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A. Executive Summary

Overview

St. Cloud State University President Earl H. Potter III signed the American College & University Presidents Climate Commitment (ACUPCC). Signatories of the ACUPCC have agreed to create Climate Action Plans for accelerating research and educational efforts to equip society to re-stabilize the earth’s climate and reduce their campus greenhouse gas (GHG) emissions. They have also agreed to publicly share their greenhouse gas emissions inventory, climate action plan, and subsequent progress reports.

In September, 2010, a Greenhouse Gas Emissions Inventory was completed for St. Cloud State University for fiscal years 2004-2009 and was submitted to the ACUPPC. A second Greenhouse Gas Emissions Inventory documented the emissions for fiscal years 2010, 2011, and 2012. In January of 2012, the first climate action plan was prepared and submitted, and second climate action plan was submitted in January of 2014.

This document shall serve as St. Cloud State University’s third Greenhouse Gas Emissions Inventory, and documents the emissions for fiscal years 2013 and 2014. This information can be used to track trends and evaluate progress towards the university’s goal of becoming climate neutral by 2035.

Methodology

Under the direction of John Frischmann, Director of Facilities Management, GLTArchitects created this inventory, interviewing campus sources and vendors to collect data on six separate categories:

- Institutional Data
- On-Campus Stationary Fuel Use
- Purchased Electricity
- Agriculture (Fertilizer Use)
- Refrigeration
- Transportation

Emissions were only tracked for properties owned by the University. The temporal boundary for the inventory was set at FY 2013–FY 2014.

The data gathered was entered into the Campus Carbon Calculator (software developed by Clean Air-Cool Planet and the primary calculator used by the institutions that are a part of the ACUPCC). The Calculator converted the information into greenhouse gases, and reported it as CO₂ equivalents (eCO₂) to estimate the carbon footprint of the University. The eCO₂ is reported in metric tons.

It should be noted that version 7.0 was used for this inventory. Since the last inventory that utilized version 6.8, updates have been made to the calculator to more accurately account for emissions based on the latest research. All of the source data from the previous study was
reentered into the new calculator. As a result, some of the emissions values in this report may not match those of the prior report.

**Results**

SCSU emitted 41,056 metric tons of eCO\textsubscript{2} in FY 2014. Total emissions were 6,627 metric tons less than in FY 2009, a reduction of 13.9 percent.

SCSU emits approximately 3.3 metric tons of eCO\textsubscript{2} per student. Signatory institutions in St. Cloud State University's peer group (per IPEDS) emit a range of 1.8 to 6.6 metric tons of eCO\textsubscript{2} per student. Signatory public universities in Minnesota emit a range of 3.3 to 10.3 metric tons eCO\textsubscript{2} per student.

Emissions per square foot of building area in FY 2014 were 12.5 metric tons of eCO\textsubscript{2}/SF. This number has been trending downward as SCSU has renovated buildings, pointing to increased energy efficiency. It is also a result of eliminating the use of #6 oil and instead using natural gas in on-campus stationary plants. SCSU’s peer signatory institutions (per IPEDS) have emissions per square foot ranging from 8.9 to 24.7 metric tons of eCO\textsubscript{2}/SF. Minnesota signatory institutions have emissions per square foot ranging from 12.1 to 30.0 metric tons of eCO\textsubscript{2}/SF.

The most significant source of eCO\textsubscript{2} emissions for SCSU is electricity purchased from Xcel Energy. This source, coupled with transmission and delivery (T & D) losses, accounted for 36 percent of SCSU's total GHG emissions in FY 2014.

On-campus stationary sources of GHG emissions, such as boilers, accounted for 14,427 metric tons of eCO\textsubscript{2}, or 35 percent of total emissions.

Air travel was responsible for 9 percent of emissions, and daily commuting accounted for 18 percent of emissions in FY 2014. Direct transportation (university-owned vehicles) were responsible for 1 percent of emissions, and other directly financed travel (namely rental vehicles) were responsible for an additional 1 percent of emissions.

