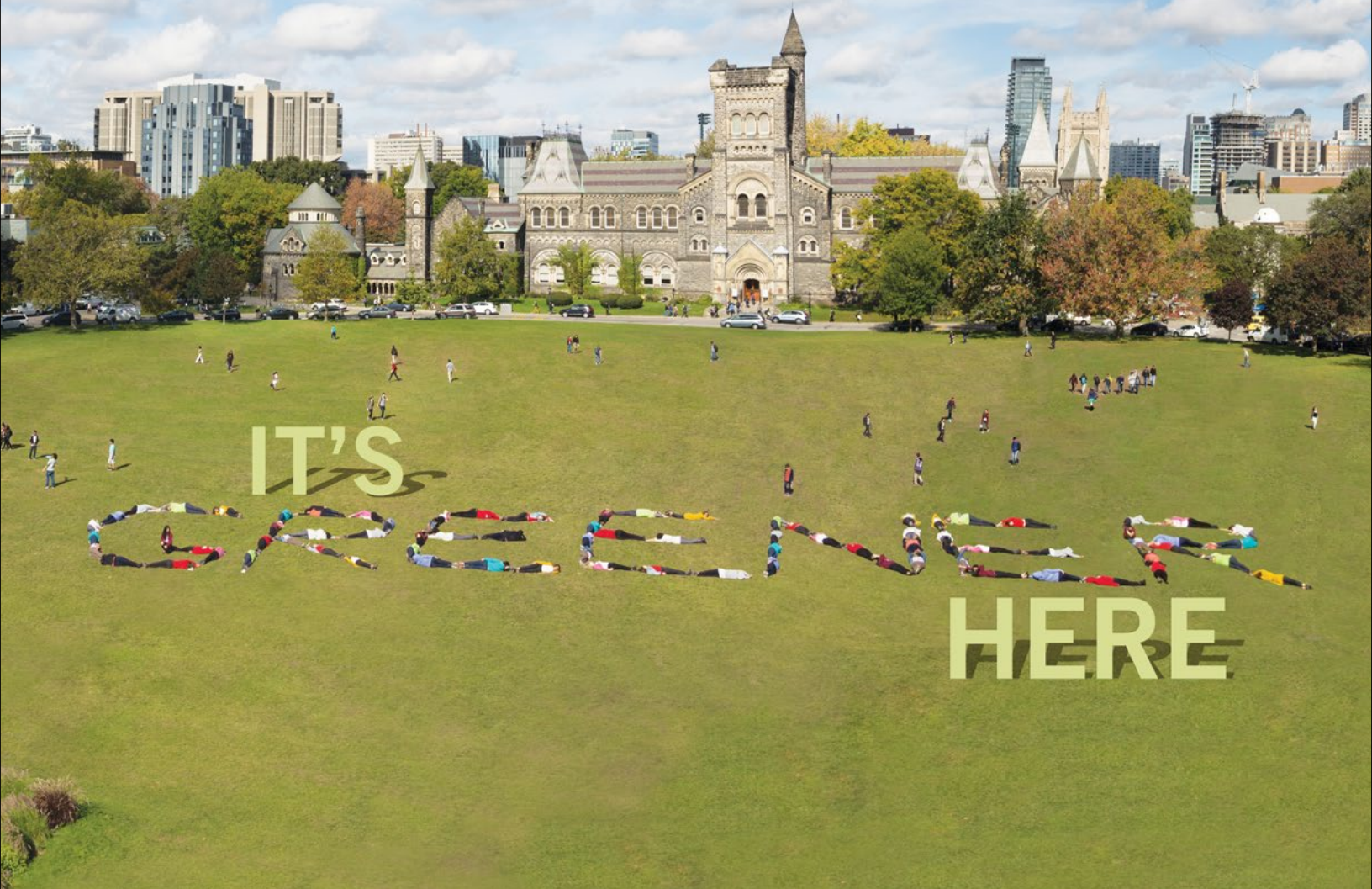


2015–2016 SUSTAINABILITY YEARBOOK

Highlights from the St. George Campus



UNIVERSITY OF
TORONTO



MESSAGE FROM THE PRESIDENT



Photograph: Anthony Macri

“The brilliant work of our students, staff and faculty gives me hope for a sustainable future.”

