2016 PROGRESS REPORT

SUSTAINABILITY ACTION PLAN: CAMPUS OPERATIONS 2014-2019

University of Victoria

SUSTAINABILITY IN ACTION

In 2014, the Sustainability Action Plan: Campus Operations 2014—2019 was prepared to help guide the University of Victoria's path toward sustainability across various operational activities. The plan built on the achievements of the 2009—2014 Action Plan and was developed with input from students, staff and faculty, as well as community members.

This progress report summarizes the efforts made to implement the plan over the last two years. Using the following indicators, the report highlights the outcomes achieved on the Action Plan goals.

PROGRESS ON KEY GOALS

NOT STARTED

Work has yet to be undertaken. The goal is planned for completion by the end of 2019.

IN PROGRESS

Work has been undertaken. The progress achieved is indicated as 25 per cent, 50 per cent, or 75 per cent complete.

COMPLETED

The goal has been achieved.

CHALLENGE

Factors identified in the report put the goal at risk of not being achieved by 2019.

CLIMATE, ENERGY AND WATER

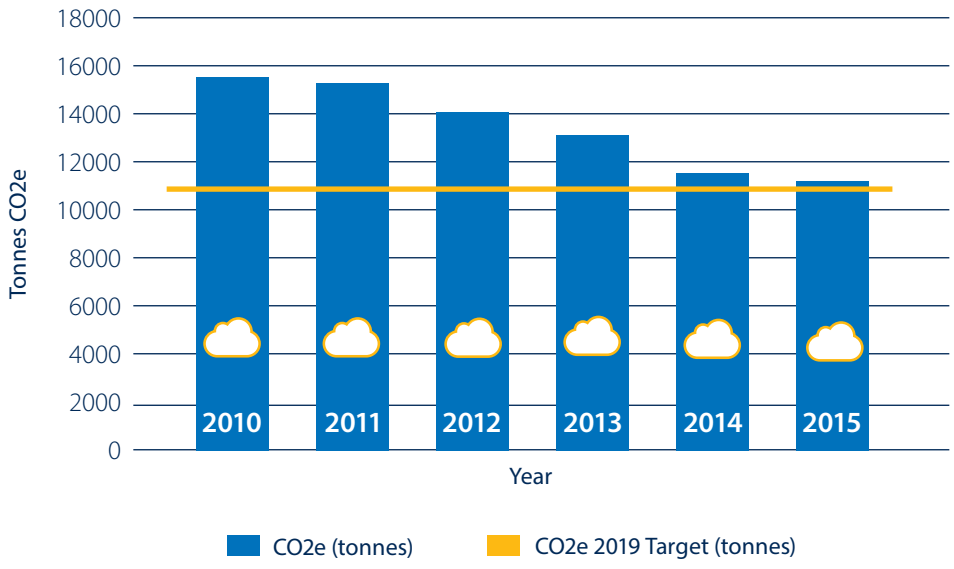
GOAL

Achieve a total institutional greenhouse gas emissions reduction of 30% by 2019.

In 2015 university greenhouse gas (GHG) emissions were 27 per cent lower than the 2010 baseline.

Energy conservation practices and retrofit work that began in 2010 through the university's energy management program allowed UVic to make significant a advancement toward achieving this goal. The program received assistance from BC Hydro, Fortis BC and financial support through the Ministry of Advanced Education's Carbon Neutral Capital Program (CNCP).

