



THE UNIVERSITY OF  
WINNIPEG

**MEASURING OUR SUCCESS:  
UWINNIPEG SUSTAINABILITY  
PERFORMANCE REPORT**

FISCAL YEAR 2016

APRIL 1, 2016 — MARCH 31, 2017

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## List of Abbreviations

CSO - Campus Sustainability Office  
FY - Fiscal Year (April 1 - March 31)  
GESA - Geography & Environmental Studies Students' Association  
GHG - Greenhouse gas  
LEED - Leadership in Energy & Environmental Design  
RCFE - Richardson College for the Environment  
TCO2e - Tonnes of Carbon Dioxide Equivalent  
UWSA - University of Winnipeg Students' Association  
VP HR, Audit & Sustainability - Vice President Human Resources, Audit & Sustainability  
AASHE- Association for the Advancement of Sustainability in Higher Education  
STARS - Sustainability Tracking, Assessment, & Rating System  
WRC - Workers Rights Consortium

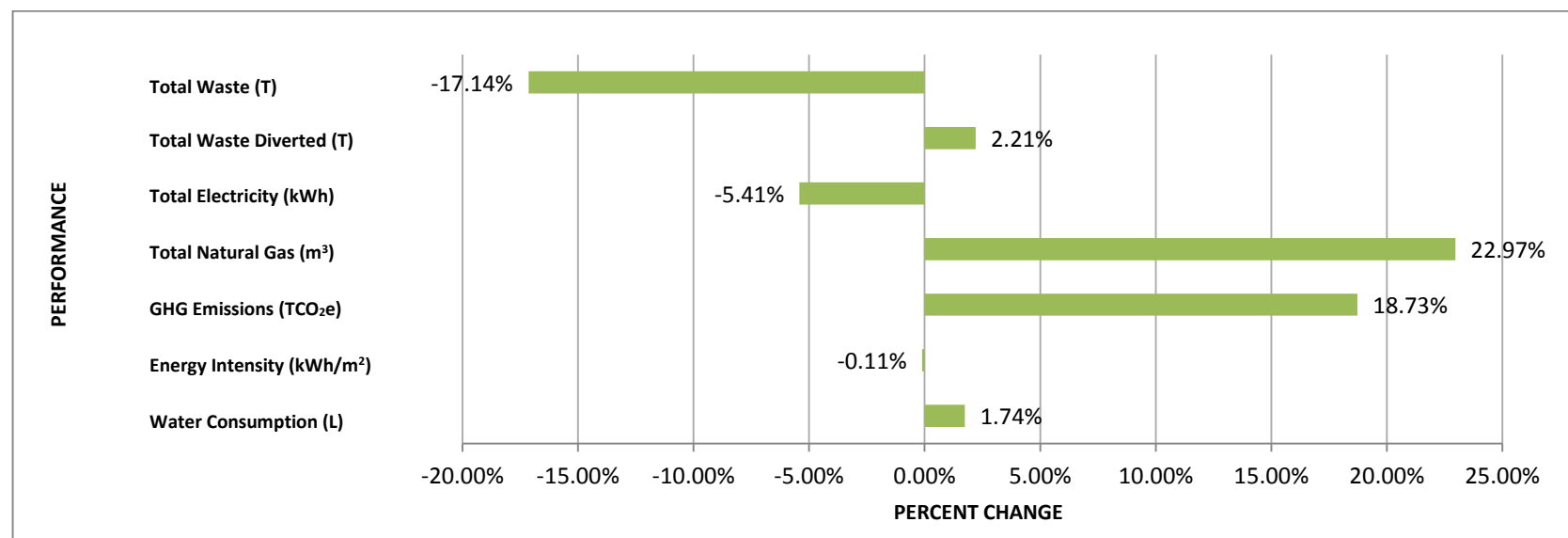




## 1.0 Executive Summary

### 1.1 Performance

Throughout FY2016, campus sustainability efforts have focused on maintaining progress while developing a new institutional sustainability strategy. The action plans established by the Campus Sustainability Council will provide the roadmap for all activities related to campus sustainability at UWinnipeg for the next five years. Details on the status of each action can be found in Appendix A; the performance metrics in Figure 1 and those provided in more detail in relevant report sections speak to the results achieved through the University's efforts. Key successes, key challenges, and FY2017 priorities are highlighted in the three sections following.



**Figure 1** Sustainability Performance Summary for The University of Winnipeg from April 1st, 2016 – March 31st, 2017 showing annual percent change for waste collection (T), waste diverted (T), water consumption (L), energy intensity (kWh/m²), electricity consumption (kWh), natural gas consumption (m³), and greenhouse gas (GHG) emissions (TCO<sub>2</sub>e). GHG emissions and natural gas consumption are normalized for weather.

**Table 1** Sustainability Performance Summary for the University of Winnipeg from April 1<sup>st</sup>, 2016 – March 31<sup>st</sup>, 2017.

	Water Consumption (L)	Energy Intensity (kWh/m <sup>2</sup> )	GHG Emissions (TCO <sub>2</sub> e)	Total Natural Gas (m <sup>3</sup> )	Total Electricity (kWh)	Total Waste Diverted (T)	Total Waste (T)
<b>% Change</b>	1.74%	-0.11%	18.73%	22.97%	-5.41%	-3.70%	-4.05%
<b>FY-2015</b>	62,667,600	247	2,130	1,008,666	22,281,803	135	222
<b>FY-2016</b>	63,758,233	247	2,529	1,240,317	21,075,316	130	213
<b>Total Difference</b>	1,090,633	9	399	231,651	-1,206,487	-5	-9

## 1.2 Key Successes

### New Campus Sustainability Strategy

FY2016 marked a major turning point for sustainability at the University of Winnipeg as our first five-year strategic planning cycle drew to a close and a new cycle began. During this time, the CSO led a strategic review and consultation process to inform the development of the new 2017 Institutional Sustainability Strategy. This process was an opportunity to look back at our journey of sustainability leadership, take stock of our successes, and consult campus stakeholders on new goals and priorities. A key output from this work was our engagement report, “What We Learned: Environmental Scan and Engagement Summary.” This document looks at how well we met our 2012 objectives, reviews the landscape on core environmental issues, discusses the implications of new climate regulatory frameworks for UWinnipeg, and summarizes the feedback and aspirations of campus community members who participated in consultations. Together, these elements provided a solid foundation for the development of our new five-year Institutional Sustainability Strategy, which was presented to the Board of Regents in June of 2017.

The full “What We Learned” report can be found here:

[www.uwinnipeg.ca/sustainability/docs/what\\_we\\_learned\\_final.pdf](http://www.uwinnipeg.ca/sustainability/docs/what_we_learned_final.pdf)

The full 2017 Institutional Sustainability Strategy can be found here:

[www.uwinnipeg.ca/sustainability/docs/2017\\_07\\_Sustainability\\_InstitutionalStrategy\\_V04.pdf](http://www.uwinnipeg.ca/sustainability/docs/2017_07_Sustainability_InstitutionalStrategy_V04.pdf)

## Diversity Food Services

The work of Diversity Food Services also stands out as a continuing sustainability success. Our campus food provider fosters local agricultural economies while addressing socioeconomic challenges in the community through well-developed social enterprise practices. A study conducted by a student at the University of Manitoba's Asper School of Business found that for every dollar Diversity spent on employment in FY2016, the local community saw \$1.68 of social benefit. A more detailed look at Diversity's achievements begins on page 34.

## Investors Group Waste Audit

The CSO successfully carried out two waste audits for the Portage Avenue Investors' Group building before and after they implemented floor-level recycling programs. These audits provided hands-on experience for students and demonstrated a potential revenue stream for sustainability initiatives on campus. Based on the success of this initiative, our office is now working with a faculty member and students from the business department to test the idea of a student-run waste auditing social enterprise.

## Norway Renewable Energy Teaching & Research Partnership with the Norwegian University of Science and Technology

In early 2017, UWinnipeg confirmed the details of a new research and teaching partnership with the Norwegian University of Science and Technology that seeks to develop research and study opportunities related to sustainable energy systems in Canada and Norway. The initiative is called the Norway-Canada Sustainable Energy Project and is part of the Norwegian Centre for International Cooperation in Education's High North Program. Through this partnership, faculty and students from UWinnipeg's Geography department, along with CSO staff, had the chance to participate in an exploratory trip to Norway for ten days in March.

## 1.3 Key Challenges

### Data collection and management

The CSO continues to face challenges with data collection and management. Since our institution takes a broad approach to sustainability and is committed to making improvements in areas relating to our social, economic and environmental impact, measuring progress requires the tracking of many different types of data. Since we began formally monitoring our performance, there have been challenges with regards to data collection and accuracy, and 2016 was no exception. Energy intensity data, or the amount of energy used per square meter of building space, presents ongoing challenges. This uncertainty stems from variability in space measurements for buildings occupied as well as from inaccurate billing and metering. The CSO has taken steps to address this problem, conducting a retrospective space inventory of all owned and leased space that has significantly increased the accuracy of our space measurements. There are still

discrepancies requiring attention; moving forward, we are hopeful that our adoption of online software, Energy Star Portfolio Manager, will enable more accurate record-keeping.

Several other data collection challenges emerged in 2016, including difficulties calculating travel claim mileage, tracking the use of Eco Logo certified versus non-certified cleaning products by both Physical Plant and contracted cleaners, and tracking sustainability-related research outputs at our institution. In the coming year, CSO staff will be working with various campus stakeholders to overhaul the data collection and report writing process.

## Outreach and Engagement

Throughout FY2016, sustainability-related outreach and engagement on campus was minimal, with limited resources given to core initiatives like the Green Office Program, Grass Routes and our office mailing list. One of the main functions of UWinnipeg's CSO has always been to keep the campus community informed about sustainability efforts and, consequently, invested in improving our overall environmental performance. As such, CSO staff are currently working to revamp these efforts on several fronts: We are re-launching the Green Office Program with a new presentation and tool kit, playing a lead role in establishing a new planning committee for Grass Routes, growing our mailing list and sending regular newsletters, and systematically connecting staff and students to extracurricular learning and volunteer opportunities.

## Priorities for FY2017

Based on the challenges outlined above and the ambitious plans outlined in the 2017 Institutional Sustainability Strategy, our office has identified several key priorities for FY2017:

- **Update purchasing criteria** so that procurement practices reflect our renewed sustainability goals.
- **Establish a baseline and reporting mechanisms for Scope 3 emissions** so that we can begin working to develop reduction targets in FY2018.
- **Build the capacity of the Sustainability Council's Academic Working Group** so that it can foster a community of practice among researchers and educators who focus on sustainability and track the number of students who are taking sustainability-related courses.

- **Revamp outreach and engagement efforts**, re-launching the Green Office Program with a new presentation and tool kit, playing a lead role in establishing a new planning committee for Grass Routes, growing a mailing list and sending regular newsletters, and systematically connecting staff and students to extracurricular learning and volunteer opportunities.
- **Streamline the annual report process**, working with relevant campus stakeholders to improve tracking and reporting procedures, key datasets, and performance indicators, streamlining the design of the report for readability, and highlighting important findings through creative digital communications in an effort to raise awareness of successes and areas for improvement.



**Image 1** Staff from the CSO, Indigenous Studies, MDP, and Experiential Learning shared lunch with Vandana Shiva before her public talk in May 2017.

## 1.4 Reporting Period and Scope

This report applies to FY2016 (April 1<sup>st</sup>, 2016 - March 31<sup>st</sup>, 2017) and where possible applies to the full scope of the University of Winnipeg's facilities and operations. This includes:

1. All physical facilities and buildings owned and managed by The University of Winnipeg, including all future acquisitions of real properties which come to be owned and managed by The University.
2. All physical facilities and buildings, or spaces within facilities or buildings, leased or rented by The University of Winnipeg, and over which The University can reasonably influence the sustainability performance of the facility. Utility data for leased spaces are not included in this report due to lack of access to data.
3. All routine activities, programs and operations of The University of Winnipeg, whether on or off campus, and including staff, faculty and student travel, both directly on behalf of the University in conducting its operations and programs, or commuting of staff, faculty and students to and from their places of residence for purposes of work, teaching, research, study, recreation or any other University activity.
4. All activities, programs or special events which may from time to time be hosted by The University of Winnipeg, or for which the University may provide physical facilities, active partnerships, or other support when such programs or events are offered by institutions, groups, corporations or organizations that are not formally recognized as part of the University community.
5. All "arms-length" agencies, corporations, institutes, research centres or other entities, to which University policies may generally apply.

