



2019 – 2020

Campus Annual Energy Use Report

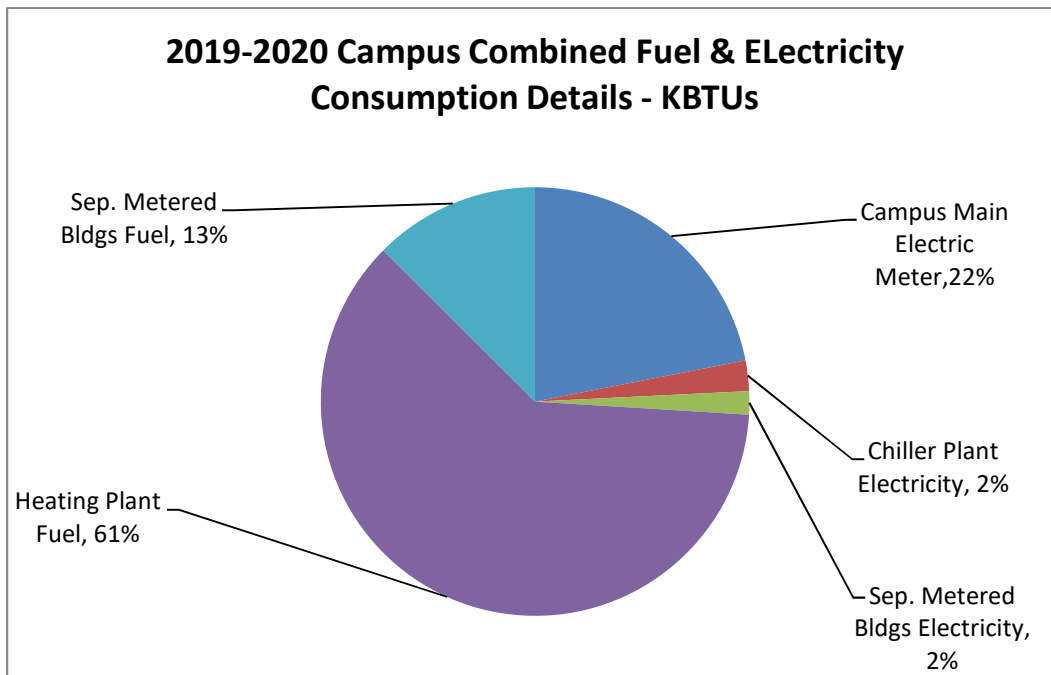
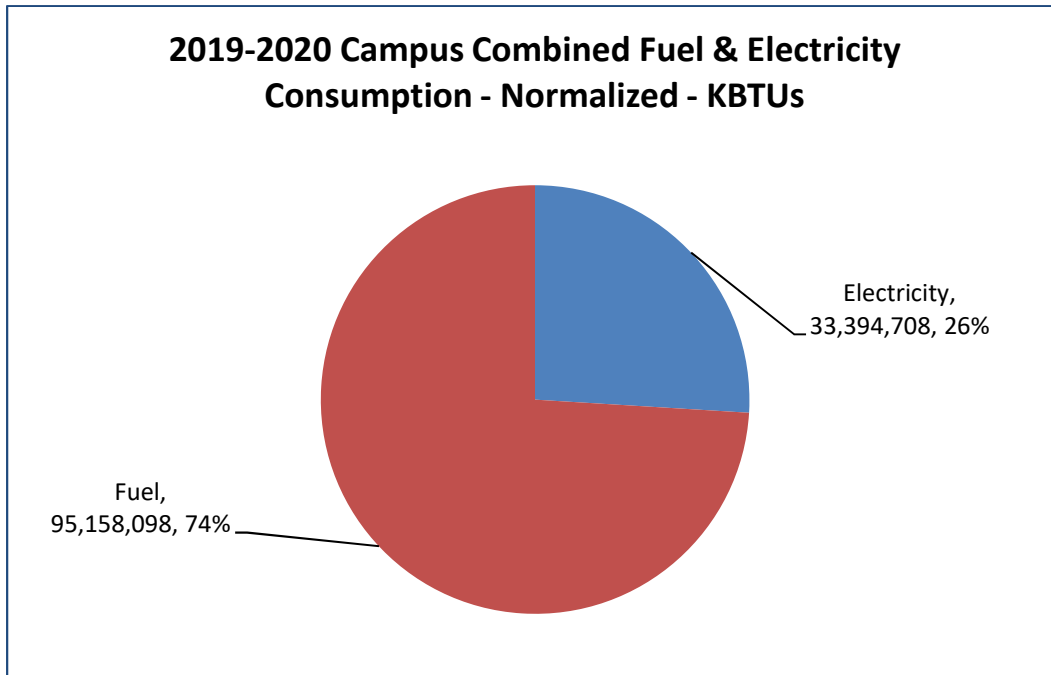
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Fuel, Electricity, & Water Consumption

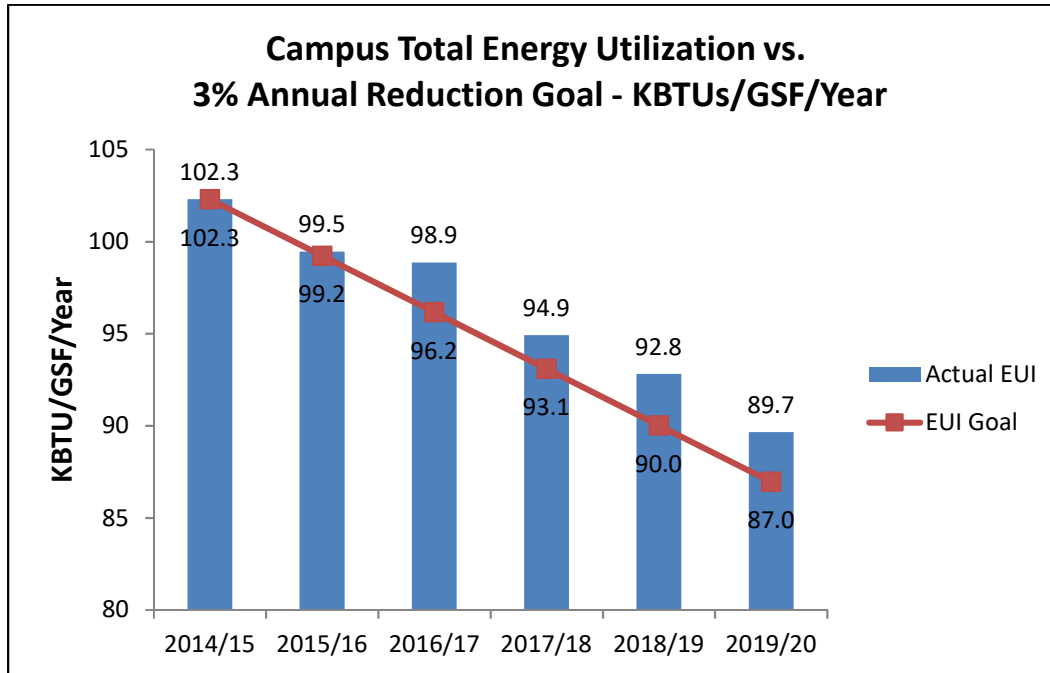
FY 2019-2020 Total Energy Consumption

In fiscal year 2019-20, Macalester College consumed 128,552.806 kBTUs of energy on its campus. 74% of the energy was comprised of natural gas and the balance of the consumption (26%) was electricity usage. The largest single consumer of energy on campus was the heating plant – its consumption accounted for 61% of the campus' total energy usage.



Energy Consumption vs. Annual Reduction Target:

In 2015, Macalester College set a goal to reduce the College’s total energy consumption by 15% within five years, with fiscal year 2014-2015 selected as the base year for comparison. In FY 2019-20, the College’s energy utilization index value (EUI) was 89.7 kBTUs/GSF/Year, which equates to a reduction of 12.4% vs. the desired 15% cumulative reduction target of 87.0 kBTUs/GSF/Year.



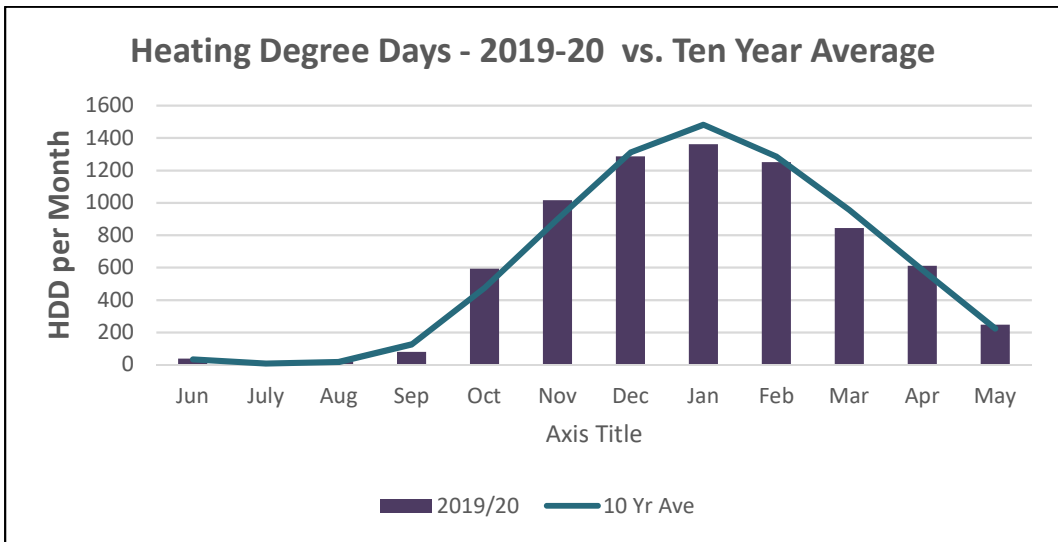
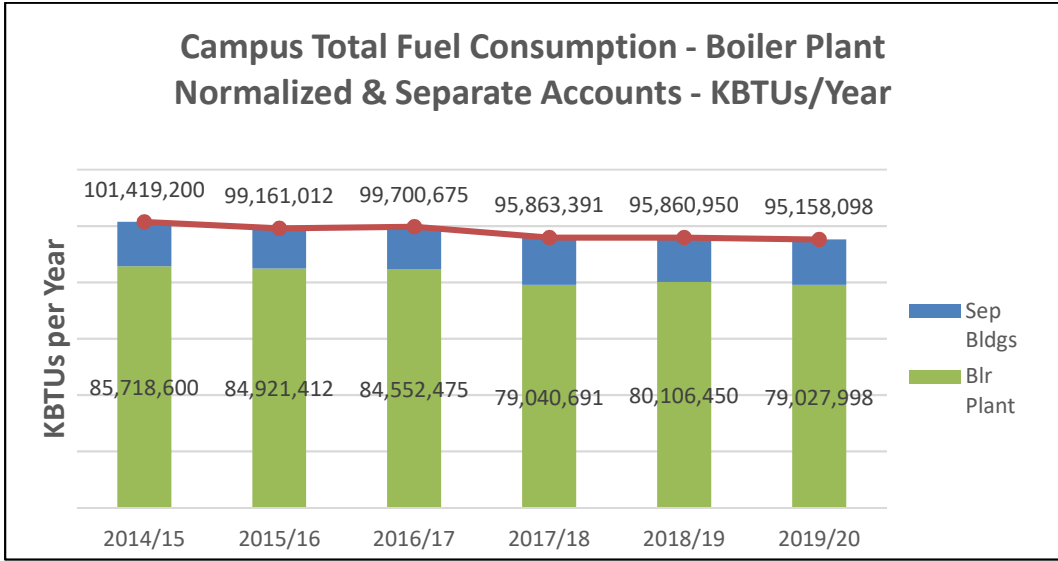
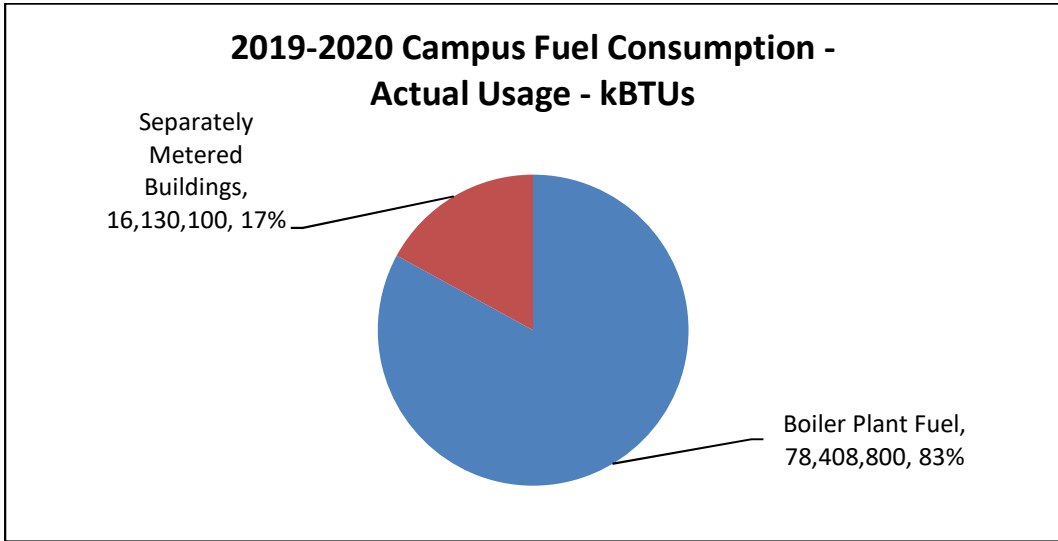
Fuel Energy Consumption