UVIC EMISSION: 2010–2015

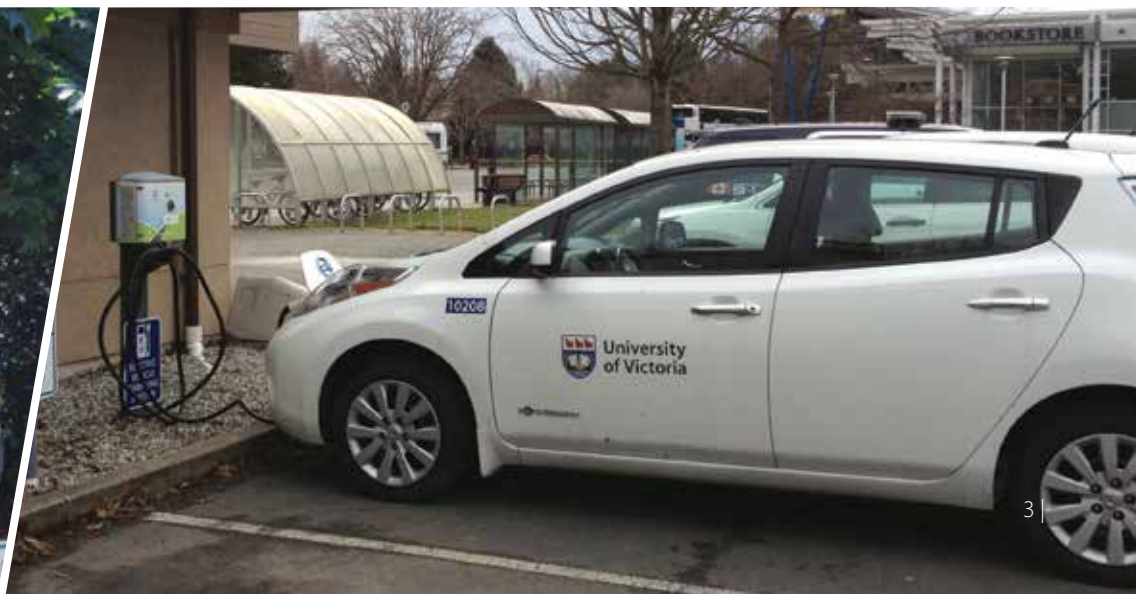


2015 | **UNIVERSITY GREENHOUSE GAS EMISSIONS** | **27%** | LOWER THAN 2010

2014
NATURAL GAS CONSUMPTION INTENSITY

19%

LOWER THAN **2010**

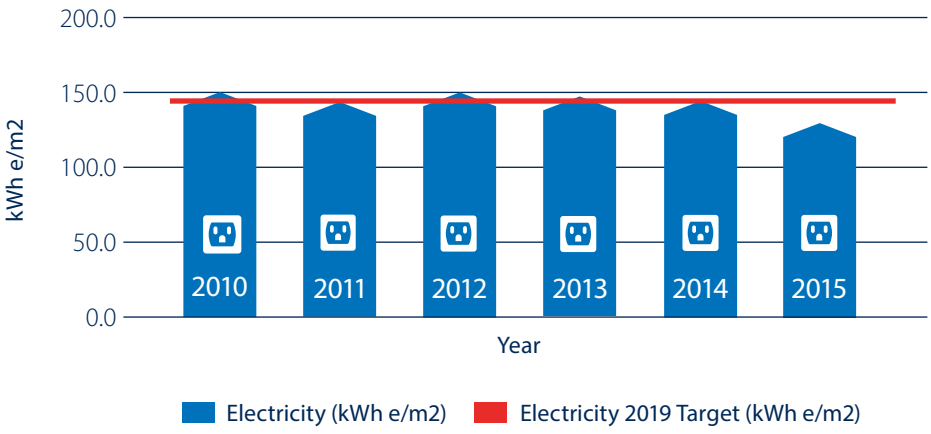


GOAL Reduce campus electricity consumption intensity by 8% by 2019.

In 2014, the campus electricity consumption intensity was 9 per cent lower than in 2010. The Action Plan goal was achieved in 2014.

Further discussion is required to set updated electricity use goals for the 2016—2019 period that align with the campus Energy Master Plan framework and campus energy efficiency efforts.

