



# Did You Know?

This document is intended to support incumbents of the Green Office Program in their pursuit to achieve a more environmentally friendly office environment. It contains several facts, tips and tools which are described on the following pages:

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## **Air Conditioning at Western**

At Western, air-conditioning means more than just keeping a space cool in the summer and warm in the winter. It also includes maintaining a comfortable humidity condition, and providing adequate ventilation.

Ventilation is the continuous exchange of stale indoor air with new outdoor air. Minimum ventilation rates are required by the Ontario Building Code through reference to ASHRAE standard 62.1. Ventilation is a great thing as it is a critical component to providing a comfortable indoor environment. However, it comes with a cost...Energy!

Any outside air that is brought into a building must be brought to a set point temperature before it can be supplied to a space; cold outside air must be warmed up, and hot outside air must be cooled down. This is done with the building's air handling system which uses electricity for cooling, and natural gas for heating.

Occupants at Western can help to reduce the energy used by the building's air handling system through control of their room temperature set points. By setting a thermostat to the higher end of the permitted temperature range in the summer, and vice-versa in the winter, the building's air handling system will use less energy.

## **Carbon Footprint**

A carbon footprint is an indication of the impact activities have on the environment, with a specific focus on climate change. It is a measurement of all of the direct and indirect greenhouse gases one emits in their day-to-day life through electricity usage, transportation, food consumption, etc. A carbon footprint is expressed in tonnes of carbon dioxide equivalent, and is usually calculated over the time period of one year.\*

Several carbon footprint calculators are available online and can be found on websites such as [Footprint Network](#).

Source:

\* <http://timeforchange.org/what-is-a-carbon-footprint-definition>



### **Energy Star**

ENERGY STAR is the international symbol of premium energy efficiency. Products that display the ENERGY STAR symbol have been tested according to prescribed procedures and have been found to meet or exceed high energy efficiency levels without compromising performance.\*

Source:

\* <http://oee.nrcan.gc.ca/residential/business/energystar/index.cfm>

## **Environmentally Preferable Dishwashing Soap**

Many dishwashing detergents are made from non-renewable fossil fuel resources like petroleum. Plant-based, biodegradable dish soaps are environmentally preferable because they are made from renewable resources that are safer for the environment.\*

Chemicals that should be avoided within dishwashing soaps are: butyl cellosolve, triclosan, phosphates, and synthetic fragrances which are dangerous to human health and the environment. Next time you buy dishwashing soap, look for products made from grain alcohol, coconut or other plant oils, rosemary and sage.\*\*

Sources:

\*<http://www.practicallygreen.com/actions/switch-to-all-natural-dish-soap>

\*\* [http://environment.about.com/od/greenlivinginyourhome/a/laundry\\_soaps.htm](http://environment.about.com/od/greenlivinginyourhome/a/laundry_soaps.htm)



### **EPEAT**

EPEAT is the global registry for greener electronics. It targets purchasers, manufacturers, resellers and others wanting to find or promote environmentally preferable products.\*



EPEAT®-registered products meet strict environmental criteria. From fewer toxins in manufacturing to efficient operation and easier recycling, EPEAT-registered products offer a reduced environmental impact across their lifecycles



The EPEAT registry currently includes desktops, laptops/notebooks, workstations, thin clients and displays (computer monitors).\*



Source:

\*<http://www.epeat.net/>

### **Fair Trade**

Buying fair trade products can be an effective way to support producers in developing countries. The goal of fair trade is to help workers and farmers earn a decent living and secure a better life for themselves. It can contribute to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers.\*

Source:

\* [http://www.fairtrade.net/buying\\_fairtrade.0.html](http://www.fairtrade.net/buying_fairtrade.0.html)

### **Get Involved!**

Several sustainability related conferences and webinars are available online. They are a great resource for learning about principles of sustainability and how to apply sustainable practices in the workplace. Visit the [Natural Step](#) or [Academic Impressions](#) to find upcoming webinars and conferences.

A number of activities that promote a healthy planet are also available in the City of London. Visit [ecoLIVING London](#) for upcoming events.

### **Great Hall Catering**

Great Hall Catering is a division of Housing and Ancillary Services at Western. When events and meetings on campus are catered through Great Hall Catering, transportation requirements and greenhouse gas emissions can be reduced. Ordering from Great Hall Catering also helps to support the Western community.

Great Hall Catering provides organic, fair trade coffee from [The Fire Roasted Coffee Co.](#) which is a locally owned business in London. Bulk milk and cream can also be requested on an as-need basis to reduce waste from disposable milkettes.

Great Hall Catering provides china service at an additional cost. This service reduces waste from disposable plates, cups, and cutlery. When china service is not affordable, Great Hall Catering provides plastic platters that can be reused or recycled. Disposable plates and cups from Great Hall Catering are also biodegradable, but it is important to keep in mind that these items will not biodegrade unless they are composted.

Overall, Great Hall Catering provides several sustainable alternatives. If Great Hall Catering is used to cater events and meetings, make sure to inquire about local, organic food and other sustainable options.

