

IMAGINE

a sustainable campus

Imagine Reduces Impact on the Campus Environment

Over the first two years of this unique partnership with Xerox, Imagine has been able to achieve positive results for the environment by consolidating office equipment on campus. The initial results show a 9 % reduction in total energy use, a 10 % reduction in greenhouse gases and a 23 % reduction in total weight of solid waste.

Simply, this translates into **several less vehicles on the road** and a **reduction of over 1,000 green garbage bags of waste**.

“Replacing many laser printers with fewer multifunction devices is a key part of the transition from a paper-based to a digital campus. As well, replacing these older printers reduces energy consumption and decreases the production of greenhouse gases and solid waste.” said Harold Esche, CIO at the University of Calgary.

Faculties and departments are doing their part to create a greener campus. Graduate Studies, for example, has reduced energy in their department by 35 %, greenhouse gases by 36 % and solid waste by 53 % by implementing an Imagine Office Services solution.

Look for further analysis and definitive comparisons of the positive environmental impact achieved by Imagine initiatives in the next environmental update.

How Can You Help?

We all share the responsibility to preserve the world in which we live. Here are some ways you can help:

- Increase the use of digital communication
- Redesign business processes to optimize the flow of information and documents electronically
- Make better use of fewer printing devices
- Scan instead of fax
- Eliminate fax cover and confirmation sheets
- Use the 2 sided print function
- Reuse binders, file boxes and inter-office envelopes
- Use letterhead templates on your computer
- Create electronic forms instead of pre-printed
- Reduce font size and margins
- When using paper, use recycled

Did You Know?

Through Imagine, the University has **reduced annual paper consumption from 72 million to 56 million sheets.**



“To us, sustainable development is a race with no finish line. It requires leadership that sets high expectations and clear direction, and innovation that constantly pushes the frontier of what is possible.”

– Anne M. Mulcahy
CEO, Xerox

How is Xerox Helping the U of C?

Xerox technology, products and solutions can help the University of Calgary reach their environmental sustainability goals.

- The University wants to **reduce energy** use for cost and environmental savings. Xerox ENERGY STAR offerings and office services do just that. In fact, departments can reduce energy use from their document technology by up to 50 percent when they replace single function devices with Xerox’s multifunction systems.
- The University wants to **reduce the use of paper** and use environmentally preferable papers. Xerox’s digital technology reduces paper use through easy-to-use features such as 2-sided printing, scanning and electronic document management. Xerox carefully manages its supply of paper to ensure protection of the world’s forests. We offer recycled content papers and environmentally certified papers.
- The University wants to **reduce waste**. Through Xerox’s Green World Alliance program, customers can return spent imaging supplies for reuse or recycling. For equipment at end-of-life, Xerox has a return program to responsibly manage equipment that has reached end of life. Solid ink “cartridge-free” technology further reduces waste.
- The University wants to **protect their indoor air quality**. Emissions of chemicals from Xerox products such as ozone and dust are strictly controlled and are well below regulatory requirements.
- The University wants Xerox to help them **measure** the environmental benefits of their actions so they can demonstrate the value to the campus community.

Together we are working towards a sustainable campus.

What is High Yield Paper?

Xerox High Yield Business Paper™: is a mechanical fiber paper developed by Xerox scientists. Ideal for transactional printing, it’s made through a “greener” process than standard paper, using 90 % of the tree by weight versus only 45 % in creating traditional digital printing paper. In addition, High Yield Business Paper requires less water and chemicals and is produced in a plant using hydroelectricity to partially power the pulping process.

Xerox Introduces Reusable Paper

Xerox scientists have invented a way to make prints whose images last only a day, so that the paper can be used again and again. The technology, which is still in a preliminary state, could ultimately lead to a **significant reduction in paper use**. Xerox estimates that as many as two out of every five pages printed in the office are for what it calls “daily” use, like e-mails and reference materials that have been printed for a single viewing.

Xerox Environmental Sustainability Calculator Answers "How Green is Our Campus"?