The report also makes reference to the University's new five year sustainability strategy (adopted on June 19, 2017) which will serve as the blueprint for sustainability management at UWinnipeg moving forward.

## 1.5 Sustainability Governance & Strategic Plan

Implementation of the University of Winnipeg's Sustainability Policy is coordinated through the Campus Sustainability Office, with the support of the Campus Sustainability Council and its various committees. With the assistance of Campus Sustainability Office staff, the VP HR Audit & Sustainability champions sustainability-related issues at the University's senior level.



In January 2012, The University's Board of Regents adopted the *UWinnipeg Sustainability Strategy*. This document, aimed at advancing progress on the implementation of the University's Sustainability Policy and eight related administrative policies, provides a roadmap for sustainability-related action and initiatives throughout the University. Performance relative to each target area forms the main substance of this report.

The 2012 Sustainability Strategy guided sustainability management at Winnipeg through to the end of FY2016. Over the past year, the CSO coordinated the drafting of a new five year Institutional Sustainability Strategy. This coordination included analyzing lessons from our sustainability practices thus far and working with campus stakeholders to develop a shared vision and specific targets for our next phase of sustainability practice. Although the new strategy did not influence FY2016 performance objectives, the challenges outlined in this report are ones that we hope to address as our university enters a new phase of sustainability management.

## 1.6 Annual Demographic and Space Variations

The number of people on campus, annual variations in weather, and changes in the campus footprint all have an impact on the University's sustainability performance. More people, cold winters, hot summers, and a larger footprint will all increase resource demand, while fewer people, warmer winters, cooler summers, and reductions in the University's footprint will have the opposite effect.

### Owned, Leased and Occupied Space

UWinnipeg provides about 10,000 students access to post-secondary education in the densely populated downtown Spence Neighbourhood. The campus' accessible and centralized location comprises of both owned and leased space.

As explained in past annual reports, accurately identifying owned, leased and occupied space has been challenging because of incomplete building acquisition records as well as conflicting datasets. This year the CSO moved to develop a more reliable occupancy picture, hiring a part-time research assistant to conduct a detailed historical space inventory. This involved consolidating data sources and remedying discrepancies. As such, the table below represents re-stated numbers for previous years that differ slightly from earlier annual reports. Intensity-based data has also been revised based on this higher-quality space data. It should also be noted that the new Leatherdale Hall building is not reflected in this year's data as the building was completed after FY2016 ended.



**Image 2** *The Richardson College for the Environment and Science Building accounts for 13,872 m<sup>2</sup> of occupied space. The building is LEED Gold certified.*

This report reflects data on buildings that the University owns and/or for which the University exercises some degree of control over utility consumption. It is important to note that performance data discussed in the report, including energy use and emissions, does not include leased space.

**Table 2:** Space inventory at University of Winnipeg from FY1990 – FY2016 including buildings/housing leased and space change percentages between FY2015 and FY2016. All measurements listed are in m<sup>2</sup>.

Year	Buildings Owned	Buildings Leased	Housing Owned	Housing Leased	Total Area Occupied	Total Owned Space	Total Leased Space
<b>1990-91</b>	90,137	0	0	0	90,137	90,137	0
<b>2005-06</b>	94,041	5,692	1,992	4,541	106,266	96,033	10,233
<b>2006-07</b>	94,041	6,518	1,992	4,541	107,092	96,033	11,059
<b>2007-08</b>	94,011	7,357	1,992	4,541	107,901	96,004	11,898
<b>2008-09</b>	93,403	7,673	1,870	4,541	107,487	95,273	12,214
<b>2009-10</b>	92,925	6,649	5,824	4,541	109,940	98,750	11,190
<b>2010-11</b>	95,177	6,281	8,649	4,541	114,647	103,826	10,822
<b>2011-12</b>	110,379	7,754	8,649	4,541	131,323	119,028	12,295
<b>2012-13</b>	109,302	8,559	8,348	5,354	131,562	117,649	13,913
<b>2013-14</b>	108,434	9,785	8,247	5,935	132,401	116,682	15,720
<b>2014-15</b>	121,936	10,100	8,247	5,122	145,405	130,183	15,222
<b>2015-16</b>	125,514	10,100	8,247	4,541	148,403	133,762	14,641
<b>2016-17</b>	125,514	9,588	13,450	4,541	153,093	138,964	14,129
<b>% change from FY2015 to FY2016</b>	<b>0%</b>	<b>-5.07%</b>	<b>63.08%</b>	<b>0%</b>	<b>3.16%</b>	<b>3.89%</b>	<b>-3.50%</b>

### Campus Population & Operational Changes

There were no significant changes to the number of people who work and study on campus in FY2016; no major impacts due to campus population are expected on resource consumption and waste generation. Student and staff numbers are represented in the table below. As seen in Table 3, the student population is measured in full course equivalents (FCE) while staff numbers are measured in full time equivalents (FTE). As one would expect, the numbers of full and part time students on campus are much greater during the fall and winter semesters than during spring and summer. The UWinnipeg graduate student population continues to grow steadily, with 174 FCE graduate students attending UWinnipeg in FY2016.

**Table 3** Student and staff population of University of Winnipeg from FY2010 – FY2016.

<b>Fiscal Year</b>	<b>Students (FCE*)</b>	<b>Students (FTE)</b>	<b>Staff (FTE)</b>
<b>FY2010</b>	NA	NA	724
<b>FY2011</b>	23,452	NA	756
<b>FY2012</b>	24,074	7,559	824
<b>FY2013</b>	27,842	7,679	810
<b>FY2014</b>	26,961	7,496	854
<b>FY2015</b>	26,567	7,563	832
<b>FY2016</b>	<b>26,567</b>	<b>7,576</b>	<b>832</b>

\*FCE numbers revised to align with streamlined reporting processes.

New numbers reflect only undergraduate FCE

## 2.0 Performance

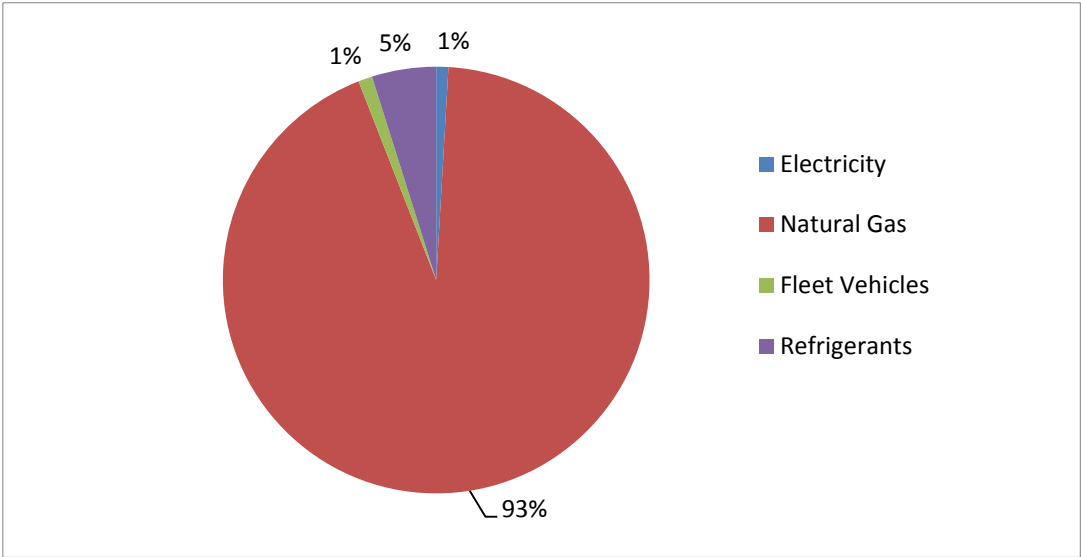
At the end of FY2015, the CSO worked with the University's Sustainability Council to develop actions plans for FY2016 for each goal in the University's 2012 Sustainability Strategy. The objectives set for FY2016 were modest to ensure capacity within the CSO and elsewhere to support the development of the new 2017 Institutional Sustainability Strategy. Status updates for each of the 2016 Action Plans are included in Appendix A. The targets found in the new Strategy will provide action frameworks for the next five years and will be reviewed annually to identify key pursuits required to achieve targets for the year moving forward. The following section provides a detailed summary of our campus performance in FY2016 across a broad range of indicators.

### 2.1 Air, Energy & Water

#### Greenhouse Gas Emissions & Energy Consumption

The University of Winnipeg currently reports Scope 1 and Scope 2 greenhouse gas emissions. These include emissions from electricity and natural gas, as well as fuel used in fleet vehicles and fugitive emissions from refrigerants. Not included in this inventory are Scope 3 emissions such as business travel, waste, commuting, and purchases. These Scope 3 emissions will be included in the future.

Emissions from natural gas used for heating make up the bulk of UWinnipeg’s Scope 1 and 2 emissions. Emission reduction efforts to date have emphasized reducing natural gas consumption on campus by fuel switching and efficiency upgrades.



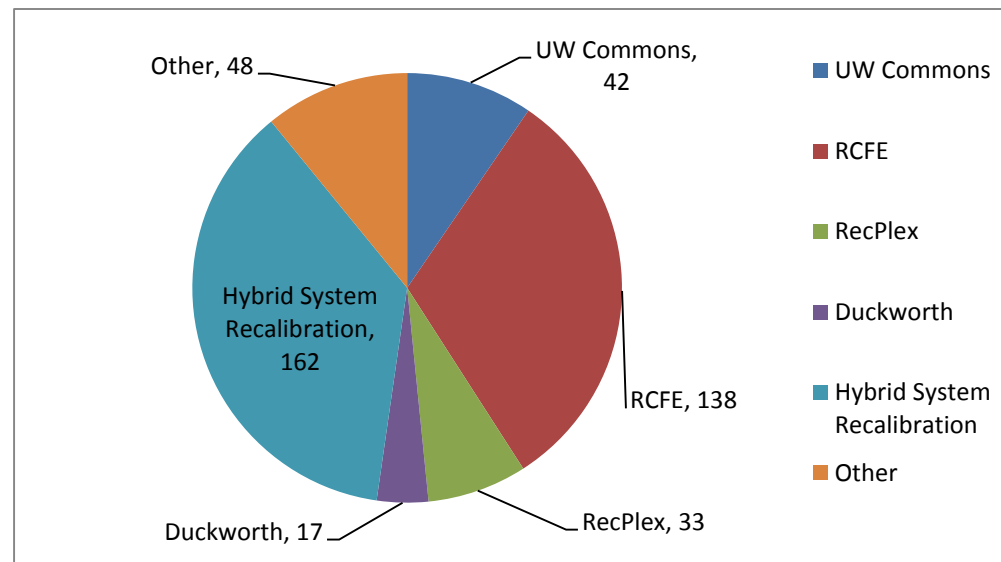
**Figure 2** Breakdown of greenhouse gas emissions (% TCO<sub>2</sub>e) from UWinnipeg in FY2016 by source, including electricity, natural gas, fleet vehicles, and refrigerants.

**Table 4** Breakdown of greenhouse gas emissions (TCO<sub>2</sub>e) from UWinnipeg in FY2016 by source, including electricity, natural gas, fleet vehicles, and refrigerants.

FY2016 GHG EMISSIONS (T CO2E)	
Electricity	23.2
Natural Gas	2354.1
Fleet Vehicles	28.9
Refrigerants	123

The University remains committed to reporting absolute GHG emissions. With that in mind, it is important to note that the University's owned space has increased 54% since 1990. After adjusting for weather, FY2016 weather adjusted emissions were 19.25% lower than 1990 but 18.73% higher than FY2015 (see Table 5 and Figure 4). Energy intensity (energy use per square meter of owned space) remained static at 247 kWh/m<sup>2</sup>. Weather adjusted natural gas consumption in 2016 was 35.69% lower than it was in 2009 (the year major energy retrofit work began), but 22.98% greater than FY2015 (Table 6). On the other hand, electricity consumption decreased by 5.41% between FY2015 and FY2016.

A number of factors contributed to the increase in emissions this year. Due to the numerous efficiency upgrades undertaken on campus, our hybrid boilers have had their peak demand setting reduced to match the new natural building peak consumption. The result has been a reduction in electricity consumption but an increase in natural gas consumption. The vivarium humidifier at RCFE was only 50% operational for key winter months, which also resulted in increased natural gas consumption. Use of the larger, natural gas-operated steam humidifiers in the RCFE also increased over the past year.