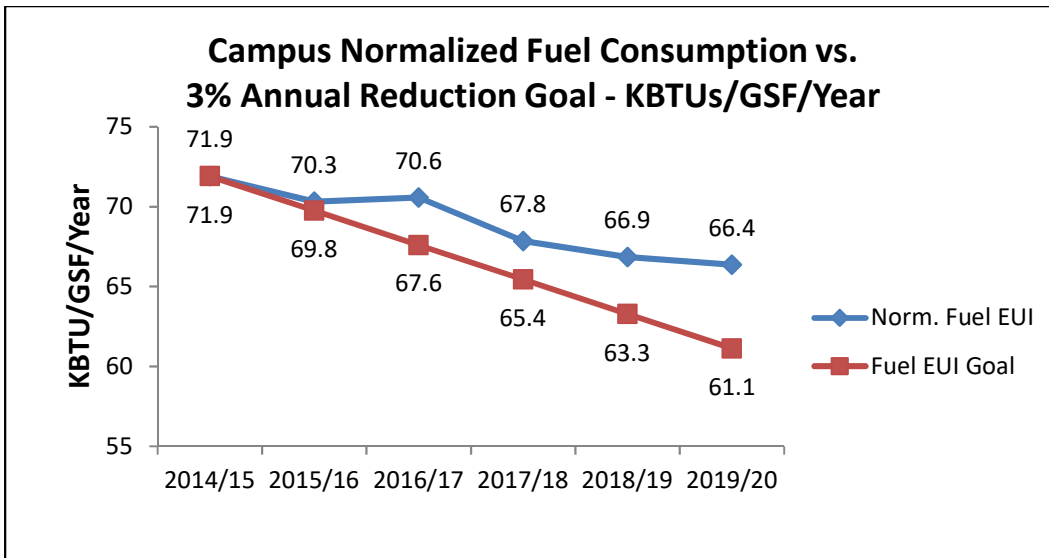
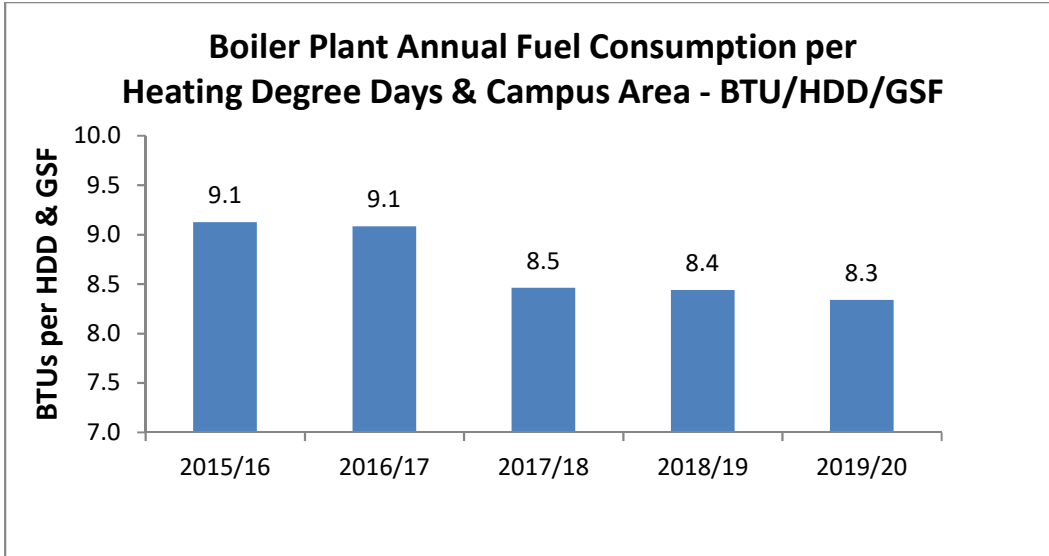
94,538,900 kBTUs of fuel were consumed on campus during FY 2019-20. 83% of the fuel energy was consumed by the central heating plant and the balance was used in other buildings and houses on campus for space heating, domestic water heating, and cooking. The Art building’s kilns and forges also consume a significant amount of natural gas.

The actual amount of fuel consumed in any given year can be adjusted via weather normalization calculations to provide an “apples to apples” comparison with the fuel consumption in any selected base year. The winter of FY 2019-20 was fairly typical, with 7,438 heating degree days (HDD) vs. the average of 7,411 HDD for the previous ten years and 7,686 HDD in the 2014-15 base year.

After weather normalization, the total fuel consumption for the campus was 95,158,098 kBTUs, which was very similar to the amount consumed in the previous two years, both in terms of the amount of fuel consumed as well as in the rate of consumption after normalization for weather and changes in the campus area. This amount is 6% less than the weather normalized fuel use in the FY 2014-2015 base year but still significantly higher than the 12% aggregated reduction goal for the year.

Macalester College benefits from a reduced rate for natural gas due to an agreement with Xcel Energy whereby the utility can request that Macalester will use fuel oil in the boiler plant instead of natural gas during periods of extremely cold weather. The College was not required to burn any #2 fuel oil in the campus’ central heating plant in FY 2019-20.





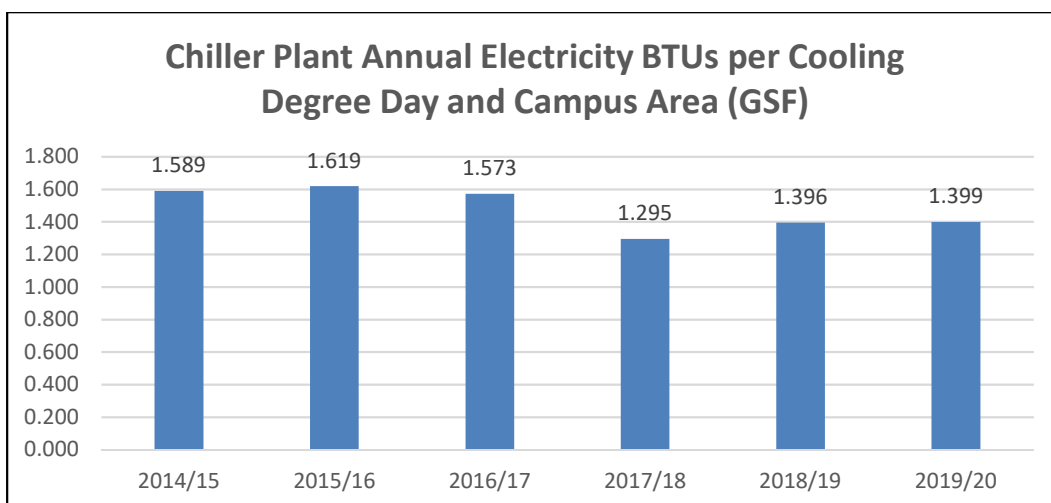
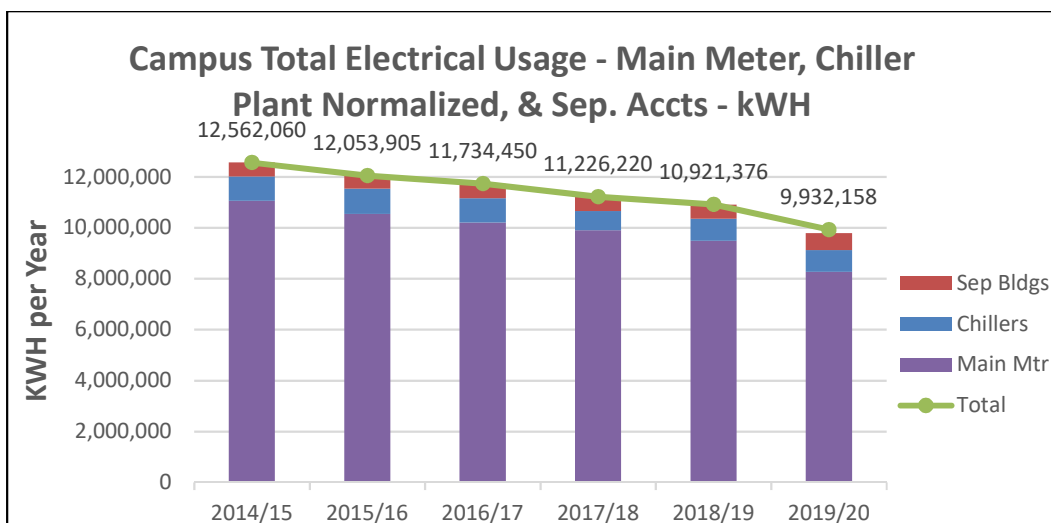
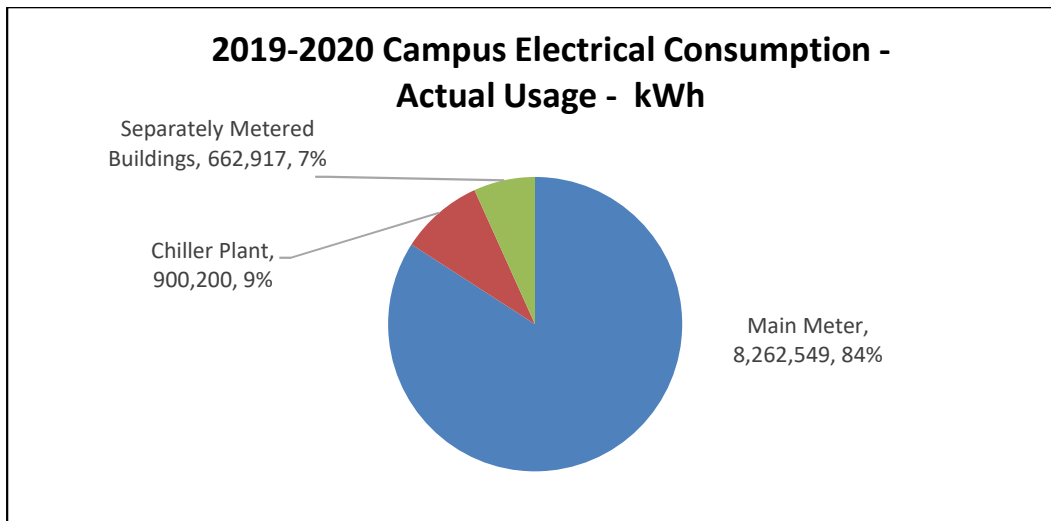
Electrical Energy Consumption

Macalester College’s total actual electrical consumption in FY 2019-2020 was 9,970,401 kWh. 84% of the electricity was used for the electrical loads that are served by the campus main electric service, such as building lighting, HVAC equipment, and plug loads. The College’s chiller plant is on a separate Xcel meter and used 9% of the campus’ total electric energy. The remaining 7% was used in the various buildings and houses on campus that also have individual electric services and meters.