**Greenhouse Gas Emissions Target**

Carbon neutrality goals were established as part of St. Cloud State University’s 2012 Climate Action Plan. The targeted carbon neutrality date for St. Cloud State University is 2035, with a short-term target of a 15% reduction by 2017 and a mid-term target of a 40% reduction by 2024 relative to 2009 emissions.

**Conclusion**

The greatest impact on its carbon emissions St. Cloud State University could make would be to reduce or eliminate its reliance on purchased electricity and by continuing to find alternatives to fossil fuel combustion in its stationary on-campus plants.
B. Acknowledgements

St. Cloud State University

Facilities Management
John Frischmann, Director of Facilities Management
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Roger Spieker, Plant Maintenance Engineer Chief
Ron VanHeuveln, Physical Plant Director
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Sara Blaszak, East Side Oil Companies
David Floy, Ferrell Gas
Tom Quinlan, AmeriGas
Scott Hinde, Xcel Energy
Erica Ellis, Enterprise Holdings
Ruth Vorwerk, Lubrication Technologies, Inc.
Kris Erickson, Northway Oil
Sue Tschimperle, Holt-Peterson Bus
C. Summary and Overview

The American College and University Presidents' Climate Commitment (ACUPCC) was formed by a small group of higher education institutions concerned that the earth’s climate is rapidly destabilizing. The ACUPCC signatories recognize global climate change as the defining challenge of the 21st century.

The commitment also acknowledges the important role universities play in research, education and modeling solutions relative to this challenge. Since its inception, the ACUPCC has grown from 12 founding members to 685 signatories.

As a signatory to the American College and University President’s Climate Commitment (ACUPCC), St. Cloud State University has committed to eliminating our greenhouse gas (GHG) emissions in a reasonable period of time. An inventory of current and past GHG emissions has been completed and will be updated every other year to measure our progress. Additionally, SCSU has agreed to create and implement a Climate Action Plan with a target date and interim milestones for achieving campus climate neutrality. We have agreed to integrate sustainability into the curriculum and make it part of the educational experience. SCSU has also agreed to make the action plan, inventory, and periodic progress reports publicly available.

This report summarizes the third Greenhouse Gas Emissions Inventory for St. Cloud State University. The inventory includes data collected for fiscal years 2013 and 2014. The inventory was prepared in accordance with the guidelines established by the ACUPCC. This report also includes some analysis, comparing the new results to those of the previous inventories and to measure the progress that St. Cloud State University is making towards our established emissions goals.

ACUPCC Requirements

1. Initiate development of a plan to achieve climate neutrality

   Within 2 months of signing: Create institutional structures to guide development and implementation of plan

   Within 1 year of signing: Complete a comprehensive inventory of all greenhouse gas emissions and update every other year (First inventory competed in 2010; second inventory completed in 2013, third inventory submitted in 2015)

   Within 2 years of signing: Develop an institutional action plan for becoming climate neutral (Competed in 2012, updated in 2014)

2. While plan is being developed, initiate 2 or more tangible actions to reduce greenhouse gases

3. Make the documents publicly available by submitting to the ACUPCC Reporting System
D. Methodology

The group on campus primarily charged with providing data for the inventory was Facilities Management, under the lead of John Frischmann, Director. GLTArchitects was hired to facilitate the process, identify the information needed, track the information, create a history and journal of the collection effort, calculate the GHG emissions, publically post the information to the ACUPCC website, and prepare this report.

This inventory includes data from fiscal years (FY) 2013 and 2014, covering the period of time from July 1, 2012 to June 30, 2014.

The inventory includes data related to all properties owned by the University, including the main campus and the Minnesota Highway Safety Research Center. Leased spaces (University Welcome Center, Coborn Plaza Apartments, and the Twin Cities Graduate Center) were not included in the study. Institutional data was collected, including building square footages; operational budgets; and staff, faculty, and student counts. This allows for limited peer-to-peer comparisons to be made based on per person and per square foot calculations.

