a new student's

# GREEN GUIDE

to sustainability at Carleton





#### Excuse Our Mess!

Carleton's Utility Master Plan is currently under construction and includes three geothermal bore fields under Carleton's campus and a heat pump to transform the 100-year old steam heating system into an energy solution for the 21st century. Visit the Geothermal website for more information!



Geothermal drilling on the Mini Bald Spot (Fall 2017)

#### Welcome to Carleton!

As you may or may not have realized by now, sustainability is a big deal here. With the help of committed students, faculty, and staff, Carleton has developed a culture of environmental awareness, responsibility, and action, and a strong desire to make our world a better place. This "Green Guide" should serve as an introduction to how you can become a part of Carleton's sustainable community.

#### Carleton's Environmental Statement of Principles

"Carleton College recognizes that it exists as part of interconnected communities that are impacted by personal and institutional choices. We are dedicated to investigating and promoting awareness of the current and future impacts of our actions in order to foster responsibility for these human and natural communities. Carleton strives to be a model of stewardship for the environment by incorporating ideals of sustainability into the operations of the college and the daily life of individuals."

Approved by the Environmental Advisory Committee on April 12, 2001

Endorsed by the Board of Trustees, Building and Grounds Committee on May 18, 2001

## This Green Guide was produced by the Environmental Advisory Committee and the Sustainability Assistants (STAs):

The Sustainability Assistant program was created in 2007 and each year employs 8-12 students to aid Carleton's sustainability efforts on campus. Areas of focus include Residential Life, food, waste, energy and other facilities functions.

The Environmental Advisory Committee (EAC) is a CSA-chartered committee in charge of sustainability initiatives on campus. It brings together STAs, the manager of Campus Energy and Sustainability, and student, faculty and staff liaisons. Meetings are open to the public.

If you are interested in attending please contact Martha Larson, Manager of Campus Energy and Sustainability for meeting times.

For more EAC information: <a href="https://apps.carleton.edu/governance/environment/">https://apps.carleton.edu/governance/environment/</a>

If you have any questions about sustainability at Carleton, how to get involved, or what we're up to in the sustainability office, or if you have an idea for how to make Carleton more sustainable we would love to hear from you. sustainability@carleton.edu

2019- 2020 Sustainability Assistants (STAs)

Madhay Mohan '22 Andrew Farias '21

Becca Horwitz '22 Madeline Hagar '20

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#### **Sustainability Staff**

Alex Miller, Sustainability Program Coordinator

Martha Larson, Manager of Campus Energy and Sustainability



## SUSTAINABILITY FUN FACTS

Carleton has a lot of sustainability initiatives! Here are some major ones to know before you get to campus (and start creating your own sustainability projects).

In order to reach climate neutrality by 2050, Carleton has developed a Climate Action Plan (CAP). This document guides sustainability education and outreach related to transportation, waste management, energy, procurement, and land management. You can find Carleton's CAP on the <u>sustainability</u> website.

Carleton was the first college in the country to own a utility-grade wind turbine (now two!). The first turbine, installed in 2004, produces the equivalent of one-third of the College's consumed electricity. A second turbine was installed in Fall 2011 and sends its energy directly to campus. You can view live data of the wind turbines on Carleton's sustainability website.

**Carleton's Cowling Arboretum is home to 880 acres of native prairie and forest.** The Arb is carefully managed to promote biological diversity and serves as a nature preserve, an outdoor classroom, and a place for recreation. It also sequesters 900 MT of carbon per year! For more information on the Arb, visit the arb's website.

**Environmental Studies Department (ENTS)** collaborates with other departments to emphasize an integrated, multidisciplinary approach to learning. Most other academic departments include at least one course with a focus on the environment or sustainability. Visit the <a href="ENTS website">ENTS website</a> for more information on the ENTS major and courses available for fall term.

The development of Carleton College's Utility Master Plan (UMP) has resulted in 3 Geothermal bore fields located around campus. With this addition, Carleton will be the 1<sup>st</sup> college campus in Minnesota to install a district-energy scale geothermal system! Check out the <u>UMP website</u> for more information.



### WASTE DISPOSAL

We have a triple-bin waste system. Learn what to put into the compost, the recycling, and what to send to the landfill.







#### A variety of other items can be recycled or disposed of in different places across campus:

Terraycling boxes for **chip bags and granola bar wrapper**s are available in most dorms and most academic buildings.

Old **clothes** can be donated to charity – put them in the marked boxes in any campus laundry facility.

Used **books** can be re-sold to the bookstore on any textbook buy-back day (held at the end of each term)

**Apparel, furniture, appliances**, etc. can either be donated to the annual CCCE Lighten Up garage sale at the end of spring term, or sold ia the Free and For Sale Facebook page.

**Batteries** can be disposed of in battery bins in select buildings across campus.

Compact fluorescent light bulbs (CFLs) can be given to Facilities (x4133). Contact sustainability@carleton.edu for more information.

## **ACTING GREEN**

Carleton is working to improve efficiency across our facilities, but much of the electricity and other resources we consume are used by students. We need your help to use less carbon.