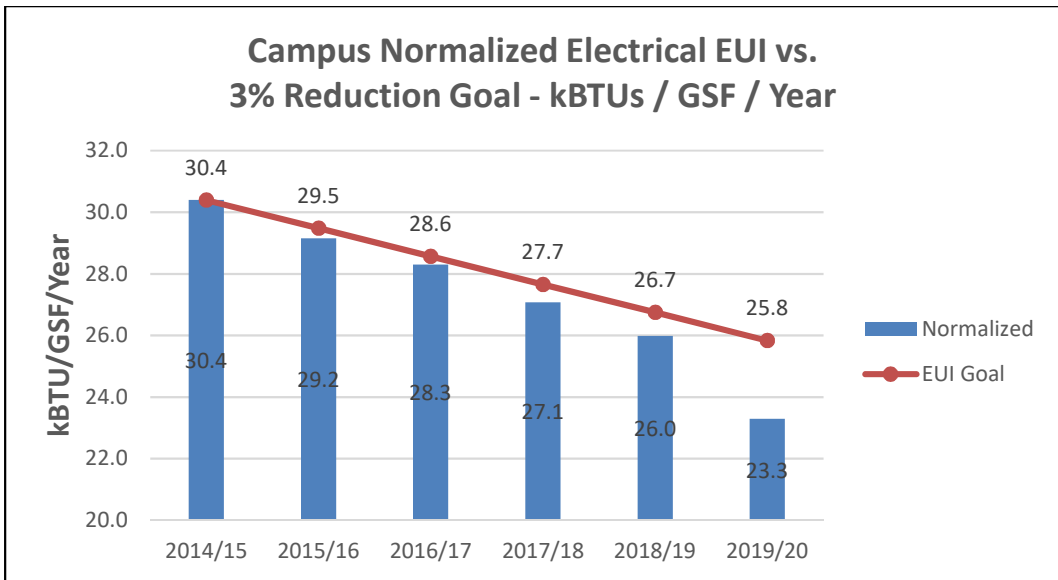
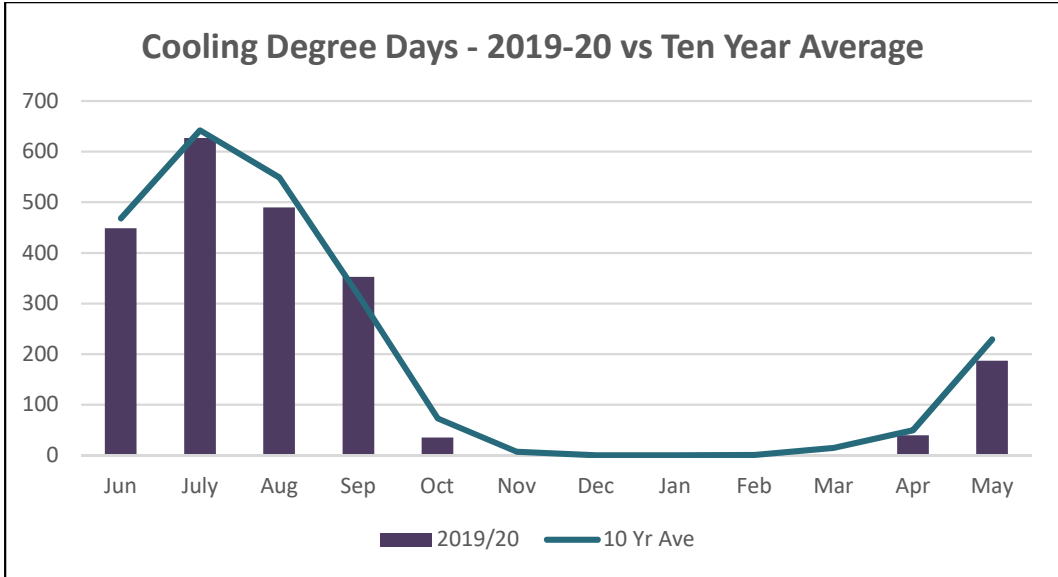
Like the boiler plant’s fuel consumption, the amount of electricity used in Macalester College’s central cooling plant is affected by seasonal weather variations and is adjusted via weather normalization calculations to provide a standardized method of measuring year-to-year progress toward the College’s energy reduction goals. After adjusting for weather and changes in the campus area it serves, the rate at which the chiller plant used electricity in FY 2019-20 was exactly the same rate as in the previous year. Fiscal year 2019-20’s cooling season was fairly mild, with 2,179 cooling degree days (CDD) vs the average of 2,347 CDD for the previous ten-year period and 2,081 CDD in the 2014-15 base year.

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After weather-normalization of the chiller plant's usage, the total electrical consumption for the campus was 9,932,158 kWh, which was 21% less than the 2014-2015 baseline period and also significantly less than the 15% cumulative energy reduction goal for the year.

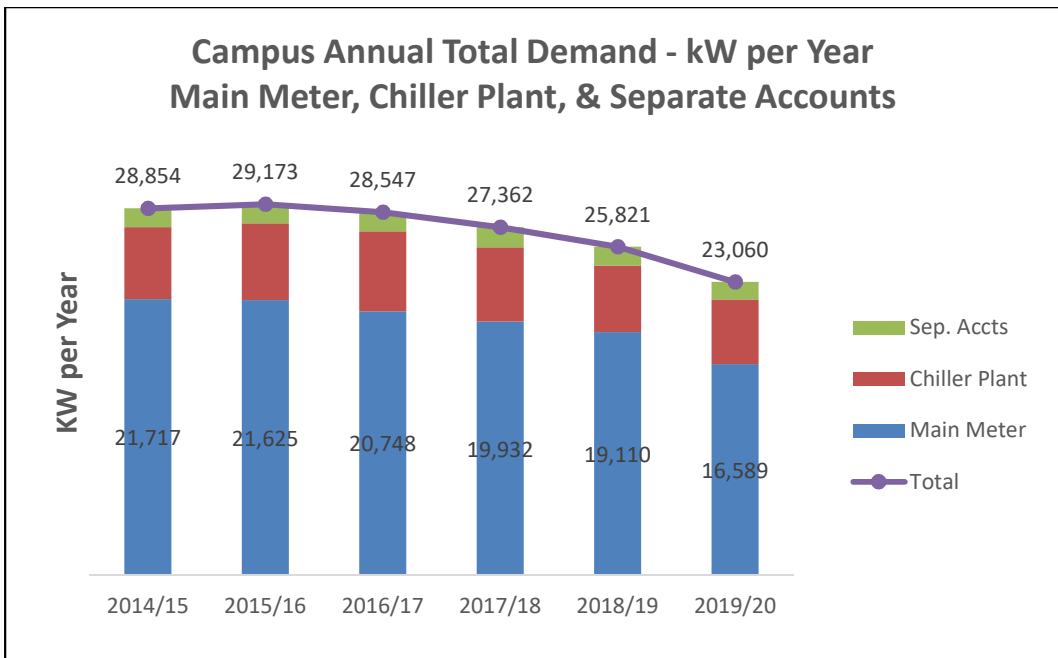
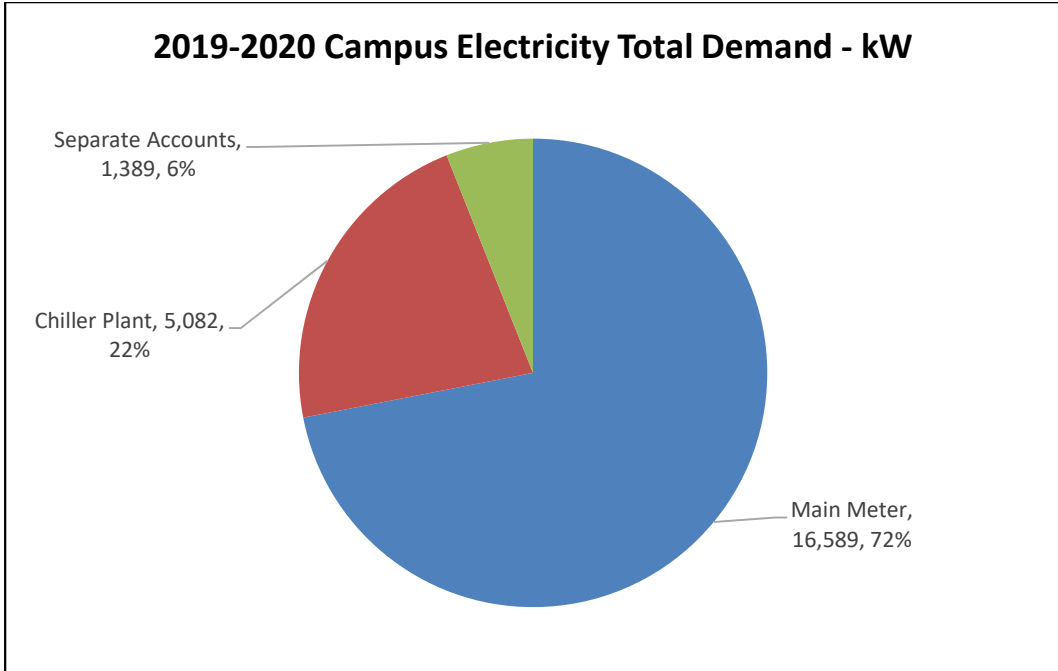


