GREEN OFFICE HANDBOOK

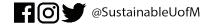




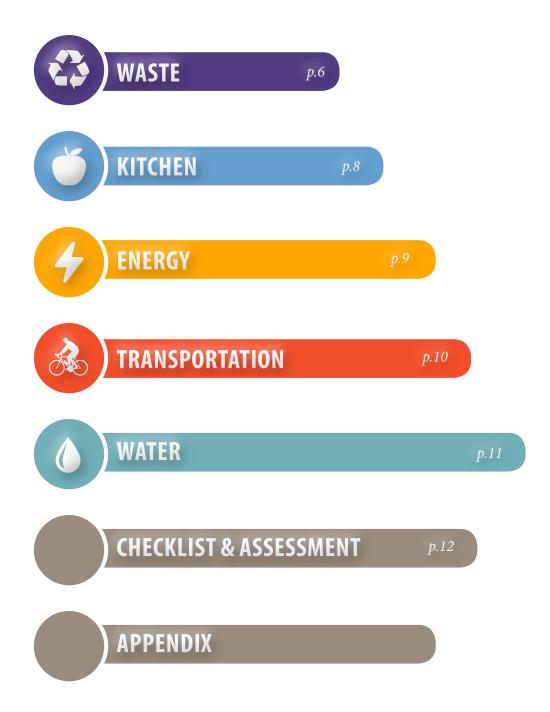
This handbook was created by the University of Manitoba's Office of Sustainability as a tool for implementing green office practices.

Office of Sustainability

501 Fitzgerald Building (204) 474-6121 sustainability@umanitoba.ca



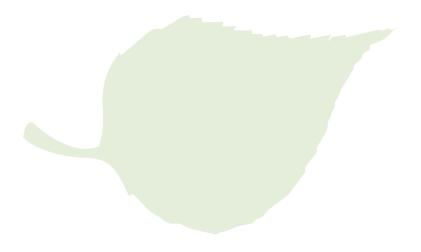
CONTENTS



WHAT IS THE GREEN OFFICE PROGRAM?

The Green Office Program offers a guide for campus offices to incorporate green office practices into day to day operations while directly contributing to the University of Manitoba's sustainability goals. The Green Office Handbook is the tool-kit offering information, assessment and resources. The intuitive framework addresses current practice while setting future objectives and strategies to support green kitchen options, transportation alternatives, waste management and resource conservation.

Simple and effective changes in your office space can support healthy lifestyle choices and provide an outstanding work environment!



GETTING STARTED

1 ES

ESTABLISH A GREEN LEADER

Would you like to learn how to involve your colleagues in greening your office? Become a Green Office Representative (GO-Rep) to guide your office through the program and provide support to your colleagues. The GO-Rep will work with a Green Office facilitator from the Office of Sustainability to guide assessment, develop strategies to propose to management for implementation and help ensure sustained practices.

2

DEFINE THE SCOPE

The program can be tailored to meet your needs! You have the option of participating in any or all of the 5 following sections:

- 1. Waste
- 2. Kitchen
- 3. Energy
- 4. Transportation
- 5. Water

3

ASSESSMENT

An easy-to-follow self-evaluation checklist will first be conducted to assess current practice in relation to the selected areas of interest. The checklist will guide you through a series of actions that your office may or may not have in practice. A point is awarded for every action in practice. If an action does not match up exactly to current practices, you can choose the most relevant action and explain your reasoning in the space provided for comments. You are encouraged to fill in questions, comments and/or concerns in the appropriate column.

A facilitator from the Office of Sustainability will help you identify any barriers and/or opportunities in order to set future goals and strategies for your office.

4

CONTACT THE OFFICE OF SUSTAINABILITY

Interested? Contact the Office of Sustainability with approval of your office director. A program facilitator can meet with you to present the program and answer any inquiries.



UM WASTE OVERVIEW

Reducing the amount of waste offices produce has never been easier! There are a few simple actions that can dramatically reduce waste generated.