**Figure 3** Breakdown of greenhouse gas emissions increases (TCO<sub>2</sub>e) from FY2015 to FY2016.

The switch to high-efficiency LED lighting in the Duckworth Gym, Riddell Hall, and Bulman Centre, as well as many outdoor areas, also

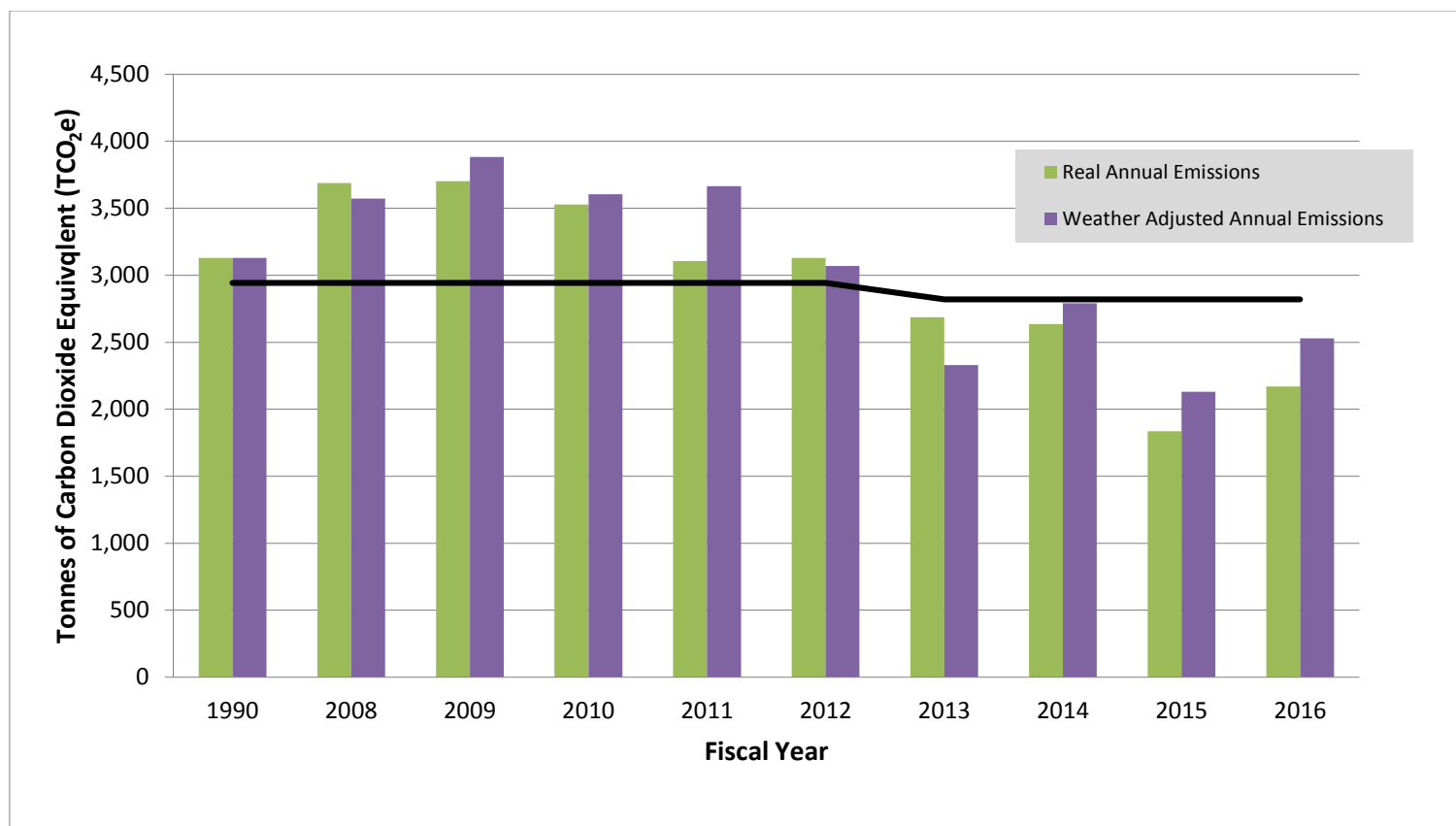
contributed to reducing electricity consumption. Electricity consumption would have been reduced even further in FY2016 were it not for a few minor irregularities. First, there was more regularly scheduled programming at the RecPlex than in previous years, meaning the high-powered field lighting spent less time in shutdown mode. Second, temporary electrical heaters were required in Sparling and Wesley Halls in order to keep these spaces above freezing. Third, during its construction phase, the Leatherdale project required electrical heat and heat loss occurred as a result of many of the walls being open.

As part of the ongoing effort to increase efficiency and reduce both natural gas and electricity consumption, the facilities team continued work on several projects over FY2016. In addition to the lighting improvements mentioned above, both the Buhler and Helen Betty Osborne buildings had their control systems upgraded midway through the heating season. Quantifying the impact of these improvements will require a year's worth of new data. The Facilities team has also developed and approved a plan to install a bio-mass boiler in the main boiler room. The project is set to be complete in the spring of 2018.

The Downtown Commons building was the only major capital project to come online in FY2016. The building was only operational for a portion of the fiscal year and was not fully commissioned until December. As such, energy consumption and associated emissions from this year cannot be considered representative of what they will be in the years ahead. Assessment of actual impact against projected impact is therefore not yet possible.

Two other projects are projected to come online in FY2017: Leatherdale Hall and the UWSA Daycare expansion. Overall, accurately estimating the emissions impacts of new capital projects remains an important but challenging aspect of our capital planning process.

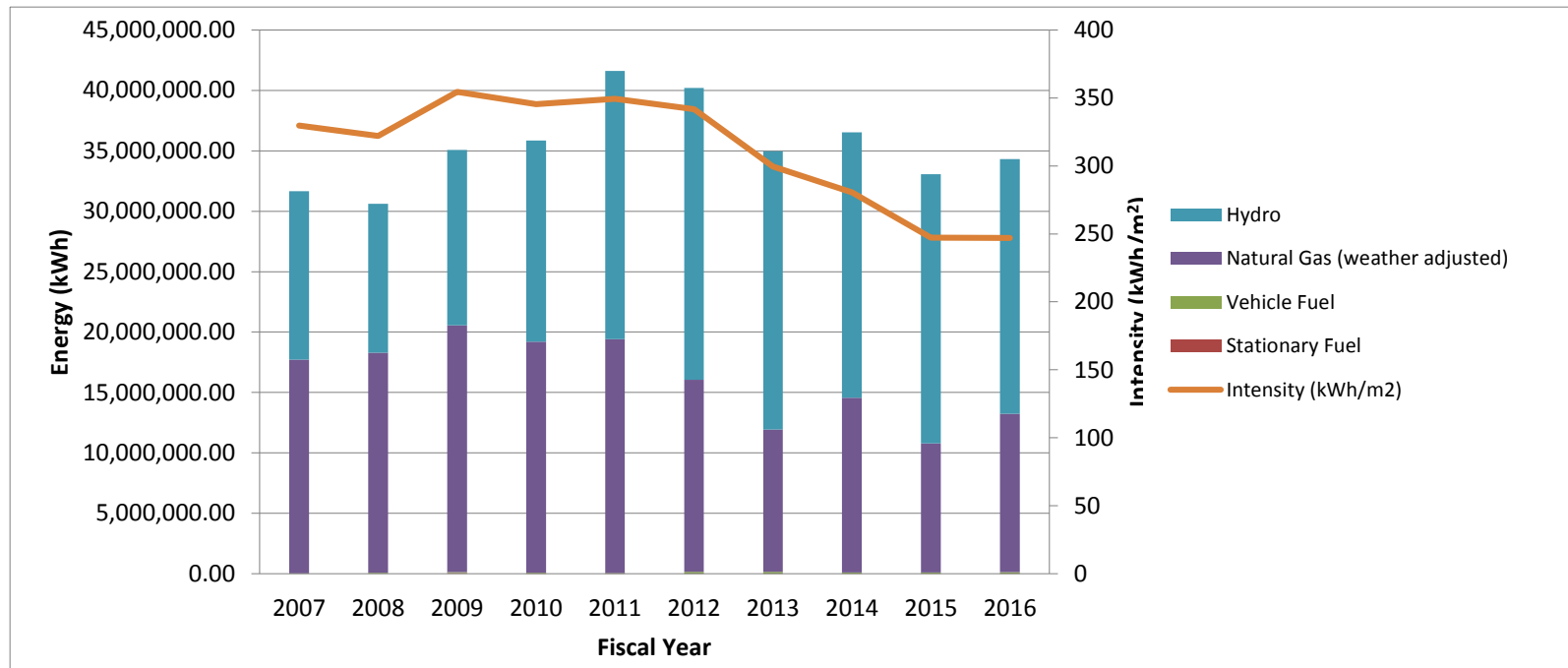




**Figure 4** Greenhouse gas emissions and targets (TCO<sub>2</sub>e) from FY2008 to FY2016 (including the baseline year of 1990) for UWinnipeg. Real annual emissions and weather adjusted amounts are shown.

**Table 5** Greenhouse gas emissions and targets (TCO<sub>2</sub>e) from FY2008 to FY2016 (including the baseline year of 1990) for UWinnipeg. Real annual emissions and weather adjusted amounts are shown.

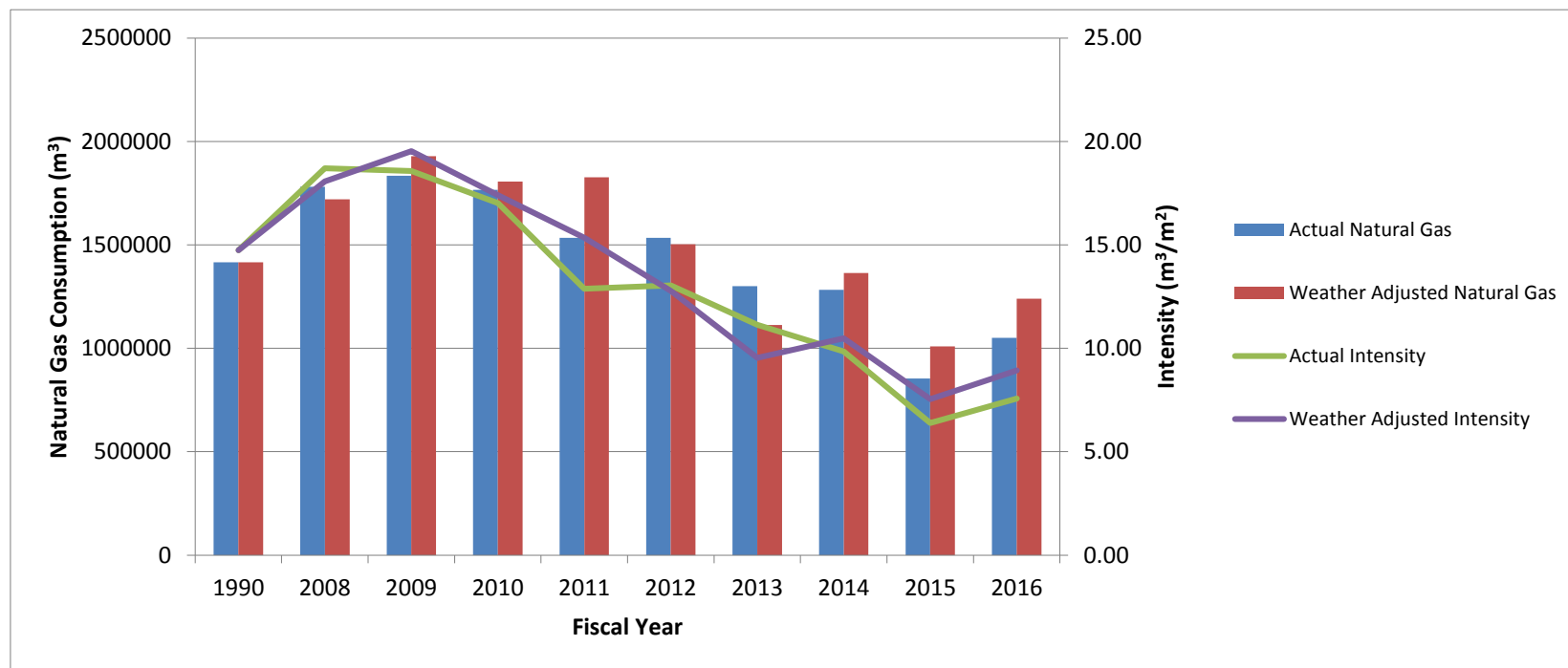
Year	1990	2008	2009	2010	2011	2012	2013	2014	2015	2016
Real Annual Emissions	3130	3688	3701	3529	3107	3130	2686	2636	1836	2170
Weather Adjusted Annual Emissions	3130	3572	3882	3605	3664	3070	2330	2791	2130	2529
Target	2943	2943	2943	2943	2943	2943	2819	2819	2819	2819



**Figure 5** Energy consumption breakdown for UWinnipeg from FY2007 to FY2016 including stationary fuel, vehicle fuel, natural gas (weather adjusted) and hydro (kWh). The intensity (kWh /m<sup>2</sup>) is also shown.