I AM DELIGHTED TO SEE

the second instalment of the *Sustainability Yearbook*. The breadth of content in this publication proves there is much to celebrate when it comes to sustainability efforts on our St. George campus. And the news is timely, arriving on the heels of the Paris Conference, where world leaders negotiated a universal agreement to keep the average global temperature increase to less than two degrees Celsius to prevent the most serious effects of climate change.

The yearbook also clearly demonstrates how the University of Toronto continues to build on past achievements. In 1977, U of T hired its first energy-reduction manager and shortly thereafter set aside a special fund to support energy-saving projects. The creation of the Sustainability Office more than a decade ago was another visionary step forward. As a whole, U of T is a leader in operational sustainability, excelling in waste diversion, sustainable food sourcing and local, efficient power generation.

We're proud of these accomplishments, and we aim to do even more. A recent sustainability survey revealed that the majority of staff and students at U of T consider environmental issues to be a critical focus for the University. This yearbook illustrates that their sustainability actions speak as loud as their words. Taken together with our profound contributions as an international leader in climate change research and teaching, the University community is indeed committed to the fight against climate change.

As a society, we face enormous challenges to ensure that future generations don't bear the burden of environmental degradation. But the brilliant work of our students, staff and faculty gives me hope for a sustainable future. Congratulations to the dedicated team at the Sustainability Office on the publication of their second *Sustainability Yearbook*. And thank you; it truly is Greener Here!

A handwritten signature in black ink, reading "Meric S. Gertler". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Meric S. Gertler
President

DISCOVER WHY IT'S GREENER HERE!

Living and Working on a Sustainable Campus (Pg. 6-7)

Small changes, big impact.
Welcome to a #greenerUofT

Community Engagement and Leadership (Pg. 4-5)

Growing a culture of sustainability in and around campus

Natural and Built Environment (Pg. 8-9)

We're going greener every day, inside and out

Education, Research and Innovation (Pg. 14-15)

We're driving innovations in sustainability for a brighter future

Energy and Emissions Reductions (Pg. 10-11)

We're talking tonnes of savings

Waste and Materials Management (Pg. 12-13)

Celebrating waste reduction on campus



Image credits: Front and back cover photograph: Dominic Ali. Photography: Jonathan Sabeniano or Dominic Ali. All photographs are the property of the University of Toronto. **Sources:** for further details about any of the facts in this yearbook, please contact the Sustainability Office at sustainability@utoronto.ca. **Concept and design:** Green Living Enterprises

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UNIVERSITY OF
TORONTO

Sustainability Office
FACILITIES & SERVICES



Learn more at uoft.me/SustainYB1516





COMMUNITY ENGAGEMENT AND LEADERSHIP

Working to create a sustainable community.



Photograph: Food Services

FIVE BRAND NEW LOCAL FOOD CONCEPTS ON CAMPUS THIS YEAR

In September 2015, Food Services launched five new food concepts on the St. George campus—all of which use locally sourced and sustainable foods. Not Just Greens, Soup!, Stone Oven Pizzeria, Tortillas and the Gourmet Burger House deliver customized, high-quality and healthy food options to the campus community.

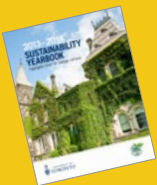


Image credit: Brook Malloy

HURON-SUSSEX NEIGHBOURHOOD PLAN

The Huron-Sussex Neighbourhood is a collection of houses and University buildings built between 1850 and 1900, and the City of Toronto, U of T and local residents are collaborating to transform this neighbourhood into a greener community!

Picture this: “living lanes” activated by cyclists and pedestrians, and low-energy and low-water-use designs for residents. We’re even exploring a unique “community energy system,” which connects the neighbourhood to our own sustainable district heating and cooling system! Keep your eyes on this community—a small laneway demonstration will be there soon.



Did you miss the 2013–2014 yearbook?

Check it out by visiting uoft.me/SustainYB1314

DID YOU KNOW?



Bikechain, a not-for-profit cycling organization, celebrated their 10th year at U of T in 2015!

3,000+

is the number of U of T staff, students and faculty who have taken The Pledge to live a greener lifestyle. Look for the Sustainability Office Outreach Team to make your pledge, or make one online: uoft.me/the-pledge





Photograph: Brook Melroy

Sustainability Survey Results

1,700 people participated in the St. George Sustainability Survey to share their knowledge and ideas.