The University of Manitoba strives to reduce its total waste yearly, and divert waste from the landfill where possible through a variety of waste management activities:

- The Re-Shop redistributes office furniture and supplies to any interested campus community members for office, personal or charity needs. It is open Tuesdays 9:00 a.m.-12:00 p.m. and 1:00 p.m.-3:00 p.m. in room 149 of the Helen Glass Center.
- **Lug-a-Mug** campaign offers a discount on coffee and teas at all campus Food Services locations with the use of a reusable mug.

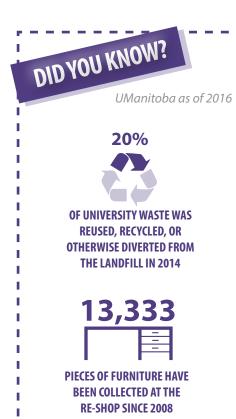
| PREVENTION | Leads to the smallest environmental and economic cost. |
|---------------|--|
| REUSE | Check, clean, repair, and/or refurbish existing material/product. |
| RECYCLE | Sorting and processing recyclable products into raw materials. |
| RECOVER | Recovery of materials or energy. |
| DISPOSAL Dump | oing and incineration of materials/products without energy recovery. |

The Waste Hierarchy

The waste hierarchy establishes priorities based on sustainability actions. The hierarchy reflects successive stages of waste management initiatives from the most (top) to least (bottom) favourable options.

Waste Prevention Tips!

- When printing, consider **printing multiple pages onto a single sheet.**
- **Shredded paper** can be used as packaging infill.
- Participate in the **Mini-bin Program** by contacting the Waste Prevention Office. Smaller garbage bins help to emphasize a reduced waste output.
- **BYOBB** (Bring Your Own Bag and Bottle) to save money and reduce the amount of disposable containers.





DISPOSABLE CUPS WERE
PREVENTED FROM ENTERING THE
LANDFILL WITH THE
LUG-A-MUG CAMPAIGN IN 2014

CONTACTS:

Waste Prevention Office

wpo@umanitoba.ca 204-474-9608

Office of Sustainability

sustainability@umanitoba.ca 204-474-6121

What goes where?

BLUE BINS

- · Aluminum/steel cans
- Milk cartons & Tetra packs (juice boxes)
- Yogurt Containers
- Plastic bottles with a recycle symbol and number (#1-5, #7)
- Glass Products
- Paper Products

All blue bin waste will be recycled!

BATTERY BINS

Located in common areas. All batteries can be placed in these bins. Follow the instructions on the box.





GREY BINS

- Styrofoam
- Organic Waste
- Ceramic

All grey bin waste will be sent to the landfill

PLASTIC BAG BIN

Located in common areas. Plastic grocery bags can be recycled by placing the bags in this bin.



Reusable Mug Discount Locations

Receive a discount on your coffee purchases if you bring a reusable mug to one of the following locations:

Tim Hortons - Various locations
IQs - 3rd floor University Centre
Degrees - 3rd floor University Centre
Hard Chalk Café - Education Building
Green House Café - Dafoe Tunnel - Arts
Complex

Daily Bread Café - St. John's College **Belltower Café** - St. Paul's College **The Young Associates Cafe** - Drake Centre

Starbucks - Various locations

Reusable Water Bottles

Water bottle filling stations are located on campus. Each station dispenses filtered, cold water which helps reduce the amount of single use plastic water bottles being recycled or sent to landfill.

RESOURCES:

Print What You Like Google Chrome Extension allows you to exclude advertisement on web pages when you print.

Consider the Environment Before Printing email signature: http://thinkbeforeprinting.org/get-the-message.php

Terra Cycle

http://www.terracycle.ca/en-CA/



Paper Reduction Poster



WHY THE KITCHEN?

Implementing simple green actions in the kitchen can improve behaviour, productivity, and the health of an office. A sustainable kitchen also reduces consumer waste, such as plastic water bottles, styrofoam products, and food packaging, while integrating environmentally friendly cleaning practices!

UM Food Overview

With a historically strong focus on agriculture, human ecology and food sciences, the University of Manitoba maintains a well-known wealth of food expertise. On campus, the University with its partners has been working over the last few years to provide more sustainable food options to campus community members. Approximately 17% of all food and beverage purchasing are third party certified and/or local and community based from UM Food Services. UMSU grows their own produce and purchases the majority of their products from Manitoba farmers, and processors. They also offer a variety of vegetarian and vegan items on their menus.