ELECTRICAL ENERGY INTENSITY: 2010–2015



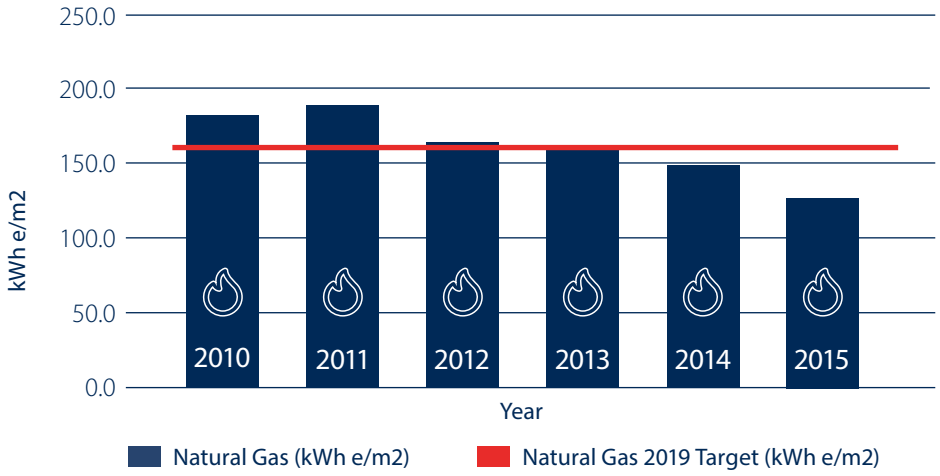
GOAL Reduce campus natural gas consumption intensity by 12% by 2019.

In 2014, the campus natural gas consumption intensity was 19 per cent lower than in 2010.

The Action Plan goal was achieved in 2013 as the current Action Plan was being prepared.

Staff will revisit the natural gas consumption intensity goal for annual reporting on natural gas use in 2016, 2017 and 2018 in conjunction with the update of the campus Energy Master Plan.

NATURAL GAS ENERGY INTENSITY: 2010–2015



GOAL

Reduce campus water consumption by 25% by 2019.

2015 WATER CONSUMPTION

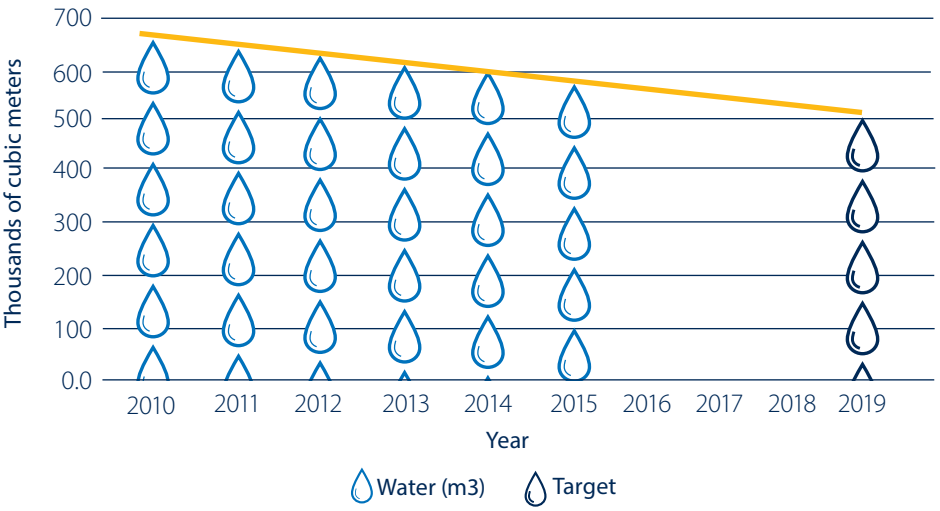
17% BELOW 2010

Water consumption in 2015 was almost 17 per cent below 2010.

Key factors contributing to water savings include:

- A significant decrease in work at the UVic Outdoor Aquatics Unit
- Replacement of cooling units with air-cooled systems
- Completion of water saving retrofits across campus

WATER CONSUMPTION: 2010–2015



BUILDING CONSTRUCTION & RENOVATIONS

GOAL

Ensure all new buildings and major renovation projects achieve LEED Gold or equivalent certification.

New construction—CARSA LEED Gold certification

All new academic and administrative buildings constructed since 2007 have achieved the Leadership in Energy and Environmental Design (LEED) Gold building certification.

The latest addition to campus, the Centre for Recreation, Athletics and Special Abilities (CARSA) received LEED Gold Certification in January 2017.

CARSA's green features include stormwater bio-swales, state-of-the-art LED high-bay field house lights, reflective roofing material to reflect solar radiation and—a campus first—a geo-thermal heat exchanger.

Major renovations

The largest building renovation on campus since 2014 was the Continuing Studies building addition project. The construction of the addition featured energy saving technologies such as the inclusion of entry vestibules, daylighting to all inhabited spaces, and the installation of a high efficiency heat pump to account for the increased heating load that accompanied the addition.