**Table 6** Energy consumption breakdown for UWinnipeg from FY2007 to FY2016 including stationary fuel, vehicle fuel, natural gas (weather adjusted) and hydro (kWh). The intensity (kWh/m<sup>2</sup>) is also shown.

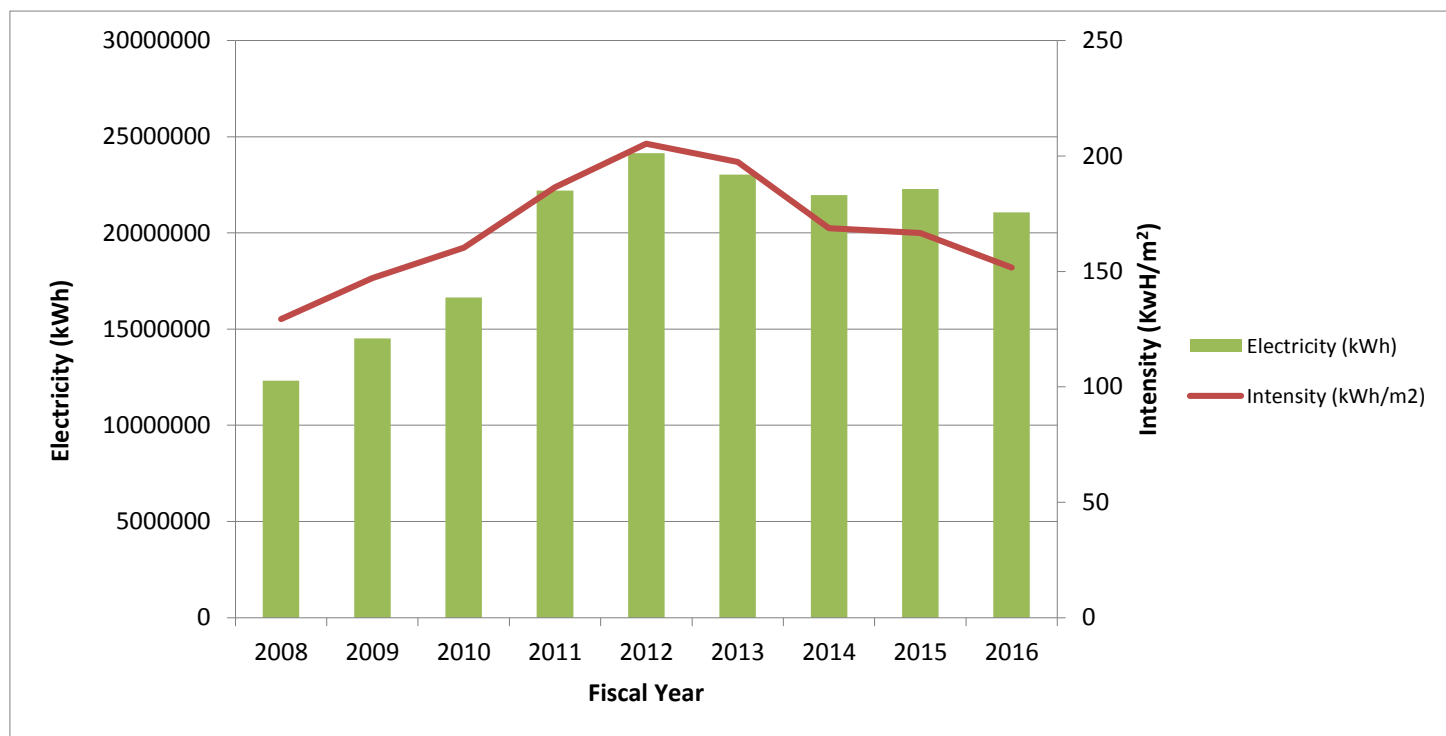
Type (kWh)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Stationary Fuel	0	58,320	1,625	1,625	1,625	1,625	1,625	3,125	1,625	1,625
Vehicle Fuel	27,047	75,015	76,159	89,891	64,784	145,868	151,020	114,880	115,862	121,101
Natural Gas	17,692,420	18,212,494	20,412,307	19,122,245	19,337,721	15,901,281	11,772,471	14,440,035	10,675,015	13,126,645
Hydro	13,935,414	12,326,236	14,522,600	16,644,876	22,193,651	24,156,504	23,037,343	21,967,443	22,281,803	21,075,316
<b>TOTAL</b>	<b>31,654,881</b>	<b>30,672,065</b>	<b>35,012,691</b>	<b>35,858,637</b>	<b>41,597,781</b>	<b>40,205,278</b>	<b>34,962,459</b>	<b>36,525,483</b>	<b>33,074,305</b>	<b>34,324,687</b>
<b>Intensity (kWh/m<sup>2</sup>)</b>	<b>330</b>	<b>322</b>	<b>355</b>	<b>345</b>	<b>349</b>	<b>342</b>	<b>300</b>	<b>281</b>	<b>247</b>	<b>247</b>



**Figure 6** Natural gas consumption for UWinnipeg from FY2008 to FY2016 (with the baseline year of 1990 included) including real annual consumption and weather adjusted consumption (m³). The intensity (m³/m²) is also shown.

**Table 7** Natural gas consumption for UWinnipeg from FY2008 to FY2016 (with the baseline year of 1990 included) including real annual consumption and weather adjusted consumption (m³). The intensity (m³/m²) is also shown.

Natural Gas Consumption	1990	2008	2009	2010	2011	2012	2013	2014	2015	2016
Actual Natural Gas (m3)	1,415,408	1,781,636	1,833,601	1,766,845	1,533,726	1,534,067	1,299,843	1,283,007	853,861	1,051,129
Weather Adjusted Natural Gas	1,415,408	1,720,871	1,928,728	1,806,832	1,827,192	1,502,488	1,112,363	1,364,417	1,008,514	1,240,317
Actual Intensity (m3/m2)	14.74	18.70	18.57	17.02	12.89	13.04	11.14	9.86	6.38	7.56
Weather Adjusted Intensity	14.74	18.06	19.53	17.40	15.35	12.77	9.53	10.48	7.54	8.93



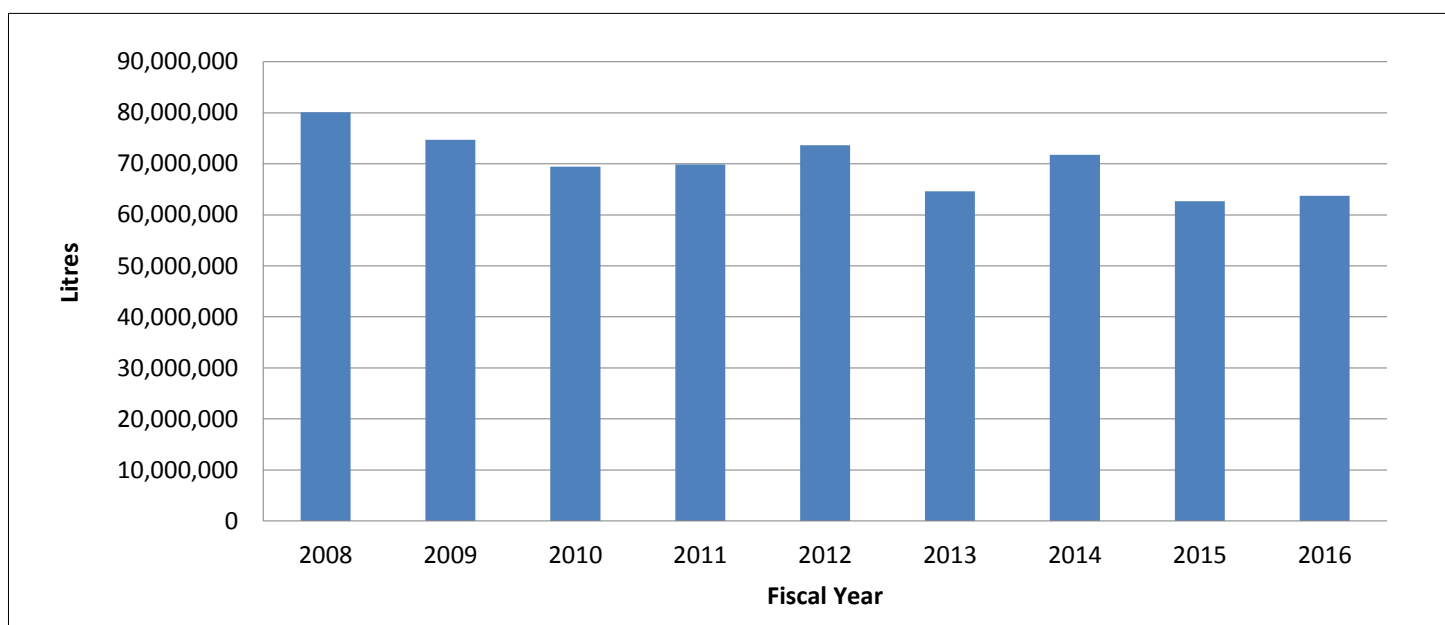
**Figure 7** Electricity consumption (kWh) for UWinnipeg from FY2008 to FY2016. The intensity (kWh/m<sup>2</sup>) is also shown.

**Table 8** Electricity consumption (kWh) for UWinnipeg from FY2008 to FY2016. The intensity (kWh/m<sup>2</sup>) is also shown.

Electricity Consumption	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity (kWh)	12,326,236	14,522,600	16,644,876	22,193,651	24,156,504	23,037,343	21,967,443	22,281,803	21,075,316
Intensity (kWh/m <sup>2</sup> )	129	147	160	186	205	197	169	167	152

### 2.1.1 Water

Water consumption in FY2016 increased 1.74% over the previous year. A small number of fixtures on campus have not yet been replaced with low-flow alternatives. These fixtures will be replaced as possible. Water consumption has gone down since retrofits, but fluctuations still occur.



