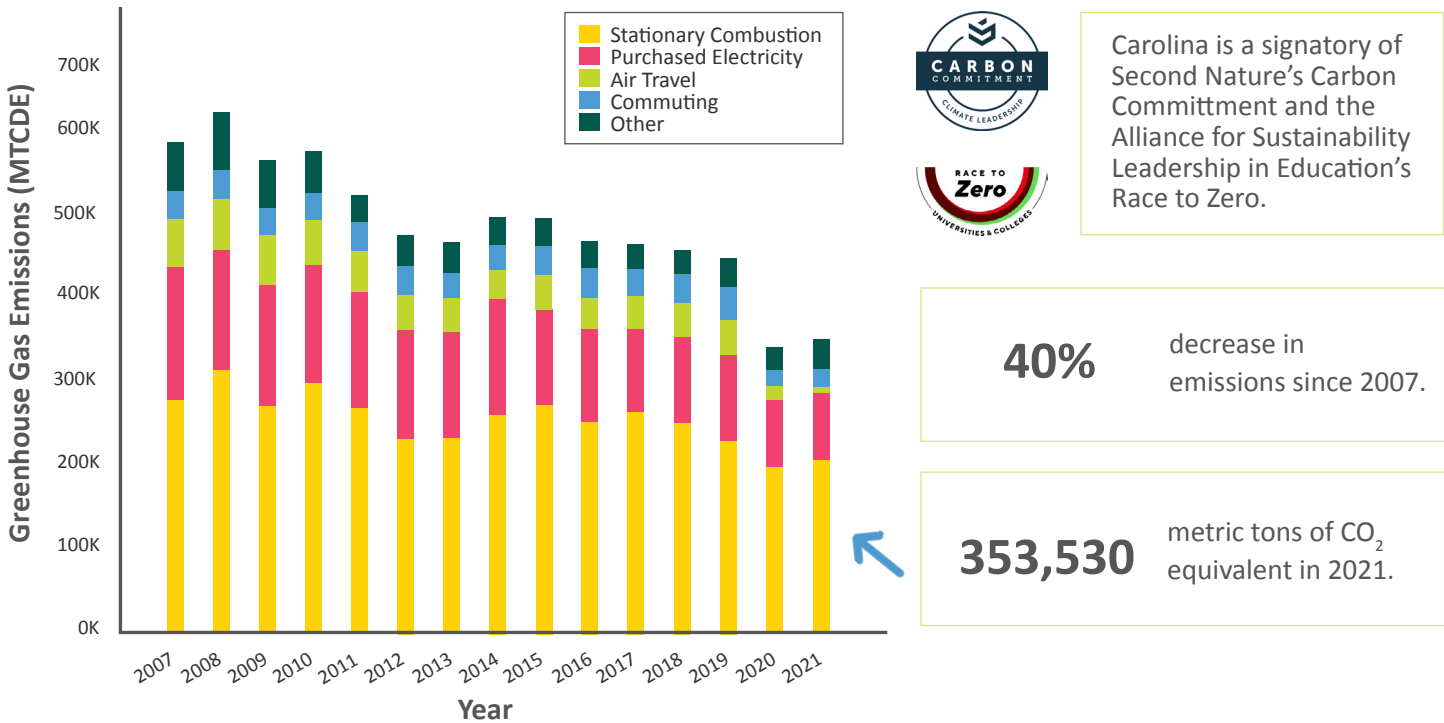




# 2021 Greenhouse Gases | By the Numbers

Carolina began [robust tracking of campus emissions](#) in 2007. Today, we use the 2007 greenhouse gas inventory as a benchmark. The numbers below reflect the improvements made over the past 15 years.



Carolina is a signatory of Second Nature's Carbon Commitment and the Alliance for Sustainability Leadership in Education's Race to Zero.

**40%** decrease in emissions since 2007.

**353,530** metric tons of CO<sub>2</sub> equivalent in 2021.

Campus steam use per square foot has decreased by **36% since 2007**. Steam is critical for campus and hospital operations and must be generated by stationary combustion (see graph above) at the cogeneration plant. During the pandemic, hospital steam use increased, but emissions from generating steam decreased.

## Since 2007:

- 54%** reduction in coal consumption.
- 49%** reduction in purchased electricity emissions.
- 23%** reduction in electricity consumption, per square foot.
- 36%** reduction in fleet emissions.
- 32%** reduction\* in commuting emissions. *\*Decreased travel during the pandemic impacts this number.*

## Improving Energy Efficiency

Carolina is continuously improving campus building efficiency. UNC Energy Management has made improvements to its energy usage dashboard. Users can now select different timeframes and location to create detailed usage charts. Proper energy conservation can reduce campus emissions by minimizing the amount of steam, chilled water, and electricity.

## Exploring Renewable Electricity

By increasing on-campus solar generation and engaging in stakeholder discussions around utility-scale renewables, Carolina is working to reduce electricity emissions. The University prioritizes high-impact, cost-effective projects and programs for renewable energy.