Reusable Beverage Container Poster

Campus Composting!

The 2017 campus waste audit was the first step towards establishing a University of Manitoba composting system. Office-level compost collection is a priority item for sustainability at U of M.

Green Kitchen

- Make your office a Fair Trade Workplace. Have 3 Fair Trade Certified items in your office kitchen to be eligible to become a Fair Trade Workplace. Sign up at www.fairtrade.ca
- **Avoid using polystyrene (styrofoam) products.** 'Styrene' is hazardous to health and groundwater.
- **Sustainable food choices** reduce the embodied energy required for food transportation, while simultaneously improving your health.
- When purchasing dishwashing soaps, look for **biodegradable**, **non-toxic**, and **petroleum** free.
- Not enough dishware? Visit a **Yard Sale** or a **Goodwill store** to pick up an extra
- If using paper towels or napkins, make sure they are **unbleached** and have **high** recycled content.



CONTACTS:

Office of Sustainability sustainability@umanitoba.ca 204-474-6121



UM ENERGY OVERVIEW

Whether it's switching your computer off at night, taking advantage of natural daylight or using energy efficient light bulbs, reducing energy consumption is often a simple matter of changing habits. In addition to simply turning out the lights, here are some energy reduction strategies you can encourage:

- Turn the **lights off** when you leave your room
- Turn all unused electronics off
- Unplug unused electronics like your phone and computer chargers
- Work by task lighting in your room opposed to overhead lighting. Use an LED bulb in your task lights.
- Set your computer to NRG mode.
- Long weekend? Unplug your computer!



Phantom Load

Phantom Load is the energy consumed by appliances and electronics while they are switched off or on standby mode - i.e. the power needed to keep clocks lit up or maintain your TV settings. When left turned on for a period of time, energy consumption adds up in resource consumption, and on bills!



Contact Physical Plant

Physical Plant can be contacted to verify appropriate temperature settings and fan speeds for heating and cooling seasons to avoid over-cooling and overheating in the office.

75 vs. 5 watts

Monitor 'Sleep Mode'

A regular computer monitor uses 75 watts of energy when left turned on. 'Sleep Mode' lowers energy to approximately 5 watts,.

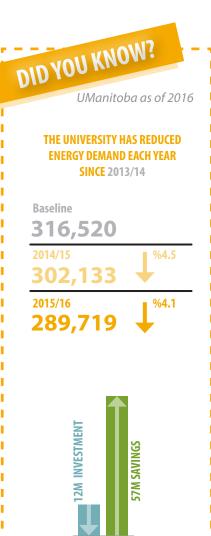
Passive Heating and Cooling

Passive heating and cooling takes advantage of local and seasonal climates by maximizing energy from the sun to heat and cool buildings. In the winter, open the blinds and let sun shine in and close them in the summer months.



Light-emitting Diodes (LEDs)

LED lights use up to 90% less energy and last up to 10 times longer than traditional incandescent lights. This type of light directs light more efficiently, comes in compact sizes and has no infrared or UV emissions.



CONTACTS

Physical Plant

Fort Garry: 204-474-6281 Bannatyne 204-789-3636

1997 ENERGY PERFORMANCE CONTRACT

Office of Sustainability

sustainability@umanitoba.ca 204-474-6121



WHY GREEN TRANSPORTATION?

Sustainable transportation practices will go a long way in reducing your ecological footprint, as well as reducing the University's total CO₂ emissions. The University supports various modes of travel to help you and your colleagues be healthy and more productive, while saving on travel expenses and lowering emissions. Participating in green transportation helps the University maintain its Silver certification through the AASHE STARS campus certification program.

