



2012 Sustainable Tennessee Agenda - Policy & Practice Fact Sheet

Mountaintop Removal in Tennessee

Source: *Appalachian Voices*

- Surface mining including mountaintop removal mining has destroyed more than 125 square miles in Central Tennessee, an area twice the size of Washington, DC.
- Tennessee coal production is in steep decline. Having fallen more than 80% in two decades, coal produced in Tennessee now represents just 0.2% of the coal mined in the United States. More than two-thirds of our coal comes from destructive surface mining methods.
- Mountaintop removal means fewer coal mining jobs for Tennessee. Underground mining employs far more people per ton. In fact, Tennessee coal mining jobs have fallen 85% since 1985, due to an increase in surface mining and a decrease in overall production.
- In Tennessee, 95% of the acreage on all high elevation surface permits are held by out of state coal operators. Nearly half are controlled by Jim Justice, a rogue West Virginia operator who recently laid off 155 employees of National Coal. These 155 laid off workers represent more than 40% of Tennessee's coal employment as of 2011.
- In Tennessee, our mountains are our most important economic asset. The Great Smoky Mountains National Park is the most visited National Park in the entire country, with more than 9 million visitors annually (twice as many as the Grand Canyon.) The Tourism industry, employs more than 175,000 in our state and brings more than \$13 billion in benefits every single year. We simply can't afford to destroy our mountains.
- Tennessee has one of the lowest coal severance taxes in the country. The total tax collected in Tennessee for all methods of coal mining is under one million dollars per year, less than the cost of one luxury, mountain home.
- However, independent studies show that the impact of the coal industry on the Tennessee state budget is a negative one, costing Tennessee taxpayers millions in wasteful spending every year. The entire coal industry in our state employs less than 400, a number which is rapidly falling.
- Mountaintop removal is associated with areas of high unemployment, high poverty, and poor health. Eastern Kentucky's fifth Congressional district has more mountaintop removal than any other district in the nation. It also ranks dead last in life expectancy, dead last in emotional health, and dead last in overall well being.

- In 2005, a 12-year-old bond-released surface mine site in the Sundquist Wildlife Management Area gave way. Twenty-three acres of remodeled mountain slid into Smoky Creek which flows into the Big South Fork National River which eventually feeds Nashville's water supply via the Cumberland River. Sediment from the slide continues to pollute the water. Such slides are not unusual.
- TVA and Tennessee avoid buying Tennessee coal because it is the most expensive on the market. In all, Tennessee coal makes up less than 0.7% of all of TVA's coal purchases. The majority comes from the American West and the Illinois Basin. Surface mined coal from Central Appalachia makes up less than 2% of TVA's electricity production. We don't need mountaintop removal to keep the lights on in Tennessee.
- TVA actually pays *more* for surface mined coal from Central Appalachia than they do for underground mined coal from Central Appalachia
- EPA has shown that mountaintop removal coal mining degrades the quality of water through deforestation, erosion, and rubble deposits in small mountain streams.

Clean Energy, Energy Conservation and Green Jobs in TN

- Tennessee has more solar potential than Germany, the world's solar leader, and it's experienced a huge solar business and job creation boom in the last decade—solar and solar-related industries already employ more than 6,400 Tennesseans.
- Citing a \$5 million imbalance in revenues vs. expenses, TVA says the cutback in its solar programs is necessary because the huge popularity of the renewable incentives has outpaced customers' voluntary green power contributions.
- At the same time, TVA—a U.S. government-owned corporation—has found the cash to pay almost \$13 billion in cleanup costs and fines for its 2008 coal ash spill, on record one of the worst environmental disasters in U.S. history. It also dug deep in its pockets to find an unplanned \$5 billion to finish the new Bellefonte nuclear plant. We are calling on TVA to restore funding to incentive programs that drive solar power and renewable energy in the Valley and decouple the funding for Generation Partners and Green Power Switch.
- The TN Climate Action Campaign will press TVA to adopt an annually compounded 1% energy efficiency target. Over a ten year period, those energy savings will allow many more TVA coal plants to close.