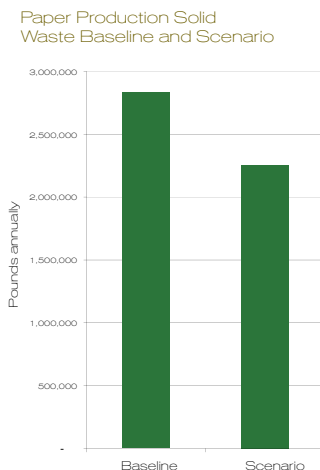
The Sustainability Calculator is the newest assessment tool available through Imagine Office Services. It evaluates the current office environment of printers, copiers and multifunction devices and then measures environmental benefits that could be achieved in terms of energy and paper use, solid waste, water, air and greenhouse gas emissions. This tool provides departments the first fact-based measurement of their environmental footprint.

How it Works

The Sustainability Calculator employs proprietary algorithms and document assessment research to deliver data about the University's entire fleet of office products, from printers to multifunction devices and copiers, regardless of the equipment supplier. The Sustainability Calculator can also provide information on the impact of printing on two sides or using different types of papers.

With the impact activities clearly identified, the University can assess and reengineer processes to truly integrate environmentally sound practices.

"The goal for the Xerox Sustainability Calculator is to point customers in the right direction, to identify opportunities where the reduced impact to the environment can be balanced with boosting the bottom line," said Patricia Calkins, vice president of Environment, Health and Safety, Xerox.



How Do We Recycle?

To date, Xerox has installed over 400 print devices that meet established environmental standards. Over 800 older, less efficient print devices have been removed from the campus and sent to eCycle Solutions, a safe, secure, audited and **environmentally friendly recycling facility** in Airdrie.

Our industry-leading recycling programs have kept thousands of used cartridges and toner bottles out of landfills.

Did You Know?

40 cases of 30% post consumer content (recycled) paper **saves 7.2 trees.**



"The cutting of trees and unsustainable management of forests leads to the loss of nearly 36 million acres of natural forests each year - an area bigger than the state of New York. "

- World Wildlife Fund

Working Together for Greater Impact

Attaining Xerox's goals for sustainability means going beyond what we can control directly. We engage our suppliers, our customers, our people and other important stakeholders to extend our reach and magnify our impact.

Our decisions resonate like ripples on water. Wise choices today will create a better environment tomorrow.

Sustainability is a "Hot Topic" in the Information Technology Industry!

Rising energy costs and increased environmental awareness are driving significant change in how IT is managed and used. It is estimated that Data Centres consume 1.5 % of all the electricity produced worldwide. The number of computers that exist requires us to consider the environmental impacts of the manufacturing process and the safe handling of the e-waste that is generated as we replace systems on a typical 3 or 4 year cycle.

It is estimated that each knowledge worker generates about 1,000 pages per month. For the University of Calgary that means on a yearly basis we print a stack of paper about 30,000 feet high!

Fortunately there are ways we can begin to address these issues. New server and cooling technologies can reduce the power consumption in the Data Centre. We can insist that our vendors use responsible manufacturing approaches, and we can deploy more efficient printing technologies or implement processes that remove the need for paper-based documents.

We can also use IT to reduce the impact of our other activities and better monitor our environmental footprint, ensuring we only provide services where and when we need them. We can use IT to collaborate across distance and time, reducing the need for travel. There are many opportunities to use IT to help create a sustainable world!

Harold Esche
CIO, University of Calgary

Xerox Nurtures the Environment

Take a look at some of Xerox's programs, products and initiatives:

- Xerox's solid ink technology used in printers and multifunction devices use cartridge-free ink sticks that generate **90 percent less waste** than laser devices.
- Intuitive "**power down**" capabilities in Xerox's solid ink printers learn the printing patterns of an office and automatically shift into a low-power mode in low use.
- Emulsion Aggregation (EA) toner requires less toner to be placed on a printed page while using **25 percent less energy** to print and manufacture than previous types of toner.
- **High Yield Business Paper™**, created using 90 % of a tree versus 45 % of a tree typically used to create standard white office paper.

- **Forest Stewardship Council** branded paper products that were manufactured using raw materials harvested from certified sources and can be tracked from harvest through distribution.
- Our **ENERGY STAR** products conserve energy and reduce associated greenhouse gas emissions.
- Toner, print cartridge and service parts **recycling**.
- 85 % of our delivery packaging is **reused or recycled**.
- 80 % of equipment trade-ins are returned for **remanufacturing**.

When combined, all of these efforts and alternatives will help our customers reduce their use of resources, and ultimately their environmental footprint.

Did You Know?

Customers worldwide returned more than 2.7 million cartridges and toner containers, and 1.3 million pounds of waste toner to Xerox last year for reuse/recycle.

Imagine

in partnership with Xerox