This project was not LEED certified as the scope did not include major renovation work to the existing building envelope or mechanical and ventilation systems.

GOAL

Develop systems that provide for the reduction, measurement and reporting of construction and demolition waste.

The construction of LEED-certified buildings requires UVic to track all construction waste. These projects typically achieve a waste diversion rate higher than 90 per cent.

UVic faces challenges in monitoring and reporting on waste produced by smaller projects, including demolition.

Construction and demolition waste is regulated at the regional level. Recycling is encouraged once hazardous items, such as asbestos, drywall, thermostats and recyclables, are removed.

In the future, the Sustainability Office will conduct a review of post-secondary institutions that track demolition waste and produce a report with recommendations related to waste diversion practices for smaller projects, for consideration by UVic Facilities Management.

ALL NEW ACADEMIC AND ADMINISTRATIVE BUILDINGS CONSTRUCTED SINCE 2007 HAVE ACHIEVED THE LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED) GOLD BUILDING CERTIFICATION.

TRANSPORTATION

GOAL

Increase the use of transit, cycling, walking and carpooling to 70% of the transportation modal split by 2019.

The travel modal split of approximately 60 per cent non-auto-drivers to 40 per cent auto drivers has stabilized, with little change over the last eight years.

Although the overall modal split between auto-drivers and other forms of transportation has been stable since 2010, there is a high level of engagement across campus in sustainable transportation measures under the Travel Choices program.

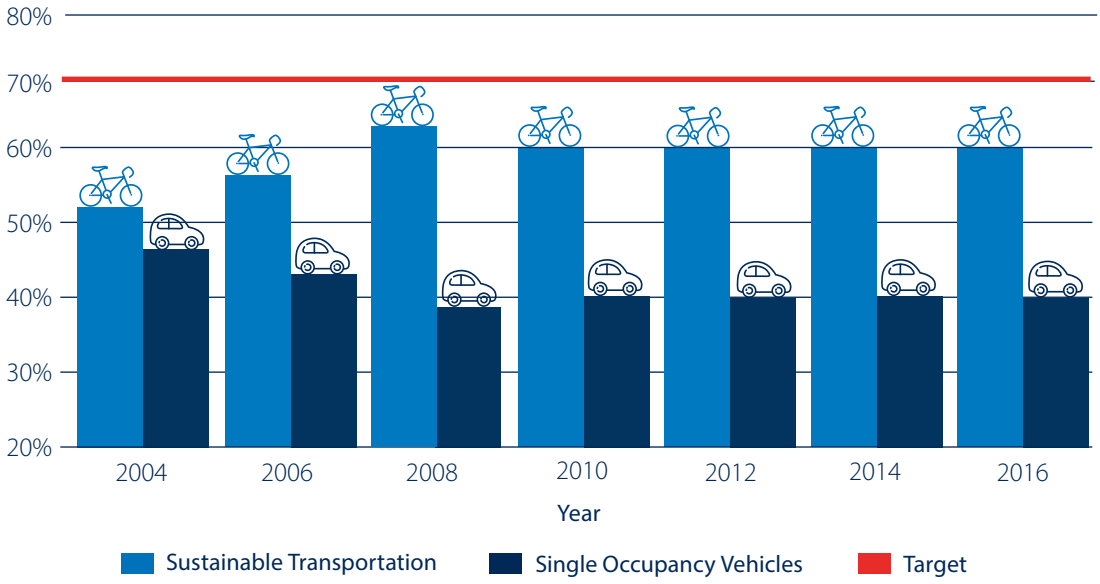
These include:

- Full time undergraduate and graduate students receive a Universal Bus Pass (UPASS)
- Over 500 bike loans provided to students, staff and faculty by the SPOKES bike loan program.
- Participation in sustainable transportation engagement initiatives including Bike to Work Week and #sharethespace.

A new SPOKES Resource Coordinator position has been created, and there is increased profile and use of the Campus Bike Centre.

The Sustainability Office recognizes that the university travel mode share is dependent upon regional transportation infrastructure and services, and that new initiatives will need to be considered to make progress towards the Action Plan goal.

