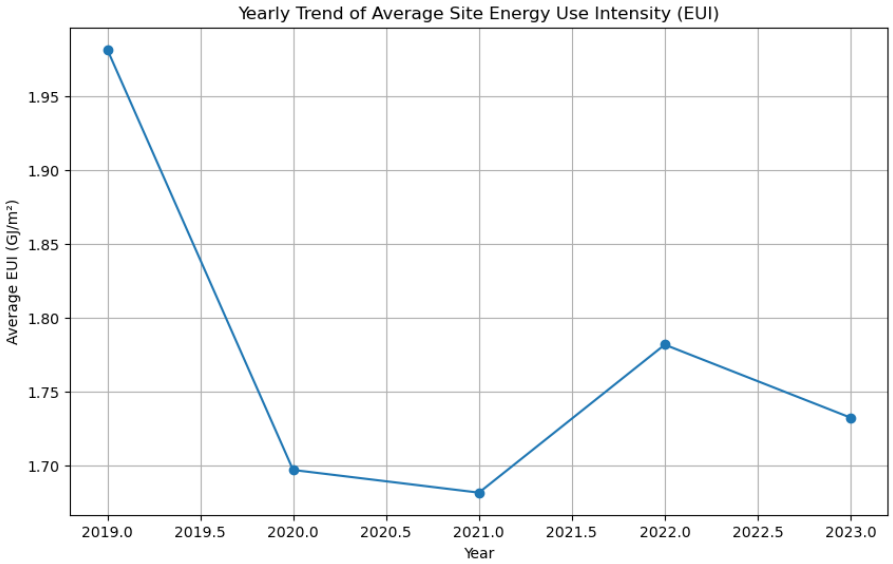
Report

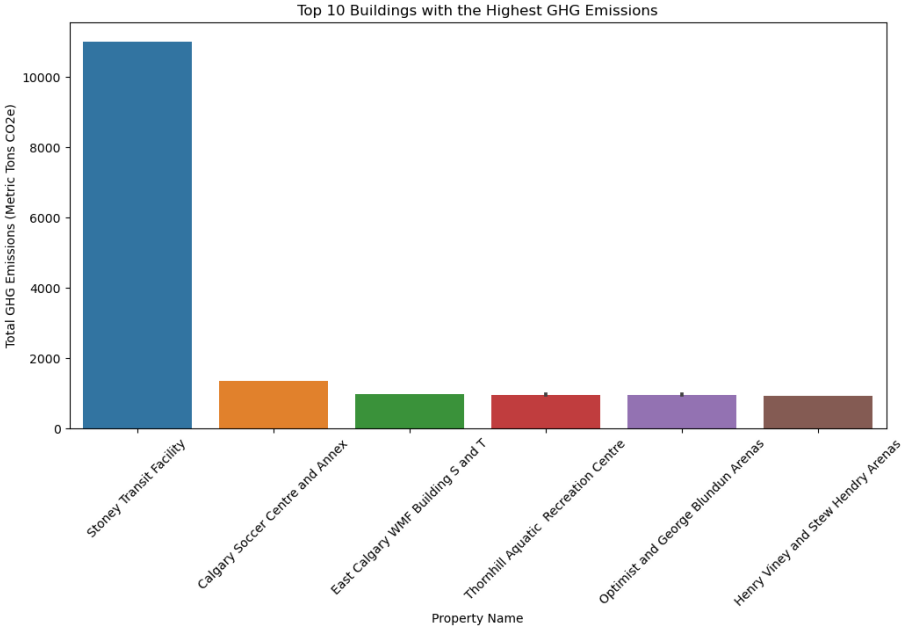
Key Trends in Energy Consumption and Efficiency

A significant decrease in EUI values is observed from 2019 to 2020, indicating an improvement in energy efficiency during that period.Subsequently, there is a slight increase in energy consumption in 2021, followed by a more considerable increase in 2022, suggesting a potential need for additional energy efficiency measures or changes in building usage patterns.The fluctuation in EUI values ranging from approximately 1.70 to 1.95 GJ/m² over the years highlights variations in energy consumption and efficiency trends.