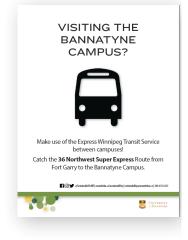
UM Transportation Overview

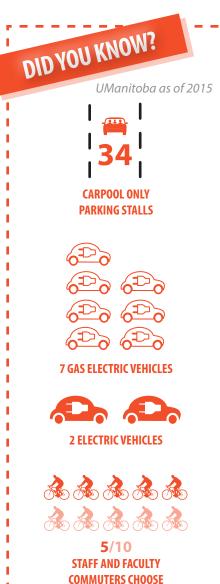
Let your office know the following information:

- Real-time arrival and departure information is available to students and staff at Dafoe Station, other stops near both UM campuses, and through the University's mobile app.
- Winnipeg Transit bus #36 offers a super express service between the Bannatyne and Fort Garry campuses.
- Preferred-location carpool parking stalls are now available in premium parking locations within B, U and Q lots. Staff and Faculty can apply for a carpool permit with parking services for a reserved stall that can be used by multiple vehicles.
- Transportation routes through Southwood link the Fort Garry campus with neighbourhood bike and walking routes to the north and west. Routes can be viewed in the 'Walking & Cycling Map' for the area, available online at: winnipeg.ca/publicworks/pedestriansCycling/maps/default.stm.
- The University **Parkade Bike Station** is a weather-protected bike parking garage available in the Fort Garry and Bannatyne campus parkades. More information can be found online at: umanitoba.ca/campus/parking/bike station.html. U of M Physical Plant can grant card access to the secure bike cages.
- Bike lockers have been installed to securely house your bicycle and bike accessories

on campus. Individual lockers are available. Contact Parking Services at parking_services@umanitoba.ca for more information on how to rent.

- **UMCycle bike kiosk** located at the corner of Sidney Smith Street and Curry Place. Offers bike repair services and operates as the Fort Garry campus cycling hub.
- GoManitoba offers a free, easy way to find people interested in carpooling to the U of M. This online platform matches you with drivers and/or riders who are looking for someone to share their daily commute with. Sign up today at: umanitoba.gomanitoba.ca





CONTACTS

Office of Sustainability

sustainability@umanitoba.ca 204-474-6121

SUSTAINABLE TRANSPORTATION

Safewalk 204-474-9312 24hrs, 7 days a week

Transit Poster



ONE DROP AT A TIME!

As potable water is being consumed at a faster rate than the planet can replenish, it is becoming an increasingly scarce resource. In Canada, we use more water per capita then anywhere else in the world next to the United States. Small steps towards water conservation can minimize pollution entering water-bodies, alleviate waste treatment operations, maintain health of aquatic environments, and save money!







UM Water Overview

The University of Manitoba is the first post-secondary institution to sign on to the Lake Friendly Accord. As a signatory to this accord, the University of Manitoba commits to the shared goal of improving water quality by reducing nutrients in rivers and lakes through the engagement of all. Through its operations, the University promotes water efficiency and demand reduction with significant strides on conserving potable water. Efforts such as improving processes for water metering technologies, selection of indigenous drought-tolerant vegetation to decrease irrigation, land naturalization of SmartPark and Southwood Lands, and the use of green cleaning products all work together to reduce stormwater runoff and hazardous materials entering water systems.



Water Saving Poster

Water Tips!

- When washing dishes by hand, don't let the water run. Fill one basin with wash water and the other with rinse water.
- Designate one glass for your drinking water each day, or refill a water bottle. This will cut down on the number of glasses to wash!
- When washing your hands, turn the water off while you lather.
- While you wait for hot water, collect the running water to water plants.
- Remember to choose eco-friendly detergents and soaps.



UManitoba as of 2016

REDUCED WATER CONSUMPTION FROM 2014/15 TO 2015/16



521,000 726,400 WATER USAGE IN KILOLITRES



HIGH VOLUME WATER BOTTLE FILLING STATIONS CAN BE FOUND ACROSS CAMPUS

CONTACTS

Office of Sustainability sustainability@umanitoba.ca 204-474-6121

GREEN OFFICE CHECKLIST & ASSESSMENT

Fill out the following checklists to assess what green initiatives your office already has in practice and what can be improved. Your Green Office facilitator will go through your checklist with you and help you fill out the assessment portion of this section. The assessment will help you evaluate your current state and set future goals for you and your office to work towards.



