In 2005, Yale University pledged to reduce its greenhouse gas emissions 43% 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 24% reduction, despite a 14% increase in campus size.

Yale continues to more broadly implement effective strategies each year, which include: reducing the energy intensity of buildings through conservation and efficiency projects, deploying new technologies, increasing diligence with building occupancy hours and set points to align with University Standards, adhering to sustainable construction and renovation standards, and promoting behavioral shifts and culture change with building occupants.

Yale’s reduction strategy continues to focus on technologically feasible and fiscally sound programs that align with the university’s mission. As previously mentioned in past GHG summary reports, it is important to recognize that our emission reduction path will not be linear, but rather a combination of increases and decreases leading to an overall net reduction in 2020. Our 2016 totals showed a significant drop in campus emissions compared to the prior year.

This decrease can be attributed to:
1. savings realized from numerous energy conservation projects and initiatives implemented during the 2015 fiscal year,
2. typical winter conditions experienced in our region (versus the extremely cold winter experienced during the 2015 fiscal year), and
3. diminished demand from some larger buildings that are currently under construction.

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

The 2005 figure represent emissions from Bayer while it was operating at full capacity. Yale has not yet reached full occupancy of the campus.

Main Campus Size (gross square feet) Yale’s gross square footage (served by the power plants) has increased by 14% since 2005.

Additional information regarding Yale’s progress can be found at sustainability.yale.edu.
Yale’s 2005 greenhouse gas emissions baseline included energy consumed by all buildings connected to the University’s two on-campus co-generation power plants and purchased electricity.1 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 one emissions sources.2

As a separate effort, Yale is also addressing emission reductions at West Campus which was purchased in 2007.3 In 2015, we successfully installed a 1.34 MW DC photovoltaic solar array at West Campus.

Inventories for Yale’s scope three 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 three emissions are developed, Yale may consider expanding its emission reduction target to include this wider scope.

THE CLIMATE REGISTRY

In 2014, President Salovey announced that Yale would join The Climate Registry (TCR), a non-profit organization that works with businesses, universities, and other entities on measuring, verifying, and reporting on their GHG emissions. The University has since submitted two GHG emissions inventories, one for calendar year 2014 and one for calendar year 2015, both of which have been verified by a third party and are available on The Climate Registry website. By pursuing this effort, Yale is showing its commitment to a consistent and transparent standard in GHG emissions accounting.

The numbers reported to The Climate Registry differ from the numbers reported in Yale’s annual Greenhouse Gas Emissions Reduction Progress Report in two ways: first, TCR requires calendar year data, while Yale reports on a fiscal year (June 1–July 30) basis; and second, TCR uses an operational boundary, whereas Yale reports on energy consumed by all buildings connected to the University’s two on-campus co-generation power plants and purchased electricity. Crucially, despite these differences, Yale’s participation in The Climate Registry has confirmed the accuracy of the way the University has been calculating its emissions.

The University will continue to report on its GHG emissions both ways until the conclusion of Yale’s 2005 goal in 2020, at which point we will report exclusively through The Climate Registry.

For more information, please visit www.theclimateregistry.org

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

2 Based on guidance from the World Resources Institute and the World Business Council on Sustainable Development, the Greenhouse Gas Protocol defines three scopes of emissions sources. Scope 1 is a direct emission and scopes 2 and 3 are indirect emissions.

3 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.