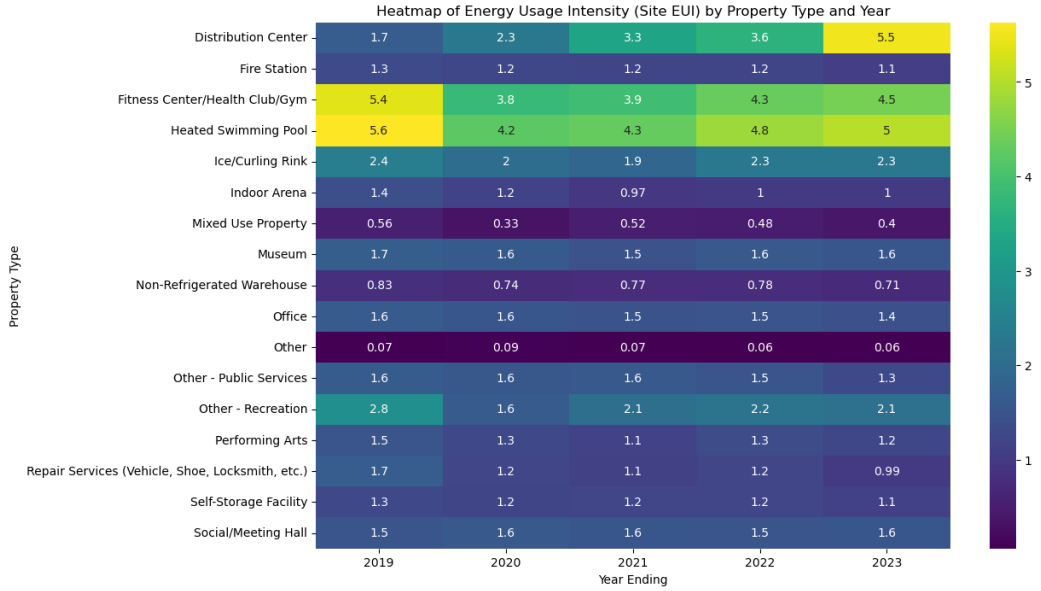


Seasonal and Property Type Variations

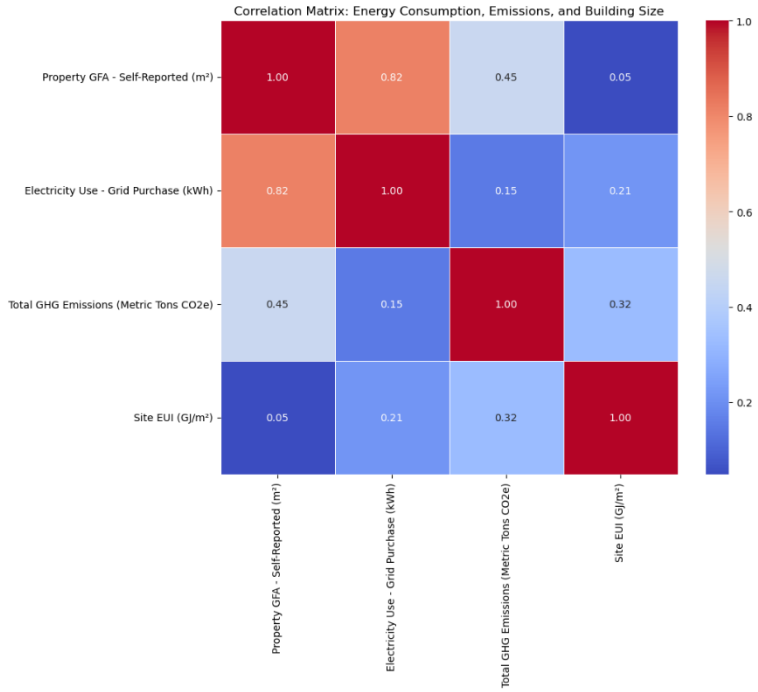
The Stoney Transit Facility has the highest greenhouse gas emissions, six times higher than the second ranked Calgary Soccer Center and Annex.



Some property types show higher EUI values, such as "fitness center/fitness club/gym" and "heated swimming pool", indicating areas where energy consumption can be optimized. In contrast, property types like Indoor Arena and Other - Public Services show lower EUI values, suggesting differences in energy efficiency among different building functions.



Strong positive correlations exist between electricity use, total GHG emissions, and building size, properties with higher electricity consumption often have higher emissions, emphasizing the importance of energy efficiency measures in reducing environmental impact.



Recommendations for improving energy efficiency and reducing emissions

Focus on properties with the highest energy consumption and greenhouse gas emissions,

such as heated swimming pools and old office buildings. Implementing energy-saving HVAC systems, upgrading insulation materials, and using intelligent energy management systems can significantly reduce energy consumption. Focus on improving site energy efficiency in properties with high total GHG emissions and electricity consumption to reduce environmental impact.Encourage the use of on-site and off-site green electricity to reduce dependence on grid power and lower greenhouse gas emissions. Implement seasonal energy-saving measures, such as optimizing winter heating systems and using natural ventilation in summer. Deploy advanced energy management systems, optimize energy use, reduce emissions, and promote long-term sustainability.