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Electrical Demand

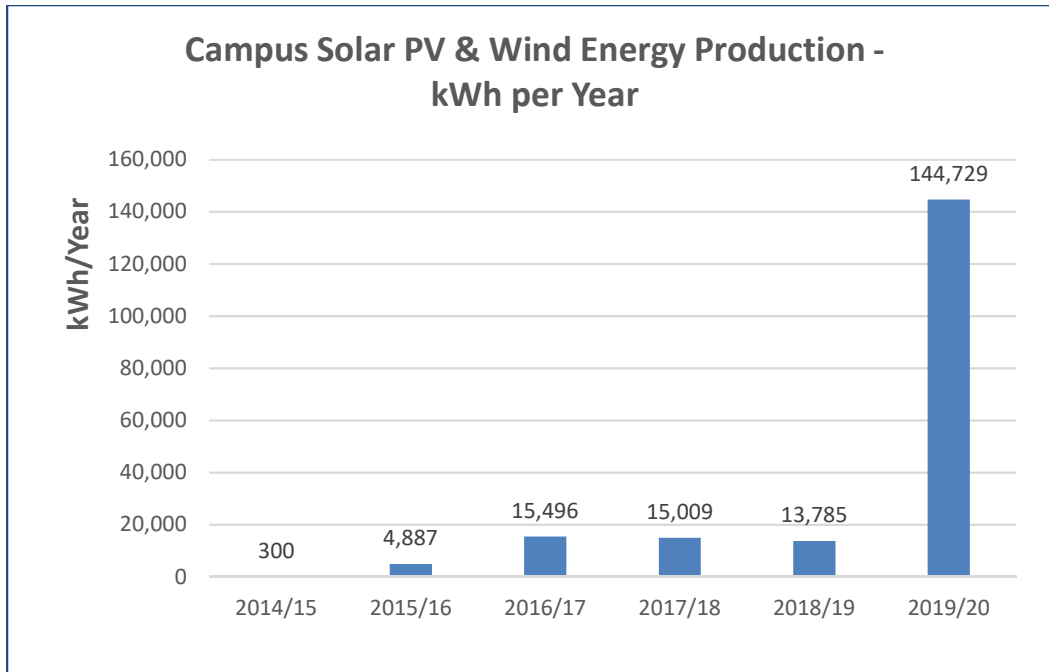
In addition to the amount of electricity consumed on campus (measured in kilowatt-hours or kWh), the College is also charged for the rate at which it uses electricity (demand, which is measured in kilowatts or kW). Macalester used 25,825 kW in FY 2019-2020, which was 10% less than the 28,793 kW used in the 2014-2015 base year. The demand charges for Macalester’s chiller plant comprise the single largest component of the College’s demand – although it is operated only from May through October and its electrical consumption is 9% of the campus total, the demand charges associated with the chiller plant account for 22% of the campus total.



Campus Solar & Wind Energy Production

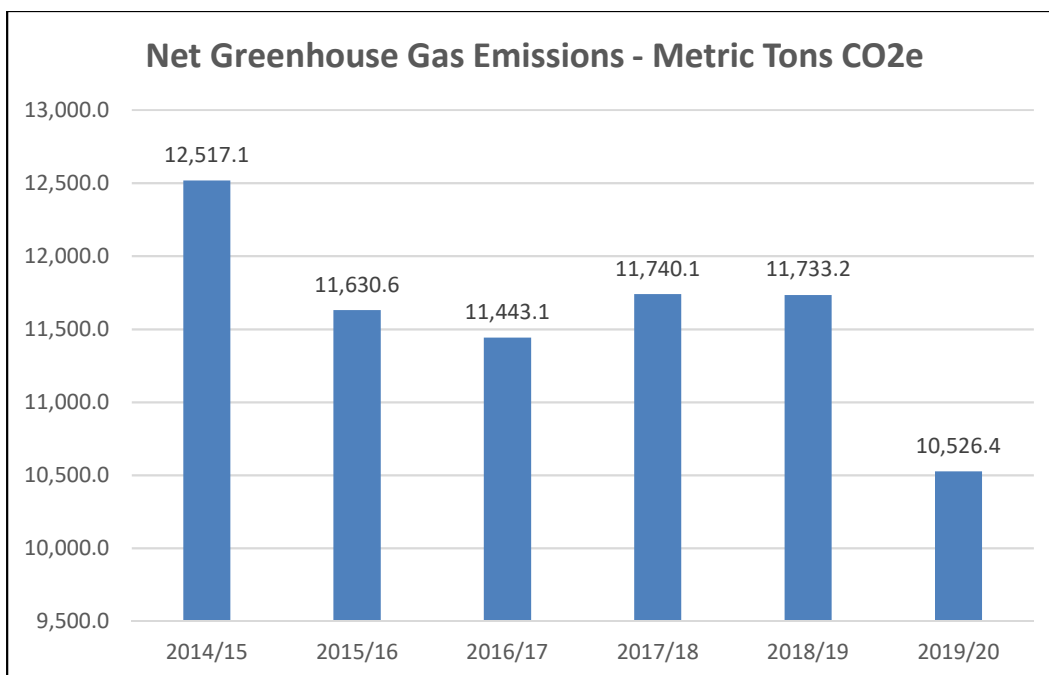
Prior to FY 2019-20, the solar & wind power installations on Macalester’s campus consisted of a 13.1 kW solar array installed on the roof of the International Global Center (IGC) and a 9 kW demonstration wind turbine installed next to the Olin-Rice Science Building. In FY 2019-20, a 132 kW PV array was installed on the roof of the new Theater building and a 13 kW PV array was installed at the Ordway Field Station. The systems produced a combined total of 144,729 kWh in FY 2019-20, which was equivalent to 1.5% of the campus’ total electrical consumption. During the summer of 2020 a 130 kW PV array was installed on the roof of the Leonard Center. It is expected to fully operational by September 2020.

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Carbon Footprint / Greenhouse Gas Emissions

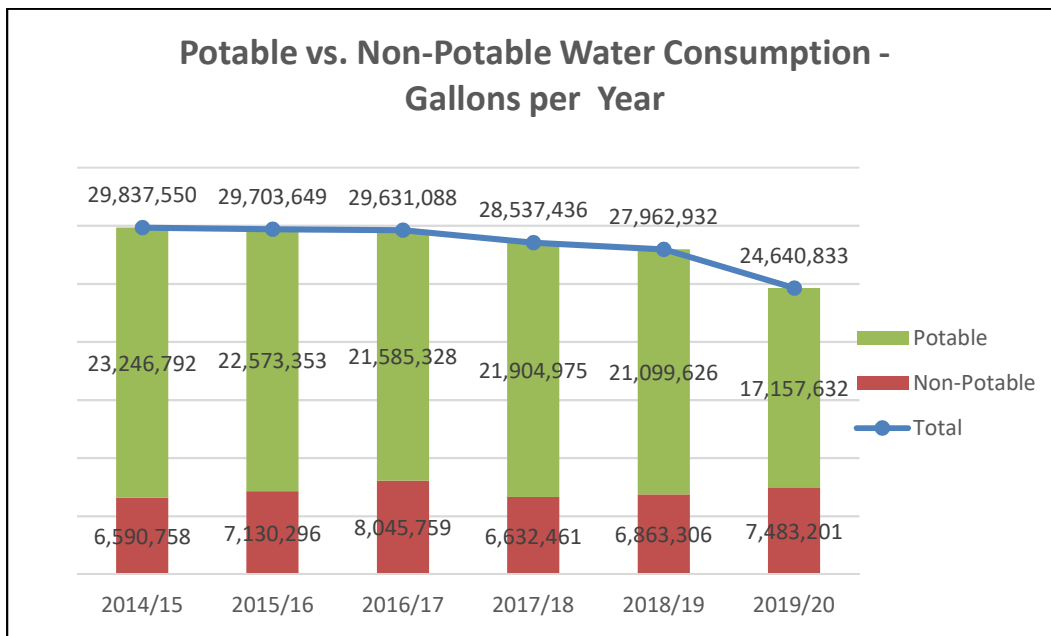
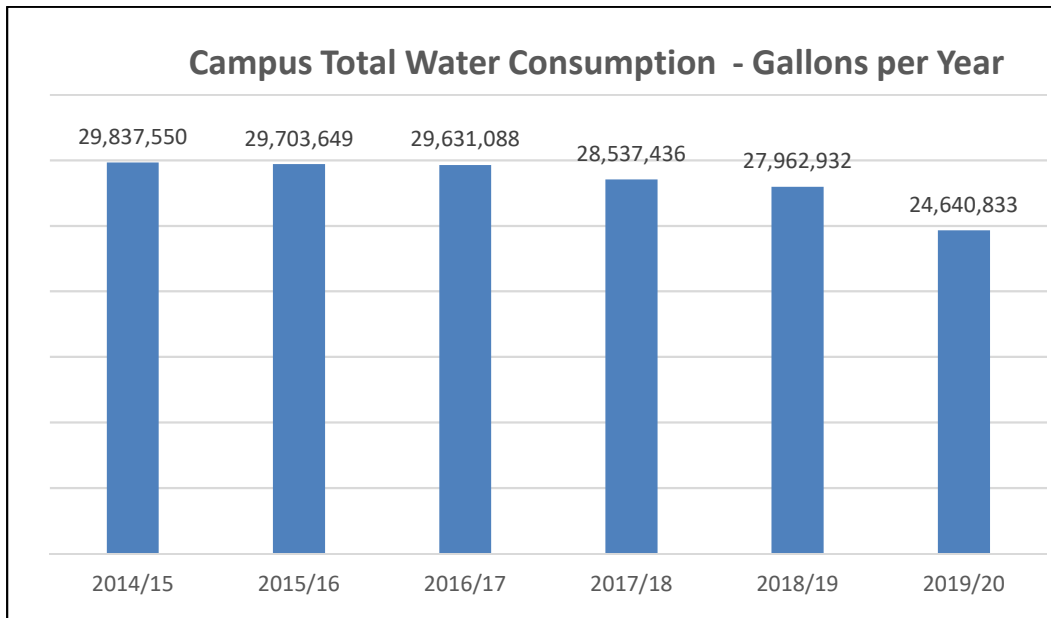
Macalester College records the data related to its purchases of electricity, natural gas, and fuel oil in an Excel spreadsheet, a cloud-based utility bill tracking software application (kWh360), and Energy Star Portfolio Manager (ESPM). The Energy Star application uses Xcel Energy's emissions factors to calculate the College's greenhouse gas emissions and carbon footprint. For FY 2019-20, ESPM estimated that Macalester's emitted 10,526.4 metric tons of CO₂e, which was 1,990.7 fewer tons and 16% less than the 12,517.1 metric tons of CO₂e that were emitted in FY 2014-15.



Water Consumption

Macalester consumed nearly 25,000,000 gallons of water on its campus in FY 2019-20. Approximately 25% of the water consumed on Macalester’s campus each year is used for the irrigation of campus vegetation and as makeup water in the central heating & cooling plant’s boilers and cooling towers. After deducting the non-potable consumption, approximately 17,000,000 gallons of water was used for drinking, cooking, and in restrooms in FY 2019-20.

The amount of potable water consumed on Macalester’s campus in any given year is directly related to the number of full-time students on campus. Due to the campus shutdown caused by the COVID-19 pandemic the amount of water that was consumed on campus declined dramatically during the fourth quarter of FY 2019-20.