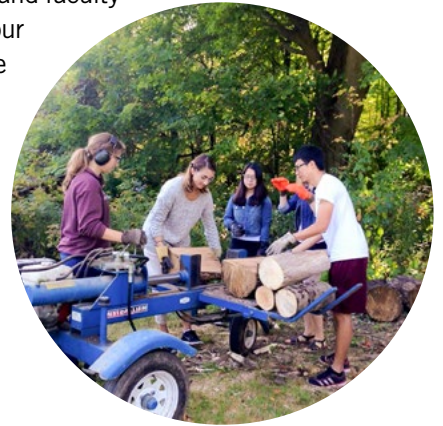


of respondents think sustainability is important.

STUDENT GROUPS

Fair Trade Committee is a group of students, staff and faculty working to make our campus Fair Trade designated.

→ **Hart House Farm Committee** provides outdoor programming and promotes sustainability at a 150-acre farm in Caledon, north of Toronto.



Photograph: Hart House Farm Committee

UTERN (University of Toronto's Environmental Resource Network) is the meeting point for environmental student groups on campus.



GREEN GALA

Since 2014, the Sustainability Office has hosted a Green Gala to recognize the environmental community on the St. George campus. The Gala brings together staff, students and faculty to celebrate recent accomplishments and inspire future efforts for a #greenerUofT.



STUDENT-LED ACTION ON CAMPUS

2015 marked **45 years** of student-led environmental activism on campus! To celebrate, a second plaque was installed near Robarts Library. The first was put up in 1970 by U of T's earliest student environmental group, Pollution Probe.



LIVING AND WORKING ON A SUSTAINABLE CAMPUS

With a campus community of 75,000+, small changes make a big difference!



Photograph: Michael Baker



U OF T NAMED ONE OF CANADA'S GREENEST EMPLOYERS

Earth Day was made more special with news that we were named one of Canada's Greenest Employers! This competition recognizes organizations that "lead the nation in creating a culture of environmental awareness." Congratulations to everyone who contributes to a #greenerUofT!

PAYROLL GOES GREEN

Since February 2015, all U of T pay stubs are digitized—so long, paper statement and envelope! This Human Resources & Equity initiative has saved the printing and mailing of more than 12,000 statements each month.



DID YOU KNOW?



10%

is the discount Veggie Mondays card holders get when they purchase any vegan or vegetarian meal on campus every Monday! **Veggie Mondays** is a campus-wide initiative to celebrate and raise awareness about plant-based foods. It's free to sign up.



CHEERS TO OUR CERTIFIED GREEN OFFICES!

- Victoria College Principal's Office
- Gerstein Library
- Student Life (two locations)
- Campus & Facilities Planning
- Tobe Lab
- Donaldson Research Group

To find out more, visit uoft.me/greenoffice



A DAY IN THE LIFE OF A STUDENT ON CAMPUS



9 a.m.

Grab a trayless breakfast



10 a.m.

Catch a gym class at the Athletic Centre, and then shower with solar-heated water



11 a.m.

Find a relaxing green place to study



12 p.m.

Meet friends for lunch at vegetarian café Harvest Noon



2:30 p.m.

Quick fact-check at Gerstein Library, a certified Green Office



3:45 p.m.

Pick up a fair trade caffeine boost with a reusable mug and save 25¢



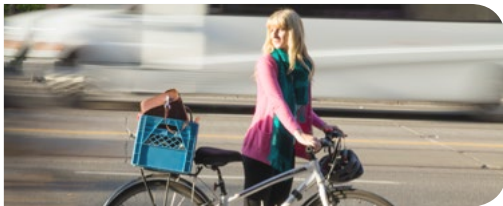
4 p.m.

Attend PSY 435 Environmental Psychology



5:30 p.m.

Rent a bike from Bikechain for an eco-friendly commute



Sustainability Survey Results



97% of respondents participate in one or more sustainability-related behaviours.

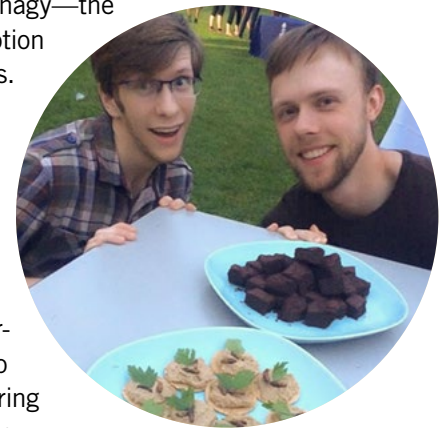
STUDENT GROUPS

➤ **Bug Bites** promotes food consciousness and sustainable consumption by means of entomophagy—the consumption of insects. (Yes, you read that right!)

