

2022SestosoTreus-abstract

Thesis Question

How can tall buildings help save the environment?

Thesis Statement

The implementation of large-scale, vertical power-production buildings, with mixed-adaptable programming, can help improve and protect the environment.

Abstract

The world is getting denser. Population is increasing, resources are diminishing, cities are expanding, land is becoming scarcer, man-made production is compounding, and with it all, our carbon emissions are skyrocketing. Energy is becoming an increasingly needed resource in order to sustain our population. There is a trend of urbanization in our cities, which requires more resources, space, and energy in a limited area, but it is becoming harder and harder to incorporate energy production within a dense urban-scape. Buildings must expand vertically. Therefore, energy production must condense and must also go vertical. Architecture must rethink, redesign, and readapt the modern skyscraper with these factors in mind, incorporating dense functionality and adaptability with a low embodied and operational carbon rate. This skyscraper must also contain net-zero carbon materials and an efficient energy production system to maximize its building footprint.