WASTE CHECKLIST

| Objective | Description | In practice | Not in practice | Comments |
|-------------------------------|--|-------------|-----------------|----------|
| Collect Paper | A designated paper collection area is made available where scrap paper can be reused. | | | |
| Reuse Envelopes | Envelopes are reused when possible instead of one-time use envelopes for on-campus mail. | | | |
| Use the Re-Shop | Unwanted furniture is sent to the Re-Shop. | | | |
| Ose the Re-Shop | Incoming furniture is sourced from the Re-Shop | | | |
| Use Recycling | Recycling bins are placed in all common areas where trash bins are present. | | | |
| Bins | Each work area (cubicle or office) has a desk-side paper-recycling bin. | | | |
| Use Signage | Item/material designation signage accompanies recycling bins. | | | |
| Lico Pocyclod | Paper products (i.e. envelopes, post-it notes, file folders) are at least 40% post-consumer recycled. | | | |
| Paper Products | Jse Recycled aper Products For all printing outside the office, use Forest Stewardship Council (FSC) certified paper if available. | | | |
| Share Files Electronically | The office only prints when necessary. Files are shared electronically through an "S" drive, Google docs, Dropbox, Moodle docs or other sharing options. | | | |
| ŕ | Public documents are made electronically available when possible to prevent printing. | | | |
| Print Double-sided | Printer and photocopy settings are programmed to print double sided by default. | | | |
| Post a Poster | Paper reduction posters are posted near printers. | | | _ |

| ΤΛΤΔΙ | |
|-------|--|
| IVIAL | |



SUSTAINABLE KITCHEN CHECKLIST

| Objective | Objective Description | | Not in practice | Comments |
|--|--|--|-----------------|----------|
| Use Refillable Coffee and Water Mugs Refillable water bottles and reusable coffee mugs, are used by individuals in the office area and outside office meetings. | | | | |
| Use Reusable Dishware | Cupboards have an adequate supply of reusable dishware: mugs, plates, and silverware. | | | |
| Use Reusable Takeout Containers | The office provides reusable takeout containers (or staff have their own) for use in cafeterias/restaurants. | | | |
| Create an Email Reminder | Before events and meetings an e-mail is sent to remind attendees to bring mugs or reusable cups if beverages will be served. | | | |
| Use Recyclable/ Compostable Certified Products | Recycled paper or compostable certified (EPI) products are used instead of plastic materials. Products are recycled/composted after use. | | | |
| Post a Poster | 'Reusable Mug' poster is posted in the kitchen area | | | |
| Use Bulk Containers | Individual packaging is eliminated by providing bulk containers of: sugar, salt, condiments, and beverages (including water). | | | |
| Fair Trade Food and | Fair Trade Food and The office uses fair trade coffee and/or tea. | | | |
| Kitchen Items | The office is Fair Trade Workplace Certified. | | | |
| Use Reusable Coffee Filters | The office uses a reusable coffee filter. | | | |
| Introduce Food Alternatives | Vegetarian or vegan options are available at catered meetings and events. | | | |
| Local and Sustainable Sources | Local/sustainable food is used whenever possible. at catered meetings and events. | | | |
| | The office kitchen uses environmentally friendly dishwashing and hand soap. | | | |
| Use Environmentally Friendly Soaps & Cleaners | The office kitchen uses environmentally friendly, non-toxic cleaners (i.e. glass, counter top, etc.). | | | |
| | The office makes our own environmentally friendly cleaning products. | | | |
| Use Washable Dishtowels | The office is equipped with washable dishtowels to dry dishes rather than paper towel. | | | |