**Figure 8** Water consumption (L) for UWinnipeg from FY2008 to FY2016.

**Table 9:** Water consumption (L) for UWinnipeg from FY2008 to FY2016.

Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016
Water Consumption	80,113,761	74,714,597	69,452,051	69,914,000	73,638,940	64,608,500	71,787,100	62,667,600	63,758,233

## 2.2 Waste, Grounds & Cleaning

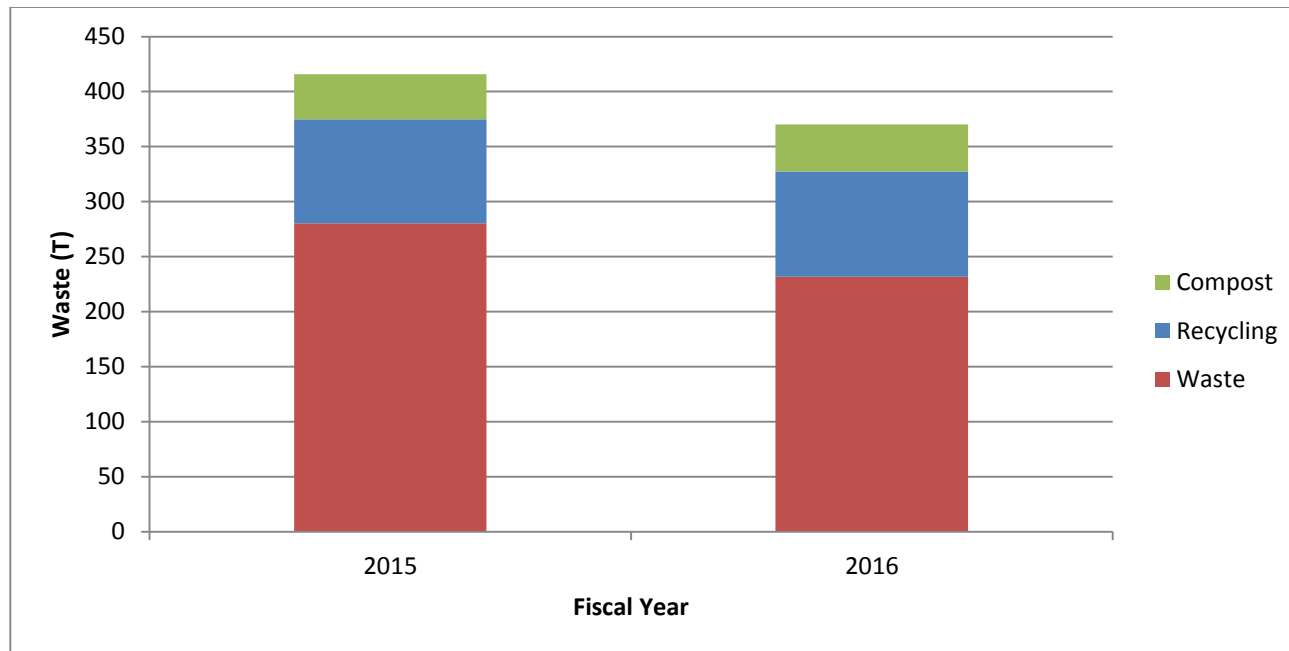
### Campus Waste Summary

Waste diversion rates were similar to those reported in 2015 (Figure 9). No campus waste audit was conducted in FY2016, but year over year discrepancies in reporting continue to be a concern. While pen recycling was discontinued on campus, the GESA Eco-grant was awarded to UWinnipeg student Rebecca Pedneault for a new campus initiative to collect plastic grocery bags for re-distribution to Winnipeg Harvest. As part of their light bulb retrofitting efforts, Physical Plant replaced approximately 22,200 incandescent bulbs with LEDs. The old light bulbs, weighting a total of 800kgs, were recycled and did not end up in the landfill.



**Image 3** UWinnipeg trash auditors gain hands-on experience.

In October, the CSO hired five students to conduct a preliminary 3-day waste audit for Investors Group's corporate office at 447 Portage Avenue – a building with 18 floors and approximately 1000 employees – before a composting and re-vamped recycling program was introduced on-site. In January, students returned to Investor's Group for a 3-day audit to determine the program's efficacy. This audit provided a paid, hands-on experience in waste management solutions for students. This year, the CSO is partnering with the Business Department's Create Coop to gauge the feasibility of establishing a regular waste audit team. This enterprise would provide opportunities for leadership, employment, and sustainability education for students and allow the CSO to fund further sustainability initiatives on campus.

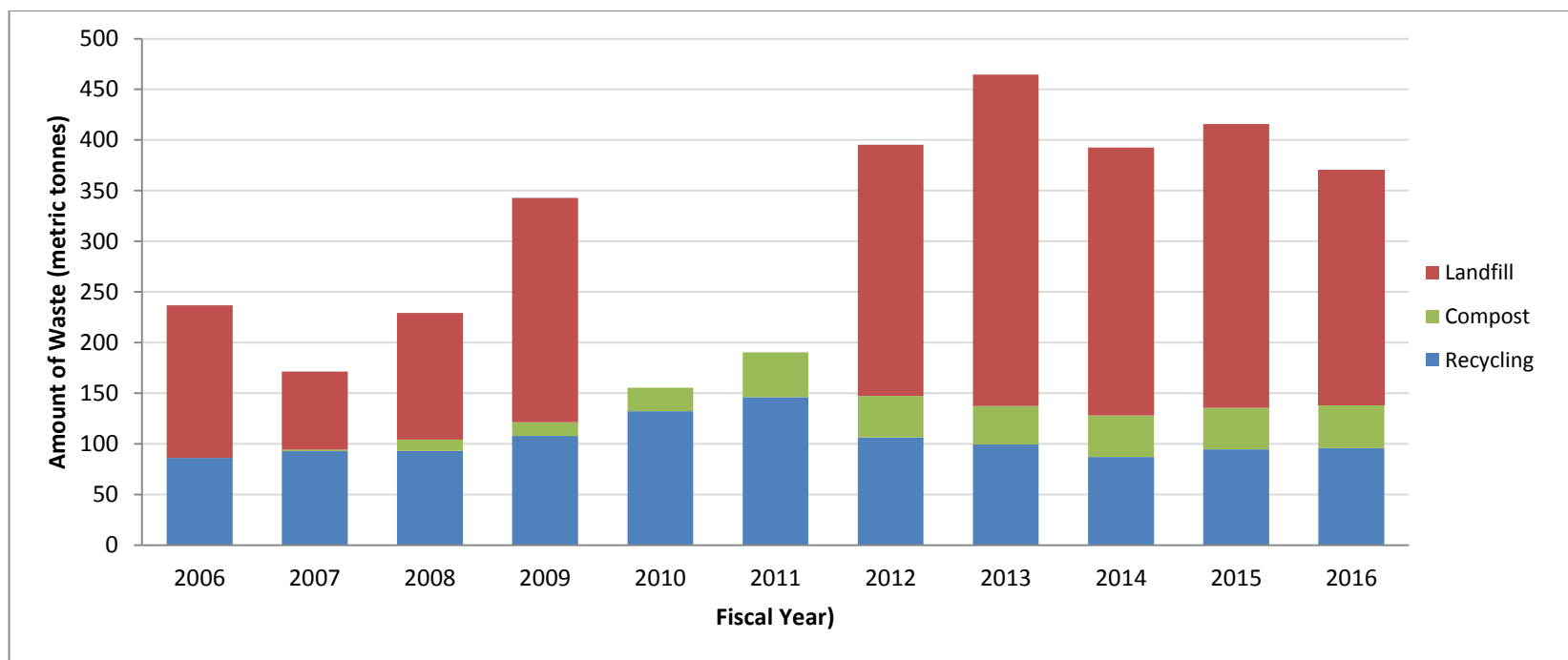


**Figure 9** UWinnipeg's waste profiles for FY2015 & FY2016 (comparing hauler data only, metric tonnes).

**Table 10** UWinnipeg's waste profiles for FY2015 & FY2016 (comparing hauler data only, metric tonnes).

	Waste	Compost	Recycling
FY2015	280	41	95
FY2016	232	43	96



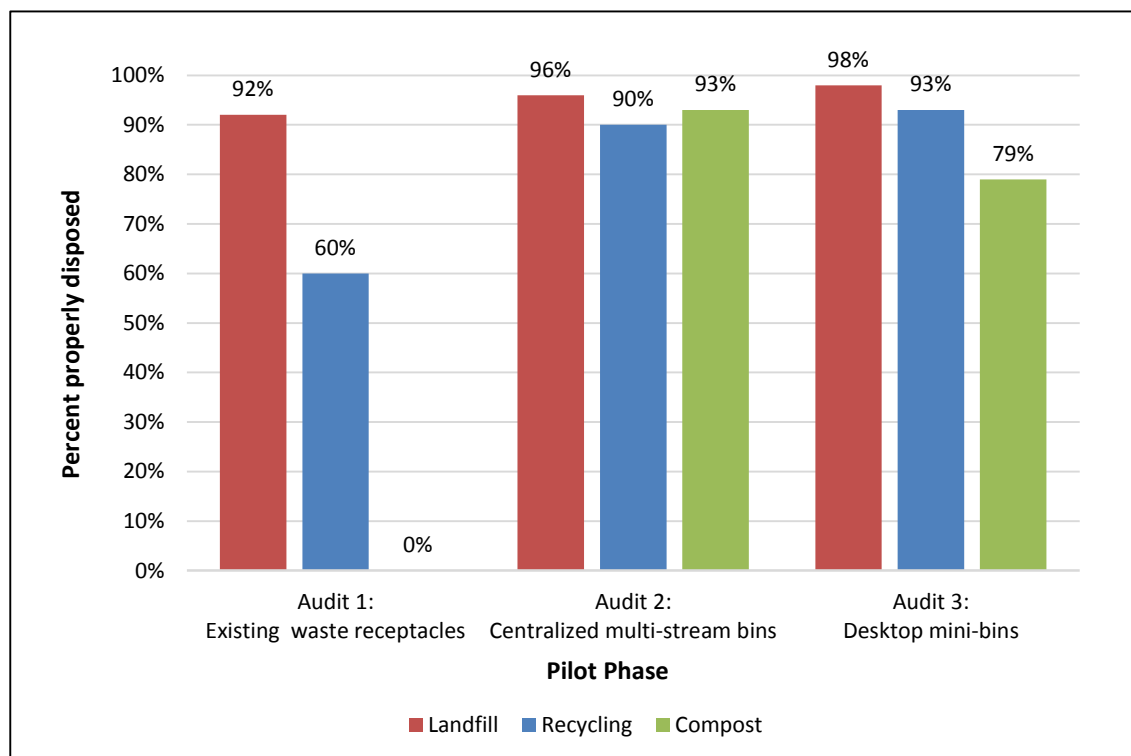


**Figure 10** Annual landfill, recycling and composting amounts (metric tonnes) at UWinnipeg for FY2006 to FY2016

**Table 11** Annual landfill, recycling and composting amounts (metric tonnes) at UWinnipeg for FY2006 to FY2016.

Waste Stream	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	<u>FY2015</u>	<u>FY2016</u>
Recycling	86	93	93	108	132	146	106	99	87	95	96
Compost	0	2	11	14	23	44	41	38	41	41	43
Landfill	151	77	125	221	NA	NA	248	327	264	280	232

## Office-Level Waste Collection Pilot Project



**Figure 11** Disposal rates for waste systems tested in Office-Level Waste Collection Pilot Project.

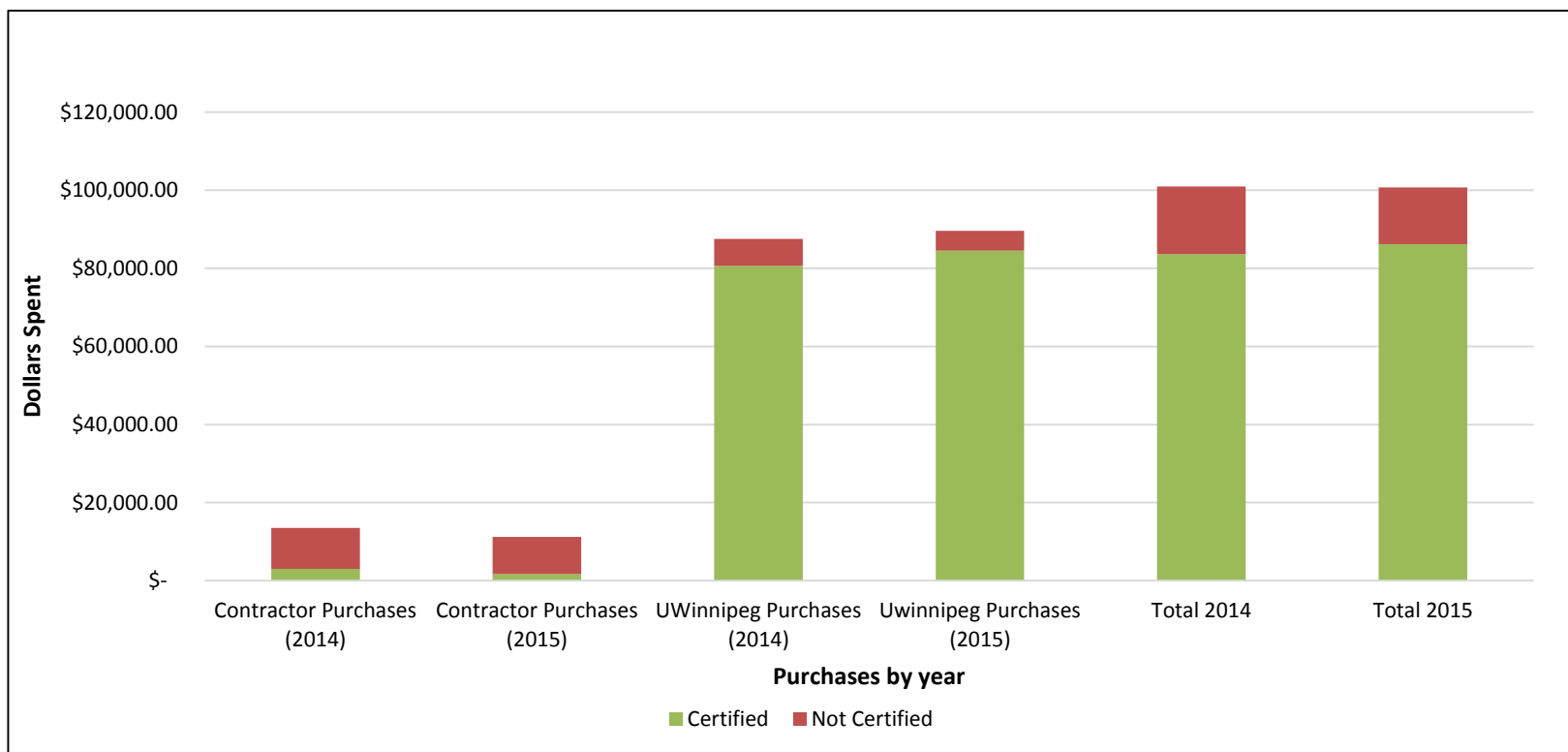
The CSO recently began exploring solutions for increasing landfill diversion rates, an area that continues to be a challenge for UWinnipeg. In the summer of FY2016, the CSO worked with Physical Plant on a pilot project to assess opportunities for improving office-level waste disposal on campus. Two new office-level waste collection models were tested on several offices spaces in the Rice Building. First, centralized multi-stream receptacles were placed in the office space while desk-side garbage and recycling were left in place. Then, desk-side waste baskets were removed and replaced with desktop mini-bins for composting and garbage while only desk-side recycling bins were left in place. Audits were conducted after each test model was left in place for one month in order to identify landfill, composting and recycling rates for each system. A baseline was established by measuring the waste produced using the existing collection method prior to employing the two trial models.

