

Electric Consumption Analysis: UK-Wide Commercial vs Domestic Usage, Regional Insights, and Wales Focus

NOTE: Electricity usage measure are in Giga Watts per Hour (GWh)



Box Plots:

distribution shape detail.

Display data distribution through quartiles.

Show the median and highlight potential



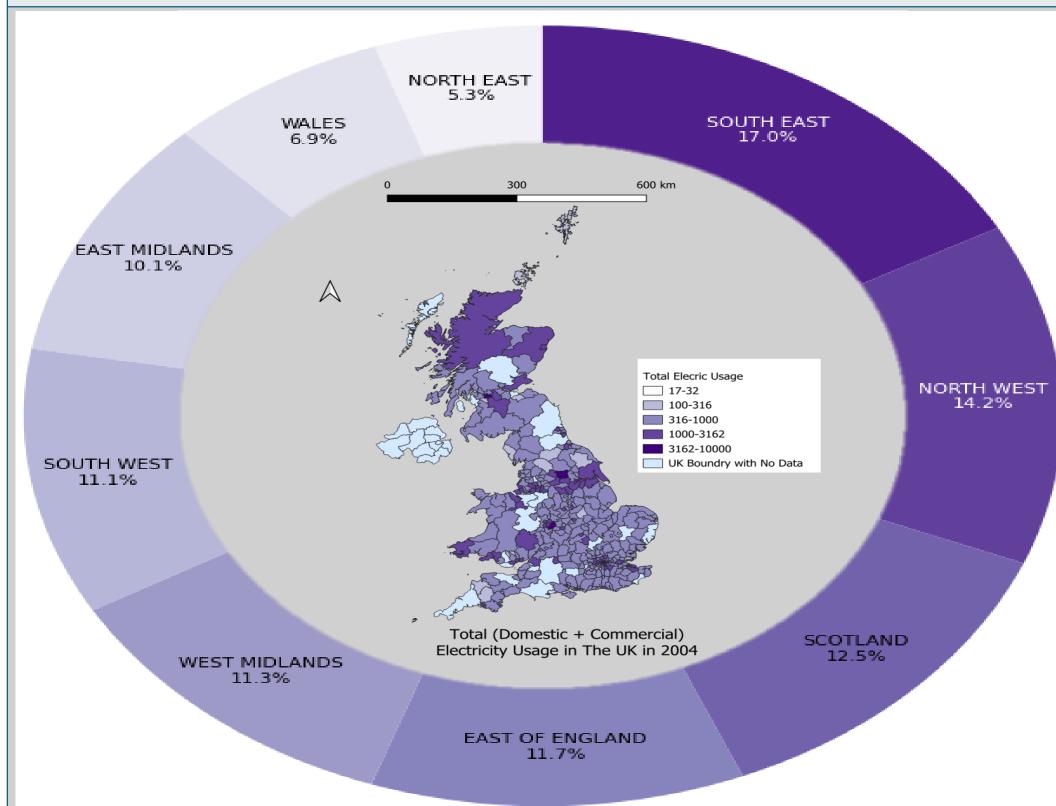


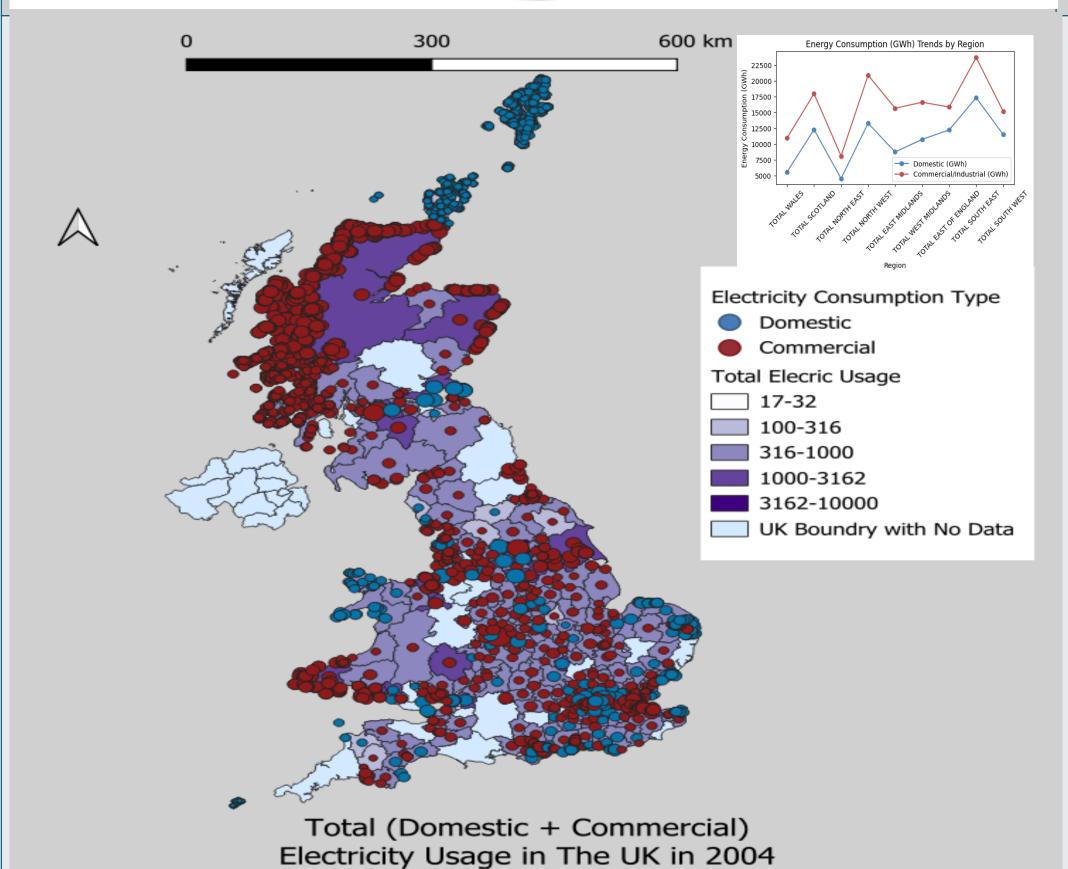
