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Energy Overview

Most people think of energy related to the type of energy they consume – heat for their house, electricity for their lights and appliances, and gasoline for their cars. When you look at what generates the electricity or gasoline, North Carolina's energy use by source is dominated by petroleum and coal. In fact, our transportation sector relies on petroleum for 96 percent of its energy, whether it is gasoline for our cars, diesel for our trucks, or jet fuel for our airplanes.

Most of the coal and nuclear power are used to generate electricity. North Carolina has among the highest electricity production and consumption rates in the country. Almost 90 percent of this electricity comes from coal and nuclear power plants. Although North Carolina is one of the top nuclear power producers in the United States, most of this power goes to the larger metropolitan regions around Raleigh and Charlotte. The percentage of power generation in the west is very different than the state as a whole.

Energy Use by Sector State of North Carolina







Household Energy

Household energy expenditures in the MRC region averaged 5.6 percent of median household income – 13.7 percent higher than the state average of 4.9 percent of median household income. Henderson County households spent the most on energy, at \$2,402 per household, followed by Transylvania County households at \$2,342.

Households located in the MRC counties are heated with a greater diversity of fuels than those in the state as a whole. While about 73 percent of households in North Carolina are heated with electricity or natural gas, in the MRC region 72 percent of households are heated with electricity or fuel oil. Twice as many households in the MRC region use wood or solar heating as do other areas across the state.





State and GroWNC Region Dependence on Imported Fuels

With no local deposits of coal, petroleum, or natural gas, the vast majority of energy resources for North Carolina's mountain region must be imported. The following table provides information on the value and sources of North Carolina coal imports.

North Carolina Coal Imports by Source State or Nation (2010)		
State or Nation	Total Value of Imported Coal	% of Total
West Virginia	\$1,425,272,127	65.6%
Kentucky	\$633,554,617	29.1%
Virginia	\$101,945,464	4.7%
Colombia	\$12,699,976	.06%
Total NC Imported Coal	\$2,173,472,185	



Rising Cost of Petroleum (Oil)

For over 100 years, oil was plentiful and cheap. During this period, the price of oil stayed almost flat, at about \$20 per barrel. The car and airplane were invented to take advantage of this cheap and efficient source of energy, and most of our current infrastructure was designed based on this low-cost source of energy. Now, however, the global oil supply has diminished, and as population and development have increased, so has the demand for petroleum.

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Data sources: Mountain Resources Commission Western North Carolina Sustainability and Vitality Index, U.S. Energy Information Administration North Carolina Energy Fact Sheet, U.S. Bureau of Labor Statistics, North Carolina Sustainable Energy Association 2011 Clean Energy Data Book, Land-of-Sky Regional Council EvolveEnergy Partnership Report