As seen in Figure 11, the results of this study demonstrate that significant improvements can be made to campus recycling and composting by introducing relatively simple measures at the office level. The waste audit data and the results of a staff feedback survey indicate that placing multi-stream waste receptacles in centralized locations within offices provides a more convenient and effective option to waste disposal than both the existing standard and the desk-top composting bin model. Based on the results of this study, the CSO and Physical Plant will be deploying centralized multi-stream bins to office spaces across campus over the coming year.

## Cleaning

While UWinnipeg maintenance staff and Bee Clean cleaning contractors continue to use environmentally preferable cleaning products wherever possible, staffing changes resulted in certain reporting procedures being temporarily suspended for FY2016. As such, we are missing the bulk of the data related to janitorial products purchased by the University. This data is required to quantitatively assess our use of EcoLogo certified products. CSO staff have identified the gaps in the reporting process and are working with both Physical Plant and Bee Clean to implement standardized product tracking for next year.

It is safe to assume that the proportion of EcoLogo certified versus non-certified products is similar to that of recent years. For reference, we have included Figure 12 and Table 10, which show cleaning product expenditures for FY2014 and FY2015 broken down by certified versus non-certified products and by contractor versus UWinnipeg-purchased products. Expenditures on cleaning products do not necessarily translate into actual quantities of products used, nor do they necessarily capture progress in areas related to product reduction and consolidation. In many cases, non-certified products are more expensive specialized products used for specific applications without environmentally preferable alternatives. Regardless, the University will continue to monitor data as expressed here while also developing other approaches to monitoring cleaning-related data.



**Figure 12** Expenditures on EcoLogo vs. Non-EcoLogo Certified janitorial and cleaning products from FY2014-FY2015.

**Table 12** Expenditures on EcoLogo vs. Non-EcoLogo Certified janitorial and cleaning products from FY2014-FY2015.

	Certified	Not Certified
<b>Contractor Purchases (2014)</b>	\$3,012.31	\$10,470.90
<b>Contractor Purchases (2015)</b>	\$1,659.93	\$9,512.52
<b>UWinnipeg Purchases (2014)</b>	\$80,657.49	\$6,860.17
<b>UWinnipeg Purchases (2015)</b>	\$84,543.24	\$5,035.30
<b>Total 2014</b>	\$83,669.80	\$17,331.07
<b>Total 2015</b>	\$86,203.17	\$14,547.82

### 2.2.1 Grounds

FY2016 marked the sixth year of cosmetic herbicide-free grounds keeping at the University of Winnipeg, but this has not prevented maintenance staff from keeping our outdoor spaces in top form. The Physical Plant grounds keepers continue to accommodate student-led initiatives involving outdoor space at UWinnipeg. FY2016 saw the continuation of Cultivate UW, a student-led rooftop gardening initiative made possible by the GESA Eco-Grant. Cultivate UW grew produce on unused roof space and sold this produce on campus in the fall.



**Image 4** University grounds are maintained without the use of cosmetic pesticides or herbicides.

### 2.3 Procurement

In FY2016, UWinnipeg renewed its membership with the Worker Rights Consortium (WRC) after affiliating for the first time last year. The WRC is an independent labour rights monitoring organization that conducts investigations of working conditions in factories around the globe. WRC affiliate universities receive regular reports on conditions in factories that produce collegiate apparel, with specific reference to whether factories are in compliance with universities' codes of conduct.



**Image 5** Clothing with a UWinnipeg logo is produced using fair labour practices.

As part of our membership, the WRC works to verify that all clothing products that carry the UWinnipeg logo have been produced using fair labour practices. To ensure this verification took place this year, the CSO sent the WRC a vendor report; to date, there has been no response indicating undesirable practices at the factories that produce our school's merchandise.

Socially and environmentally sustainable purchasing, of course, pertains to far more than just clothing. UWinnipeg spends money on operational materials, new construction projects, renovations, and contracted services, all of which must be considered as part of our overall environmental performance. While we have made progress towards establishing sustainable purchasing standards and requirements, this is an area with room for improvement. As mandated by the University's Sustainability Strategy, the CSO is working on a number of efforts related to procurement that will ensure

accelerated progress in this area. These changes are intended to help purchasers select environmentally and socially preferable goods and services.

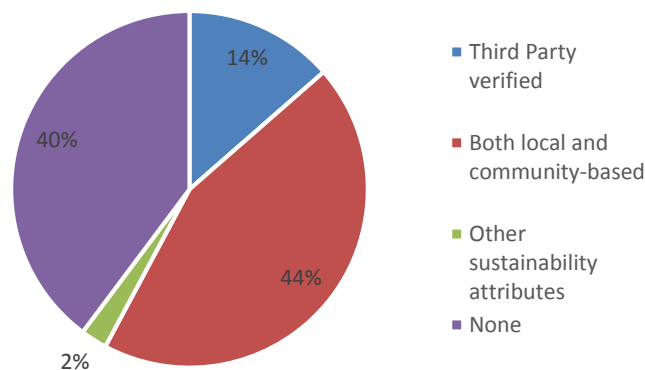
## 2.4 Food Security

Food and beverage purchasing is a key component of UWinnipeg’s sustainable procurement program. Our campus community continues to benefit from the work Diversity Food Services, the University’s subsidiary food provider which operates on a social enterprise model while maintaining a commitment to local, organic and fair trade products. As seen in Table 13, Diversity spent nearly \$500,000 on food and beverage items that were either third-party verified as local or community-based. That means nearly 60% of the food and beverages sold on campus are recognized as environmentally responsible, as classified by AASHE’s STARs rating system, while less than 40% of the items sold by Diversity are produced using conventional, non-sustainable methods. When it comes to animal products, which typically have greater environmental impact, Diversity also performs well. As seen in Figures 13 and 14, only 36% of food items sold on campus are produced from animals, of which 75% are considered local, organic or sustainable. Diversity also has plans to produce more products in-house, including honey and ice cream.

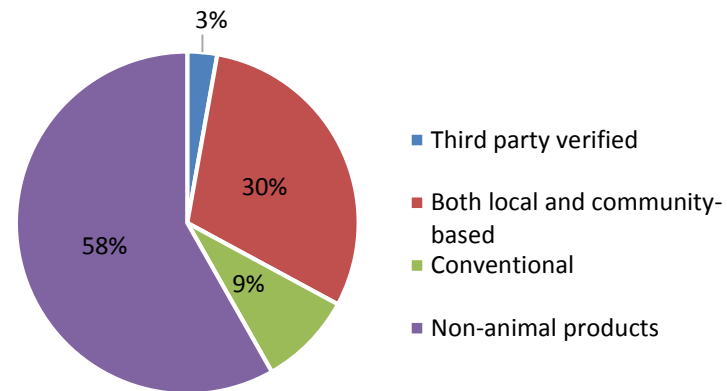
**Table 13:** Diversity Food Service’s total expenditures for FY2016 categorized by sustainability attributes.

STARs Category	Amount Spent	Percentage of total purchases
Total expenditures on products that are third party verified or both local and community-based	\$492,333.18	57.8%
Total expenditures on conventional products with other sustainability attributes	\$20,455.75	2.4%
Total expenditures on conventional products with no verifiable sustainability attributes	\$338,625.70	39.8%

Diversity’s commitment to local and ethical purchasing has had important benefits for the agricultural economy in Southern Manitoba. Several of Diversity’s suppliers have been able to expand their operations as a result of UWinnipeg’s large, stable demand for local produce, dairy and meat, resulting in increased market availability of sustainable food products in our province.



**Figure 13:** Sustainability attributes of Diversity's expenditures on food and beverage products for FY2016.



**Figure 14:** Sustainability attributes of Diversity's expenditures on animal products for FY2016.

2016-2017 has also been a period of off-campus expansion for Diversity. They took over restaurant and catering operations at both the Fort Whyte Alive and Players Golf Course. There is a clear social and environmental benefit to Diversity's growth beyond the University: more consumers have access and exposure to locally produced food, while the two new operations mean that most of Diversity's ninety employees can retain their positions over the summer when low campus populations have historically resulted in seasonal layoff.

In August of 2017, Arly Akerstream, a student at the University of Manitoba's Asper School of Business, researched the social impact of Diversity's business practices. The report shows that 78% of employees at Diversity self-identify as belonging to at least one marginalized group. It also contains a social return on investment (SROI) analysis demonstrating that for every dollar Diversity spent on employment in FY2016, the local community saw \$1.68 of social benefit.

The practices of Diversity Food Services must be acknowledged as an example of social and ecologically responsible purchasing and employment. Diversity's commitment to local agriculture and the social enterprise model is helping UWinnipeg remain a leader in sustainable campus food provision.

Alongside the work of Diversity, there are also student-led initiatives that contribute to food security on campus and in the surrounding community. First, the food bank operated by the UWSA is an important service for many people, including lower income neighborhood residents and international students. Over 140 students and community members access the food bank every week. Second, Cultivate UWinnipeg, a student-led rooftop gardening program, sold nearly \$200 worth of produce on campus in the fall.



## 2.5 Transportation

Transportation is an important consideration when measuring sustainability performance, as carbon emissions from planes and automobiles are among the largest sources of greenhouse gases globally. At UWinnipeg, we are concerned with reducing our transportation-based emissions on two fronts: long distance travel, measured by tracking reimbursed travel claims, and commuter travel, measured by the commuting modal split of UWinnipeg students and staff. Several initiatives, including the student UPass for Winnipeg transit, the Go Manitoba ride sharing service, and the Bike Lab, provide opportunities for reducing carbon emissions generated from local commutes.

