and more will likely be offered in the future to help inform the Council; no deliberations occur among Council members over these webinars. The public is also welcome to participate in the informational webinars.

The Tennessee Comptroller of the Treasury has developed an SEPC website that provides essential information, including a meeting schedule and supplemental resources (<https://comptroller.tn.gov/boards/sepc.html>). The website allows Council members, policymakers, and the public at large to stay abreast of SEPC deliberations and resources.

A Vision for Tennessee Energy Policy

The SEPC has developed a vision statement for its legislated mandate to develop a comprehensive state energy plan:

A state energy sector which provides for improved quality of life, economic growth, greater public health and minimized environmental impact while developing energy distribution and its infrastructure that is stable, resilient and secure for Tennessee

This requires monitoring and understanding of markets, policies, technologies and other factors that influence energy-related outcomes and policy development to help reach the state's readiness and leadership in the evolving energy economy. Energy sector leadership can promote economic competitiveness in the modern economy and improve the quality of life for Tennesseans.

Policy Framework

Through its engagement to date, the SEPC has identified potential broad targets that capture the key policy touchpoints of the state energy landscape. Policy efforts could focus on end users, energy producers and distributors and underlying production systems and technology (e.g. small modular reactors). Policy might also focus on the labor market where there is an inadequate supply of skilled workers (e.g. solar installers, alternative fuel vehicle mechanics). Policy might also target technologies that reduce the environmental footprint. Additionally, energy policy actions might work to support Tennessee's rural and underserved communities, such as its economically distressed counties. These examples illustrate the broad array of general targets for state policy.

For convenience, the SEPC has placed the potential policy targets into three areas:

- Fuel sources for energy production that may be consumed in state (including imports) or exported out of the state for use elsewhere
 - Bioenergy
 - Coal
 - Hydro
 - Natural gas
 - Nuclear
 - Petroleum
 - Propane
 - Solar
 - Wind
- Energy infrastructure as it regards generation, transmission, and distribution
 - Distributed energy resources (e.g. co-generation units, back-up generators)
 - Electricity
 - Natural gas
 - Other transportation and/or heating fuels (e.g., diesel, gasoline, propane)
 - Storage
- Energy consumption
 - Agriculture
 - Commercial
 - Government
 - Industrial
 - Residential
 - Transportation

The SEPC has also developed a set of criteria to be used when considering the design, implementation and evaluation of state energy policy. These criteria establish a framework and lens through which the benefits of developed policies or legislative actions can be determined. These criteria were developed through a review of resources (such as the NASEO report cited above), presentations to the SEPC by Council members and other experts, informational webinars and group discussion.

- *Economic development* -- promoting quality of life for Tennesseans, including job opportunities for workers, market opportunities for businesses and tax base expansion for state and local governments.
- *Efficiency and conservation* -- practices and technologies that can reduce consumption and costs for users, including households and businesses.
- *Environmental impacts* -- accounting for the natural resource, climate and related social consequences of resource extraction, energy production, transmission, distribution and use
- *Equity* -- ensuring that the benefits and burdens of the state energy sector are shared broadly among different segments of the state population, including those who live in rural and urban areas of the state.
- *External effects* -- factors arising from the activities of other states and the federal government that may constrain or enhance the ability of Tennessee to enact and effectively execute a state energy plan.

- *Resource use* -- utilization of energy resources available in Tennessee.
- *Resiliency* -- ability to adapt to changing circumstances, including technology and policy, or to respond to and recover from natural climatic events and man-made disasters.

Challenges and Constraints

Energy policy in Tennessee faces constraints that must be recognized when developing a state energy plan or specific policies. Five important constraints are (1) federal policy that influences markets and state policy in Tennessee; (2) global and national markets that influence prices for energy use and energy products; (3) technology and innovations that can affect energy cost and availability; (4) TVA's unique role in electric power generation (including the fuel mix), transmission, and regulator over distribution; and (5) market forces that limit availability and supply of energy sources.

Potential Opportunities

Even with the constraints identified, there are numerous opportunities for Tennessee to take advantage of the rapidly changing energy landscape that can yield benefits to the state's economy and residents and promotes Tennessee's energy leadership role. These opportunities include:

- Creating a comprehensive state energy plan that recognizes and leverages the value of the constraints and aligns energy interests in the state to enhance economic development. Identification of efficient and cost-effective areas of growth in Tennessee's energy industry leading to business opportunities, new jobs and tax base expansion.
- Understanding the impact of aging or absent transmission and distribution infrastructure, along with capacity constraints to determine policies needed to support investment for modernizing and improving the state's energy infrastructure.
- Recognize and leverage energy-related R&D and technological innovations for the benefit of the Tennessee energy sector and Tennesseans.
- Understanding and improving transportation efficiency to reduce vehicle emissions and strengthen the resiliency of the transportation sector.
- Understanding the growing impact of energy poverty on economically challenged Tennesseans to determine and provide opportunities to reduce energy burden and improve the health and overall quality of life for all residents of the state.
- Evaluate opportunities for new energy industries and technologies that can be a boon to rural communities, attracting business and creating jobs.
- Further promote efficiency and conservation to reduce expenditures and environmental stressors.

Policy Considerations and Next Steps

In considering the potential opportunities, Council members have recommended a number of important near-term issues that could provide Tennessee with opportunities to lead in the energy sector, remain competitive in the modern economy, and improve the quality of life for all of Tennessee's residents. The Council intends to focus on these opportunities and will provide further guidance and recommended policy strategies, consistent with the Council's vision statement. The areas where Tennessee can lead include:

- Exploit Tennessee's unique comparative advantages in distinct areas of the energy landscape for research, supply chain and operations of nuclear technology.

- Capitalize on the resources and infrastructure to expand electric vehicle adoption, use, and production within the state to reduce the environmental impacts and increase the resiliency and efficiency within the transportation sector.
- Expand opportunities for fuel source diversification to support broader applications like mass transit and commercial transport, where appropriate.
- Evaluate opportunities to utilize conservation and advanced energy technologies to support and improve health, education, and economic status of Tennessee's rural and underserved areas.