SCSU agreed to collect data from the operational boundaries recommended by the ACUPCC, namely all Scope 1 and Scope 2 emissions and part of Scope 3 emissions. Scope 1 refers to the GHG emissions occurring from sources that are owned or controlled by the institution, including on-campus stationary combustion of fossil fuels, mobile combustion of fossil fuels by university owned/controlled vehicles, and “fugitive” emissions. Fugitive emissions result from releases of GHGs from refrigeration and fertilizer use. Scope 2 emissions refer to indirect emissions generated in the production of electricity consumed by the institution. Scope 3 emissions refer to all other indirect emissions – those that are a consequence of the activities of the University, but occur from sources not owned or controlled by the institution. Scope 3 emissions required to be tracked by the ACUPCC include all air travel, and staff, faculty, and student commuting to and from campus. Emissions resulting from transportation paid for by the University also fall under Scope 3. Transmission and delivery losses for purchased electricity are also included in Scope 3.

Data was gathered from both on-campus sources as well as University vendors. Where possible, data from vendors was cross-checked with data from University sources to verify accuracy.

The Clean Air–Cool Planet Campus Carbon Calculator was again used to document the GHG Inventory. This calculator is recommended by the ACUPCC because it is comprehensive, relatively easy to use, and easily accessible. Improvements have been made to the calculator to align it specifically with the requirements of the ACUPCC GHG Inventory. It should be noted that version 7.0 was used for this inventory. Since the last inventory that utilized version 6.8, updates have been made to the calculator to more accurately account for emissions based on the latest research. All of the source data from the previous study was reentered into the new calculator. As a result, some of the emissions values in this report may not match those of the prior report.
E. Inventory Results

Institutional Data

Since FY 2009, SCSU’s operating budget has increased a modest 4.01 percent, or 0.80 percent per year.

Total student enrollment peaked in FY 2011 at 18,650 and ended at 16,245 in FY 2014. Compared to FY 2009, the student head count was 7 percent less, and a greater portion of students in FY 2014 were part-time students.

Since FY 2009, the faculty/staff full-time-equivalent has been reduced about 22 percent, with a decrease in the number of full-time employees and an increase in part-time employees.

The gross building area has increased since the last inventory due to a 52,570 s.f. addition to the National Hockey Center and the construction of the 100,037 s.f. Integrated Science and Engineering Laboratory Facility (ISELF). The total building area now stands at 3,280,469 square feet.

Greenhouse Gas Emissions

The greenhouse gas emissions are tracked in metric tons of carbon dioxide equivalents (eCO2). SCSU emitted 41,056 metric tons of eCO2 in FY 2014. In comparison, FY 2009 saw total eCO2 emissions of 47,683 metric tons. Therefore, total emissions have decreased by 6,627 metric tons since FY 2009, a reduction of 13.9 percent. Purchased electricity (including transmission and delivery losses) is responsible for 36 percent of emissions. On-campus stationary sources such as boilers account for 35 percent of emissions. Air travel is responsible for 9 percent of emissions, and daily commuting totals 18 percent of emissions. Direct transportation is responsible for 1 percent of emissions, and other directly financed travel is responsible for an additional 1 percent of emissions.

Total Emissions per 1,000 Square Feet of Building Area (in Metric Tons of eCO2)

![Graph showing total emissions per 1,000 square feet of building area from FY 2004 to FY 2014.]
Total Emissions by Sector (in Metric Tons of eCO₂)

2014 Total Emissions by Sector

- Stationary Combustion: 35%
- Purchased Electricity: 36%
- Commuting: 18%
- Air Travel: 9%
- Direct Transportation: 1%
- Refrigerants: 0%
- Other Directly Financed Travel: 1%
Greenhouse Gas Emissions Target

Carbon neutrality goals were established as part of St. Cloud State University’s 2012 Climate Action Plan. The targeted carbon neutrality date for St. Cloud State University is 2035, with a short-term target of a 15% reduction by 2017 and a mid-term target of a 40% reduction by 2024 relative to 2009 emissions.
Scope 1 Emissions
Scope 1 Emissions are direct GHG emissions occurring from sources that are owned or controlled by the institution.