### Reimbursed Travel

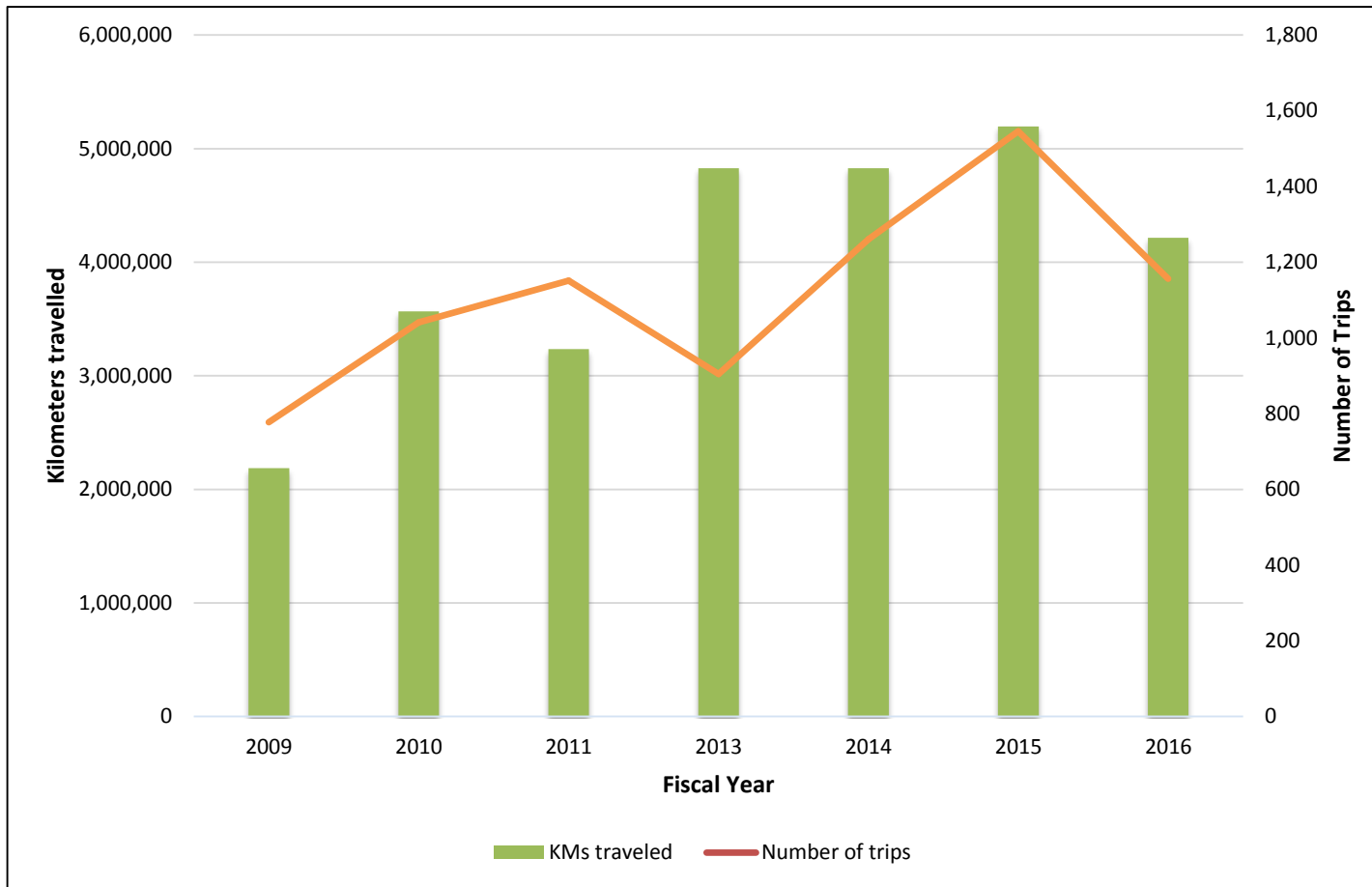
Data collection for reimbursed travel continues to present difficulties. Proper data collection from travel claims remains a serious challenge for our office, and it is likely that the drop in travel emissions between FY2015 and FY2016 reflects less accurate reporting this year. The sheer number of claims being submitted means there is a high probability of data entry errors, but even more challenging is the fact that submitting travel claims is time consuming and staff do not always account for their road, rail, and air mileage accurately. Most travel mileage accrued by the University results from business-related trips requiring flights and car rentals as well as inter-city bus travel for our school's sports teams. Keeping data challenges in mind, our current numbers indicate that reimbursed travel at the University in FY2016 is down almost 19% over the previous year, but still nearly 93% higher than it was in 2009.



**Image 6:** Winnipeg Transit's Balmoral Station and rapid transit hub.

**Table 14:** Total distance travelled for reimbursed travel, all modes of transportation (air, car, bus, other). No data available for FY2012.

<i>Fiscal Year</i>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Distance (km)</b>	3,825,791	2,185,508	3,566,003	3,234,791	4,828,557	4,828,288	5,195,727	4,214,397



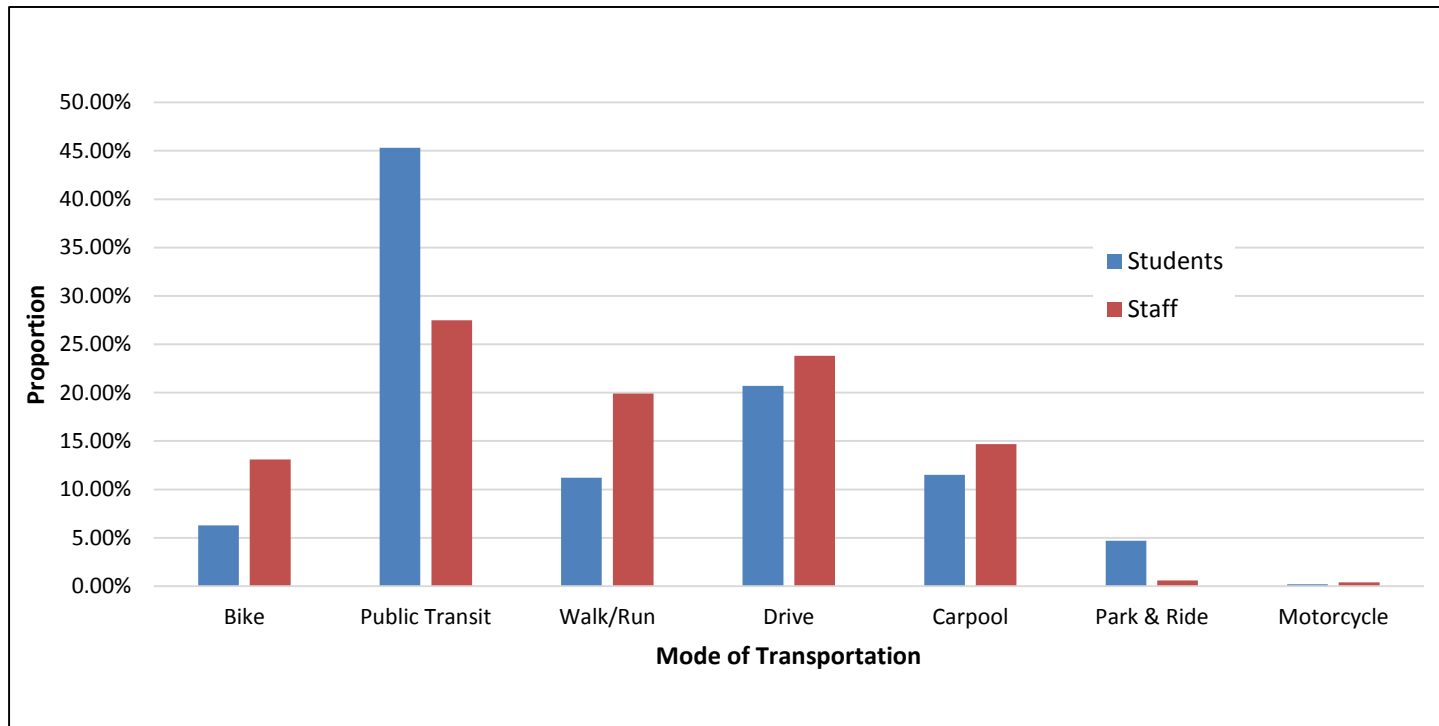
**Figure 15** Total number of travel claims and distance travelled (km) from all reimbursed travel of staff and faculty at UWinnipeg from FY2009 to FY2016(excluding FY2012).

**Table 15:** Total number of travel claims and distance travelled (km) from all reimbursed travel of staff and faculty at UWinnipeg from FY2009 to FY2016 (excluding FY2012).

<i>Transportation Mode</i>	<i>Units</i>	<i>FY2009</i>	<i>FY2010</i>	<i>FY2011</i>	<i>FY2013</i>	<i>FY2014</i>	<i>FY2015</i>	<i>FY2016</i>	<i>% Change FY15- FY16</i>
<b>Reimbursed Air Travel</b>	km	2,054,975	3,393,691	3,088,687	4,710,564	4,607,430	4,937,673	4,049,258	-17.99%
	# of claims	340	486	508	617	626	758	563	-25.73%
<b>Reimbursed Automobile Travel</b>	km	128,790	158,314	128,782	89,029	180,338	222,784	138,741	-37.72%
	# of claims	393	522	576	247	549	724	508	-29.83%
<b>Reimbursed Intra-City Bus Travel</b>	km	632	8,956	15,974	19,504	30,613	23,193	13,723	-40.83%
	# of claims	20	23	43	29	64	42	38	-9.52%
<b>Other Reimbursed Travel</b>	km	1,112	5,042	1,348	9,460	9,907	12,077	12,675	4.95%
	# of claims	24	10	24	12	22	22	47	113.64%
<b>Totals</b>	km	2,185,508	3,566,003	3,234,791	4,828,557	4,828,288	5,195,727	4,214,397	-18.89%
	# of claims	777	1,041	1,151	905	1,261	1,546	1,156	-25.23%

### Commuting Modal Split

UWinnipeg consistently promotes cycling as a viable method of commuting. Creation of the Bike Lab, access to showers, and more secured bike parking options are just some of the initiatives intended to make cycling to campus more desirable. In FY2016, the University began conversations with a consortium of businesses, colleges, universities and NGOs to explore the possibility of a regional ride-matching service. In 2015 UWinnipeg commissioned a commuting survey through the Green Action Centre; the data on staff and student commuting from this survey are shown below. Public transit was the most popular commuting method for students and staff. Staff were found to be more likely than students to drive or carpool, but also about twice as likely to bike or walk. Another commuting survey will be conducted in FY2017 to collect more recent data.



**Figure 16** Staff and student modal splits from 2015 Commuting Survey.

**Table 16** Staff and student modal splits from 2015 Commuting Survey.

	Bike	Public Transit	Walk/Run	Drive	Carpool	Park & Ride	Motorcycle
<b>Staff</b>	13.1%	27.5%	19.9%	23.8%	14.7%	0.6%	0.4%
<b>Students</b>	6.3%	45.3%	11.2%	20.7%	11.5%	4.7%	0.2%

The new U-Pass initiative is also helping the University cut carbon emissions. The Winnipeg Transit U-Pass for students incentivizes transit ridership by embedding the cost of an eight month bus pass into mandatory tuition fees. The U-Pass launched at both our institution and the University of Manitoba in September. During the seven months that the U-Pass was available in FY2016, over one million U-Pass rides occurred on city buses. This number includes students from both UWinnipeg and the University of Manitoba. Moving forward, the CSO will work with the UWSA and Winnipeg Transit to establish a mechanism for tracking and reporting U-Pass usage and opt-out rates. We will also incorporate questions about the U-Pass into the next commuter survey to determine if the U-Pass has changed transportation habits.

## 2.6 Sustainability Education and Engagement

When our Environmental Studies program launched in 1970, it was one of the first interdisciplinary undergraduate environment programs to emerge worldwide. Today, UWinnipeg remains a leader in sustainability education, offering six streams in Environmental Studies and Sciences and a variety of sustainability courses across other disciplines. In FY2016, courses like the Philosophy Department's "Philosophy

of Nature" and International Development Studies' "Participatory Local Development" continued to provide students outside of the environmental studies stream the opportunity to engage with these critical issues.

FY2016 saw the approval of a Certificate in Sustainability and Corporate Responsibility through the University's Professional and Continuing Education (PACE) program. This five course certificate covers topics like climate change action planning and sustainability marketing. The first classes will be offered in January of 2018.

Here at UWinnipeg, sustainability education reaches beyond classrooms and labs. We work to create innovative extracurricular initiatives that allow students to draw connections between their lives and urgent environmental issues. The CSO was pleased to work on a number of such initiatives in the past year, most notably hosting a revamped Grass Routes Festival from March 13-17. In concert with the UWSA, the "Land"-themed festival challenged students to consider issues of resource impact, land rights, and resilience. Two of the week's events, the festival's kick-off lecture and the end of week DIY Fest, garnered crowds of over 150 students and community members.



**Image 7** Poster advertising the DIY Fest during Grass Routes 2017.

then made available to community members free of charge at the May giveaway. In addition to providing experiential learning opportunities to students, these kinds of events garner positive media coverage for the University and serve to foster community relations.