Nuclear power plants and nuclear waste in TN

- Tennessee processors receive at least 75% of the nation's low-level radioactive waste, 55 million pounds in 2010. Millions of pounds have ended up in our landfills.
- Tennessee is the only state that allows commercial burning of radioactive waste, licensing six incinerators to burn the hot stuff that other states will not allow to be burned.

Incineration is a questionable method of waste disposal. Burning does not reduce the amount of radiation, just the volume of the contaminated material, there is a risk that radiation could slip past the smokestack filters and enter the air, workplace exposure is also a serious concern.

- We would not need to build new nuclear reactors if TVA moves aggressively forward on energy efficiency, conservation and cleaner, safer, cheaper alternatives.
- The Fukushima disaster tragically reveals the fallacy of clean and safe nuclear power with 3 melt-downs and probable melt-throughs; radiation leaking from highly radioactive used fuel rods; release of massive amounts of radiation; widespread contamination of land, air, water, people, plants, animals; mass evacuations; government and utility cover-up of the danger; and world-wide exposure to released harmful radiation.
- The EF-5 tornado that took out power lines to Browns Ferry Nuclear Plant on April 27, 2011 could have made a direct hit on the 3+ million pounds of 'spent' fuel rods stored in cooling pools there – and we would have had our own Fukushima. It was a very close call with the multiple SCRAMs (emergency shutdowns) on that day. Tornadoes are an ongoing threat in this area.
- Even on a daily basis, TVA is permitted to release a certain amount of radionuclides into our water and air. Radiation is cumulative over years impacting the health of citizens and their DNA. Studies have shown that children living closest to nuclear plants are especially vulnerable to acute childhood leukemia.

Renewable portfolio standards (RPS) in TN

- Tennessee (or TVA) does not have clear renewable energy goals. With a clear renewable energy policy, Tennessee has the ability to become a leader in development in solar, wind, biomass and other renewable energy technologies.
- An RPS consists of the establishment of a quantitative requirement for the production of electricity from renewable energy resources over an established and explicit time frame.*
- Under a 10 percent RPS requirement by 2020, TVA would have to account for roughly 19.7 billion kilowatt hours (kWhs) of renewable energy output (increasing the magnitude of its Green Power Switch program some 250 times).*
- A reasonable estimate of what TVA could bring online by 2020 is 15.2 billion kWhs, with the rest of the obligation purchased through renewable energy credits (RECs).*
- The majority of the output from renewables would come from cofiring biomass at existing TVA coal fired power plants.*
- Using an input output model, it was calculated that nearly 45,000 jobs would be created across the region as a result of the initiative.*

- A feasibility study is the first step in demonstrating the potential benefits of an RPS to the state's economy and environment. An RPS has the potential to help reduce a substantial amount of REAL emissions and greatly increase energy efficiency in the long term.
- 29 states plus DC and Puerto Rico have an RPS . Our neighbor to the east, North Carolina, passed an RPS in 2007.

*Source: *Resource and Employment Impact of a Renewable Portfolio Standard in the Tennessee Valley Authority Region. University of Tennessee Institute for a Secure and Sustainable Environment*

Tennessee Air Control Board

- Administrative boards with the mandate to adopt environmental regulations and presiding over environmental litigation are not balanced currently. There is an overwhelming influence from industry, municipalities, and other polluters.
- The State of Tennessee must ensure a diverse composition of its administrative boards, including the state Air Pollution Control Board, the Water Quality Control Board, and the Solid Waste Control Board. These boards must be fair and balanced, with representation from citizen and environmental and conservation organizations as well as industry. Recommendations include adding at least two community environmental health advocates to each board.
- The annual American Lung Association Asthma Capitals report of top "Asthma Capitals" for 2011 include Knoxville, TN (rank 2), Memphis, TN (3), Chattanooga, TN (4) and Nashville, TN (10). Several factors contribute to the ranking of cities including annual air quality – which tracks pollution levels and number of unhealthy outdoor ozone days,