## IN (OR OUT OF) THE DINING HALL

**Cut back on meat consumption.** A recent United Nations report found that the meat industry produces nearly a fifth of all global greenhouse gas emissions. Bon Appétit, Carleton's dining service, provides plenty of vegetarian options at every meal. If going vegetarian seems like too much of a challenge, consider eating only one meat meal per day, or eating vegetarian one day a week (such as Meatless Monday).

**Take only what you can eat in the dining halls.** Even though all food waste is composted at Carleton, it's better to not create the waste in the first place.

Use travel mugs and reusable water bottles. You even get a discount on coffee at the Sayles snack bar when you bring your own mug. 10 purchases=1 free cup of coffee!

Eat locally. Consider buying your produce and other food at Just Food (Northfield's co-op) or at the Farmer's Market (May-October at Bridge Square). This not only reduces transportation costs but also supports local farmers. Students have a membership to the Co-op! Just bring your One-Card.

#### IN YOUR DORM

Turn off lights when you are done using them and unplug electronics. Even CFLs use energy. The best way to reduce your energy consumption is to not use energy! The standby power or "phantom load" of electronics can be up to 10% of their total consumption.

Always close windows when the heat or air conditioning is on. This will reduce unnecessary energy usage. If the temperature is unpleasant, call Maintenance Services at 507-222-4133. Make sure to also close your windows during breaks or if you are gone on weekends.

Take shorter showers. Even low-flow shower heads, recently installed on campus, use 1.5-2.5 gallons per minute. You can also save water by turning off the sink while brushing teeth, washing hands, etc. Pro tip: try to shower within the length of one song!

Wash clothes on cold (the "bright colors" setting) and use a drying rack or clotheslines. Close to 95% of the energy used in a washing machine goes towards heating the water, and clothes dryers are some of the most electricity-consuming appliances. As an added bonus, not using campus dryers also saves you money! For more laundry tips, check out the "Sustainable Laundry Tips" poster, which is posted in your dorm laundry room.

Buy used. If you need clothes or appliances, try the NNB or one of the several consignment stores downtown. Also, join Carleton's Free and For Sale Facebook Group, which allow students to exchange clothing and other items. The Sustainability Assistants bring the Free and For Sale group to life each term- watch for posters!

#### IN YOUR CLASSES

**Buy used books** from the Carleton bookstore, or rent your books from a book-renting website such as Chegg.com. You can also find used books on Amazon.com.

**Select double-sided and multiple-sheet-per-page printing.** Carleton computers default to duplex printing, and you can save even more paper and ink by printing more sheets to a page. Better yet, don't print your digital readings at all. If you do print your E-Reserves, make sure to avoid printing unnecessary pages (such as title sheets, references and bibliographies).

#### TRANSPORTATION

It's easy to find sustainable transportation at Carleton, in Northfield, or to the Twin Cities, whether it be carpooling, public transportation, biking, or using your own two feet. Go to apps.carleton.edu/transportation/ for more information on your transportation options.

















## **GET INVOLVED**

Carleton has a huge number of student organizations involved with sustainability (both directly and indirectly). Below is a list of many of the groups.



Food Truth and Farm Club members, along with other volunteers, prepare to plant Eat The Lawn / photo by Katie Blanchard '10

#### Food Truth

Food Truth is an organization dedicated to raising food consciousness by examining the environmental, political, social and ethical impacts of what we eat. Food Truth organizes events, speakers, community dinners, films, workshops, and field trips to encourage discussion and advocacy around food-related issues.

#### Students Organized for the Protection of the Environment (SOPE)

Meetings: Wednesdays, 8 p.m., Sayles 251

SOPE is a student organization dedicated to promoting environmental awareness and activism on campus and in the community. Students meet weekly for discussion about environmental issues both on and off campus, as well as continued work on specific projects and task forces. SOPE primarily works on Carleton-related issues.

#### Carleton's Student-Run Farm

Carleton's student organic farm sells produce to the dining halls and makes produce available for all students, faculty and staff. Students oversee all aspects of the farm – planning, planting, weeding, harvesting and coordinating with the dining hall. Farm club members are encouraged to come out to the farm during our open hours to either volunteer or hang out! Students of all experience levels are welcome to come and share their ideas/thoughts/enjoyment.

#### Carls for the Boundary Waters

Meetings: every other Thursday (even-numbered weeks) at 8pm in Leighton 426

Carls for the Boundary Waters is dedicated to protecting the Boundary Waters from proposed sulfide-ore copper mining. The Boundary Waters Canoe Area Wilderness is a federally protected wilderness area in Northeastern Minnesota where countless Carleton students love to paddle, camp, and adventure. Carls for the Boundary Waters educates Carleton students and the greater Northfield community about this issue, collects petition signature, reaches out to elected officials, and hosts event to help protect the Boundary Waters.

