

Wichita State University Carbon Footprint Analysis

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In the modern age, we are growing more aware of the limited time and resources this planet has and that we must take steps to prevent this. As a leader in innovation, we should also progress our efforts to combat the ongoing climate crisis. This research's main intent is to update the carbon footprint in respect to Scope 2 emissions of Wichita State University (WSU) from a previous study in 2019. Scope 2 will include the emissions produced through purchasing of utility power; electricity and natural gas bought from our providers. To calculate our emissions, we will catalog our usage of each utility, in kWh and MCF (1000 cubic feet) respectively, over 2022, and then multiply it by the emissions profile as reported by the Energy Information Administration. Once collected, we converted our usage information into kg CO₂. Our results show that WSU Scope 2 emissions in the year 2022 produced 33,710,218.191 kg of CO₂, approximately 2 million kg more than in 2019. Overall, there was a significant increase in emissions from electricity usage but with a decrease in gas usage. Nonetheless, putting us enroute to the average of producing just over 52,000 MT of CO₂. This data will provide valuable insight on how to address campus carbon emissions and general energy usage to potentially help lower costs. This will help to promote awareness of carbon emissions in our lives and campus to better combat this increasingly large epidemic. Also, this study should be used for future revisions of Wichita State's carbon footprint as was the intention of the previous research study.