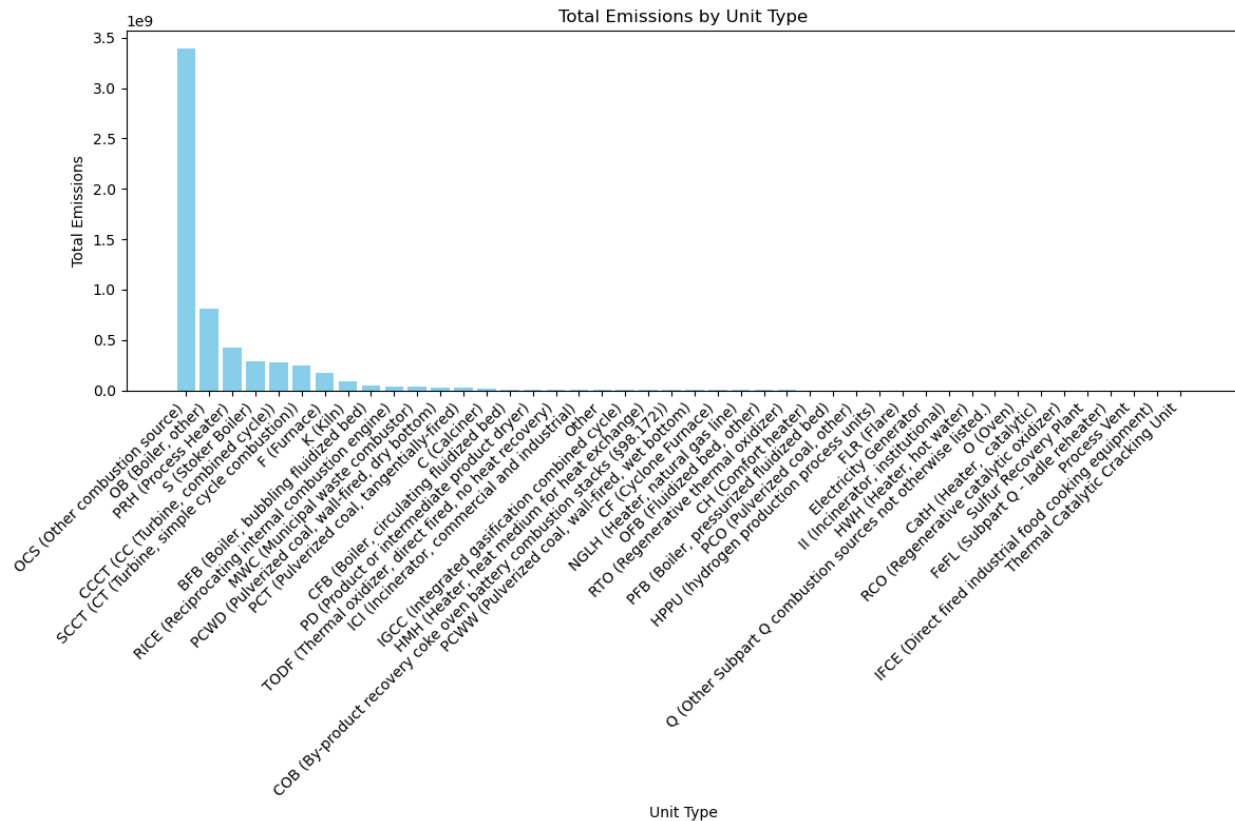
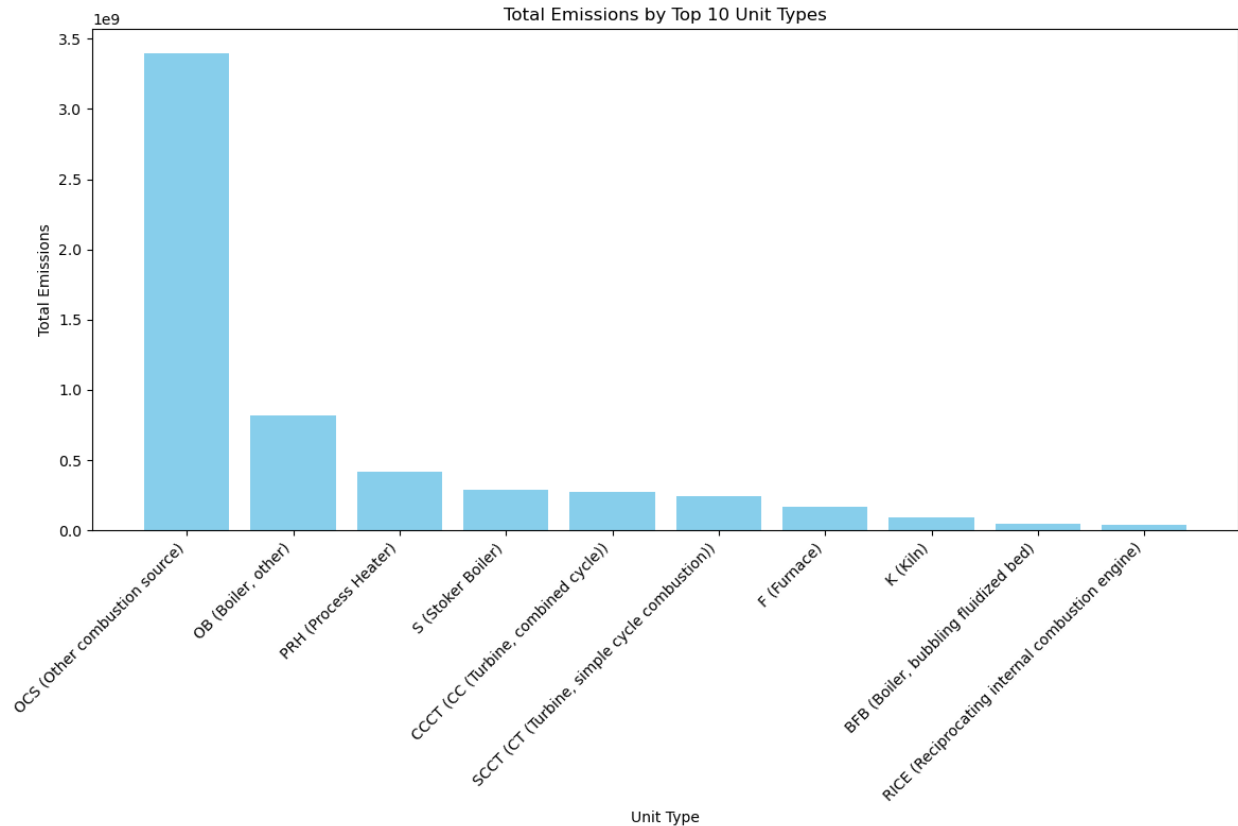