Stationary Combustion
Stationary combustion refers to the burning of fuels to produce steam, heat or power using equipment in a fixed location such as boilers. In FY 2014, it accounted for 35 percent of SCSU’s eCO2 emissions.

On-Campus Stationary Source Emissions and Heating Degree Days

The level of emissions related to on-campus stationary sources has directly correlated to the local weather patterns. For example, the winter was much milder during FY 2012.

Since 2009, St. Cloud State University has completely eliminated using #6 fuel oil in its boilers, and instead uses primarily natural gas. This switch resulted in a reduction of 26 kg of eCO2/MMBtu. However, in January 2014, there was a regional shortage of natural gas. Because St. Cloud State University participates in Xcel Energy’s interruptible gas rates program, the University was required to switch to a back-up fuel source for 19 days. During those days, St. Cloud State University had to use diesel instead of natural gas.

The gross building area has increased since the last inventory due to an addition to the National Hockey Center and the construction of the Integrated Science and Engineering Laboratory Facility (ISELF). While they are designed to be efficient, they are still energy-intense spaces that have the potential to create a net gain in heating, cooling, and electricity demand.
Direct Transportation / Mobile Combustion

Mobile combustion refers to the burning of fuels by institution-own transportation vehicles such as cars, trucks, and maintenance equipment. In FY 2014, it accounted for only one percent of St. Cloud State University’s eCO₂ emissions.

Since 2009, St. Cloud State University has significantly reduced its vehicle fleet. A partnership has been created with Enterprise Rent-a-Car to provide vehicles on an as-needed basis under the state contract. Effective July 1, 2011, St. Cloud State University only had 12-passenger vans in their motor pool rental fleet, with all other vehicle rentals occurring through Enterprise. Effective July 1, 2013, St. Cloud State University eliminated the 12-passenger vans as well, so now all vehicle requests go through Enterprise.

Minnesota now requires that all diesel fuel sold in the state for vehicle use must contain at least 5% biodiesel (B5), and this is reflected in the calculations. In addition, all gasoline sold in Minnesota must contain at least 10% ethanol (E10). St. Cloud State University no longer directly purchases E85 because of the changes to the vehicle lease arrangement.

State agencies, of which SCSU is a part of, are required to achieve strict reductions in fuel usage in agency-owned on-road vehicles and increase their use of alternative fuels.

SCSU was the first higher education member of the Drive Electric Minnesota Initiative. This organization is a partnership of state and local government, utilities, private business and nonprofit entities working together to bring electric vehicles and plug-in charging infrastructure to Minnesota. SCSU has purchased three GEM vehicles that are 100% electric powered. Because they are recharged from the regular power grid, their emissions are included in the Purchased Electricity category.

Fugitive Emissions

Fugitive emissions are due to the intentional or unintentional release of eCO₂ in the production, processing, transmission, storage and use of fuels and other substances. Emissions resulting from the use of refrigeration equipment and fertilizers would fall under this category. Refrigerants and chemicals did not contribute to St. Cloud State University’s 2014 eCO₂ emissions. Fertilizer accounted for 0.02 percent of the 2014 emissions.

Refrigerants will continue to contribute an ever smaller quantity of eCO₂ emissions. The refrigerants with the worst ozone-depleting potential (designated as Class I substances) have already been completely phased out in the United States, except for exemptions allowed under the Montreal Protocol. Class II substances, which are transitional substitutes for many Class I substances, are being phased out now. As a developed country and a party to the Montreal Protocol, the U.S. must incrementally decrease HCFC consumption and production, with a reduction to at least 90 percent below baseline in 2015 and a complete HCFC phaseout by 2030.
**Scope 2 Emissions**

Scope 2 Emissions are indirect GHG emissions that are a consequence of activities that take place within the organizational boundaries of the institution, but that occur at sources owned or controlled by another entity.