Harvest Noon is a volunteer-run co-op café offering affordable, locally sourced, fair trade, vegetarian and vegan food.

The U of T Food Policy Council connects and inspires members of the campus community to advocate for sustainable food policy and production on campus.

The U of T Veg Club promotes vegetarian and vegan living for the sake of the planet, our health and animal compassion.



Photograph: Bug Bites



Many classrooms are retrofitted using the latest high-efficiency LED lighting technology with occupancy sensors.



NATURAL AND BUILT ENVIRONMENT

We're making campus more sustainable with LEED-certified buildings, a big boost in water conservation and community bee hives!



Image credit: Diamond Schmitt Architects

KEEPING THE GRASS GREEN

The Smart Irrigation program has helped us **reduce irrigation water use by 58%, or more than 64 million litres each year!** How did we do it? A centralized water control for our 82+ irrigation systems on campus lets us make adjustments for soil type, plants and weather.



Photograph: Jason Kygler-Baum

UTSC SPOTLIGHT

In 2015, the University of Toronto Scarborough Campus (UTSC) opened the Environmental Science & Chemistry Building. It's home to the Department of Physical & Environmental Sciences, and will be the first LEED Gold certified lab at U of T. Sustainable features include earth tubes, which use the earth's thermal mass to heat and cool ventilation air brought into the building, thereby reducing energy consumption.

DID YOU KNOW?

3,000+










is the number of trees on our campus—and we have hundreds of gardens, too. Breathe in that fresh air!
#greenerUofT



LEEDing THE WAY

We're making your work and learning environment more sustainable by upgrading buildings and designing new ones to meet LEED (Leadership in Energy and Environmental Design) standards. LEED is a globally recognized green building rating system. Congrats to our newest LEED-certified building, the Munk School of Global Affairs, which brings our institution's LEED certified buildings total to 12!