## Lights

Compact fluorescent lights (CFLs) and light emitting diodes (LEDs) are three times and ten times more energy efficient than incandescent lights, respectively. Although both options cost more upfront, they pay-back quickly with their longer life spans and energy cost savings. Keep in mind that CFLs contain mercury and must be disposed of responsibly.\*

Source:

\*<http://www.designrecycleinc.com/led%20comp%20chart.html>

## Local Food

There are no regulations on labeling local foods as there are with organic foods; however, “local” refers to products that are grown or produced, processed, and sold within a predetermined area (usually within the province). Purchasing local foods decreases energy used for transportation and supports the local economy.\*

Source:

\*<http://organicalberta.org/about-organics/organic-definitions>

## Natural Plants at Work

According to Toronto Public Health, poor indoor air quality is linked to health problems like allergies, asthma, lung cancer and infections. Indoor potted-plants have been shown to remove air-borne pollutants including volatile organic compounds, carbon monoxide, and carbon dioxide, which all contribute to poor air quality. Aside from these benefits, plants can also reduce stress, fight toxins, and even boost creativity.\* Field experiments indicate that placing plants in the work environment increases the overall health and well-being of employees.\*\*

Sources:

\*<http://www.prevention.com/houseplants/?searchType=slide>

\*\* [http://www.landscapeontario.com/attach/1301596822.Plants\\_Enhance\\_Productivity.pdf](http://www.landscapeontario.com/attach/1301596822.Plants_Enhance_Productivity.pdf)



## Organic Food

Organic food production focuses on preserving soil vitality, biodiversity, animal welfare and the overall ecological integrity of the environment.\* Organic foodstuffs are regulated in Canada under the *Organic Products Regulations 2009*\*\* and must meet all requirements under the *Organic Production Systems General Principles and Management Standards*\*\*\*. Some of the criteria in these standards pertain to

how food is grown. For instance, it is required that organic foods are grown without toxic and persistent synthetic pesticides, herbicides, fungicides, or fertilizers. Other criteria pertain to how food is prepared. For example, organic foodstuffs must be made without artificial preservatives, colours, flavours, or chemical additives. Once a farmer or business is certified, it can use the term organic, and the Canadian Organic logo.\*

While choosing to purchase organic foods over conventional foods is a powerful way to reduce one's environmental impact, it is secondary to buying local foods. Organic food that travels long distances to market - travel known as food miles - creates pollution that sometimes outweighs the positive environmental effects of organic farming.\*\*\*\*

Sources:

\*<http://organicalberta.org/about-organics/organic-definitions>

\*\*<http://www.cog.ca/uploads/regulation.pdf>

\*\*\* <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/programme-program/normes-standards/internet/bio-org/documents/032-0310-2008-eng.pdf>

\*\*\*\* <http://recipes.howstuffworks.com/local-or-organic.htm>

## **Paper**

World consumption of paper has grown by 400% in the last 40 years; unfortunately, pulp and paper mills are some of the worst polluters to air, water and land (EPA).\*

### ***Post consumer recycled paper (PCR)***

Content of recycled fibres in paper can be as little as 10% and range to 100%.\*\*

One tonne of 100% Recycled Paper Saves\*\*\*:

- 17 trees
- 7000 gallons of water
- 4100 kwh of energy, enough to power the average home for 6 months
- 60 pounds of air pollution
- 8 cubic feet of landfill space

### ***Forest Stewardship Council (FSC):***

Milled in Canada and supported by the World Wildlife Fund and the Rainforest Alliance, FSC paper is verified, guaranteeing that it is has come from FSC managed forests and mills. FSC rejects fibres from: areas of social conflict and illegal logging, genetically modified trees, high-conservation value forests, and large scale conversions that replace native tree species with faster growing non-native species.\*\*\*\*

### ***Sustainable Forestry Initiative (SFI)***

SFI products must conform to SFI Standards which promote sustainable forest management in North America through 14 core principles that promote sustainable forest management. These principles also include measures to protect water quality, biodiversity, wildlife habitat, species at risk, and Forests with Exceptional Conservation Value. SFI products are audited by independent, third-party certification bodies to ensure they conform.\*\*\*\*\*

Sources:

\*<http://ecology.com/features/paperchase/>

\*\* [http://www.summitconnects.com/Articles\\_Columns/PDF\\_Documents/200403\\_06.pdf](http://www.summitconnects.com/Articles_Columns/PDF_Documents/200403_06.pdf)

\*\*\* [http://www.recycleworks.org/paper/paper\\_wbr.html](http://www.recycleworks.org/paper/paper_wbr.html)

\*\*\*\* <http://www.graphicservices.uwo.ca/fsc-paper>

\*\*\*\*\* <http://www.sfi-program.org/sfi-standard/sfi-standards/>



### **Purchasing Environmentally Preferable Office Supplies through Grand & Toy (Office Max)**

Grand & Toy (Office Max) is Western's preferred stationery supplier. To order environmentally preferable products, login to the Grand & Toy website using your account login information. Under Western Favourites, look for the Grand & Toy environmentally friendly logo (left) which identifies products that minimize negative environmental impacts, when you click on an item for product details.

Visit Procurement Services' Stationery Supplies webpage at <http://uwo.ca/finance/purchasing/office%20supplies.html> or contact Central Supplies at [central.supplies@uwo.ca](mailto:central.supplies@uwo.ca) or Extension 87928 if you have any questions.