

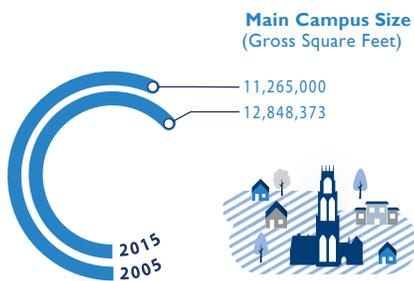
Greenhouse Gas Emissions Reduction Progress

In 2005, Yale University pledged to reduce its greenhouse gas emissions forty-three percent below 2005 levels by 2020. In 2013, emissions from Yale's vehicle fleet were incorporated into this reduction commitment. **To date, the University has achieved a twelve percent reduction, despite a fourteen percent increase in campus size.**¹

Yale's reduction strategy has focused on technologically feasible and fiscally sound programs that align with the university's mission. We recognize that our emission reduction path will not likely be linear over the course of the goal, but rather a combination of increases and decreases leading to an overall net reduction in 2020.

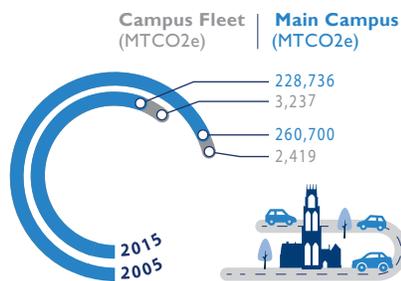
During fiscal year 2015, our emissions increased from the previous year. The increase is attributed largely to seasonal conditions with colder than average winter temperatures and increasing demand for natural gas across New England. While natural gas is the fuel source for the power plants that provide heating at Yale, curtailment of supply and budgetary goals required that #2 fuel oil be used in place of gas for periods of time this winter.

As the campus and accompanying energy demands continue to grow, we will need to develop innovative and thoughtful strategies to meet our 2020 goal.



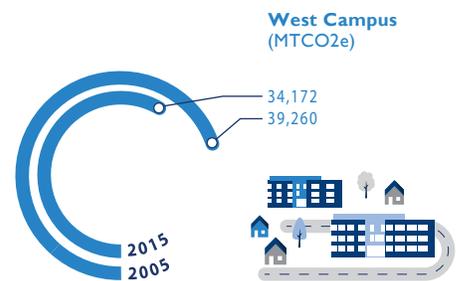
Main Campus Size

Yale's gross square footage has increased 14% since 2005.



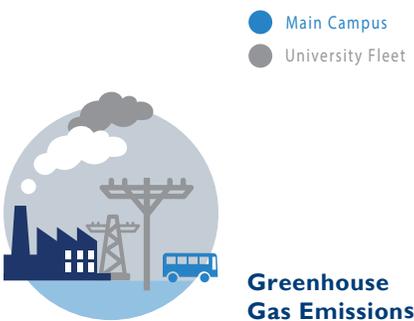
Main Campus Emissions

Yale has implemented a comprehensive energy conservation strategy that has significantly reduced emissions from its two power plants (which supply main campus buildings) and vehicle fleet.

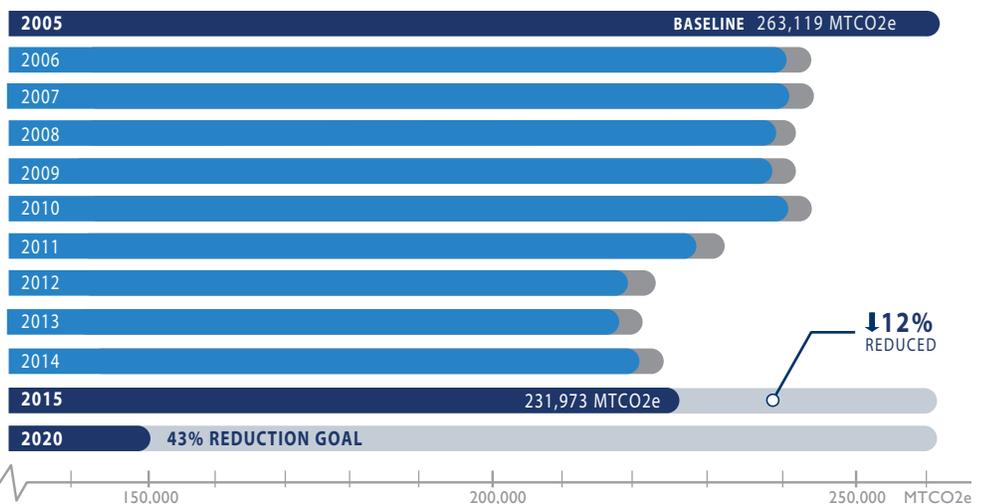


West Campus Emissions

In 2007, Yale purchased the Bayer Pharmaceutical campus to expand the University's science and medical research. The 2005 figures represent emissions from Bayer while it was operating at full capacity. Yale has not yet reached full occupancy of the campus.



