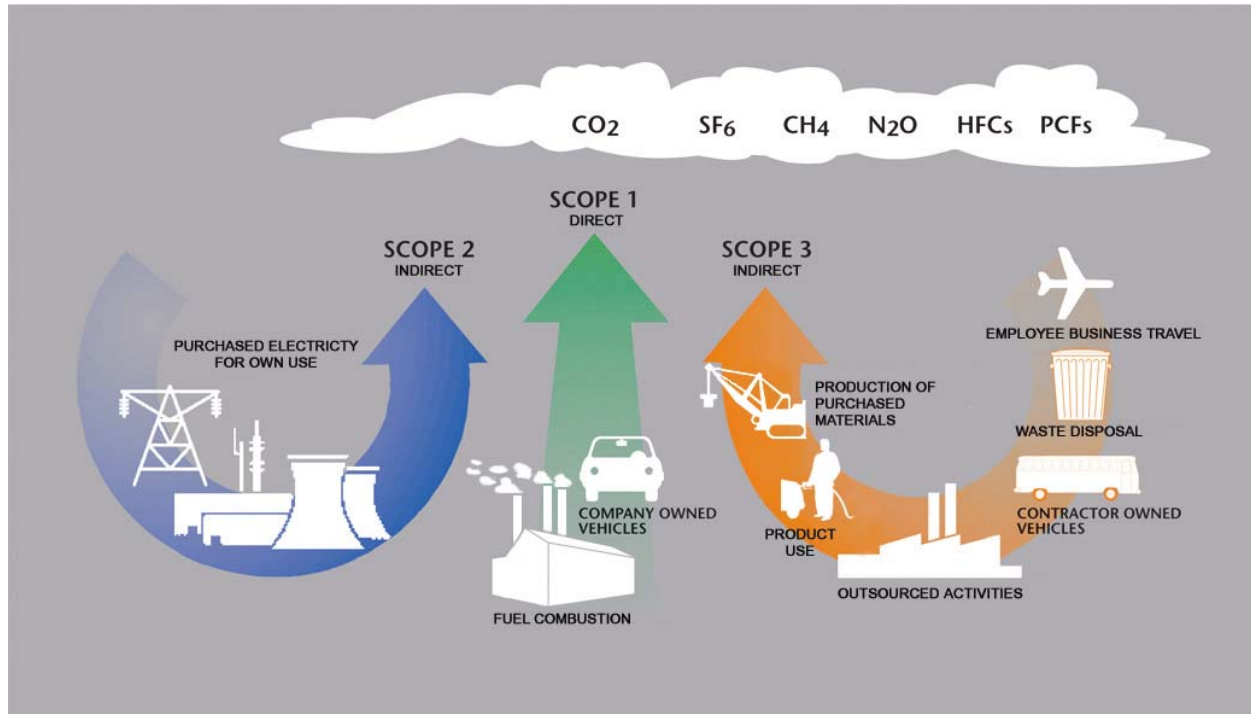


Summary of Greenhouse Gas Emissions and Mitigation Measures by Scope

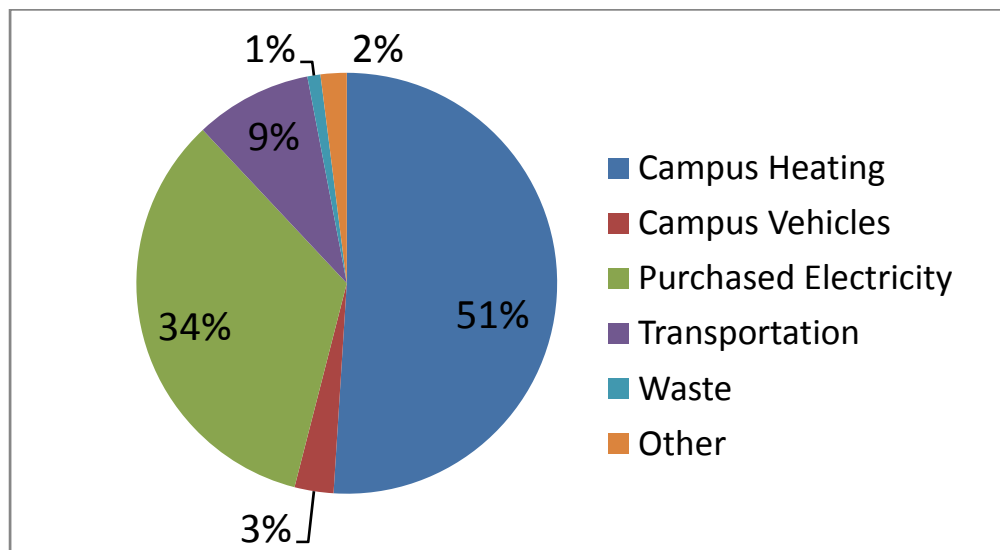
It is often said that we don't measure what we don't value and we can't manage what we don't measure. St. Lawrence's commitment to climate neutrality (zero-net greenhouse gas emissions) necessitates that we both measure and manage our greenhouse gas emissions.

