

Fuel Mix Report

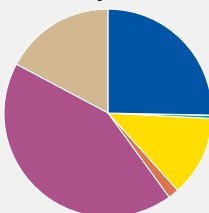
The fuel mix characteristics of Great Lakes Energy Cooperative as required by Public Act 141 of 2000 for the 12-month period ending 12/31/18.

Comparison Of Fuel Sources Used

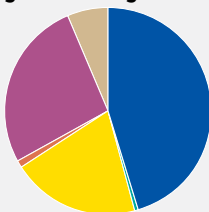
Regional average fuel mix used		
Your co-op's fuel mix		
Fuel Source		
Coal	25.72%	45.48%
Oil	0.20%	0.38%
Gas	12.47%	20.20%
Hydroelectric	1.84%	0.95%
Nuclear	42.63%	26.62%
Renewable Fuels	17.14%	6.37%
<i>Biofuel</i>	0.40%	0.91%
<i>Biomass</i>	0.19%	0.49%
<i>Solar</i>	0.29%	0.13%
<i>Solid Waste Incineration</i>	0.10%	0.04%
<i>Wind</i>	15.93%	4.31%
<i>Wood</i>	0.23%	0.49%

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.

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	1.1	2.4
Carbon Dioxide	959.9	1,916.0
Oxides of Nitrogen	0.6	1.3
High-level Nuclear Waste	0.0096	0.0060

*Regional average information was obtained from MPSC website and is for the 12-month period ending 12/31/18. Great Lakes Energy purchases 100% of its electricity from Wolverine Power Supply Cooperative, Inc., which provided this fuel mix and environmental data.