This year marked the second annual Biology Plant Giveaway. For this event, the biology department mobilized 18 student volunteers to plant and tend hundreds of seedlings that were

## 2.7 Research and Innovation

Sustainability-related research continues to thrive at the University. Interdisciplinary efforts allow faculty to investigate environmental issues from multiple angles while providing students with opportunities for deeper exploration of environmental issues. Documenting all of these projects in a report of this nature is simply impossible. Below are some representative examples of the kind of sustainability related research taking place at UWinnipeg:

- Dr. Alan Diduck of the Environmental Studies and Sciences department and Dr. Kirit Patel of Menno Simons College are currently collaborating on *Judicial environmentalism and the poor: Examining the impacts of green benches of state high courts and National Green Tribunals in India*, a project which aims to create a dialogue between Canada and India around green policy and practical outcomes.
- The Prairie Climate Center, a partnership between the University and the International Institute for Sustainable Development, seeks to centralize climate change data and distribute to relevant stakeholders as a means to move, as they put it, “From Risk to Resilience.” Recent publications include *Building a Climate-Resilient City*, a report that outlines positive steps communities can take to prepare for the impacts of climate change.
- Dr. Rafael Otfinowski (Biology) and his research assistant Hollie Swart are working on two research projects that examine the range of increasing drought and flood conditions in the Prairies and exploring how they will impact the function of plant communities.

In FY2016, the University also initiated the Norway-Canada Sustainable Energy Project, a research partnership with the Norwegian University of Science and Technology. Through this project, 20 students will be funded to study renewable energy and energy policy under the supervision of an advisor from each university. This program will culminate in a symposium in Norway in 2018.

One of the coordinators of this project is Geography faculty member Dr. Patricia Fitzpatrick, who was the recipient of the 2016 Campus Sustainability Recognition award. In addition to her work on the Norway-Canada project, Dr. Fitzpatrick has made significant contributions to environmental, social, and economic sustainability at The University of Winnipeg and within the wider community. Her work over the last twenty years has focused on better environmental governance surrounding large-scale development in Canada. She is an expert in environmental assessment and has been involved in reviews of Manitoba’s hog industry, the Keeyask hydroelectric project, and Manitoba Hydro’s Bipole III Transmission Line, among others.



## 2.8 Indigenization, Human Rights, Diversity and Equity

In the first year of implementation, there were more than 1,500 registrations in the 27 courses offered under the umbrella of the Indigenous Course Requirement (ICR). The ICR was an idea that was brought forward by the students and was implemented soon after the final report from the Truth and Reconciliation Commission was released, outlining 94 Calls to Action. Many of the Calls to Action focus on the need for sustained public education and dialogue, including youth engagement, about the history of residential schools, Treaties, and Indigenous rights, as well as the historical and contemporary contributions of indigenous peoples to Canadian society.

In implementing the ICR, the University is still learning how to effectively deliver on this initiative and fully support faculty and students. Nonetheless, it is apparent that we are on the right path and that there is a genuine desire to embrace the spirit of reconciliation in all areas of the academy.



**Image 8** *The Wii Chiiwaakonak Learning Center, located in the Helen Betty Osborne Building.*

In addition, as part of UWinnipeg's approach to reconciliation, we recognize the central role of language as the carrier of culture, tradition and knowledge. The University is offering Ojibwe and Cree credit courses, and through the *Wii Chiiwaakanak Learning Centre*, we have

free Indigenous language classes for neighbourhood residents.

In FY2016, UWinnipeg faculty offered several experiential learning courses aimed at enhancing the understanding of Indigenous perspectives. For example, Dr. Shailesh Shukla offered a field course on-site at Fisher River First Nation and also took students to Keeseekowenin First Nation, near Riding Mountain National Park, for a course in Ethnobotany. In partnership with Elders, students were introduced to local plants and their medicinal and nutritional properties.

In another summer institute, the Religion and Culture department's Dr. Mark Ruml took students to participate in local Indigenous ceremonies to learn about Indigenous healing and worldviews. Students went to the Bannock Point Petroforms in the Whiteshell in May, and camped out at the Spruce Woods Sundance in June.

In his Material Culture in Northern Plains Indigenous History course, Dr. Roland Bohr moved students out of the classroom and out to a bison ranch near Rosburn, MB. Students worked with Elders from nearby First Nations communities to learn about bison culture and traditional technologies, such as tanning hides and making archery equipment, while living in traditional tipis.

Over FY2016, the Human Rights and Diversity Office rolled out two major initiatives aimed at cultivating an inclusive and welcoming community at our institution.

First, in February 2016 the University initiated a new census of the University community. 70% of all those surveyed (846 employees) completed the census. The University's Employment Equity Committee is now working with the results of the survey to develop a University Equity Plan and Programs. In the meantime, the Human Rights and Diversity Office began offering Unconscious Bias training to University employees, particularly as it related to employee recruitment.

Second, the University began work developing its first Accessibility Plan to identify and address barriers in policies, practices and procedures that impact students, staff, and visitors to campus. As of November 1<sup>st</sup>, 2017 all University employees will be required to complete Accessibility training. A Service Animals on Campus Policy was also developed and implemented last year as part of the University's overall efforts in support of the Accessibility for Manitobans Act.



## 3.0 Challenges and Opportunities

### Data collection and management

Data Collection and management remains a challenge for the CSO. Because our institution takes a broad approach to sustainability and is committed to making improvements in areas relating to our social, economic and environmental impact, measuring progress requires the tracking of many different types of data. Energy intensity data, or the amount of energy used per square meter of building space, presents ongoing challenges. This uncertainty stems from variability in space measurements for buildings occupied as well as from billing and metering discrepancies in energy data. The CSO has taken steps to address this problem, conducting a retrospective space inventory of all owned and leased space that has increased the accuracy of our space measurements. There are still discrepancies requiring attention; moving forward, we will be using online software, Energy Star Portfolio Manager, which will enable more accurate record-keeping.

Several other data collection challenges emerged in 2016, including difficulties calculating travel claim mileage, tracking the use of Eco Logo certified versus non-certified cleaning products used by both Physical Plant and contracted cleaners, and tracking sustainability-related research outputs at our institution. In the coming year, CSO staff will be working with various campus stakeholders to update the data collection and report writing process to align with our new Strategy.

### Outreach and Engagement

Sustainability-related outreach and engagement on campus presented its own set of challenges in FY2016. One of the main functions of UWinnipeg's CSO has always been to keep the campus community informed about sustainability efforts and, consequently, invested in improving our overall environmental performance. The two most obvious avenues for this work are the Green Office Program and the Grass Routes Sustainability Festival. However, due to staff changes and reduced capacity at the CSO, neither of these initiatives were given proper time or attention this past year. Other outreach initiatives, including our newsletter and event tabling, were also neglected. Addressing these challenges is important for two reasons. First, many of our strategies for reducing our environmental impact depend on the regular and informed participation of the campus community, particularly when it comes to waste reduction and daily commuting. Ongoing engagement reminds students, staff and faculty that they have a role to play in the University's sustainability goals while also providing them with the tools and resources to participate in these efforts.

Second, the consultations our office conducted in 2016 revealed that respondents identified strongly with UWinnipeg's environmental values and believed that sustainability education would serve them well after university. However, a significant portion of participants did not demonstrate knowledge of the full range of our work on sustainability, and many expressed a desire to become more informed about

issues and solutions. These realities are currently motivating staff in our office to revamp outreach and engagement efforts on several fronts. These include re-launching the Green Office Program with a new presentation and tool kit, playing a lead role in establishing a new planning committee for Grass Routes, growing a mailing list and sending regular newsletters, and systematically connecting staff and students to extracurricular learning and volunteer opportunities.

## 4.0 Conclusions

2016 was a benchmark year for sustainability planning at UWinnipeg as the five-year timeline outlined in the 2012 Institutional Sustainability Strategy came to a close. Recognizing this moment of transition, the CSO devoted time to taking stock of the accomplishments, challenges and lessons learned over the past five years, as well as to talk to members of the campus community about how they perceived our sustainability work and what they would like to see from our institution moving forward. The findings of this investigation were compiled in our “What We Learned” report, an extensive review of our sustainability work to date, best practices from other institutions, and opportunities for improvement based on changing policy frameworks and public perception. By devoting time and energy to this project in 2016, the CSO ensured that we had a solid foundation on which to develop a new five-year sustainability strategy, a blueprint for continued environmental leadership.

With the implementation of this new strategic plan ahead of us, UWinnipeg has a lot of work to do when it comes to sustainability management. It’s a good thing, then, that the CSO developed more capacity over the course of 2016 with the hiring and training of a new full-time Campus Sustainability Coordinator. There is now a solid leadership team in place who are ready to work closely with partners across campus to develop and execute action plans on all the major objectives in the strategy. We are particularly excited about engaging staff, faculty and students with creative outreach initiatives designing to get everyone on campus acting on our shared sustainability values in meaningful ways.

## Appendix A: Results of FY2016 Action Plans

### A.1 Air, Energy & Water

**Target:** Reduce GHG emissions to 6% below 1990 levels by 2012, and to 10% below 1990 levels by 2016.

**Target:** Reduce energy intensity of operations by 18% relative to 2009 baseline by 2016.

**Target:** Reduce water consumption.

Action	Status
Identify opportunities for communication, outreach and data management from the implementation of smart meter technology and portfolio manager software.	In FY2016, a discrepancy was found between paper bills and energy data that was automatically uploaded into Portfolio Manager. As a result, much of the year was spent working to identify the technical problem with the data uploading functionality of this new piece of software. As this problem is resolved, and as new staff in the CSO become familiar with the tool, it is hoped that energy data management will improve.
Ensure results of “shadow” LEED assessment of facilities are incorporated into revised sustainability policies and strategy.	Done. Shadowing LEED O&M is a central target of the new strategy.
Continue with investigation into opportunities for renewable energy projects	Biomass project has been approved and will move forward in FY2017. Further work ongoing for other opportunities.

### A.2 Waste, Grounds, Cleaning

**Target:** Achieve 65% waste diversion by 2016; University demonstrates best practices in cleaning and grounds keeping.

Action	Status
Monitor implementation of changes to waste hauling contract to ensure progress on data quality and monitoring issues	Waste was weighed for two weeks in FY2016 to generate a better picture of waste weights on campus. The CSO continues to monitor the issue of waste data quality and hopes to achieve further progress in FY2017.
Review outcome on office bin pilot and implement changes to other office areas as determined by outcomes of pilot	Bin pilot complete, decision made on plan moving forward, budget for new bins has been identified for bin purchases in FY2017.
Complete assessment of non Eco-Logo cleaning products to identify any opportunities for switches to Eco-Logo products	Not complete. A number of staff changes in both the CSO and Physical Plant led to challenges related to cleaning product tracking and monitoring.

## A.3 Procurement

**Target:** University strives for better practices in sustainable procurement (& finance).

Action	Status
Ensure results of student research projects from FY2015 are incorporated into revised sustainability policies and strategy	Done. Procurement targets in new strategy include improved data, update specifications, and more robust sustainability evaluation criteria in RFPs.
Maintain WRC reporting process and monitor contract rollovers to continue to incorporate WRC language as possible	Done. All garments now being purchased through the bookstore.

## A.4 Transportation

**Target:** University strives for better practices in sustainable transportation

Action	Status
Ensure results of Transportation Working Group are included in the sustainability policy and strategy review	Done; however, transportation related elements of strategy are going to be reflected in LEED O&M process.
Ensure travel data is reported in the new finance system	Not yet done; it is unclear if this will now move forward as several processes continue to be undertaken manually.

## A.5 Governance, Finance & Administration

**Target:** Sustainability Planning and governance reflect better practices in campus sustainability and is integrated into University planning and governance procedures and processes; University provides tools and resources for greening university administrative systems.

Action	Status
Undertake a sustainability policy, target, indicator, and strategy review.	Done.

## A.6 Academics & Engagement

**Target:** Active culture of sustainability teaching, learning, research, and work.

Action	Status
Identify options for sinks for staff and students to enable them to rinse their dishes on campus	This issue was raised again this year; however, no solution was identified.
Identify next steps for implementation of sustainability elements of the Integrated Academic and Research Plan	Done. Academic Working Group on Sustainability has received a renewed mandate through the new strategy to lead this work.
Maintain “Campus Sustainability” student project portal	Done for FY2016.
Roll out revised Green Office program	Delayed due to staff turnover in CSO; new program ready to go for FY2017.
Complete Senate submission for the Sustainability Management Certificate at PACE and ensure high- quality instructors are identified.	Done. Program approved.
Deliver sustainability competency training	Done. Half-day session delivered to University leaders and incorporated into the Sustainability Strategy engagement process.