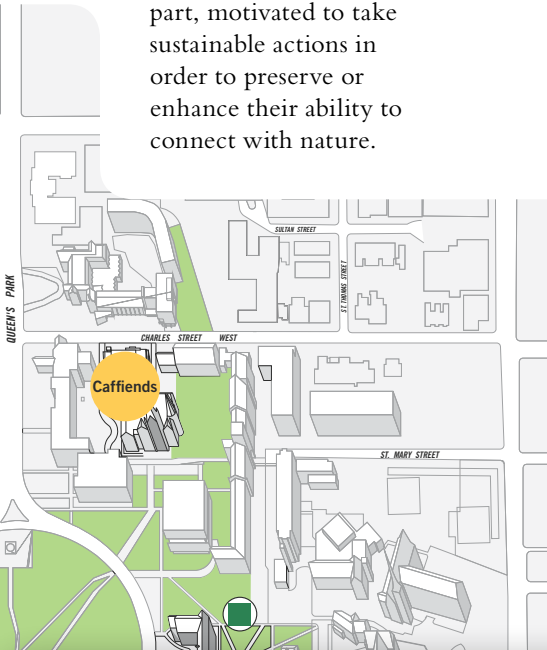
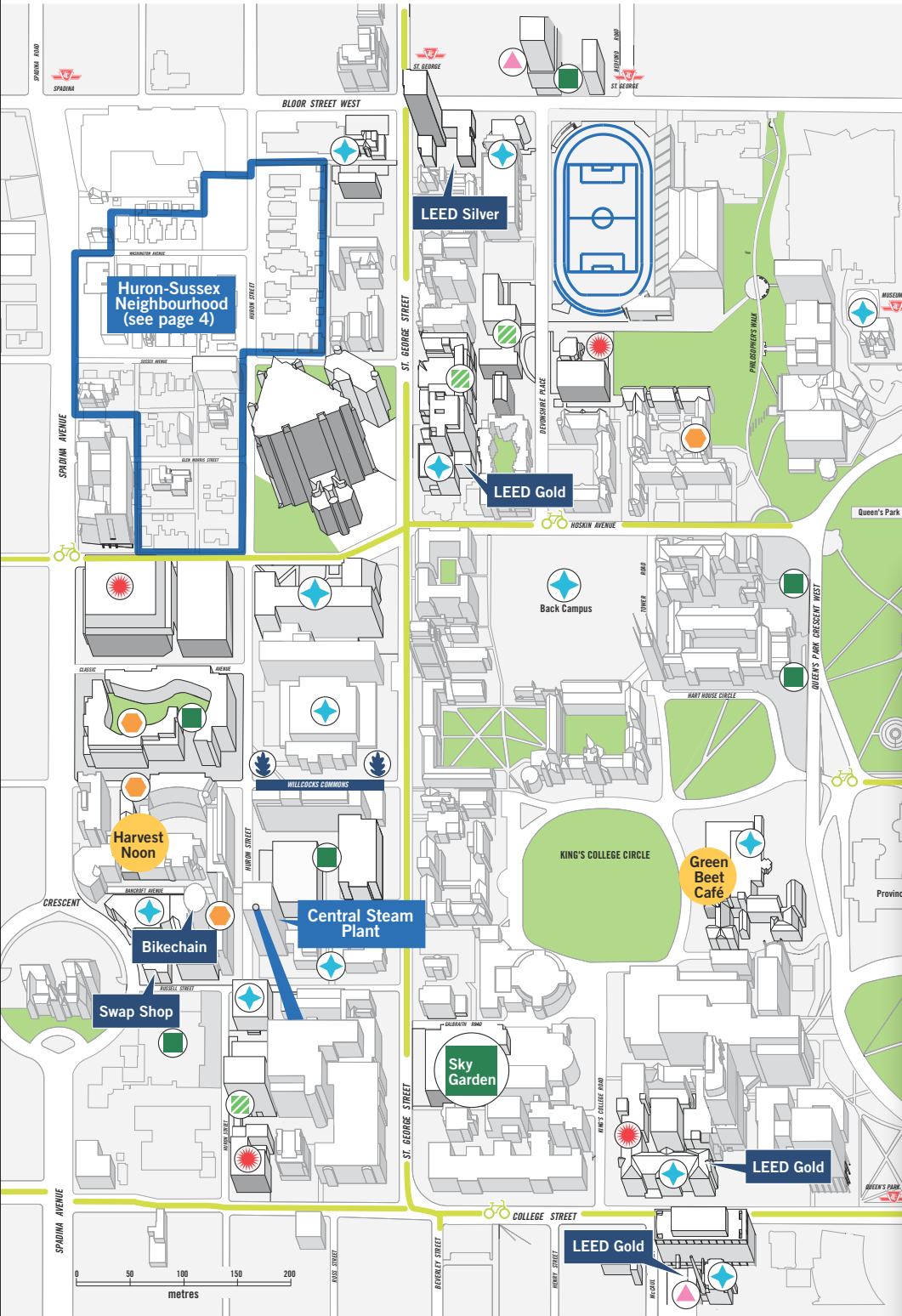
DISCOVER THESE ENVIRONMENTAL FEATURES ON CAMPUS

-  Bee hive
-  Green roof
-  Sustainability kiosk
-  Bike lane
-  Rainwater cistern (above- and belowground)
-  Veg and learning garden
-  Food: local, sustainable and vegetarian options
-  Solar installation
-  Willcocks Commons (car-free zone)

Sustainability Survey Results



of respondents are, in part, motivated to take sustainable actions in order to preserve or enhance their ability to connect with nature.



STUDENT GROUPS

SEA (Sustainable Engineers Association) hosts events and provides opportunities for students in engineering and other disciplines to collaborate on sustainability initiatives.

↓ **U of T Bees** educates the community about beekeeping, pollinators and the production of local honey.



Photograph: Lina McDonald



ENERGY AND EMISSIONS REDUCTIONS

We're talking *tonnes* about energy savings across campus.



LIGHTS! ACTION! LEARNING!

Across campus there are tens of thousands of lights inside and outside buildings that you walk by and sit under each day and night. We're in the process of replacing these lights with energy-efficient models that reduce our energy consumption and improve the quality of lighting. You'll spot the new ones in places like the Rotman School of Management, **Upper Gym (Clara Benson Building)**, New College and the Faculty Club.

DID YOU KNOW?



7°C is the interior temperature reduction you can reach in a building simply by pulling down the shades in the summer.