| COTAL | |
|-------|--|
| | |
| VIAL | |



ENERGY CHECKLIST

| Objective | Description | In practice | Not in practice | Comments |
|----------------------------------|---|----------------|-----------------|----------|
| Utilize Power Save Mode | Computers are set up to power save mode (sleep mode) when inactive for 10 minutes. | | | |
| | Printers, photocopiers and scanners are set up to power save mode (sleep mode) when inactive for 1 hour. | | | |
| Shut Down Electronics | Electronics (computers, monitors, printers, copiers, etc.) are shutdown at the end of the day or when they are not in use. | | | |
| Use Power Strips | Power strips are used as central turn-off points to turn off work stations when inactive. | | | |
| Unplug Appliances | Appliances (i.e. microwaves, toasters and kettles) are unplugged when inactive to reduce phantom loading. | | | |
| Send Reminders | Energy saving reminders are sent out to the office to unplug when leaving the office for extended durations, long weekends and Christmas break. | | | |
| Post a Poster | Energy saving poster reminders are posted in common areas (i.e. above light switches, kitchen, break rooms). | | | |
| Reduce Solar Heating | Blinds are down in hot weather to reduce solar heating. | | | |
| Utilize Daylighting | Blinds are open in sunny weather to utilize daylighting and electric lighting is switched off. | | | |
| Use Energy Efficient Lighting | Energy efficient light bulbs (compact fluorescents, LEDs) are used whenever possible. | | | |
| Post a Poster | A poster is placed as a reminder turn off all lighting, appliances, and electronics when leaving the office. | | | |

| eaving | | |
|--------|--|--|
| TOTAL | | |



TRANSPORTATION CHECKLIST

| Objective | Description | In practice | Not in practice | Comments |
|---|---|----------------|-----------------|----------|
| Carpool, Bus, Cycle, or Walk to meetings | When meetings are off-campus, the office either carpools, uses public transportation, cycles or walks if possible | | | |
| Offer public transit | The office offers public transit pass for work-related off-campus travel. | | | |
| Include Office Directions | Meeting invitations include office directions for walking or cycling commuters. | | | |
| Provide Digital or Printed | Carpool information, biking resources, etc., are available. | | | |
| Sustainable Transportation Info and Maps | Office provides city walking/cycling maps to employees. | | | |
| Increase Employee Active Transportation Rate | At least 50% of employees choose active transportation to/from work at least once per week. | | | |
| Participate in Active Transportation Events | The office participates in active transportation events (i.e. Bike to Work Week and Commuter Challenge). | | | |
| Advertise Transportation Options | Posters for campus Winnipeg Transit route is posted in a common area. | | | |
| Bike Fleet | Sign up to host a bike in your area as part of the UM Bike Fleet (Fort Garry only). | | | |

| 11/14 | |
|-------|--|
| IVIAL | |

WATER CHECKLIST

| Objective | Description | In practice | Not in practice | Comments |
|------------------------------------|--|-------------|-----------------|----------|
| Use a Low Flow Aerator | Sink faucets use low-flow aerators. Contact physical plant to ensure faucet aerators conform to low-flow standards. | | | |
| Avoid Leaky Toilets and Faucets | Toilets and faucets are tested for leaks once a year. If leaky, report to Physical Plant. | | | |
| Use Water Efficient Devices | Water efficient devices that offer cycle and load size adjustment are purchased when buying or replacing new appliances. | | | |
| Post a Poster | Water poster reminders are posted in the office. | | | |

| TOTAL | |
|-------|--|
| IVIAL | |

FINAL SCORE

| YEAR | | Baseline | |
|----------------------------|---|----------|--|
| Waste Checklist | = | | |
| Sustainable Food Checklist | = | | |
| Energy Checklist | = | | |
| Transportation Checklist | = | | |
| Water Checklist | = | | |
| TOTAL | | | |

What now? Meet with an Office of Sustainability facilitator to review your Green Office Score, evaluate sustainable opportunities, and to set future strategies in your office. Phone: (204) 474-6121 | Email: sustainability@umanitoba.ca











OFFICE ASSESSMENT

FIll in the boxes below with your office's goals, challenges and focus areas for the next year.

| GREEN OFFICE OBJECTIVES | |
|-------------------------|--|
| | |
| | |
| | |
| | |
| | |
| GREEN OFFICE CHALLENGES | |
| | |
| | |
| | |
| | |
| | |
| | |
| PRIORITY ACTIONS | |
| | |
| | |
| | |
| | |
| | |

APPENDIX

Helpful hints & additional resources

WASTE RESOURCES

What is Terra Cycle?

Terra Cycle is an alternative waste stream based in the United States that collects hard-to-recycle items like candy wrappers and paper cups and converts them into consumer products instead of ending up in a landfill. There is a cost associated with this diversion method. Log on to TerraCycle.ca for more information.

