

Summary of the College of William & Mary's Greenhouse Gas Audit for FY 2015

This audit was completed in two parts – one for the footprint of the Virginia Institute of Marine Science's Gloucester Campus and the other for the William & Mary Williamsburg campus and other associated offices. Kelley Uhlig, a Master's student at the Virginia Institute of Marine Science (VIMS), completed the audit for VIMS and the main campus audit was completed by Professor John Swaddle and a team of students led by sustainability intern Eileen Nakahata, including Carrie Adams, Ellen Chinn, and Josh Panganiban.

Scope 1 emissions

Source	CO2 equivalents (metric tons)		
	W&M	VIMS	Total
On Campus Stationary	15,532.1	1,647.2	17,179.3
Direct Transportation	247.1	636.1	883.2
Agriculture	948.8	0.1	948.9
<i>Total</i>	16,728.0	2,283.3	19,011.40

Scope 2 emissions

Source	CO2 equivalents (metric tons)		
	W&M	VIMS	Total
Purchased electricity	36,861.8	6,203.4	43,065.2
<i>Total</i>	36,861.8	6,203.4	43,065.2

Scope 3 emissions

Source	CO2 equivalents (metric tons)		
	W&M	VIMS	Total
Faculty/ Staff Commuting	3,114.7	444.9	3,559.6
Student Commuting	2,882.3	54.3	2936.6
Directly Financed Air Travel	4,860.2	615.8	5476
Other Directly Financed Travel	0.3	124.1	124.4
Study Abroad Air Travel	3,616.4	n/a	3,616.4
Solid Waste	*	2.2	2.2
Wastewater	571.3	101.8	571.3
Paper	*	31.4	31.4
Scope 2 T&D Losses	2,278.3	383.4	2,661.7
<i>Total</i>	17,323.50	1,753.6	18,979.60

*data not collected

Total emissions

CO2 equivalents (metric tons)		
W&M	VIMS	Total
70,913.30	10,240.30	81,056.20

Methodology

Data on energy use, fertilizer application, and waste management were provided by our Facilities Management department. Fleet data was provided by our Director of Business Operations. Scope 2 emissions were calculated using the default fuel mix for our eGRID subregion. A survey was conducted to determine commuting and travel emissions at VIMS. Unfortunately, we were not able to conduct a similar survey for the rest of William & Mary. Commuting data collected in 2009 was adjusted to reflect increases in the number of students, faculty, and staff on campus FY 2015. Directly financed outsourced travel uses the most recent available data which is also from 2009. Study Abroad travel was provided to us by the study abroad office. VIMS does not have study abroad as it is solely a graduate institution. Emissions were calculated using the University of New Hampshire Campus Carbon Calculator.