

## Coal Cons

By Paul McCown and James D. Qualk

Despite global trends to phase out coal use, supporters of a coal-based energy economy have repackaged their product as one that will carry the United States into the future. However, when all external costs and risks of using coal are uncovered, coal stands out as one of the least viable options for America's energy future. For the future of our economy, our environment and our health, our nation must invest in alternatives to coal.

World coal use peaked in 1996 and continues to decline. Many factors have contributed to this decline, including environmental destruction and human health risks associated with its use. A common technique used for the extraction of coal is called mountain top removal. This "mining" method requires small teams of men with explosives to blow up the top 1,000 feet of a mountain, filling the valley below. Primarily occurring in West Virginia, Kentucky and Tennessee, this process to convert coal to electricity follows these steps: blow up a mountain, sort the pieces by fuel content, haul the pieces out by truck, load them on trains, transfer them hundreds of miles to coal-fired power plants, burn the coal to boil water which turns large turbines and generators, load capacitors with electricity, and transmit the electricity thousands of miles for use (2/3 of which is lost before reaching the user). To date, nearly 500 mountains have been erased from our landscape by this dreadful practice.

The associated health effects and costs of burning coal are not included in the cost of electricity. In the Southeast, where coal accounts for over 65% of electricity generation, asthma rates among children are abnormally high. The cause is clear. The heavy amounts of particulate matter—including mercury—produced at coal burning plants and emitted from the smoke stacks are directly linked to this growing health problem. This is particularly damaging to children's developing lungs which are more susceptible to long term damage by breathing tiny particulates. Children are not the only victims, though. Thousands of adults die each year from complications associated with breathing byproducts of burning coal. Heart attacks, strokes, deadly asthma attacks and mercury poisoning have all been directly linked to coal plant emissions.

We must make strategic changes in America's energy policy to avoid these unnecessary health and environmental risks. Aside from the obvious energy efficiency opportunities available today (Tennessee ranks number one in electricity consumption per capita), "free" energy options are now viable but are unable to compete in a market biased towards fossil fuels. Wind and solar energy production top the list of feasible solutions, but false arguments from supporters of the status quo continue to crowd out proper debate of the issue. As a Tennessean, would you rather see a wind farm on a hillside or would you prefer the removal of our mountains to get coal?

The costs of wind and solar energy production are falling quickly. In some parts of the country, the cost to produce wind energy has fallen below that of natural gas, proving that even in an unbalanced market renewable energy options are already viable. By changing our approach to energy production, we can create jobs in Tennessee while protecting the health of our citizens and our remaining wild places.

How many Tennessee Mountains will be destroyed before we realize the need to change direction? How many children will suffer from debilitating asthma before we start making better choices? Tennessee has an opportunity to lead the nation in the energy economy of the future. The choices we make today will have lasting effects on the health of our citizens and our economy.

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