Yale University committed to reducing its primary greenhouse gas emissions 43% below 2005 levels by 2020. Beginning in 2013, emissions from the University fleet were included in the reduction target.



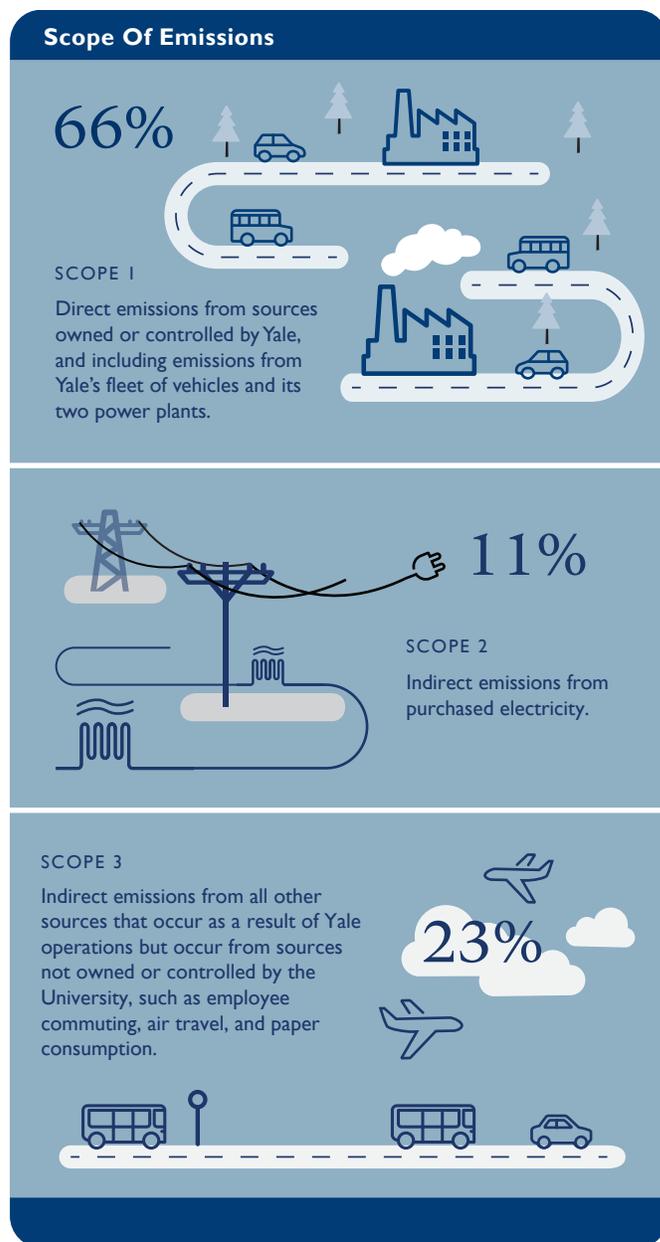
Scope of Greenhouse Gas Emissions

Reductions to date have been achieved through the following actions: reducing the energy use within buildings through conservation and efficiency, increasing efficiency within power plants with strategies such as free cooling and cogeneration, adhering to sustainable construction and renovation standards, and promoting behavioral shifts with campus users.

Yale's 2005 greenhouse gas emissions baseline included energy consumed by the University's two central power plants and all the buildings they served.² It did not include energy consumed by buildings not connected to the campus energy grid or the university fleet. Beginning in 2013, the 2005 baseline was adjusted to include emissions from the university fleet. Though it represents only a small percentage of Yale's total greenhouse gas emissions, the fleet was added to more accurately reflect the university's scope I emissions sources.³ As a separate effort, Yale is currently focusing on emission reductions at West Campus which was purchased in 2007.⁴ In 2015, we successfully installed a 350,000 square foot photovoltaic solar array at West Campus. The facility provides one megawatt of installed electric capacity.

Inventories for Yale's scope 3 emissions associated with commuting, air travel, waste, and paper purchases are analyzed on an annual basis, but are not currently included in Yale's emissions reduction target. As more accurate methodologies for accounting for scope 3 emissions are developed, Yale may consider expanding its emissions reduction target to include this wider scope.

Additional information regarding Yale's progress can be found at sustainability.yale.edu.



¹ This reduction is based on fiscal year 2015 (July 1, 2014–June 30, 2015).

² Yale owns and operates two co-generation power plants: Central Power Plant and Sterling Power Plant.

³ Based on guidance from the World Resources Institute and the World Business Council for Sustainable Development, the Greenhouse Gas Protocol defines three scopes of emissions sources: scope 1 includes direct emissions and scopes 2 and 3 are indirect emissions.

⁴ West Campus, the former Bayer Pharmaceutical facility, is a 136-acre campus made up of 1.6 MM square feet of laboratories, offices, and warehouse space.