Unit Visualizations

1. Unit Type vs. Emissions:

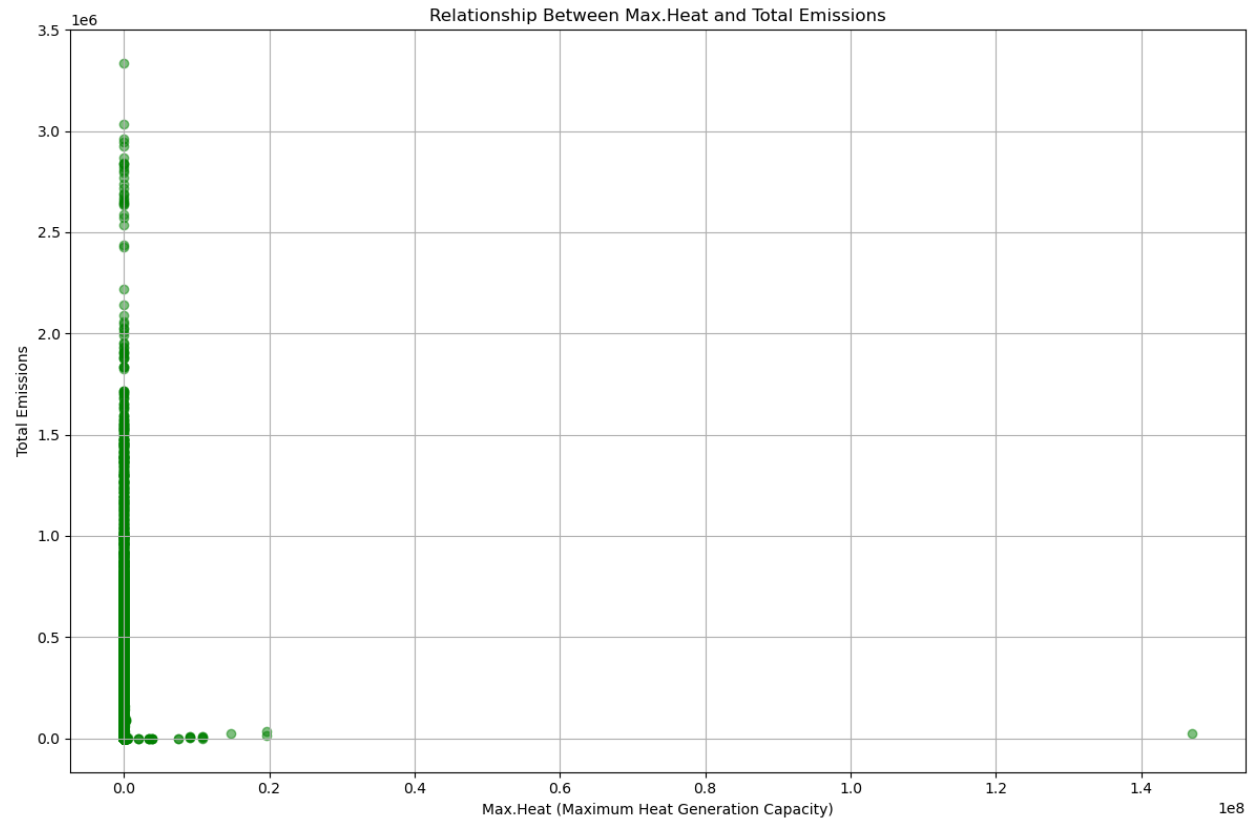
- We analyzed the total emissions associated with different `Unit.Type` s and visualized the data using a bar chart.
- The visualization focused on the top 10 unit types by total emissions, highlighting which types of units are associated with higher emissions levels.
- **Key Insight:** Certain unit types significantly contribute more to the total emissions than others. Targeting these high-emission unit types for improvements or regulatory focus could be an effective strategy for emission reduction.

