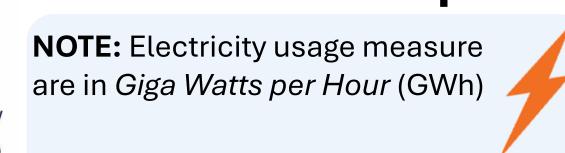


## Electric Consumption Analysis: UK-Wide Commercial vs Domestic Usage, Regional Insights, and Wales Focus





**Box Plots:** 

Display data distribution through quartiles.

Show the median and highlight potential

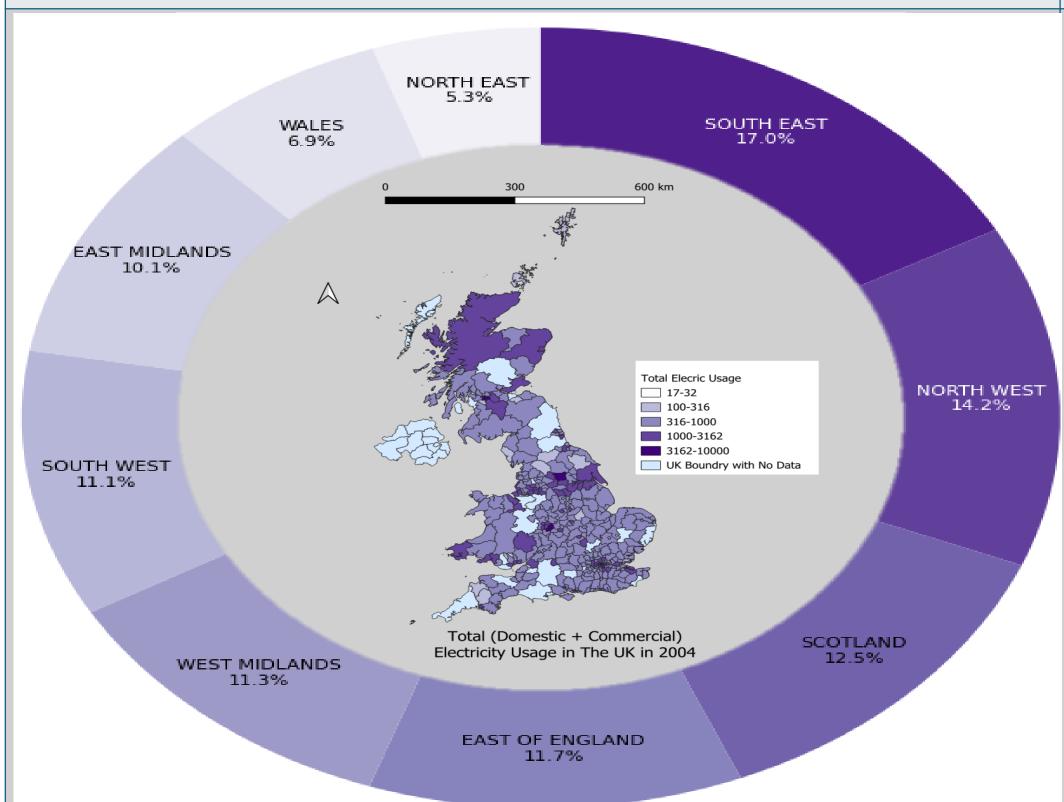


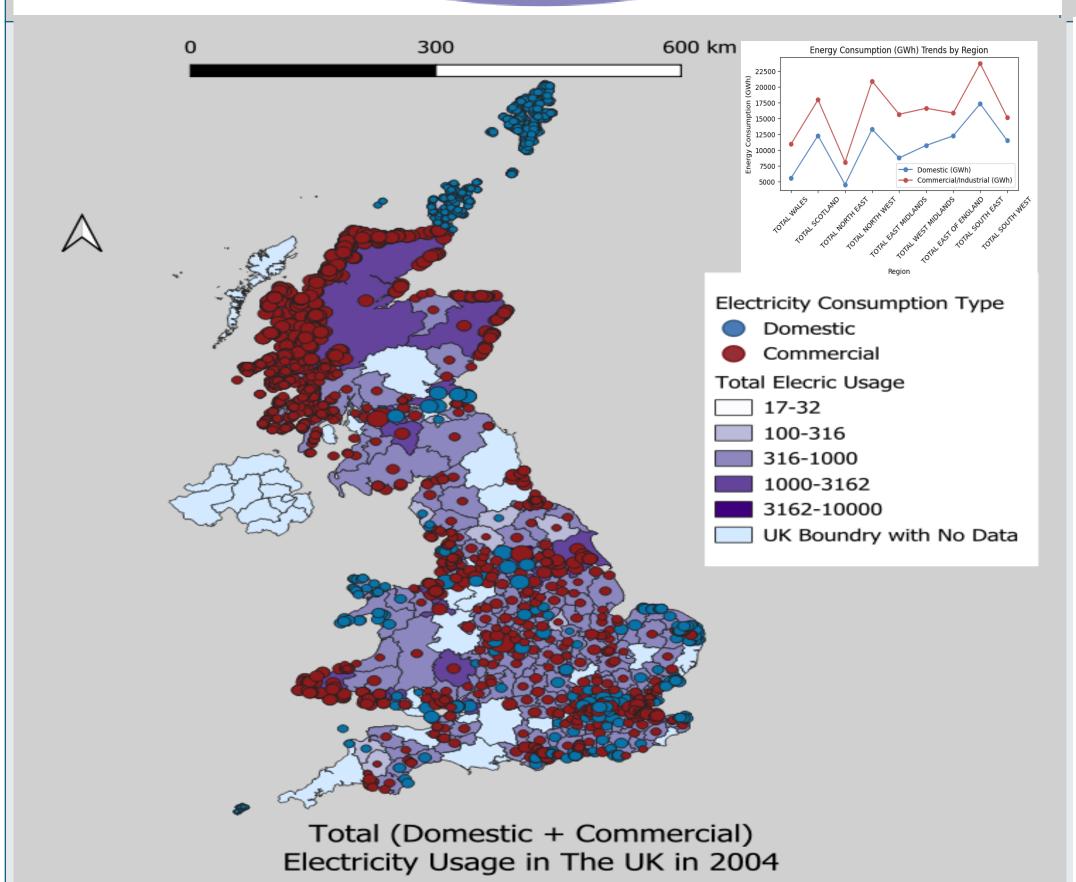




## Usage Across the UK





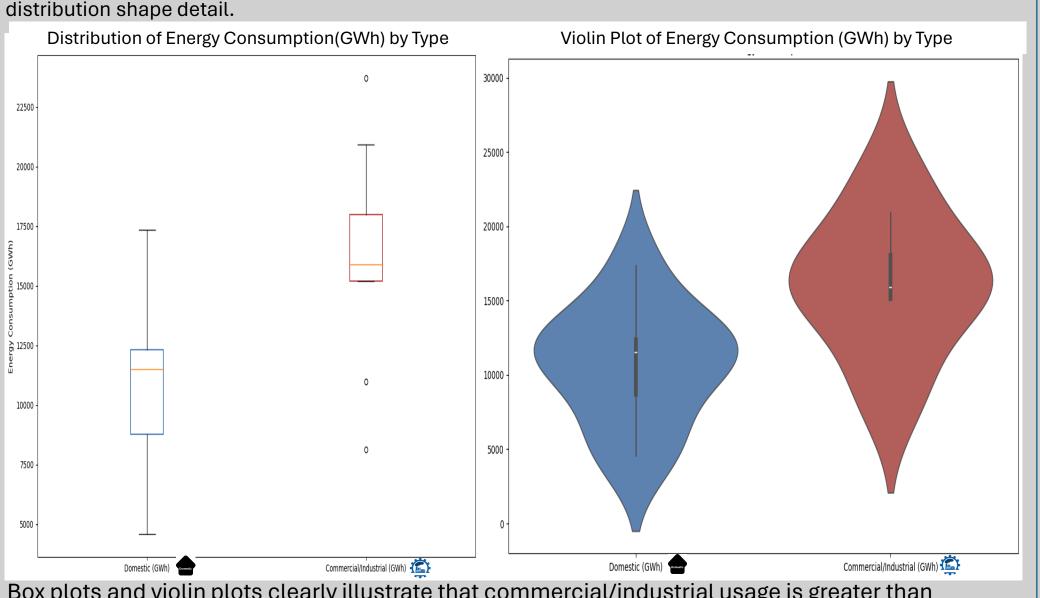


# Aggregated Regional Data Analysis

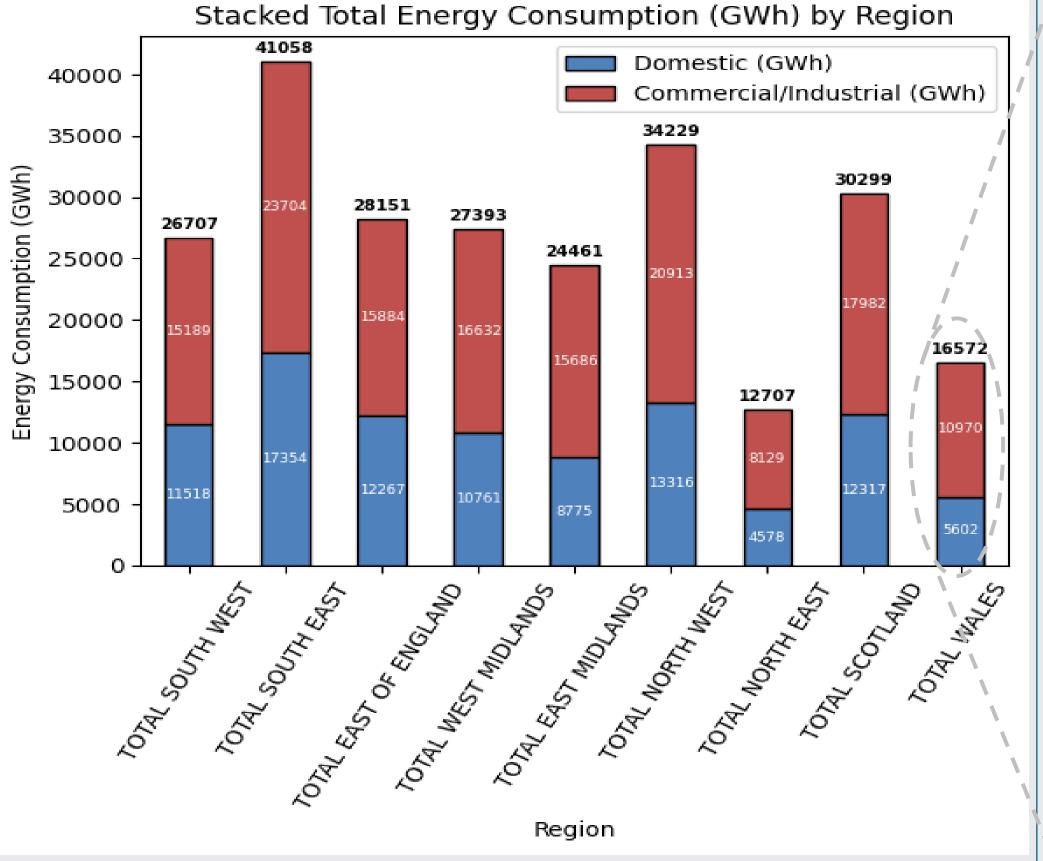


#### **Violin Plots:**

- Combine box plot features with kernel density estimation.
  Provide a comprehensive view of data distribution, including frequency variations.
- Offer a clear overview of data spread but limited distribution shape detail.



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.

