

Energy Production and Electric Vehicle Registration

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Abstract

This study investigates the correlation between electric vehicle registration and energy production in the contiguous United States between 2016 and 2023. Datasets from the United States Department of Energy's TransAtlas and the United States Energy Information Administration were utilized to achieve this goal. Additionally, spatial analysis was conducted within ArcGIS Pro to create 3 choropleth maps that visualized the data. The initial hypothesis was that there would be a direct correlation between the two variables, which would allow a further study upon the effects of electric vehicles on the environment. However, while some correlations did appear, it can not be concluded that increases in electric vehicles and energy production over the 7 year period relate to each other. This study highlights the change in time of these two independent variables, providing a baseline for further research.