The convention for measuring greenhouse gas emissions is defined by three scopes as seen in the figure below¹.



Scope One emissions are those generated from activities within the boundaries of the campus. For St. Lawrence, Scope One emissions include campus heating (both central and decentralized), campus owned vehicles, animal husbandry (horses and sheep), and refrigerants. Scope Two emissions are those from purchased electricity and Scope Three emissions include everything else. Faculty/staff commuting, university related travel, and solid waste disposal are St. Lawrence's Scope Three emissions.

The following graph depicts the percentage of the total greenhouse gas impact of the major emissions sources.

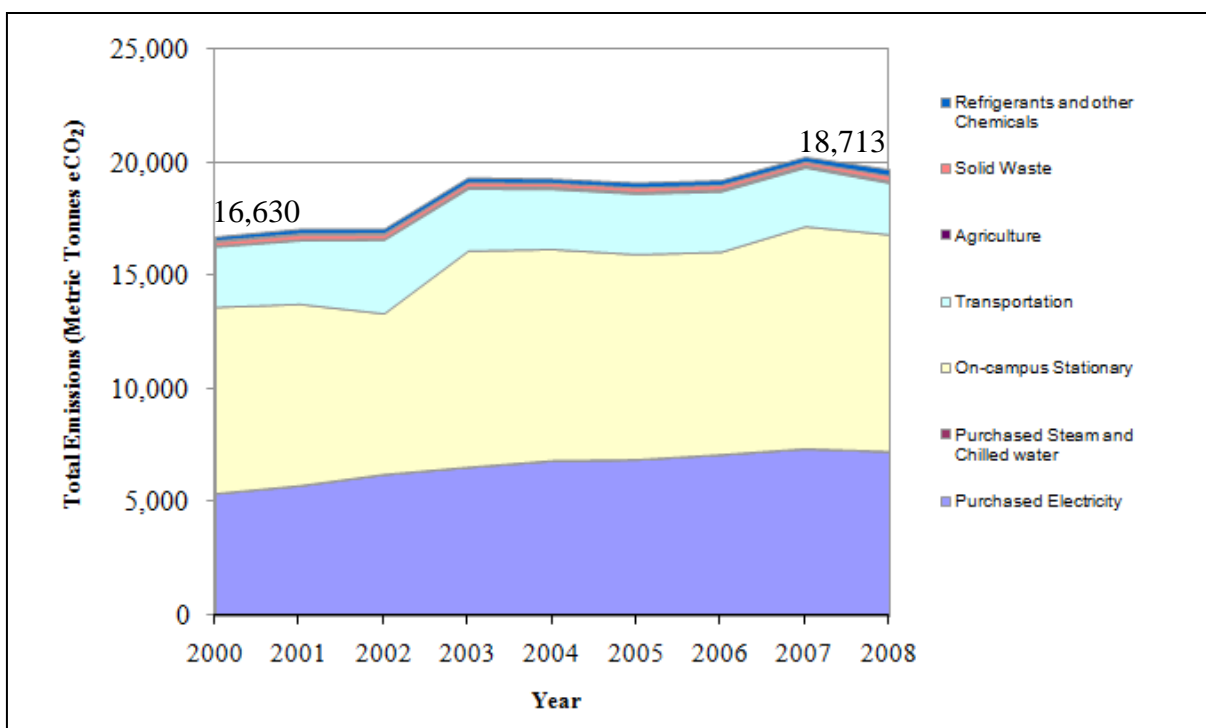


Given the cold climate, it is not surprising that over half (51%) of the greenhouse gas emissions from the campus come from heating. Around one third (34%) of our emissions are from electricity and transportation accounts for the third largest sector of emissions (9%). A detailed look at the impact of emissions and the change in emissions from the last fiscal year are seen in the table below.

