

Fuel Mix Report

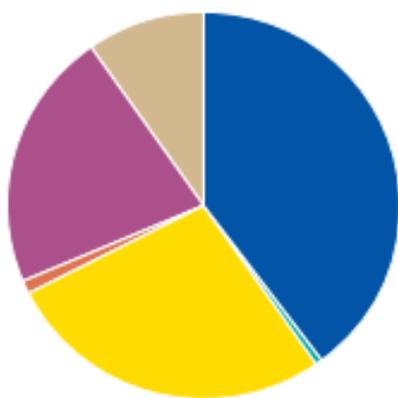
The fuel mix characteristics of Great Lakes Energy Cooperative as required by Public Act 141 of 2000 for the 12-month period ending 12/31/16.

COMPARISON OF FUEL SOURCES USED

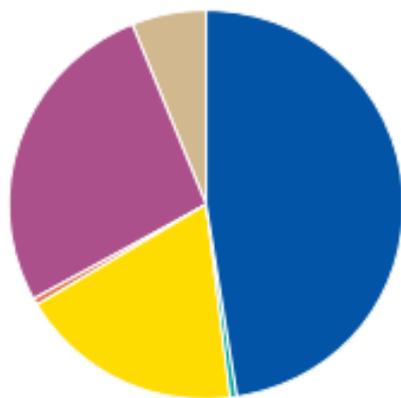
Regional average fuel mix used			
Your co-op's fuel mix			
FUEL SOURCE			
Coal	39.8%	47.7%	
Oil	0.5%	0.6%	
Gas	27.2%	18.1%	
Hydroelectric	1.3%	0.8%	
Nuclear	21.5%	26.7%	
Renewable Fuels	9.7%	6.1%	
	<i>Biofuel</i>	0.6%	0.8%
	<i>Biomass</i>	0.4%	0.5%
	<i>Solar</i>	0.1%	0.1%
	<i>Solid Waste Incineration</i>	0.1%	0.1%
	<i>Wind</i>	8.1%	4.1%
	<i>Wood</i>	0.4%	0.5%

NOTE: Biomass above excludes wood; solid waste incineration includes landfill gas; and wind includes a long-term renewable purchase power contract in Wolverine's mix, but does not include banked renewable energy credits (RECs) that bring the total for renewable fuels to 10%. The 2016 Historical Fuel Mix numbers reflected here do not reflect current and ongoing renewable percentages of fuel mix now near 20%.

Your Co-op's Fuel Mix



Regional Average Fuel Mix



EMISSIONS AND WASTE COMPARISON

TYPE OF EMISSION/WASTE	lbs/MWh	
	Your Co-op	Regional Average*
Sulfur Dioxide	5.4	7.6
Carbon Dioxide	1,578	2,170
Oxides of Nitrogen	1.5	2.0
High-level Nuclear Waste	0.0068	0.0083

*Regional average information was obtained from MPSC website and is for the twelve-month period ending 12/31/16.

Great Lakes Energy purchases 100% of its electricity from Wolverine Power Supply Cooperative, Inc. which provided this fuel mix and environmental data.