Waste Audit

Running a waste audit is a great way to compare and examine the waste your office generates. By keeping track of waste, behaviour is more likely to change and employees become accountable for their actions. If interested, contact the Office of Sustainability to learn more.

Recycle Toner Cartridges

Contact Physical Plant Dispatch for pick up of any copier/fax machine/ink jet/ laser printer cartridges with original packaging.
Pick-ups are on Fridays.

or

Toner cartridges can be sent to Xerox free of charge by ordering an Eco Box from the company. For detailed instructions, visit **Xerox.ca**

KITCHEN RESOURCES

Terms Defined

Biodegradeable

A product that is capable of being broken down into simpler compounds by bacteria, mold, and small organisms.

Compostable

A product that is capable of rapid biodegradation in a controlled environment with sufficient air and moisture.

Renewable

A product made out of an organic natural resource that can replenish and overcome usage and consumption.

Ecolabe

An "ecolabel" identifies the overall environmental impact of a product or service during its life cycle. An example of an ecolabel is 'Energy Star'. The label is designed to assist consumers in making an educated decision on a particular product/service. For quality assurance, it is important to make sure that the label is approved by a recognized government department with certification marks such as 'CTM', 'CM', or 'CertTM'.

All Purpose Cleaner Recipe

Ingredients

- >> 1/2 teaspoon washing soda (or 2 1/2 tsp Borax)
- >> 1/2 teaspoon liquid soap
- >> 2 cups hot water
- >> 16 ounce spray bottle

Directions

Mix the ingredients in the spray bottle and shake gently. Spray, and leave the cleanser on for a few minutes before wiping off.

MAKE YOUR OWN CLEANING PRODUCTS!

Baking Soda

Baking Soda (Sodium bicarbonate or NaHCO3) is a slightly alkaline compound that can neutralize acids, and it's non-toxic enough to be used for most applications. As a paste, it makes a gentle scrubbing agent for sinks, counters, refrigerators and other surfaces. In combination with other ingredients, it can be used to remove laundry stains, and kill mold and mildew.

Washing Soda

Washing soda (Sodium carbonate Na2CO3) should not be confused with baking soda! It is a highly alkaline substance and can be slightly caustic. It is an inexpensive way to treat greasy stains and can be found in the laundry detergent section of most supermarkets.

White Vinegar

White vinegar, like the kind found in supermarkets, can kill 99% of bacteria, 82% of mold, and 80% of viruses. It cuts grease and can even remove scale on coffee makers.

Lemon Juice

Lemon juice does not have the same antibacterial properties as vinegar but can be a preferred cleaning agent if killing microbes is not your main concern (i.e. polishing furniture). The acidic fruit is great for treating dirt!

Castile Soap

Castile soap, is a natural liquid soap (not detergent) found in natural foods stores, made with natural minerals and fats. By combining distilled water with olive oil and potassium hydroxide that can be purchased at local hardware stores, you can create your own grease-cutting detergents, without the toxins and the expense of some mainstream cleaning products.

Borax

Borax (Sodium borate) is a natural mineral with strong disinfectant and deodorant capabilities, and often works when gentler substances are not enough. It can be found in the laundry detergent section of most supermarkets.

TRANSPORTATION RESOURCES

Public Transportation Tips!



- > Riding the bus not only **saves money on parking fees and gas** but also contributes to mental health by catching up on reading, conversing and relaxing.
- Download the **UM mobile app** and find out about public transport information. The app is compatible with iPhones, iPads and Androids.
- Traveling to Bannatyne campus? Hop on to the No.36 Northwest Super Express Route for a quick ride!
- The **Fort Garry Campus Shuttle Bus** is a great option for trips around campus, available from 7:30am-5:00pm every weekday of the academic year.
- > Request a **Safewalk** 24 hrs a day, 7 days a week from one university location to another, to your vehicle or bus stop on university property
- Consider the **Commuting Ambassador Training program** offered by the Green Action Centre. Sign-up for free workshops and training to increase your knowledge, answer questions, and grow your toolkit of resources regarding green transportation.
- Are bus routes difficult to access? Find a **Park and Ride** lot near you and hop on the bus in 1 of 12 designated locations. Available Monday-Friday from 6:00am-6:00pm.

