

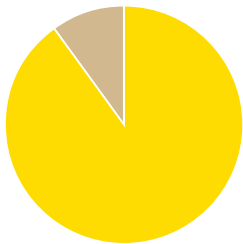
# Fuel Mix Report

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

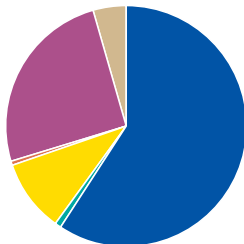
## COMPARISON OF FUEL SOURCES USED

Regional average fuel mix used		
Your co-op's fuel mix		
FUEL SOURCE		
Coal	0%	59.4%
Oil	0%	0.6%
Gas	90%	9.8%
Hydroelectric	0%	0.6%
Nuclear	0%	25.4%
Renewable Fuels	10%	4.2%
<i>Biofuel</i>	0%	0.5%
<i>Biomass</i>	10%	0.5%
<i>Solar</i>	0%	0%
<i>Solid Waste Incineration</i>	0%	0%
<i>Wind</i>	0%	2.7%
<i>Wood</i>	0%	0.5%

**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	0.25	7.6
Carbon Dioxide	897	2,170
Oxides of Nitrogen	0.23	2.0
High-level Nuclear Waste	0	0.0083

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

The fuel mix data presented by Thumb Electric is the data from CMS Energy which supplies nearly all of Thumb Electric's purchased power.