CAMPUS TRAFFIC SURVEY - MODAL SPLIT 2004 - 2016



85

BIKE LOCKER RENTALS

130+

PARTICIPATING IN UVIC CARSHARE

650

EMPLOYEES USE EMPLOYEE BUS PASS PROGRAM MONTHLY

3,000+ BIKE PARKING SPOTS

ENGAGING OUR COMMUNITY

Develop and implement programs and activities that assist the campus community in contributing to the achievement of sustainability goals.

In 2016, the university created the Campus Sustainability Fund, which provides one-time funding for projects that focus on energy or water savings, sustainability awareness or learning opportunities. To date, seven projects have received approximately $27,000 in funding.

The Invasive Species Management Program, for example, produced an Invasive Species Management Plan that included an inventory of sites (supplemented with maps) for invasive species removal, a stewardship program supported by a volunteer manual and initial coordination of the stewardship program. The program employed students to create the document, providing a valuable opportunity to learn about biophysical inventory techniques and community engagement.

Create new programming for the Sustainability Action Team program with offices, labs, and residences.

The Sustainability Office has expanded the successful Sustainability Action Team program. The program now has three components: the Res Green Team, the Green Labs Program and the Staff Sustainability Network.

In 2015, for example, the Office launched the Res Green Team to provide support for students living in UVic residence and who want to engage in sustainability. Since then, the Res Green Team has connected with thousands of students across campus in a variety of sustainability related volunteer activities. The Res Green Team also identifies campus sustainability opportunities and implements their own initiatives. Each year, the Res Green Team volunteers engage hundreds of their peers on campus through their activities.

RES GREEN TEAM CONNECTED WITH **1000+** STUDENTS ACROSS CAMPUS

CAMPUS OPERATIONS AND ADMINISTRATION

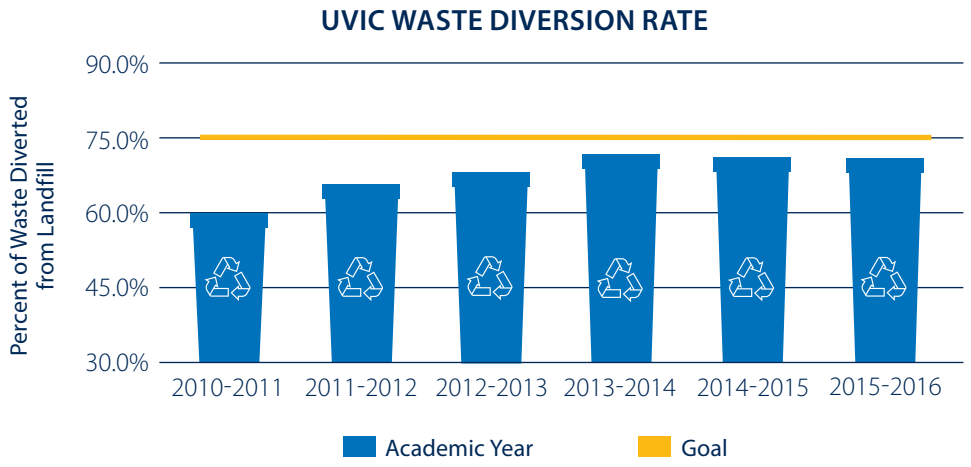
GOAL

Increase the waste diversion rate to 75% by 2019.

In February 2016, more than 300 UVic standard three-bin stations were installed in office areas.

The office expansion program has shifted how landfill waste and recycling is collected, from deskside collection to central recycling kiosks.

UVic is currently examining how to expand the composting infrastructure on campus to capture new materials, including paper towels. Paper towels accounted for almost 15 per cent of all material sent to the landfill in 2014.



300+ | **3 BIN STATIONS INSTALLED IN 2016**

DECREASE IN PAPER SINCE 2012

30%

GOAL

Develop systems and procedures that help reduce paper use in computer labs, offices and in administrative procedures across the university.