SAVE AND WIN

Facilities & Services' **Radu Ciotirca** won the Energy Managers of Ontario Excellence Award in 2015. Thanks to the hard work of Radu and others, we saved more than seven million kilowatt hours of energy last year—enough to power 700 houses!

UTM SPOTLIGHT

University of Toronto Mississauga (UTM) completed two buildings, Deerfield Hall and the **Innovation Complex**, both of which will be certified LEED Silver!

Deerfield Hall features a rainwater reuse system, a green roof, low-flow washroom fixtures and energy-efficient mechanical systems.

The Innovation Complex features a green roof, lots of natural light, efficient lighting with occupancy sensors and vertical fins on the exterior of the building to help shade the glass.

2015 CO₂ EMISSION REDUCTIONS FOR PROJECTS ON ST. GEORGE CAMPUS (BY THE TONNE!)

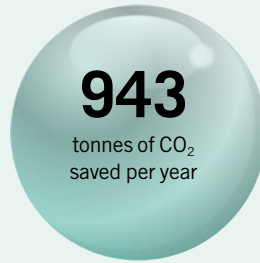
Reductions based on the latest CO₂ emission factors.



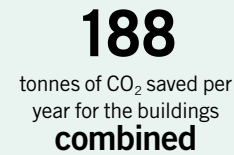
Robarts Library



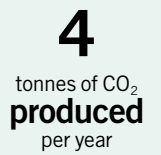
Medical Sciences Building



Ontario Institute for Studies in Education (OISE)



Rotman School of Management
Thomas Fisher Rare Book Library
Central Steam Plant
Clara Benson Building
Dentistry Building
Simcoe Hall

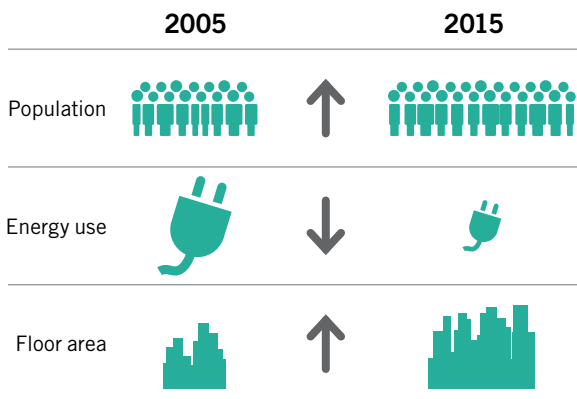


An average family-sized house



ENERGY CONSUMPTION

Even though U of T has increased in population and building space, energy consumption has stayed roughly the same thanks to the ongoing efforts of the Facilities & Services team.



STUDENT GROUPS

→ **U of T 350.org** is a climate justice group working to encourage the University to divest from fossil fuels.

U of T Solar House Design Team is competing in the Solar Decathlon Europe, an international competition to design and build a fully functioning, sustainable, net-zero-energy home.



Photograph: UofT350



WASTE AND MATERIALS MANAGEMENT

Thanks to your efforts, St. George has one of the highest waste diversion rates (70.6%) of any post-secondary institution in North America!

GOING FOR GOLD

The campus-wide commitment to waste and recycling is getting noticed. The Recycling Council of Ontario awarded Gold to St. George for our efforts in waste reduction and diversion.



Photograph: RCO

Of Rhymes & Reams

Paper, colour of cream
A ream, 500 sheets
Not enough for a time

U of T, set paper free
Saving thousands of quires
By using wires

Save money for seeds
All digital,
No trees fall

Invoices sent by beams
Of energy
The paperless dream

By Katherine Dupont

OF RHYMES & REAMS

This poem was written in jest to celebrate the paper-saving efforts of Darrel Fernandopulle and his team at Facilities & Services in collaboration with the Chief Information Officer's portfolio. Darrel led the team that changed the paper-based invoice processing system to an electronic payable processing and tracking system, **saving 80,000 sheets of paper each year!**

DID YOU KNOW?

 **25+**
tonnes

is the weight of the glass and plastic recycled through our non-contaminated lab glass and plastic recycling program, one of the first of its kind in Ontario.



Our campus uses **Green Seal certified products**, including paper towels and

cleaners. Green Seal offers third-party certification based on leadership sustainability standards that help protect the natural world and human health.



11 STEPS TO SUSTAINABILITY IN YOUR WORKSPACE

1. Draw blinds

Pull down during the summer months to keep heat out.