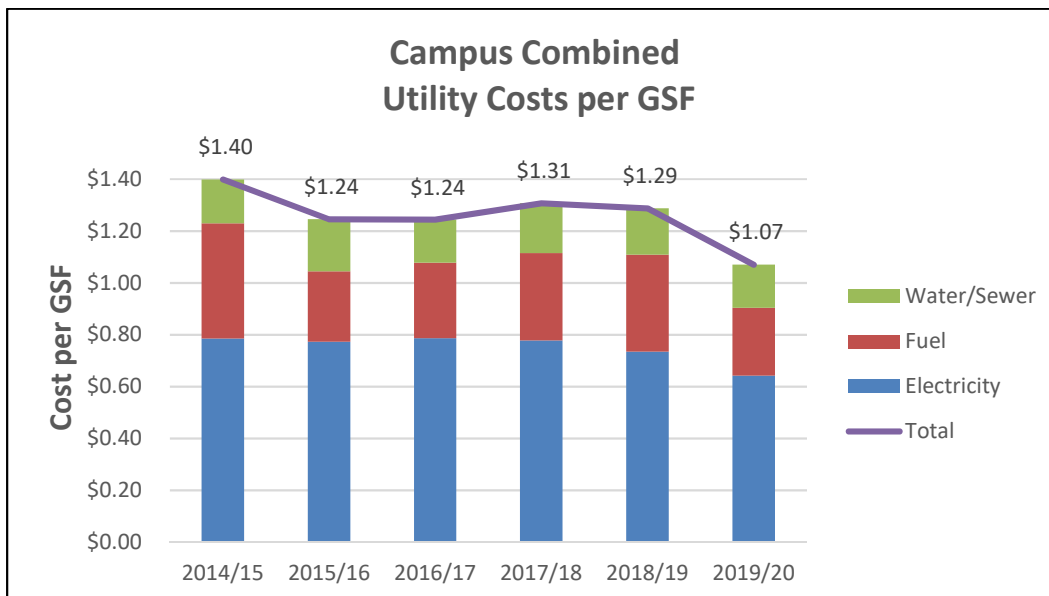
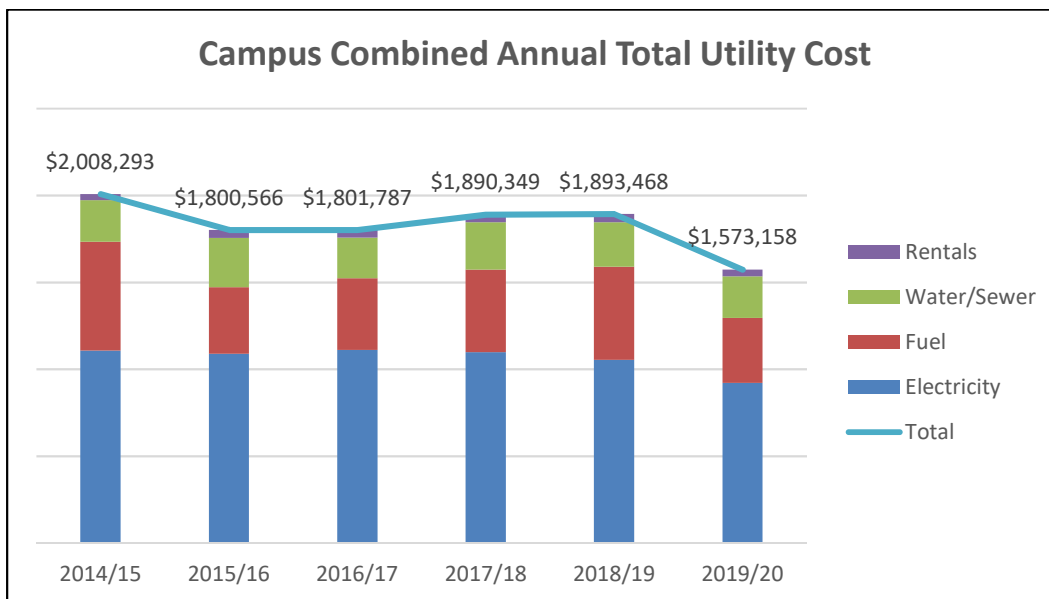


Total Utility Costs

Total Annual Utility Costs:

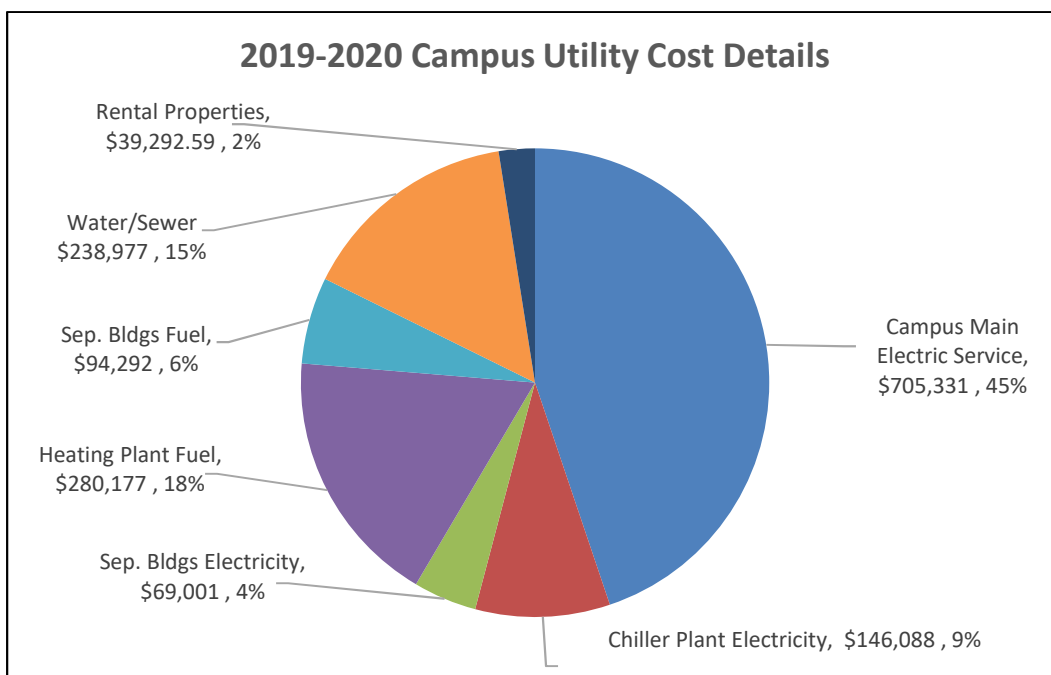
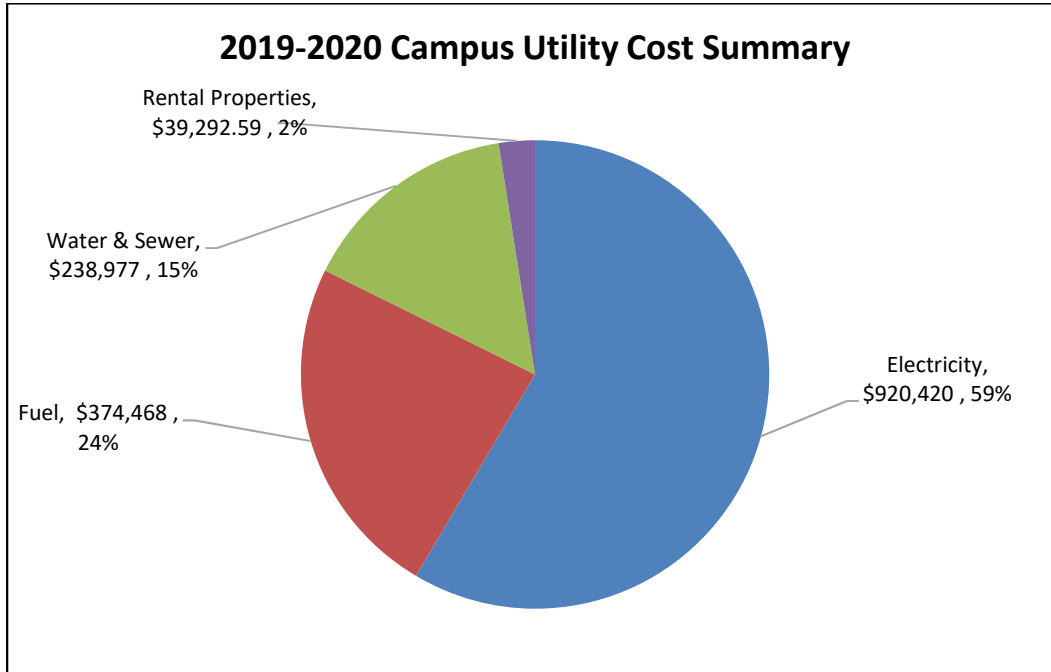
The total amount spent for utilities in FY 2019-20 was \$1,573,158, which was significantly less than the amounts spent in any of the previous five years. In addition to the reduction in the total amount spent, the amount spent as a cost per square foot of campus building areas was also lower than in any of the previous five years.

A major cause for the decrease in utility costs was the campus shutdown necessitated by the COVID-19 pandemic. The shutdown occurred from March through July 2020 and had a major impact on the College's consumption of electricity and water. Macalester also benefited from the aggregated effect of the energy conservation projects that have been implemented during the previous years as well as from a mild winter with low costs for natural gas and no purchases of #2 fuel oil.



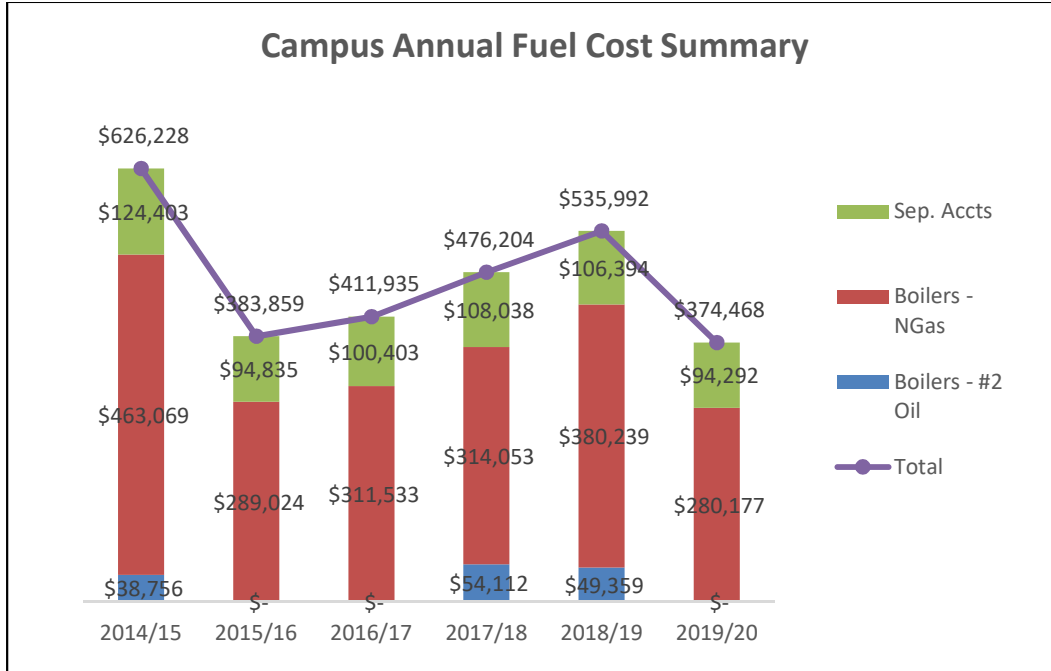
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The pie charts displayed below show a summary and detailed breakdown of Macalester College’s utility costs in FY 2019-20. Expenditures for electricity accounted for 59% of the total amount spent and were divided between the main campus electric service, chiller plant, and the buildings on campus that have individually billed electric services. Fuel costs comprised 24% of the total utility costs, and were divided between the central heating plant and the buildings on campus that have separately billed natural gas services. Water & Sewer charges comprised 15% of Macalester’s total utility costs for the year. The combined total of the electricity, natural gas, and water/sewer costs for the rental properties owned by the college accounted for 2% of the total utility budget.