Commuter Challenge (June)

The University of Manitoba proudly participates in the annual event that encourages individuals and workplaces to explore greener transportation options to and from work for personal, environmental and community health. By participating, individuals are eligible to win prizes from the Green Action Centre. Interested? Contact the Office of Sustainability and we will facilitate your registration.

Bike to Work Day (June)

Bike to Work Day is part of Bike Week Winnipeg, a week long celebration of people riding bicycles. Events are held all over the city including group rides and workshops as well as leisure and cultural events. The Office of Sustainability hosts a pit stop at the University.

Transportation and Health

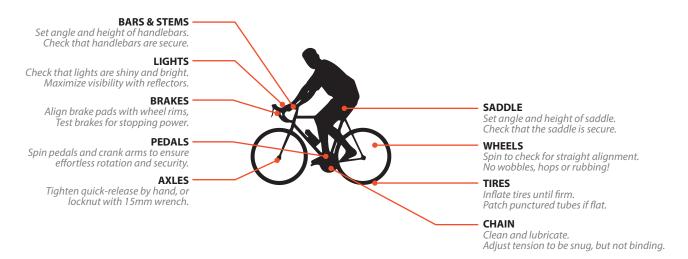
Whether it's riding the bus, cycling or walking, green transportation options optimize physical and mental health by integrating physical activity into daily activities and spending time outside.

Motorized Vehicle Tips!



- Regular maintenance increases fuel efficiency and vehicle longevity.
- Clean filters and well inflated tires can reduce fuel cost by 13%.
- > Driving at speeds above 90 km/h demands a higher rate of fuel consumption.
- When driving at a speed of more than 90 km/h, using air conditioning will increase fuel efficiency in comparison to **rolling** down a window.
- When traveling urban areas (stop-and-go traffic) rolling down the windows will save gas, since the **air compressor requires** more power then an engine at a low speed.
- > Turn off the ignition when a vehicle is idling for 10 seconds or more. Restarting a vehicle does not consume more than idling.

Bicycle Maintenance Tips



RESOURCES:

Navigo Trip Planner: www.winnipegtransit.com/en/navigo

Park and Ride Locations: winnipegtransit.com/en/rider-guide/park-and-rides/

University of Manitoba Mobile App: www.umanitoba.ca/admin/mco/mobileapps.html

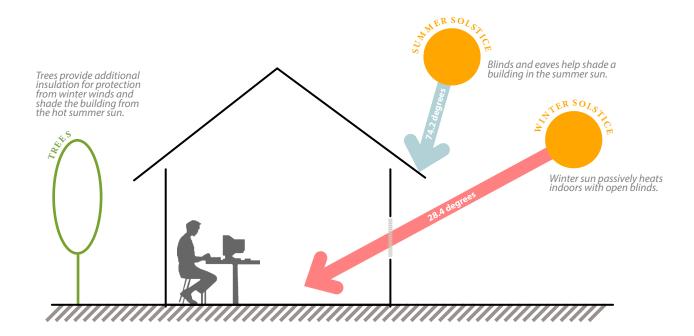
Fort Garry Campus Shuttle Bus Map: umanitoba.ca/campus/parking/shuttle/index.html

UMCycle: www.facebook.com/UMCycle-1502482629823449/

Green Action Centre: www.greenactioncentre.ca

Winnipeg Cycling Map: www.winnipegtrails.ca

ENERGY RESOURCES



Passive Heating and Cooling

Passive heating and cooling takes advantage of local and seasonal climates by maximizing energy from the sun to heat and cool buildings. Passive solar strategies are energy efficient and reduce energy consumption. What can I do? Open your blinds in the winter and close them in the summer.

Contact Physical Plant

Physical Plant can be contacted to verify appropriate temperature settings and fan speeds for heating and cooling seasons to avoid over-cooling and overheating in the office.

WATER RESOURCES

RESOURCES

The Story of Water Bottles: storyofstuff.org/movies/story-of-bottled-water/

Water Use Calculator: http://savewateramerica.com/index.htm