**Purchased Electricity**

Purchased electricity is responsible for 34 percent of St. Cloud State University's 2014 greenhouse gas emissions. Transmission and delivery losses associated with this electricity accounts for an additional 2 percent of the 2014 emissions.

**Electricity Usage**

![Graph showing electricity usage from 2004 to 2014](image_url)

**Emissions from Purchased Electricity**

![Graph showing emissions from purchased electricity from 2004 to 2014](image_url)
As noted earlier, the addition to the National Hockey Center and the ISELF building added nearly 5 percent to the gross building area. While they are designed to be efficient, they are still energy-intense spaces that could create a net increase in electricity usage. In fact, electricity usage campus-wide continues to increase slightly. However, emissions from the electricity usage have actually dropped as a result of the source of the electricity.

St. Cloud State University purchases all of its electricity from Xcel Energy. Minnesota has enacted a Renewables Portfolio Standard that requires Xcel Energy to generate or procure a specific percentage of their electricity from renewable sources as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>15 percent</td>
</tr>
<tr>
<td>2012</td>
<td>18 percent</td>
</tr>
<tr>
<td>2016</td>
<td>25 percent</td>
</tr>
<tr>
<td>2020</td>
<td>31.5 percent</td>
</tr>
</tbody>
</table>

Electricity generated by solar, wind, hydroelectric facilities less than 100 megawatts (MW), hydrogen and biomass -- which includes landfill gas, anaerobic digestion, and municipal solid waste -- is eligible for the standards and the objective.

Of the 31.5 percent in 2020, at least 24 percent must be generated by wind energy conversion systems, 1.5 percent solar, 1 percent from either solar or wind, and the remaining five percent can be generated by other eligible energy technology.

### Energy Source for Electricity from Xcel Energy

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>48 %</td>
<td>43 %</td>
<td>43.9 %</td>
<td>36 %</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>5 %</td>
<td>8 %</td>
<td>6.6 %</td>
<td>13 %</td>
</tr>
<tr>
<td>Nuclear</td>
<td>28 %</td>
<td>30 %</td>
<td>29.1 %</td>
<td>28 %</td>
</tr>
<tr>
<td>Hydro-Electric</td>
<td>8 %</td>
<td>7 %</td>
<td>7.5 %</td>
<td>7 %</td>
</tr>
<tr>
<td>Biomass</td>
<td>2 %</td>
<td>3 %</td>
<td>3 %</td>
<td>3 %</td>
</tr>
<tr>
<td>Renewable (Wind, Solar)</td>
<td>7 %</td>
<td>8 %</td>
<td>9.8 %</td>
<td>13 %</td>
</tr>
<tr>
<td>Other</td>
<td>2 %</td>
<td>1 %</td>
<td>0 %</td>
<td>0 %</td>
</tr>
</tbody>
</table>

Because of this requirement, electricity from Xcel Energy has lower emissions than the rest of its United States sub-region. Therefore, we entered a custom fuel mix into the calculator to more accurately account for the emissions. We obtained the percentages of the fuel mix directly from Xcel Energy. In 2013, 36% of the electricity was generated from coal, 28% from nuclear, 13% from natural gas, 13% from wind, 7% from hydroelectric generation, 3% from biomass, and less than 1% from solar.

Using the custom fuel mixes, the Campus Carbon Calculator determined that every megawatt of electricity consumed by the University in FY 2009 resulted in emissions of 0.50 eCO₂, whereas every megawatt of electricity consumed in FY 2009 resulted in emissions of 0.45 eCO₂.
**Scope 3 Emissions**

Scope 3 emissions required to be tracked by the ACUPCC include all air travel, and staff, faculty, and student daily commuting to and from campus. St. Cloud State University is also tracking emissions from other directly financed travel. Scope 3 emissions also include electricity transmission and delivery losses, as noted above. Obtaining Scope 3 data is challenging, as monitoring miles traveled by air, rental vehicle, personal vehicle, bus travel, or light rail is not done systematically.