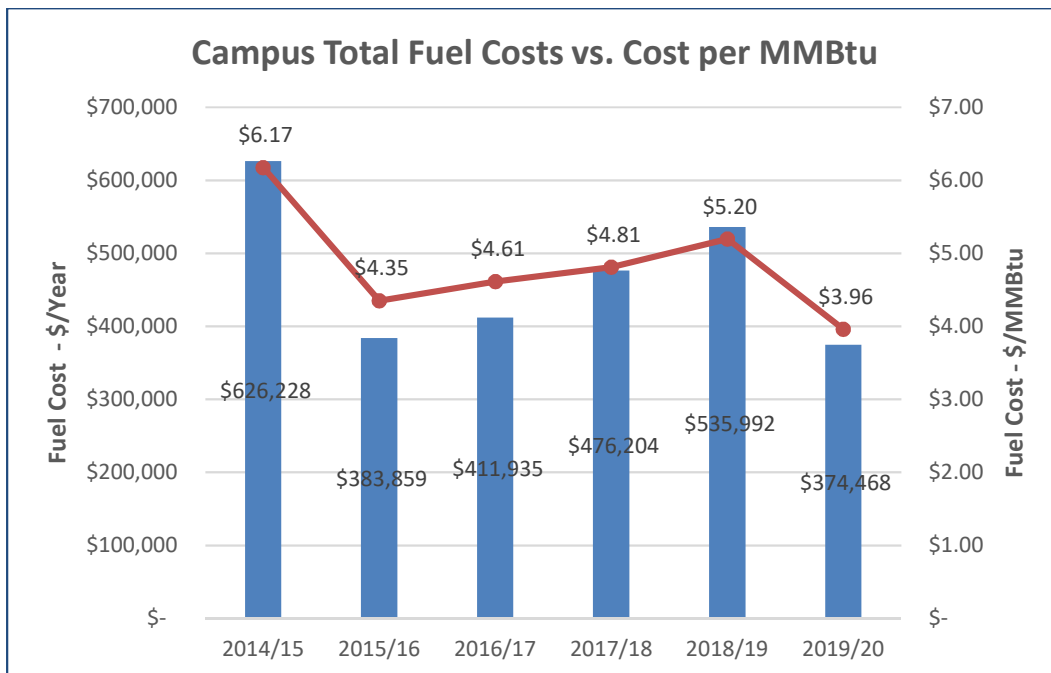


Fuel Costs

The total cost for the natural gas and #2 fuel oil consumed on Macalester College’s campus in FY 2019-20 was \$374,468. As noted above, the College benefited from a fairly mild winter and also from not having the heating plant’s use of natural gas curtailed by Xcel Energy.

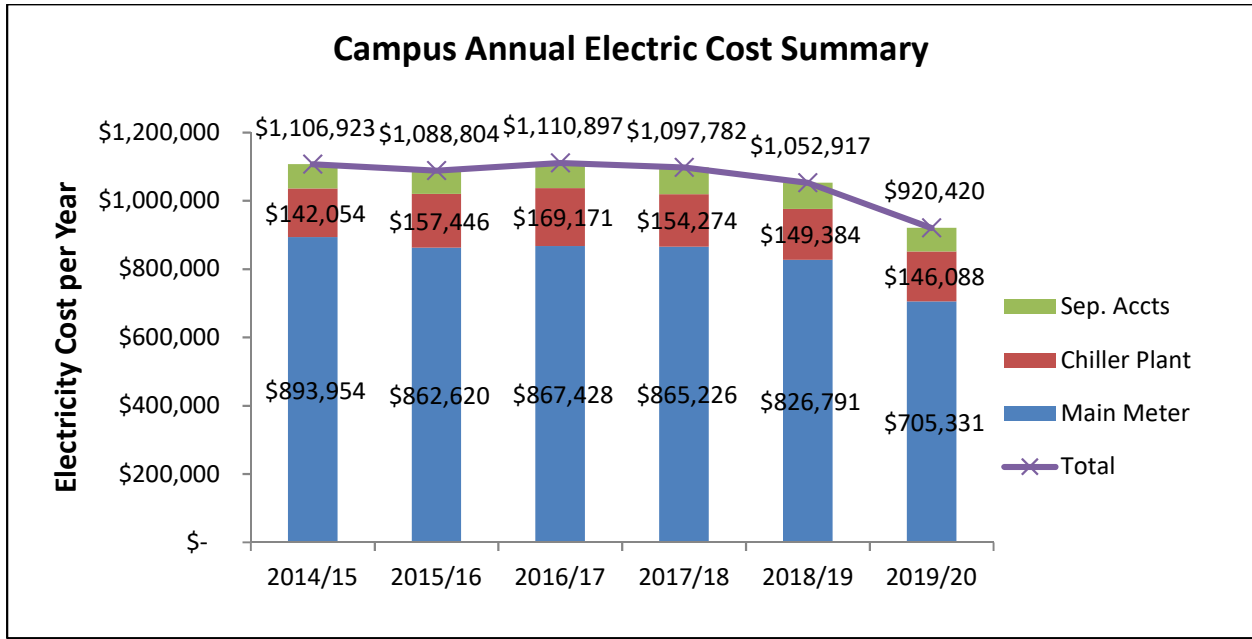


The variance in the total amount spent for fuel in any given year is affected by both the severity of the heating season and the cost paid per million BTUs (MMBtu). Since FY 2014-15 the cost paid per MMBtu of fuel has varied from a high of \$6.17/MMBtu in FY 2014-15 to a low of \$3.96/MMBtu in FY 2019-20.

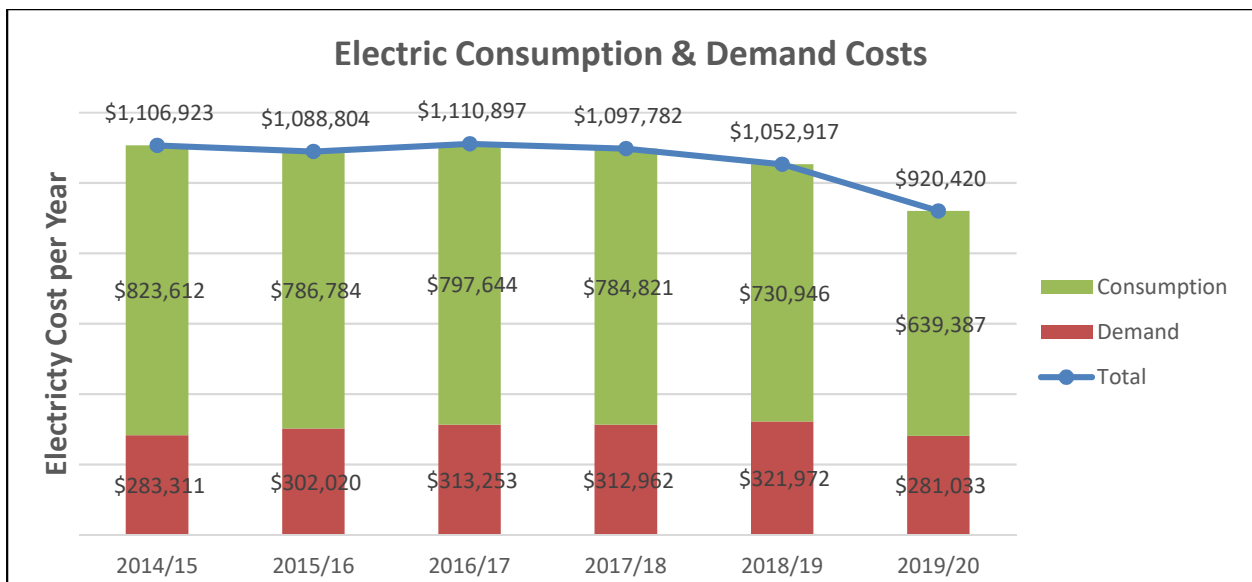


Electrical Costs

Macalester College spent \$920,420 on electricity in FY 2019-20, which was 12% less than the total amount that was spent in the previous year and 17% less than the amount spent in FY 2014-15. The majority of the savings was realized at the campus main electric meter. The amount spent on electricity for the chiller plant and separately metered buildings was about the same as in previous years.

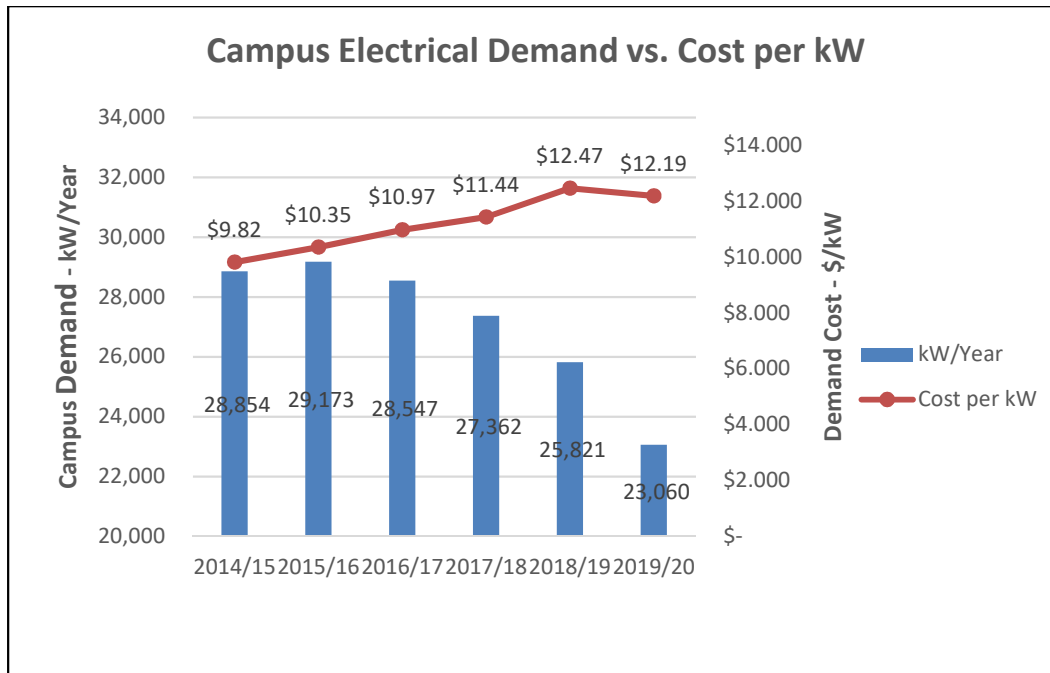


Macalester’s expenditures for electricity are comprised of the costs for consumption, measured in kilowatt-hours (kWh), plus the costs for demand, measured in kilowatts (kW). The College pays electrical demand charges for the campus main electric service, chiller plant, and several other buildings on campus that are billed individually.



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Macalester’s actual electrical demand in FY 2019-20 was 10% less than the previous year and 20% less than in the 2014-15 base year. Since FY 2014-15 the rate charged to Macalester per kW has increased by more than 20%, from \$9.82 per kW in FY 2014-15 to \$12.19 per kW last year.