2. Become a Green Ambassador

Join a network of sustainability-minded people working to green their workplace and campus. Visit uoft.me/greenambassadors

3. Bike to work

Reduce emissions on your commute by cycling.

4. Add a plant (or two!)

Plants improve your mood, the air quality and the office environment.

5. Use a stapleless stapler

Get one from Recycling Services.

6. Recycle!

Do your part! See the commonly mis-sorted items below.

7. Bring a reusable mug

You'll divert waste from the landfill and save 25 cents.

8. Get gently used office furniture and supplies

The campus Swap Shop has lots of great items for your office.

9. Pack a waste-free lunch

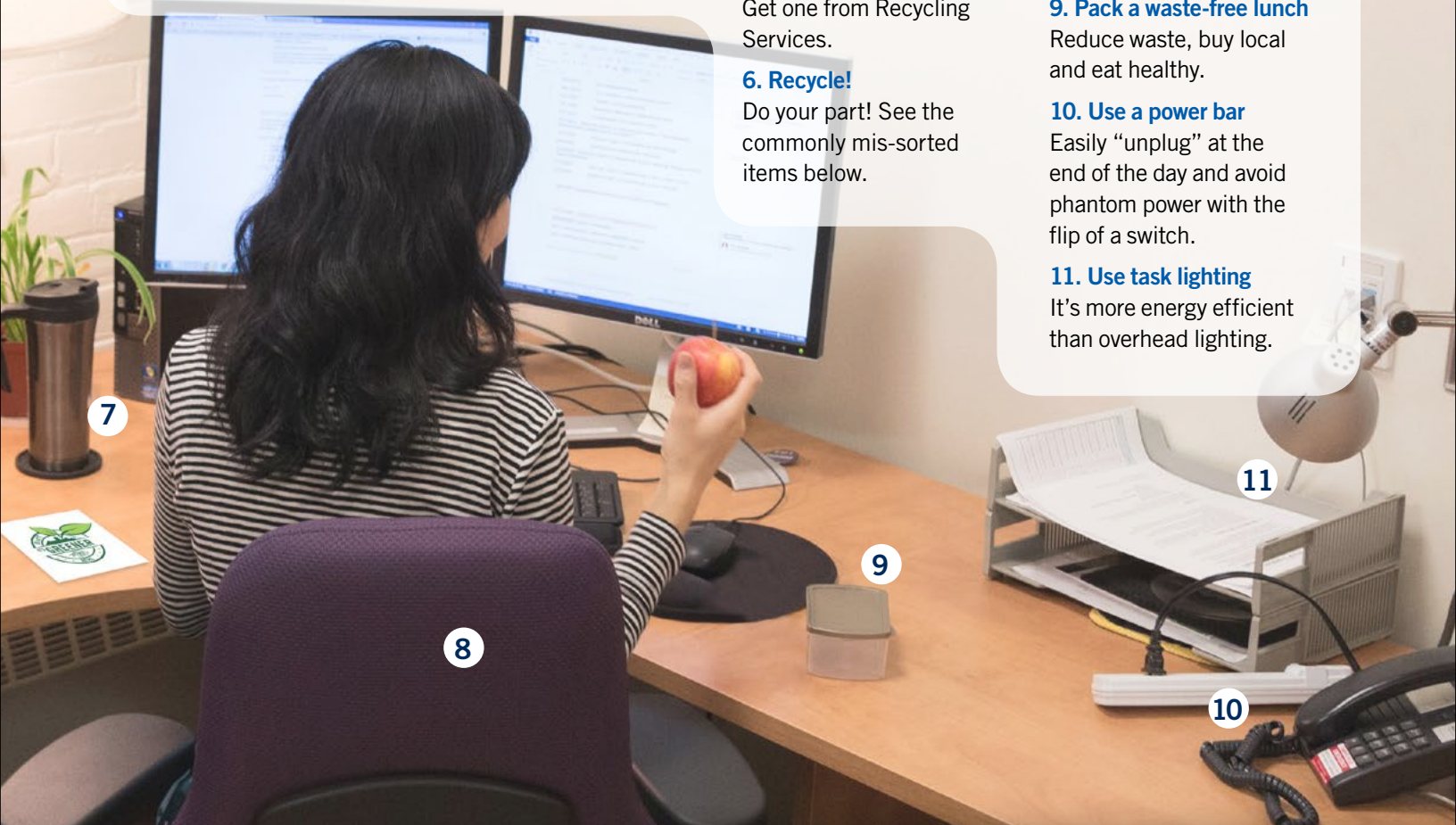
Reduce waste, buy local and eat healthy.

