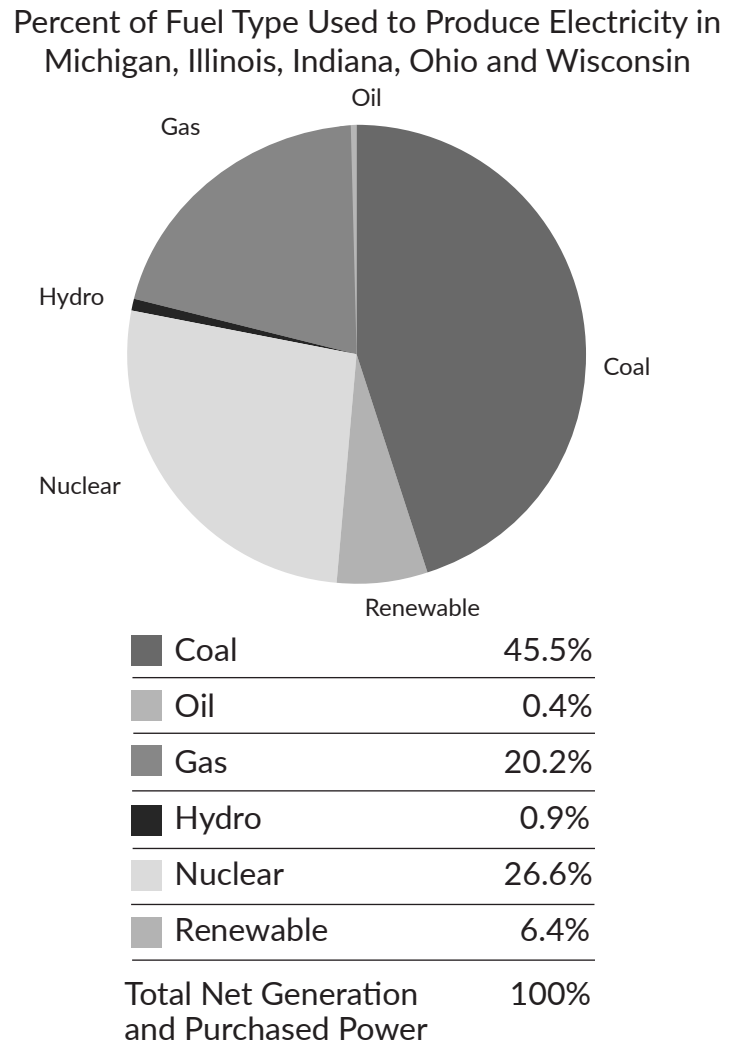
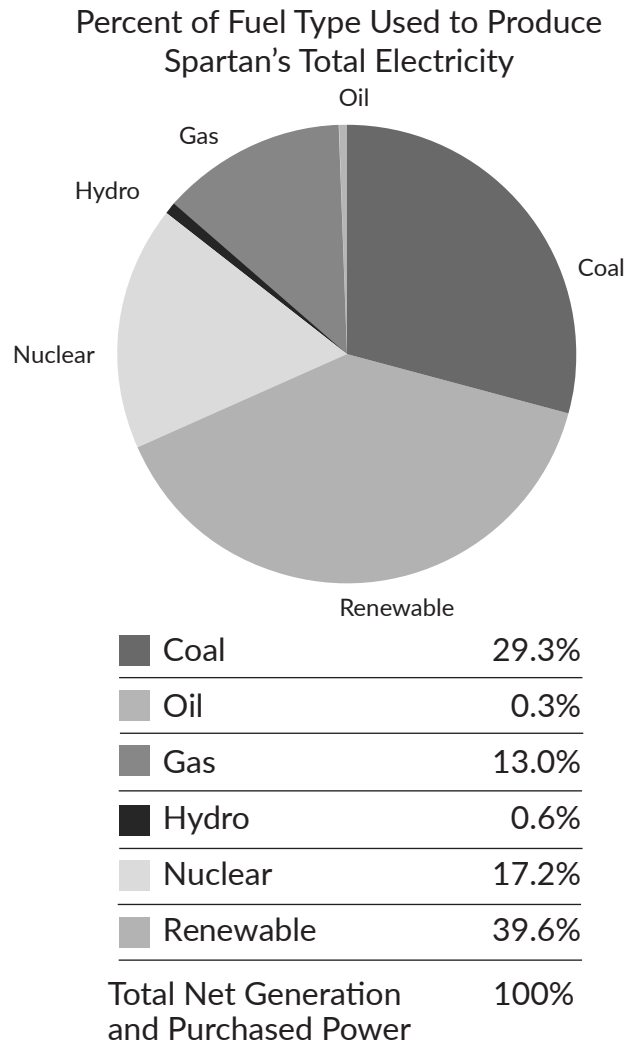




The environmental characteristics of your electricity as reported to the Michigan Public Service Commission pursuant to Public Act 141 of 2000 are as follows.

Average fuel mix comparison – Wolverine’s regional average for Spartan versus ECAR’s regional average for the 12-month period ending December 31, 2018.



Airborne emissions and high-level nuclear waste comparison – Wolverine’s regional average for Spartan versus ECAR’s regional average for the 12-month period ending December, 31, 2018.

Type of Emission/ Waste	Spartan’s Average (Pounds/MWh)	Regional Average of All Generation in Michigan, Illinois, Indiana, Ohio and Wisconsin (Pounds/MWh)
Sulfer Dioxide	1.5	2.4
Carbon Dioxide	1,235.8	1,916.0
Oxides of Nitrogen	0.8	1.3
High-Level Nuclear Waste	0.0039	0.0060