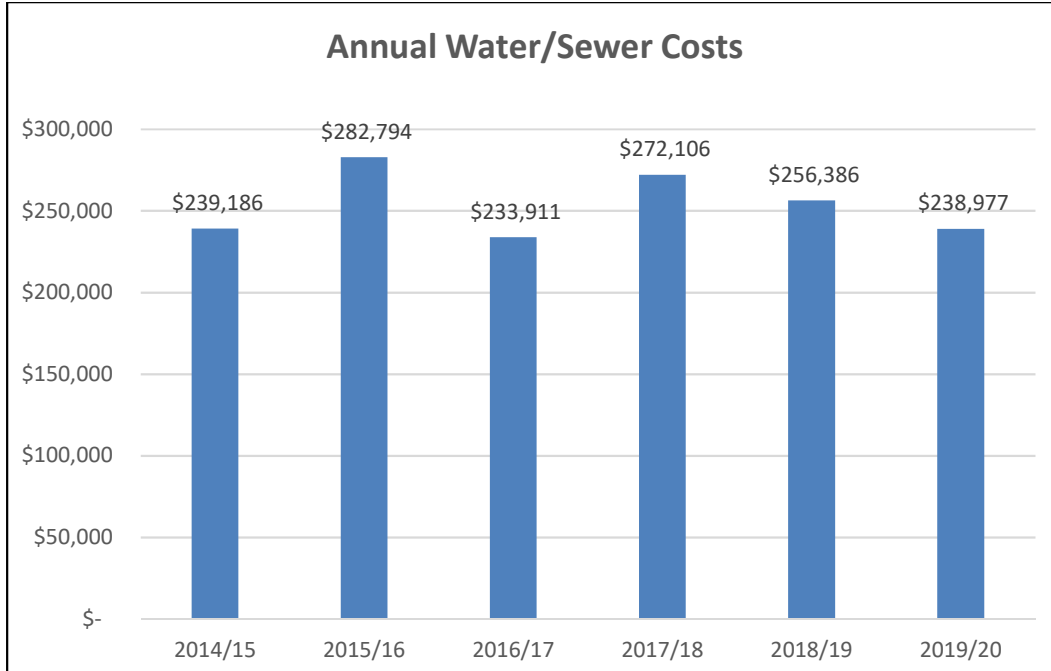


Solar Garden Energy Purchases

In FY 2018-19 Macalester College contracted to purchase and resell an amount of electricity that is equal to nearly 30% of its current electrical consumption from two regional solar gardens as a partial hedge against future increases in electric utility rates. Under this agreement, Macalester’s cost for the electricity produced by the solar gardens is locked in for the term of the contract, while the amount that the College is paid by Xcel Energy will vary with market rates and are expected to rise over time. The first garden started production in August 2018 and the second solar garden came online in July, 2019. Together, they provided a financial benefit to the College of approximately \$25,000 in FY 2019-20.

Water & Sewer Costs

Macalester College’s total water & sewer charges in FY 2019-20 were approximately \$239,000, which represents 15% of the College’s total expenditures for utilities. Water & sewer utility rates have increased by 20% since the 2014-2015 base year. Due to reductions in water consumption, however, the total amount that Macalester spent for water & sewer costs in FY 2019-20 was slightly less than the amount spent in the base year.



FY 2019-20 Energy Conservation Projects & Initiatives:

GRITS Project Summary

In 2015 Macalester started recording the costs and estimated energy savings associated with the energy conservation projects implemented on campus with the Green Revolving Investment Tracking System (GRITS). From 2015 to date the College has invested more than \$1.1M in a total of (71) energy & water conservation projects, with an estimated financial savings to date of nearly \$900,000. The major projects implemented in FY 2019-20 are listed on the following page.

Macalester College	
TOTAL PROJECTS FUNDED (COMPLETED / IN-PROGRESS)	66 / 5
TOTAL INVESTED TO DATE *	\$ 1,167,670
TOTAL FINANCIAL SAVINGS TO DATE	\$ 897,405
TOTAL ENERGY SAVINGS TO DATE	43,603 mmbtu
TOTAL EMISSIONS ABATED TO DATE	7,663 MTCO _{2e}
TOTAL WATER SAVINGS TO DATE	3,013,221 gal

Efficiency data powered by GRITS

* Includes investments to in-progress projects without savings to date
Last updated 08/05/2020

Lighting Retrofit & Control Projects:

The fluorescent lighting in the buildings listed below were upgraded to LED lighting to reduce energy consumption. Where possible, occupancy controls were either installed or upgraded to higher technology devices to ensure that the lights are turned off when the areas that they serve are vacant.

- Dupre Hall (Residence Hall) - Corridor lighting
- Humanities Building (Classrooms & Offices) - Corridor lighting
- Leonard Center (Athletics & Recreation) – Atrium lighting

Building Automation System Upgrades:

Obsolete controls for the HVAC equipment in the buildings listed below were upgraded to newer direct digital control equipment. The new controls provide the ability to implement energy conservation strategies that were not possible with the original equipment.

- 77 Mac Business Offices Building – VAV boxes
- Campus Center – Air handling units
- Olin-Rice laboratory ventilation control upgrades – Phase 5

Electrical/Mechanical Projects:

- Weyerhaeuser Heat Tapes – the quantity of heat trace tapes that melt ice and snow was reduced by about half when the building's roof was replaced.

Solar & Wind Energy Projects:

- Ordway Solar Panels – 13 kW of solar panels were installed on the roof of the Ordway Field Station when the roof of the building was replaced.

Water Conservation & O&M Projects:

- Macalester's heating plant staff audited all of the sink faucets on campus and replaced more than 700 faucet aerators with aerators that meet the US Department of Energy's current WaterSense standards.
- The steam traps in all of the buildings on Macalester's campus that are served by the campus boiler plant as well as in the 1550 Summit Avenue rental property were audited and repaired or replaced as needed.
- Several variable frequency drives (VFD's) that serve air handling units and heating pumps that were at the end of their expected service life were replaced with new units by Macalester staff in order to take advantage of Xcel Energy's rebate program.

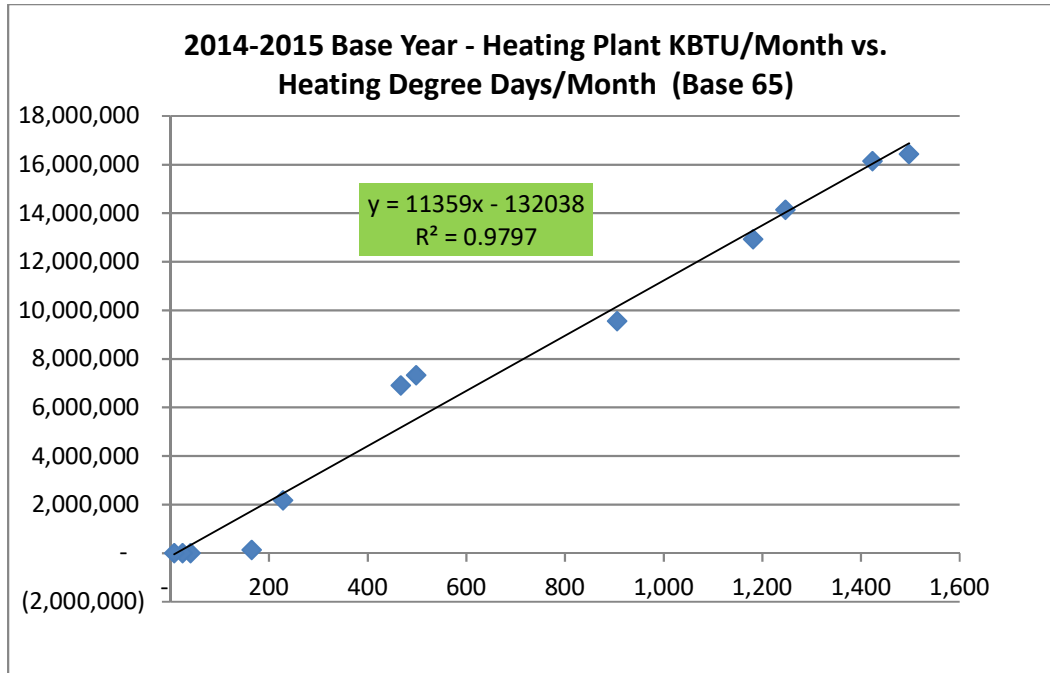
Appendices

Appendix 1: Heating & Cooling Degree Day Data

Annual Heating Degree Days, Base = 65 Degrees Fahrenheit, Fiscal Year (from DegreeDays.net)													
Fiscal Year	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
2010/11	35	1	7	181	388	893	1483	1632	1286	1089	567	246	7807
2011/12	53	1	7	175	382	776	1140	1286	1083	546	457	137	6042
2012/13	25	0	28	171	548	834	1274	1482	1271	1154	733	277	7797
2013/14	59	18	15	95	514	953	1623	1752	1563	1202	669	262	8723
2014/15	41	25	8	165	498	1181	1246	1423	1497	906	467	228	7686
2015/16	29	13	33	76	417	715	1073	1458	1151	743	536	194	6436
2016/17	26	7	11	82	393	634	1372	1361	946	964	446	236	6477
2017/18	30	5	36	98	439	922	1415	1494	1357	1002	811	96	7704
2018/19	12	5	16	139	601	1096	1204	1571	1446	1120	565	316	8090
2019/20	39	4	21	79	592	1015	1286	1361	1250	843	611	246	7348
10 Year Ave	35	8	18	126	477	902	1312	1482	1285	957	586	224	7411
Annual Cooling Degree Days, Base = 55 Degrees Fahrenheit, Fiscal Year (from DegreeDays.net)													
Fiscal Year	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
2010/11	425	658	672	182	112	9	0	0	0	0	27	192	2277
2011/12	437	752	584	269	160	2	0	0	0	104	52	290	2649
2012/13	538	775	533	299	45	7	0	0	0	0	45	206	2448
2013/14	420	630	608	370	77	0	0	0	0	1	28	206	2340
2014/15	432	517	550	255	38	0	0	0	0	14	81	195	2081
2015/16	447	586	491	401	67	21	0	0	0	17	82	265	2377
2016/17	491	625	565	326	95	27	0	0	3	5	56	190	2383
2017/18	501	633	410	373	80	2	0	0	0	0	35	415	2447
2018/19	541	617	585	336	18	0	0	0	0	2	48	145	2293
2019/20	448	627	490	352	35	0	0	0	0	2	39	187	2179
10 Year Ave	468	642	549	316	73	7	0	0	0	15	49	229	2347

Appendix 2: Boiler Plant Fuel Usage Weather Normalization

Weather normalization of energy usage allows an “apples to apples” evaluation of energy consumption in years with different weather patterns using heating degree day (HDD) data and the correlation between fuel usage and the weather. 2014-2015 has been selected as the base year for purposes of comparison. Through trial and error, HDD data based on a balance point temperature of 65F was shown to correlate very well with the boiler plant’s fuel consumption.