**Commuting**

This category includes emissions from staff, faculty and student daily commuting to and from campus, whether by personal vehicle or public transportation. It does not account for transportation to and from students’ permanent residences for weekends or holidays. Student commuting is responsible for 11 percent of St. Cloud State University’s 2014 eCO2 emissions, and staff and faculty commuting account for another 7 percent, for a total of 18 percent of emissions due to commuting.

**Emissions from Commuting**

Obtaining Scope 3 commuting data is challenging. For the prior inventories, information from surveys conducted in 2002 and in 2004 that had some of the data needed for determining the commuting habits of the faculty, staff and students, was extrapolated. In 2014, Facilities Management conducted a new survey to obtain more accurate commuting information. The St. Cloud State University Statistical Consulting and Research Center assisted with the survey creation and analysis. The results were used to calculate the commuting emissions for both FY 2013 and FY 2014.

The data from the new survey showed that the amount of commuting per person was actually less than previously assumed. Therefore, the apparent reduction in emissions can be attributed
to two items: 1) an actual reduction in the number of commuters; 2) more accurate source data to calculate commuting distances and frequencies. The source data that was used for inventories from FY 2004 to FY 2012 resulted in commuting emissions calculations of 2.9 eCO₂ per faculty and staff member, whereas the data used for FY 2013 and FY 2014 resulted in emissions calculations of 2.1 eCO₂ per faculty and staff member. The source data that was used for inventories from FY 2004 to FY 2012 resulted in commuting emissions calculations of 0.46 eCO₂ per student, whereas the data used for FY 2013 and FY 2014 resulted in emissions calculations of 0.34 eCO₂ per student.

It should be noted that many of the signatories to the ACUPCC identified compiling accurate commuting data as being particularly challenging.

**Air Travel**

This category tallies emissions resulting for air travel paid for or through the institution. This includes study abroad travel, student academic and athletic trips, and air travel associated with staff training or recruiting. Study abroad air travel is responsible for 4 percent of all of St. Cloud State University’s 2014 eCO₂ emissions, and other University air travel is responsible for another 5 percent, for a total of 9 percent of all of the emissions.

**Miles of Air Travel**

![Miles of Air Travel Graph]

[Description of the graph]

St. Cloud State University Greenhouse Gas Emissions Inventory 3.0

Last Revision: 01.15.15
Emissions from Air Travel

The emissions from air travel have been declining at a faster pace than the change in air travel miles. This appears to be the result of a lower emissions factor per mile in the Campus Carbon Calculator. In 2004, the emissions per 1000 miles were 1.34 eCO₂. In 2014, the emissions per 1000 miles were 1.00 eCO₂. The improvement may be the result of more efficient airline practices, such as more passengers per flight, more fuel-efficient airplanes, or a change in the fuel itself.

University policies directly influence the amount of air travel that is undertaken. It is possible that air travel could increase in the future, and the associated emissions would increase as well.

Other Directly Financed Travel

This category includes emissions resulting from transportation provided by others for the benefit of the University, such as rental car miles, charter bus miles, and personal vehicle mileage that was reimbursed by the University. This accounts for less than 1 percent of St. Cloud State University’s total emissions.

As noted earlier, a partnership has been created with Enterprise Rent-a-Car to provide vehicles on an as-needed basis under the state contract, resulting in a smaller University vehicle fleet. Therefore, some of the emissions that previously were included under Direct Transportation / Mobile Combustion have now been shifted to the Other Directly Financed Travel category.
F. Comparisons to Peer Institutions

The St. Cloud State University Office of Strategy, Planning & Effectiveness has identified 27 peer institutions. Ten of those institutions are ACUPCC signatories. One additional peer institution had become an ACUPCC signatory but has since withdrawn. Three of the peer institutions are past due on required ACUPCC submittals, so they have been excluded from the following charts. Historically, not all institutions have had the same reporting date. Therefore, the latest information from the ACUPCC reporting website has been used. The year of the reported data is included below the name of each institution.

