Key Findings :

1. **Churn Distribution:** The analysis reveals that churning customers represent a minority within the dataset, constituting approximately 9.7% of the total customer base. This highlights that the majority, around 90.3%, are non-churning customers.
2. **Significant Correlations:** Certain features showcase notable correlations with churn. These include :
    a. 'id'
    b. 'cons_12m'
    c. 'cons_gas_12m'
    d. 'date_activ'
    e. 'forecast_price_energy_off_peak'
    f. 'net_margin'
    g. 'pow_max'
    h. 'price_off_peak_var'
    i. 'price_mid_peak_var'.
3. **Price Sensitivity Impact:** While 'price_off_peak_var' and 'price_mid_peak_var' display relatively stronger correlations with churn compared to other features, the overall influence of price sensitivity factors on churn remains somewhat limited.
4. **Data Distribution:** A significant proportion of features in the dataset exhibit skewed distributions, indicating the possible presence of outliers.

Suggestions for Further Investigations:

To better understand customer churn, investigation of additional factors might be needed, such as :

1. customer satisfaction
2. service quality
3. engagement levels
4. market price competition, and detailed pricing information.

Exploring these aspects could enhance the predictive accuracy of churn analysis and reveal deeper insights into customer behaviour.