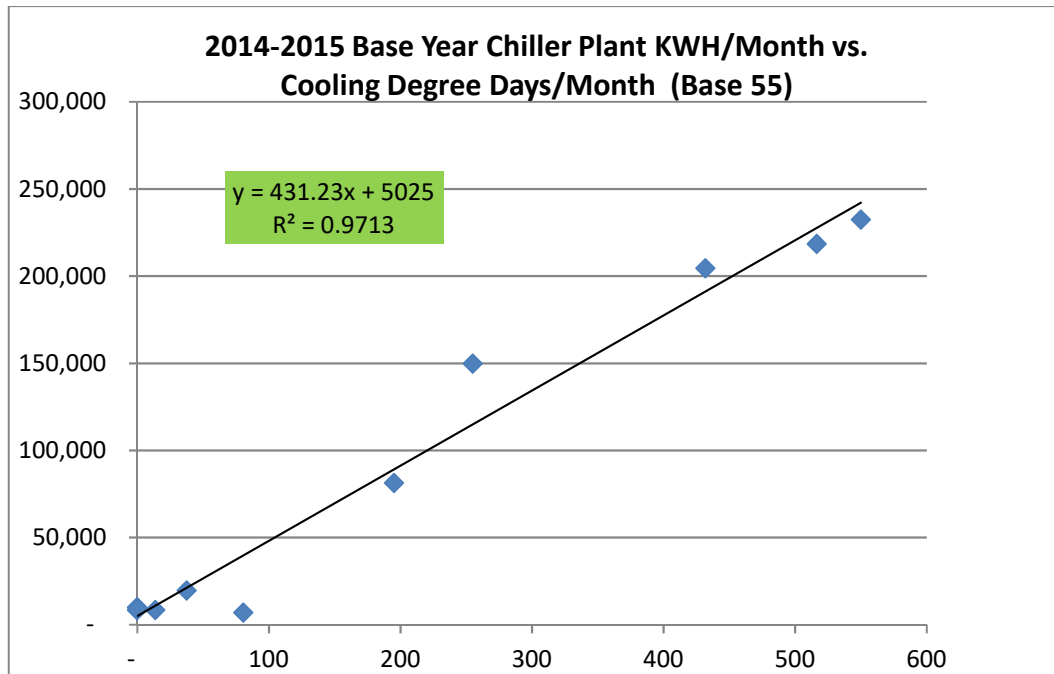


Using the linear regression formula displayed above, the amount of fuel expected to be used in an average year can be predicted and used for comparison with the consumption in the base year. The chart displayed below shows the normalized fuel consumption since the base year - that is, the fuel that would have been used if the number of HDD’s in those years had been the same as the HDD’s in the base year. Weather normalized usage that is lower than the usage predicted for the year indicates efficiency and/or operational improvements, and vice versa.

Fiscal Year	Heating Degree Days (HDD)	Actual Fuel Usage - kBTUs	Predicted Fuel Usage – kBTUs	Weather Normalized Fuel Usage - kBTUs
2014-15	7,686	85,718,600	88,887,458	85,718,600
2015-16	6,436	73,998,600	74,693,252	84,921,412
2016-17	6,477	74,136,500	75,158,971	84,552,475
2017-18	7,704	82,152,260	89,093,056	79,040,691
2018-19	8,090	87,355,360	93,475,358	80,106,450
2019-20	7,348	78,408,800	85,046,980	79,027,998

Appendix 3: Chiller Plant Electrical Usage Weather Normalization

Like the normalization shown above for the heating plant’s fuel usage, fiscal year 2014-15 was chosen for the base year for comparison. Through trial and error, cooling degree day (CDD) data based on a balance point temperature of 55F was shown to correlate very well with the chiller plant’s electric consumption.



Using the linear regression formula displayed above, the amount of fuel expected to be used in an average year can be predicted and used for comparison with the consumption in the base year. The chart displayed below shows the normalized electrical consumption for the chiller plant since the base year - that is, the electricity that would have been used if the number of CDD’s in those years had been the same as the CDD’s in the base year. Weather normalized usage that is lower than the usage predicted for the year indicates efficiency and/or operational improvements, and vice versa.

Fiscal Year	Cooling Degree Days (CDD)	Actual Elect Usage - kWh	Predicted Elect Usage – kWh	Normalized Elect Usage - kWh
2014-15	2,081	957,600	957,603	957,600
2015-16	2,377	1,114,400	1,085,161	983,402
2016-17	2,383	1,085,000	1,087,749	955,180
2017-18	2,447	880,600	1,115,606	755,878
2018-19	2,293	945,000	1,049,024	862,642
2019-20	2,179	900,200	1,000,080	861,963

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Appendix 4: Campus Gross Square Footage

Note: In FY 2019-20 the house located at 1657 Lincoln Avenue was converted from a High Winds rental property to administrative use by the College.

	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>
<u>Residence Halls</u>						
30 Macalester	9,062	9,062	9,062	9,062	9,062	9,062
37 Macalester (Cultural House)	6,294	6,294	6,294	6,294	6,294	6,294
Bigelow Hall	37,890	37,890	37,890	37,890	37,890	37,890
GD Dayton Hall	42,423	42,423	42,423	42,423	42,423	42,423
Doty Hall	43,474	43,474	43,474	43,474	43,474	43,474
Dupre Hall	65,459	65,459	65,459	65,459	65,459	65,459
Kirk Hall	53,515	53,515	53,515	53,515	53,515	53,515
Stadium (Veggie Co-op)	18,305	18,305	18,305	18,305	18,305	18,305
Turck Hall	40,377	40,377	40,377	40,377	40,377	40,377
Wallace Hall	<u>49,328</u>	<u>49,328</u>	<u>49,328</u>	<u>49,328</u>	<u>49,328</u>	<u>49,328</u>
Residence Halls Total:	366,757	366,757	366,757	366,757	366,757	366,757
<u>Admin & Support Bldgs.</u>						
100 Cambridge Garage	709	709	709	709	709	709
77 Macalester	11,944	11,944	11,944	11,944	11,944	11,944
Campus Center	76,065	76,065	76,065	76,065	76,065	76,065
Kagin Commons	41,377	41,377	41,377	41,377	41,377	41,377
Lampert Building	28,999	28,999	28,999	28,999	28,999	28,999
Wallace Library	86,910	86,910	86,910	86,910	86,910	86,910
Weyerhaeuser Chapel	17,682	17,682	17,682	17,682	17,682	17,682
Weyerhaeuser Hall	31,144	31,144	31,144	31,144	31,144	31,144
Leonard Center	174,617	174,617	174,617	174,617	174,617	174,617
Fine Arts – Chiller Plant	6,525	6,525	6,525	6,525	6,525	6,525
Fine Arts – Heating Plant	<u>11,964</u>	<u>11,964</u>	<u>11,964</u>	<u>11,964</u>	<u>11,964</u>	<u>11,964</u>
Admin/Support Total:	486,685	486,685	486,685	486,685	486,685	486,685
<u>Academic Buildings</u>						
Carnegie Hall	33,905	33,905	33,905	33,905	33,905	33,905
Old Main	28,007	28,007	28,007	28,007	28,007	28,007
Olin-Rice Halls	172,020	172,020	172,020	172,020	172,020	172,020
Ordway Biology Station	5,072	5,072	5,072	5,072	5,072	5,072
Fine Arts – Humanities	55,735	55,735	55,735	55,735	55,735	55,735
Fine Arts – Music	76,440	76,440	76,440	76,440	76,440	76,440
Fine Arts – Orig. Theater	39,677	39,677	39,677	n/a	n/a	n/a
Fine Arts – New Theater	n/a	n/a	n/a	n/a	59,145	59,145
Markim Hall – IGC	16,585	16,585	16,585	16,585	16,585	16,585
Fine Arts – Art without Heating & Chiller Plants	37,022	37,022	37,022	37,022	37,022	37,022
Fine Arts – Commons	<u>32,027</u>	<u>32,027</u>	<u>32,027</u>	<u>32,027</u>	<u>32,027</u>	<u>32,027</u>
Academic Bldgs. Total:	496,490	496,490	496,490	456,813	515,958	515,958
<u>Houses & Apartments</u>						
1657 Lincoln Ave – New High Winds Office	n/a	n/a	n/a	n/a	n/a	1,512

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	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>
1662 Princeton – Student Overflow	1,242	1,242	1,242	1,242	1,242	1,242
1668 Princeton – Russian House	1,144	1,144	1,144	1,144	1,144	1,144
180/182 Vernon – French House	2,656	2,656	2,656	2,656	2,656	2,656
188/190 Vernon – German House	3,837	3,837	3,837	3,837	3,837	3,837
196 Vernon – Spanish House	2,882	2,882	2,882	2,882	2,882	2,882
200 Vernon – Eco House	1,176	1,176	1,176	1,176	1,176	1,176
216 Vernon – Chinese House	1,928	1,928	1,928	1,928	1,928	1,928
230 Vernon - Humphrey House	1,625	1,625	1,625	1,625	1,625	1,625
53 Macalester St – Student Overflow	1,200	1,200	1,200	1,200	1,200	1,200
57 Macalester St – Student Overflow	1,200	1,200	1,200	1,200	1,200	1,200
63 Macalester St – Student Overflow	1,216	1,216	1,216	1,216	1,216	1,216
Grand Cambridge Apartments	17,049	17,049	17,049	17,049	17,049	17,049
98 Cambridge Ave - Dean of Students House	n/a	n/a	2,565	2,565	2,565	2,565
1635 Summit Ave - President’s House	3,976	3,976	3,976	3,976	3,976	3,976
1576 Summit Ave - Summit House	7,320	7,320	7,320	7,320	7,320	7,320
1661/1663 Princeton-Japanese House	2,080	2,080	2,080	2,080	2,080	2,080
1644 Summit Ave - Alumni House	7,109	7,109	7,109	7,109	7,109	7,109
176 Vernon – Arabic House	1,477	1,477	1,477	1,477	1,477	1,477
1653 Lincoln Ave – Sust. & Special Events	<u>1,265</u>	<u>1,265</u>	<u>1,265</u>	<u>1,265</u>	<u>1,265</u>	<u>1,265</u>
Houses & Apts Total:	60,382	60,382	62,947	62,947	62,947	64,459
<u>Rental Properties</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>
92 Cambridge – Rental House	1,865	1,865	1,865	1,865	1,865	1,865
1665/1667 Princeton - Rental	2,080	2,080	2,080	2,080	2,080	2,080
1667 St. Clair – Rental	1,100	1,100	1,100	1,100	1,100	1,100
210 Vernon – Rental	2,160	2,160	2,160	2,160	2,160	2,160
222 Vernon – Rental	1,420	1,420	1,420	1,420	1,420	1,420
224 Vernon – Rental	836	836	836	836	836	836
204 Vernon – Rental	1,365	1,365	1,365	1,365	1,365	1,365
1550 Summit Ave	<u>61,108</u>	<u>61,108</u>	<u>61,108</u>	<u>61,108</u>	<u>61,108</u>	<u>61,108</u>
<u>Rental Properties Total:</u>	<u>71,934</u>	<u>71,934</u>	<u>71,934</u>	<u>71,934</u>	<u>71,934</u>	<u>71,934</u>

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	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>
Grand Total GSF:						
Residence Halls Total:	366,757	366,757	366,757	366,757	366,757	366,757
Admin / Support	486,685	486,685	486,685	486,685	486,685	486,685
Buildings Total:						
Academic Buildings	496,490	496,490	496,490	496,490	515,958	515,958
Total:						
Houses & Apts Total:	60,382	60,382	62,947	62,947	62,947	64,459
Rental Properties Total:	<u>71,934</u>	<u>71,934</u>	<u>71,934</u>	<u>71,934</u>	<u>71,934</u>	<u>71,934</u>
Grand Total GSF:	1,482,248	1,482,248	1,484,813	1,484,813	1,504,281	1,505,793

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