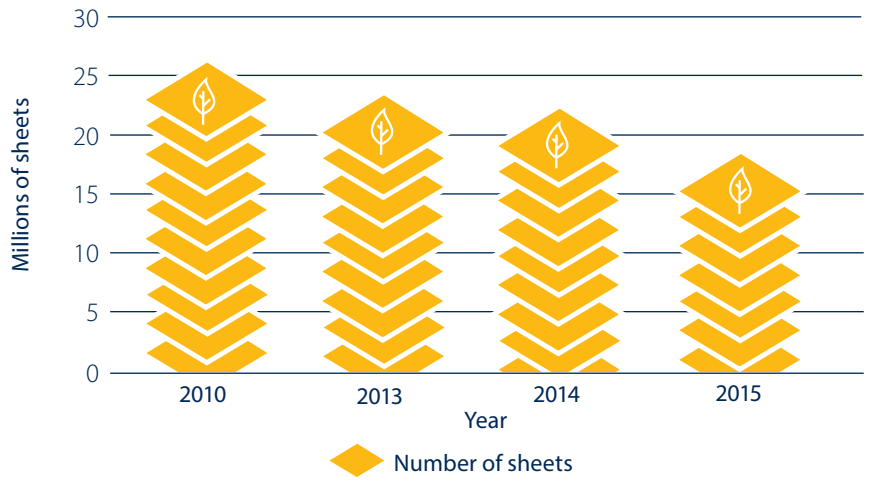
UVic achieved a 30 per cent decrease in the use of twenty-pound paper since 2012 and a 19 per cent decrease between 2014 and 2015.

The downward trend in use is indicative of the overall paper use trend due to increased digitization.

UVic recently launched the connect.uvic.ca site, which enables virtual file sharing and collaboration for administrative units.

In addition, the Facilities Management department is digitizing their service request system, which could eliminate the printing of approximately 40,000 sheets per year.

TWENTY POUND COPY PAPER CONSUMPTION: 2012 - 2015



GOAL

Further develop reporting systems that include information on the source and environmental footprint of goods and services purchased by the university.

Information regarding environmental footprints is available to varying degrees in the consumer market. Many products such as paper, natural gas and fleet vehicles have industry-supported reporting mechanisms. However, the diverse range of products and services supplied to the university by many vendors makes obtaining this information a significant challenge.

Work will continue to develop a methodology to capture and report on the environmental footprint of purchased goods, where available. The extent to which the goal may be achieved by 2019 for the final report on the Action Plan is open for further assessment.

GOAL

Improve the sustainability of the campus fleet by reducing fuel consumption by 10% through staff training and gradual replacement of vehicles with the most fuel-efficient versions on the market.

Gradual replacement of fleet vehicles with more fuel-efficient vehicles is in progress.

Several on-campus electric utility vehicles have been purchased to replace diesel models, and a Nissan Leaf electric vehicle has been acquired for tool and trade transport.

BC Government grants (Plug-In BC) for the installation of additional electrical vehicle charging stations on campus are currently being researched.

Development of a system to monitor the fuel use of university fleet vehicles and assist in reducing overall fuel consumption levels through staff training is scheduled to begin in 2017.

NEXT STEPS

The initiatives and actions undertaken since 2014 have resulted in significant progress toward the goals outlined in the Sustainability Action Plan for Campus Operations 2014 – 2019.

Work has begun on all but one of the 32 goals in the plan. Seven goals have been achieved while three have been flagged as challenges. Some goals may need to be reframed prior to the preparation of the final report on the Action Plan in 2019.

Priority goals for the near future include:

1. Work with Purchasing Services on reporting systems on the source and environmental footprint of goods and services.
2. Create a campus cycling master plan.
3. Develop a system to monitor the fuel use of university fleet vehicles.
4. Install four electric vehicle charging stations.
5. Work with Food Services to create a local food inventory and benchmarking system.
6. Develop a formal Integrated Pest Management Plan.
7. Expand composting infrastructure on campus.
8. Update the 2004 stormwater management plan.
9. Review the practices of post-secondary institutions that track demolition and construction waste.
10. Complete a report on updated greenhouse gas emission reduction goals, along with long-term electricity and natural gas consumption reduction targets for the campus in conjunction with the Facilities Management department.

The complete 2016 Progress Report is available at uvic.ca/sustainability/commitments/policy. The Office of Campus Planning and Sustainability will also continue its reporting efforts with the 2016 Carbon Neutral Action Report and 2017 STARS submission.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