#### **Divest Carleton**

Meetings: Tuesday, 8 pm in Leighton 426

Divest Carleton pushes Carleton College to rid itself of investments in the top 200 fossil fuels companies through direct action and dialogue. Divest is the Carleton branch of the global transformation towards a sustainable future through divesting our endowment, stopping new fossil fuel infrastructure, and committing communities to 100% renewable energy.

#### **Environmental Alliance**

Meetings: Twice a term, typically at dinner time

A group of leaders from various Carleton environmental clubs whose goal is to collaborate on campus sustainability issues as well as share ideas and lend support to one another. Email: environmentalalliance.group@carleton.edu

#### Kids For Conservation (KFC)

KFC works with elementary school children to teach environmental awareness. The ultimate goal is to encourage students to make responsible decisions about the environment. Hour-long lesson plans are written by Carleton volunteers and are taught in classrooms for six weeks each term.

Website: https://apps.carleton.edu/campus/act/actprograms/Youth/kfc/

#### Arbor

Meetings: Two or three Saturday mornings per term

Arbor is a program devoted to learning about the environment while aiding in the restoration and management of the Carleton Cowling Arboretum and McKnight Prairie. Activities include collecting prairie and forest seeds and nuts, removing brush and trash, and planting and protecting native tree seedlings.

#### Green Thumbs

Meetings: Weekly planning meetings and weekly volunteer days

Green Thumbs works to get elementary school students interested in gardening, environmental issues, and thoughtful eating.

#### Northfield Middle School Gardening Program

Meetings: Weekly volunteer days, about 3 hours/week

This program engages middle school students in gardening and cooking through after-school classroom lessons as well as hands-on experience in the kitchen and garden.

#### Zero Waste Task Force

Meetings: Bimonthly

This committee plans initiatives and events to help Carleton achieve environmental and social impact goals around waste.

#### Carleton Clothing Connection

Carleton Clothing Connection collects donated clothes from students in many laundry rooms around campus. These clothing items are then either donated to groups in Minneapolis/St. Paul or recycled if they are over-worn or unsuitable for donation.

#### Food Recovery Network

Volunteer Opportunities: Every day and evening

Carleton student volunteers recover surplus food from the dining halls, transport it, and donate it to community partners.

#### **Energy Club**

Meetings: Weekly

Energy Club is a project oriented discussion group. Discussions are centered around environmental sustainability and involve ethics, current events, technological advancements, local and global initiatives, and more.

#### The Carleton Association of Nature and Outdoor Enthusiasts (CANOE)

Group Summary: CANOE organizes and runs a wide variety of free student-led trips and activities to help Carleton students learn about and experience the outdoors. The group believes that the enjoyment of the outdoors should be accessible to anyone regardless of background, experience, or ability. The club is also committed to generating a respect for nature and ecological thought. CANOE lends a variety of outdoor equipment for independent student use free of charge.

Website: http://orgs.carleton.edu/CANOE/

#### The Cole Student Naturalist Program

Group summary: The Cole Student Naturalist Program is not a student organization. Instead, the program employs two or three students from each class and trains these students in natural history and nature interpretation. It also provides opportunities to lead field trips and participate in other educational events for Carleton and the Northfield community. In addition to the paid student naturalists, volunteers are welcome to join the program. Current first-years are recruited for the program in the middle of spring term. Some knowledge of natural history (birds, plants, geology) is useful, but so is enthusiasm for learning about the natural world and sharing it with others.

Contact: Nancy Braker (Arboretum director)

Website: http://apps.carleton.edu/campus/arb/programs/student\_naturalists/



## THE SUSTAINABILITY REVOLVING FUND (SRF)

The SRF fund can be used by students to finance projects that increase Carleton's resource use efficiency including reducing waste and greenhouse gas emissions.

**The philosophy** behind the SRF is that many projects that reduce waste and greenhouse gas emissions also save money. For SRF projects to be approved by the SRF Committee (a subcommittee of the EAC), there must be ample proof that the project will pay for the implementation costs through energy or utilities reductions within six years of implementation. The savings accrued through the first six years go back into the SRF. This will allow the SRF to grow over time, allowing bigger projects with higher start-up costs but higher energy returns. The SRF was created in 2007 through donations from Carleton College, the Carleton Student Association (CSA) and the Carleton Environmental Advisory Committee (EAC).

**Previous SRF proposals** have resulted in energy-efficient lights installed in both West Gym and Cowling Gym, low-flow shower heads installed in nearly all showers across campus, unused vending machines turned off over breaks, and drying racks for dorms. Approval permitting, the SRF will fund any sustainability idea that has a high up-front cost but a guaranteed payback after six years.

A SRF proposal requires the following elements: project definition (what is it and why do we want to do it?), project scope (what is involved and what will be accomplished?), key assumptions/constraints (limitations and estimated emission reductions), project approach/methodology (who will do the work and how performance will be measured), project schedule (timeline for project milestones), financial/pay-back plan (budget and expected returns), risks/contingencies (possible risks and how they will be managed), post project review (who will be responsible for operation of the project and how records will be kept). This might seem like a lot, but if you team up with a Sustainability Assistant or the SOPE SRF Task Force, it can be broken down into manageable chunks.