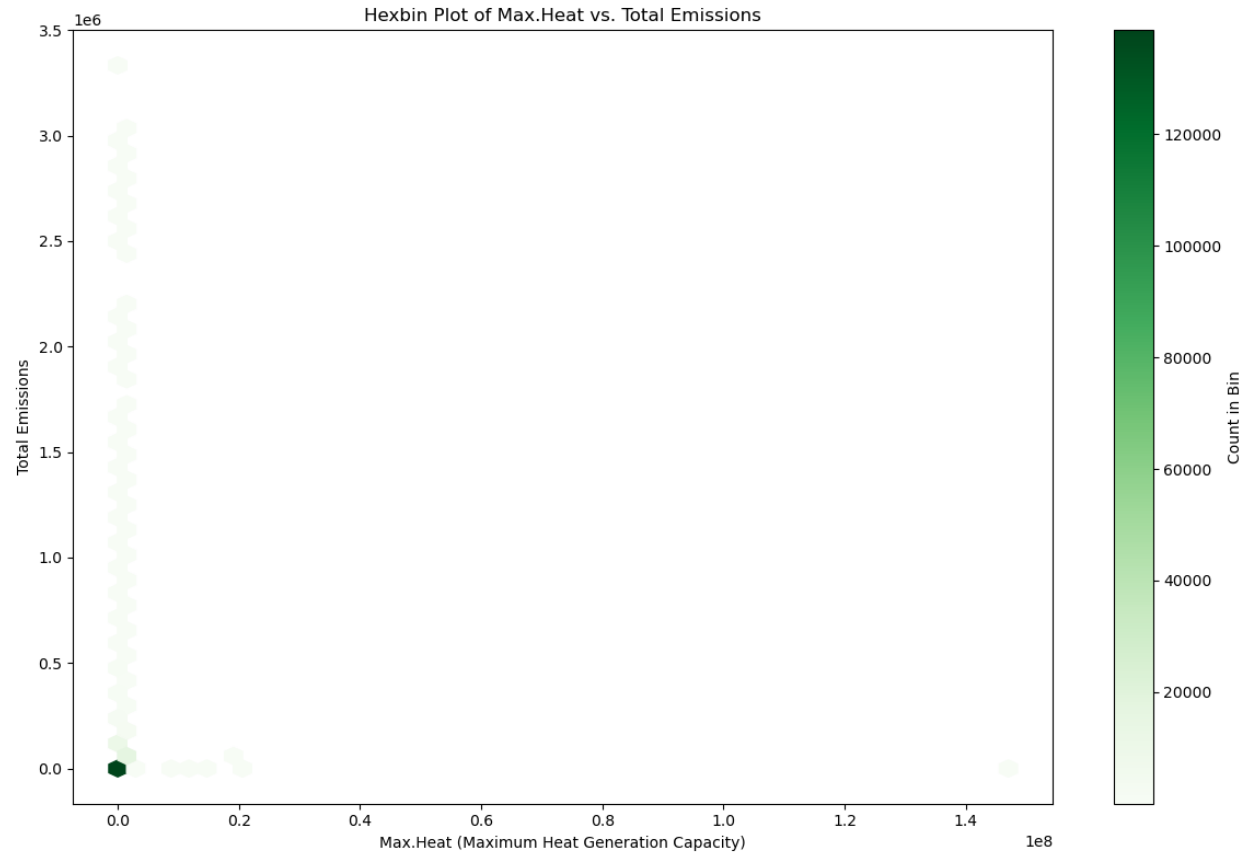


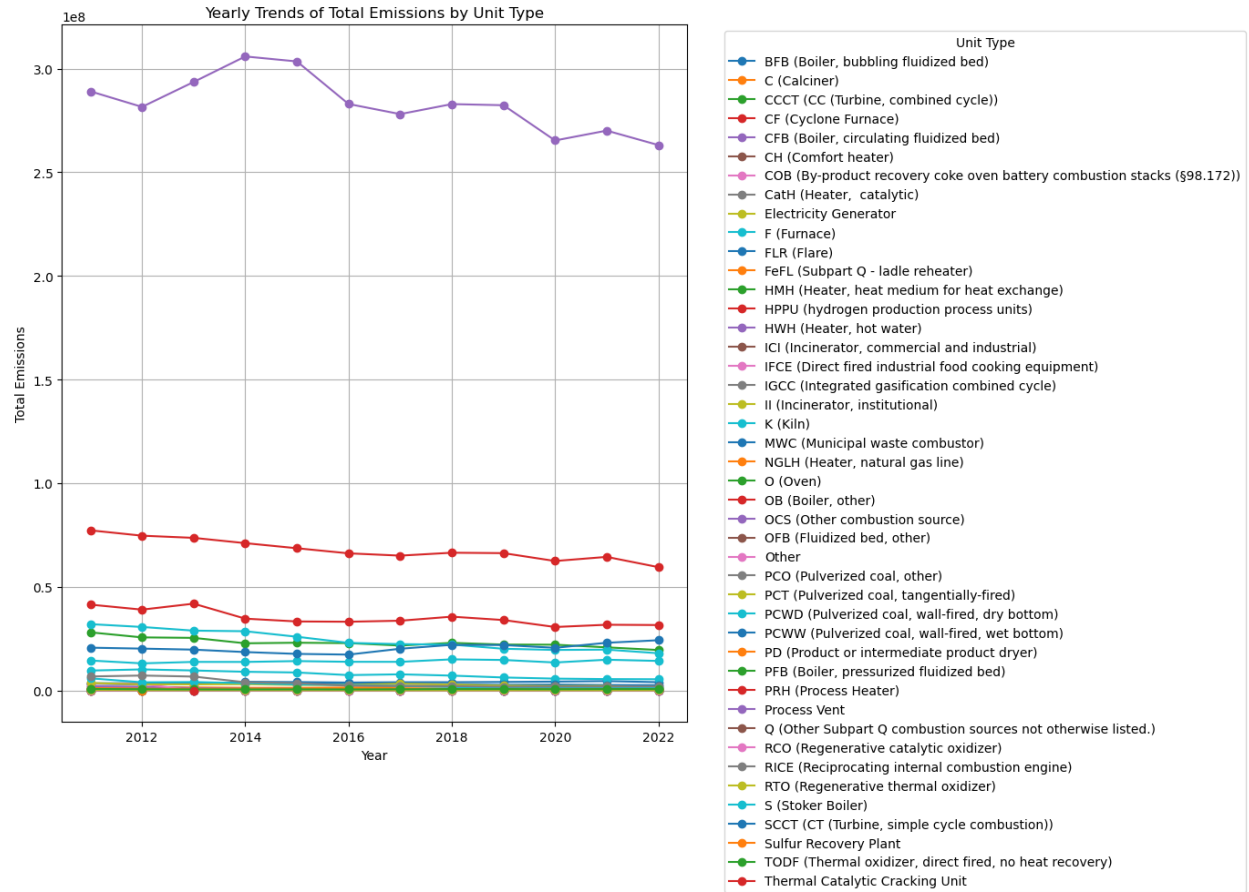


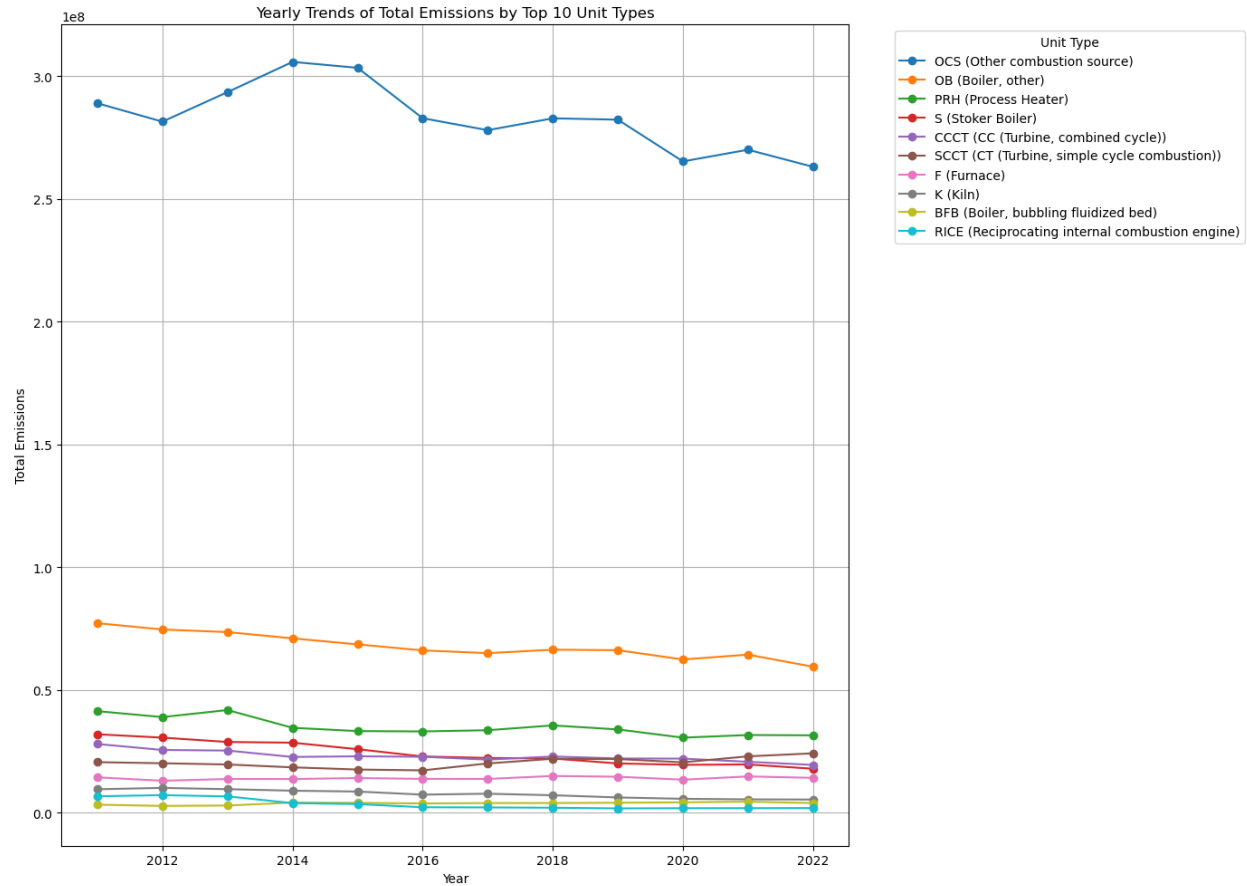
2. Heat Capacity vs. Emissions:

- We explored the relationship between the maximum heat generation capacity (`Max.Heat`) of units and their associated total emissions through a scatter plot, which was initially cluttered.
- To improve clarity, we used a hexbin plot that aggregated points into hexagonal bins, effectively displaying the density of units across different ranges of heat capacity and emissions.
- **Key Insight:** The hexbin plot provided a clearer view of the density of units in terms of their heat capacity and associated emissions, helping to identify common characteristics and potential areas for targeted emission reduction efforts.
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3. Yearly Trends by Unit Type:

- We examined how emissions from different `Unit.Type`s have changed over the years using line graphs, initially for all unit types and then focusing on the top 10 unit types by total emissions for clarity.
- **Key Insight:** The line graphs for the top 10 unit types revealed trends and changes in emissions over time, possibly reflecting the impact of technological advancements, operational changes, and regulatory developments. This analysis can inform strategies to further reduce emissions from the most impactful unit types.

General Insights:

- The analyses provided insights into which unit types contribute most to emissions, the relationship between unit operational characteristics (like heat capacity) and emissions, and how emissions from different unit types have evolved over time.
- Understanding these aspects can help in developing targeted strategies for emission reduction, informing policy and regulatory decisions, and guiding technological and operational improvements within industries.

If you need further information, wish to delve into specific aspects in more detail, or have other questions, please let me know!