10. Use a power bar

Easily "unplug" at the end of the day and avoid phantom power with the flip of a switch.

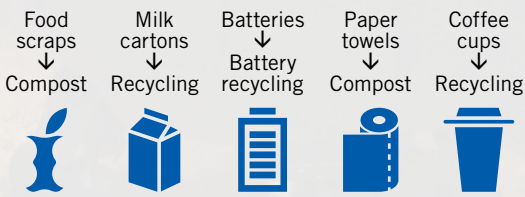
11. Use task lighting

It's more energy efficient than overhead lighting.



SORT IT OUT

Do your part to boost U of T's waste diversion rate even higher by sorting these items into the correct bins.



(or use a reusable mug)

STUDENT GROUP

Green Chemistry Initiative

(GCI) is a group of graduate students and postdocs in the Department of Chemistry who joined forces to promote sustainable practices in the lab and in everyday life. The group hosts monthly seminars, waste reduction campaigns and other events.



Photograph: GCI



EDUCATION, RESEARCH AND INNOVATION

Whatever your passion, you can green your experience here at U of T!




Photograph: Tom J. Daniels, Faculty of Architecture, Landscape, and Design

FROM GRIT TO GRID

The Green Roof Innovation Testing Laboratory—**gritlab** for short—is located on the roof of John H. Daniels Faculty of Architecture, Landscape, and Design.

Through multidisciplinary collaboration, researchers are investigating the environmental performance of green and clean technologies such as green roofs and green walls, as well as solar panels, which will soon provide electricity for the building.

DID YOU KNOW?

540+ 

is the number of certified Green Courses at

St. George. The Green Courses program focuses on paper reduction and sustainable behaviours. Certify your course at uoft.me/greencourses

PEDALLING FORWARD

Realizing conventional bicycles are not everyone's cup of tea, Sojourn Labs set out to build a pedalled vehicle that could be safely and comfortably operated year-round on the streets of Toronto. Working out of the Impact Centre at the Banting & Best Centre for Innovation & Entrepreneurship, they've created a fully operational prototype and are now at work on their second.



Photograph: Makeda Marc-All

CHRISTELLE BROUX

BSc student, class of 2016
Double major in Environmental Science & Physical & Environmental Geography, minor in Environmental Studies

My favourite part of my programs is that they allow interdisciplinary learning. I truly feel that I've expanded my perspective on environmental issues, and I'm thankful to U of T for helping me on this journey!





ANUKRITI SHAH

BASc student, class of 2016
Major in Chemical Engineering, minor in Sustainable Energy

My favourite part of my program is learning more about the world we live in and the various types of renewable energy sources that could potentially be viable alternatives to the fossil fuels we use today. I'm excited to take the knowledge that I have gained through this program and build on it in my future career.



MATTHEW TANSEY

MBA student, class of 2016
Major in Sustainability

Sustainability is going to be the most crucial challenge for businesses to tackle head on in the 21st century. To me, it is a no-brainer for business to accept a role in environmental and social responsibility, and I want to gain the tools to be at the forefront of this in my post-MBA career.



MISBAH DIN

MT student, class of 2016
Certificate in Environmental and Sustainability Education

My favourite part of my program is the ability to learn about special education, Aboriginal studies and environmental sustainability education. At OISE [Ontario Institute for Studies in Education], I feel inspired to transform my teaching practices to be environmentally friendly.

Sustainability Survey Results



of respondents said they care about understanding or acting on environmental issues.

STUDENT GROUPS

↓ **Blue Sky Solar Racing Club's** newly built Horizon solar car travelled 3,000 km across the Australian outback in the 2015 Bridgestone World Solar Challenge, placing third among North American entries.



Photograph: Blue Sky Solar Racing

ENSU (Environmental Students' Union) represents the students enrolled in the School of Environment's programs and affiliated departments.

Rotman Net Impact advocates for incorporating sustainability into the MBA curriculum and was awarded the 2015 International Chapter of the Year.

Brought to you by the Sustainability Office

uoft.me/sustainability



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