2016 ANNUAL GREENHOUSE GAS EMISSIONS

CARBON-NEUTRAL BY 2020[1]

Bowdoin is on track to achieving its goal—reducing "own-source" emissions by at least 28%.

2016 Greenhouse Gas Emissions (GHG) = 14,461 metric tons of CO_2 = 24% lower than 2008 baseline total of 19,153

Emissions by Source

On-Site Fuel Combustion = 55%
Vehicle Use = 3%
Fugitive Refrigerants = 2%
Purchased Electricity = 32%
Travel/Air = 5%
Employee Commute = 9%
Transmission Loss from Electricity = 2%
Waste[2] = -7%

2016 Own-Source Emissions[3] = 13,304 metric tons of CO_2 = 19% lower than 2008 baseline

SOLAR UPDATE

1.2 MW of Solar PV = 8% of the College's Electricity in 2016 = 1,376,000 kWhs

COMBINED WITH Electricity produced by the cogeneration turbine at the heating plant **MEANS** 14% of the College's electricity is now generated on-site from renewable or efficient sources.[4]

WHY DO THIS?

Our actions impact the health and common good of both people and the planet. Bowdoin's work and education on energy conservation and efficiency and renewable sources is a substantial way to counteract climate change and pollution. Join us by committing to reduce your energy use.

WHAT YOU CAN DO

As we have seen since the early years of implementation, the collective efforts of Bowdoin's students, faculty, and staff will be critically important to achieving carbon neutrality in 2020. Please help by personally practicing energy conservation in your residence hall or office on campus. If you sight wasted resources (i.e. a window that won't shut, a dripping faucet) place a green workorder at bowdoin.edu/facilities/workorders.shtml.

BOWDOIN CATEGORIZES EMISSIONS IN 3 SCOPES:

Scope 1 = 60% of all Emissions
(On-site Fuel Combustion, College Vehicle Use, Fugitive Refrigerants)

357 metric ton DECREASE
4% lower in 2016 than in 2008
Stationary, On-site Fuel Combustion = 7,984 metric tons in 2016
2nd lowest measurement since 2008
11,301 Gallons = Less heating oil used in 2016 than ever before
91% decrease since 2008 due to converting to natural gas

Scope 2 = 32% of all Emissions
(Purchased Electricity)

2,664 metric ton DECREASE
37% lower in 2016 than in 2008

This year major LED lighting upgrades in several arts buildings contributed to this reduction!

Scope 3 = 8% of all Emissions
(Travel—Faculty and Staff, Daily Commuting, Transmission Line Losses from Electricity Usage, Waste Disposal)

1,671 metric ton DECREASE
59% lower in 2016 than in 2008

Emissions related to employee commuting decreased 28% compared to 2008 *(largely due to carpooling, biking, and walking to work)*

FOR MORE INFORMATION GO TO BOWDOIN.EDU/SUSTAINABILITY.

[1] *With the understanding that carbon offsets will be purchased.*
[2] *The College sends a significant portion of its non-recycled waste to a facility that uses waste to generate electrical power. Waste-to-energy facilities have a much smaller GHG impact. The electricity produced displaces generation from other power plants that primarily burn natural gas—resulting in a carbon credit.*
[3] *Own-source emissions includes: on-site fuel combustion, vehicle use, fugitive refrigerants, and purchased electricity.*
[4] *Bowdoin is responsible for the solar project, but not currently able to claim carbon reduction benefits from solar generation due to the College's terms of agreement with SolarCity.*

Bowdoin