Reza Foratikashani 969477@swansea.ac.uk



Usage Across the UK





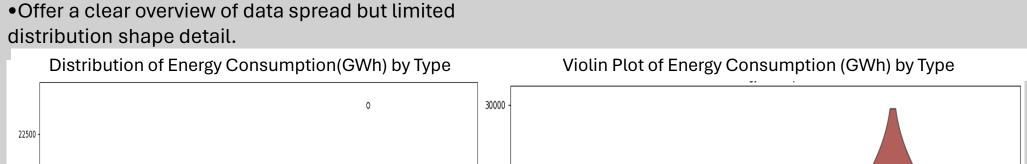


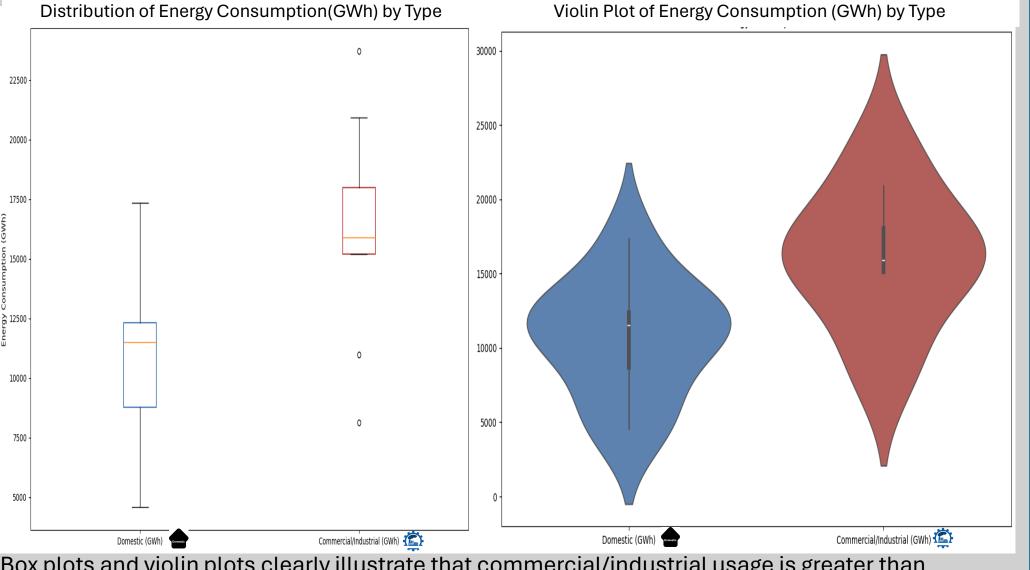
Aggregated Regional Data Analysis



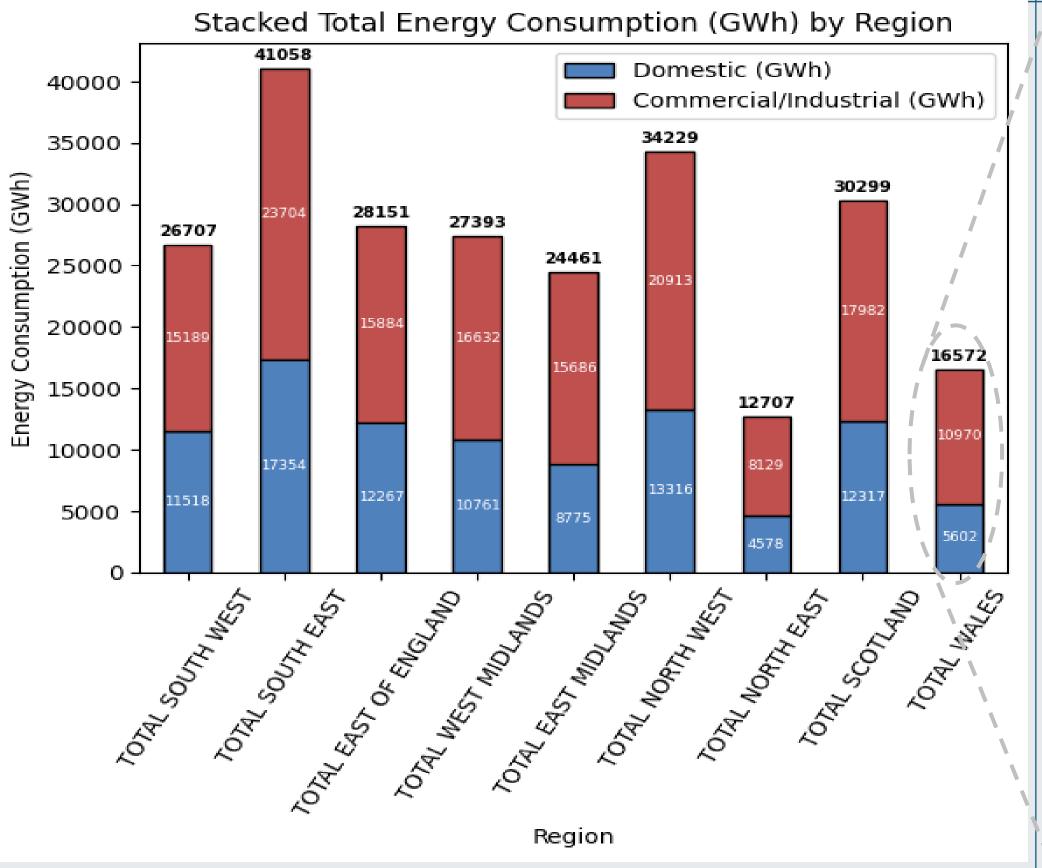
Violin Plots:

 Combine box plot features with kernel density estimation Provide a comprehensive view of data distribution, including frequency variations.





Box plots and violin plots clearly illustrate that commercial/industrial usage is greater than domestic usage. The box plot for commercial/industrial usage reveals outliers at both the higher and lower ends of the data.



Detailed Study of Wales (Cymru)



A comparison between the overall UK and Wales shows that, while industrial usage is higher in both regions, Wales has a larger gap between industrial and domestic usage.