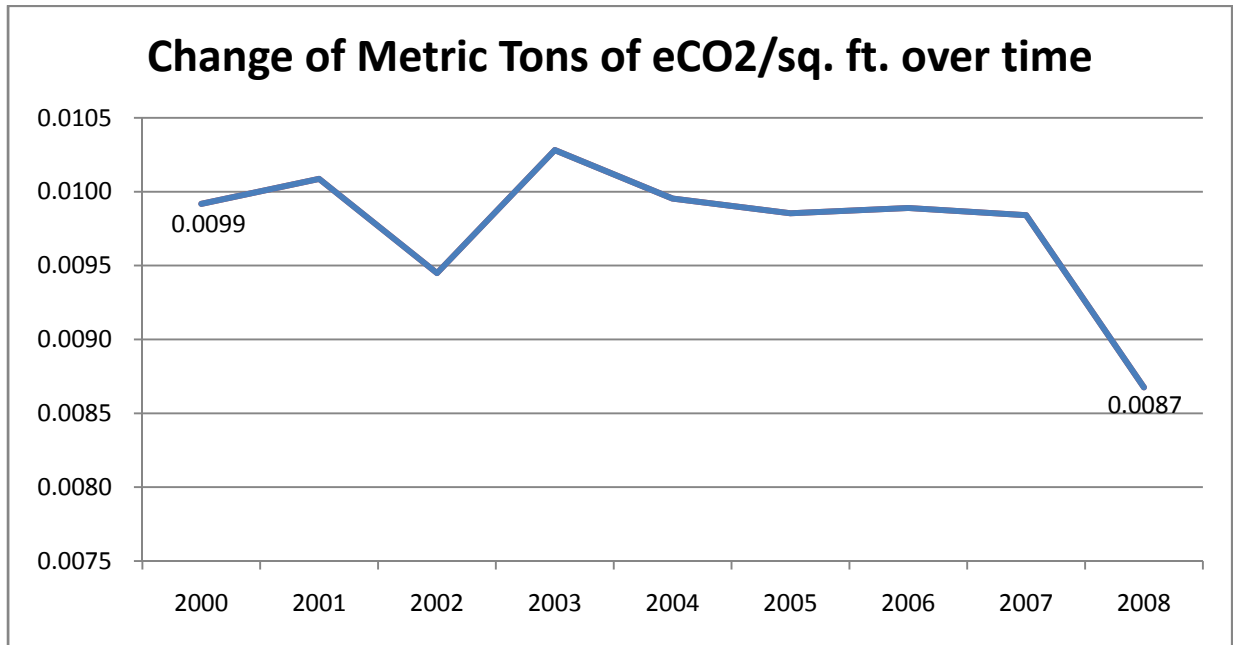
Source by Scope	MT eCO ₂	% of Total	#Accuracy	Δ MT eCO ₂ From 2007
Scope One:	10,244	55		-261
Campus heating (central and decentralized)	9,590	51	Y	-237
Campus owned/operated vehicles	519	3	Y	-23
Agriculture (sheep/horses)	54	0.3	Y	0
Refrigerants	81	0.4	N	0
Scope Two:	6,436	34		-957
Purchased electricity	7,271	39	Y	-122
RECs	-835	-5	Y	-835
Scope Three:	2,034	11		-239
Faculty/Staff Commute	1,297	7	N	-86
University related travel	460	2	N	-212
Solid waste	277	1	Y	59
TOTAL	18,714			-1458

MT eCO₂ stands for metric tons of carbon dioxide equivalent. Although we measure six greenhouse gasses, for ease of comparison, we refer to them all in their equivalent impact as it relates to carbon dioxide (the most common, but not the most powerful greenhouse gas). The column titled ‘#Accuracy’ refers to the accuracy in the data collected and the likelihood that the number of MT eCO₂ we are emitting is the same as what we are reporting. Refrigerants, faculty/staff commute and university related travel are most likely all causing us to underestimate our total greenhouse gas emissions.

The most exciting part of the table is the last column which shows that we have made progress in reducing our greenhouse gas emissions. A graph depicting the change in these emissions over time is seen below.



Although there has been a trend of overall increase in greenhouse gas emissions, St. Lawrence reduced total emissions by 1,458 metric tons in the last year. Not only have total emissions dropped, the MT eCO₂ per square foot has also dropped as indicated by the graph below.



How has St. Lawrence been able to reduce total emissions and emissions per square foot? University employees and students have been working hard to change behaviors and operations.

Recently completed initiatives (by scope) include the following:

Scope One

Campus heating (central and decentralized): replacing direct buried steam lines with tunneled steam lines, reduction of University temperature set points by two degrees (66-68 and 56-58), installation of programmable thermostats in off-campus residences, replacement of top loading washers with front loading washers (10 large drying racks in residence halls), Dana goes trayless

Campus owned/operated vehicles: purchase of hybrid vehicles (total now 5), establishment of no-mow zones (40 acres), no idle policy

Scope Two

Purchased electricity: IT rollout of 1,500 new computers (LCD screens, ENERGY STAR units, increased number of laptops, SmartStrips installed, power management settings enabled, networking of classroom projectors), permanent removal of 5 vending machines and summer shut down of low use machines, First Year Program Green Room audits/Sustainability 101 Programming (maybe?)

RECs: commitment to 15% green electricity purchase each year (National Wind)

Scope Three

Solid waste: ReUse Initiative evolves into year round thrift store (student run/student employment)

This is just a sampling of the sustainability improvements that have been recently completed. There are many other projects that our employees and students are hard at work on as we continue to reduce our greenhouse gas emissions and work our way to climate neutrality.

¹“Overview of scopes and emissions across a value chain.” The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. World Resources Institute. 2004.