Comparison of Net Emissions of Peer Institutions

<table>
<thead>
<tr>
<th>Institution</th>
<th>Year</th>
<th>Emissions (Metric Tons of eCO₂ Emissions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Cloud State University</td>
<td>2014</td>
<td>41,056</td>
</tr>
<tr>
<td>University of Minnesota-Duluth</td>
<td>2011</td>
<td>51,061</td>
</tr>
<tr>
<td>California State University-Chico</td>
<td>2011</td>
<td>26,869</td>
</tr>
<tr>
<td>Grand Valley State University</td>
<td>2012</td>
<td>83,456</td>
</tr>
<tr>
<td>Kennesaw State University</td>
<td>2012</td>
<td>86,642</td>
</tr>
<tr>
<td>University of North Carolina at Charlotte</td>
<td>2012</td>
<td>105,852</td>
</tr>
<tr>
<td>Towson University *</td>
<td>2014</td>
<td>82,566</td>
</tr>
<tr>
<td>Ball State University</td>
<td>2013</td>
<td>135,512</td>
</tr>
</tbody>
</table>

* Aspirational Peers

Average: 76,702
In addition to St. Cloud State University, there are eight public Minnesota universities that are ACUPCC signatories, three of which are also part of MnSCU. Metropolitan State University is past due on required ACUPCC submittals, so it has been excluded from the following charts.

All of these institutions have the same reporting date deadline of January 15, 2015, with the exception of Bemidji State University, which has a deadline of January 15, 2016. Therefore, the most current submittals are not yet available on the ACUPCC reporting website.

Comparison of Net Emissions of **Signatory Minnesota Public Universities**

- **St. Cloud State University** (2014): 41,056
- **University of Minnesota - Morris** (2011): 11,607
- **Bemidji State University** (2014): 19,054
- **University of Minnesota - Duluth** (2011): 51,581
- **University of Minnesota - Crookston** (2011): 12,848
- **Winona State University** (2012): 30,704
- **University of Minnesota - Rochester** (2011): 1,964
- **University of Minnesota - Twin Cities** (2012): 480,810

*Average: 81,213*
Normalized Comparison of Signatory Minnesota Public Universities

<table>
<thead>
<tr>
<th>Institution</th>
<th>Metric Tons of eCO₂ Emissions Per 1000 Square Feet</th>
<th>Metric Tons of eCO₂ Emissions Per Full-Time Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Cloud State University</td>
<td>3.3</td>
<td>12.0</td>
</tr>
<tr>
<td>University of Minnesota - Morris</td>
<td>6.0</td>
<td>12.1</td>
</tr>
<tr>
<td>Bemidji State University</td>
<td>4.4</td>
<td>12.6</td>
</tr>
<tr>
<td>University of Minnesota - Duluth</td>
<td>5.2</td>
<td>15.1</td>
</tr>
<tr>
<td>University of Minnesota - Crookston</td>
<td>8.0</td>
<td>21.2</td>
</tr>
<tr>
<td>Winona State University</td>
<td>4.1</td>
<td>13.1</td>
</tr>
<tr>
<td>University of Minnesota - Rochester</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>University of Minnesota - Twin Cities</td>
<td>10.3</td>
<td>21.4</td>
</tr>
</tbody>
</table>

Average: 5.7
Average: 17.3
G. Conclusion

St. Cloud State University has made significant progress towards their intermediate goal of reducing GHG emissions by 15 percent of FY 2009 emissions by 2017. The results of this greenhouse gas inventory have revealed that the FY 2014 emissions are already 13.9 percent below the FY 2009 numbers.

While many outside factors have contributed to this success, St. Cloud State University should be proud of what they have accomplished.

The challenge going forward will be to maintain these reductions and to implement additional measures to further reduce GHG emissions. This will require the participation and support of the entire St. Cloud State University community and its partners.