

green kitchener



Inside...

Learn how we are
leading by example



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Mayor's Message



It just happens that one of Kitchener's predominant colours, in our crest, logo and promotional material is green. This is particularly fitting since the environment and a "green" approach is a fundamental part of the City of Kitchener's strategic goals and a top priority for council, the corporation and our community as a whole.

In fact, my 2006 inaugural speech to begin this term of council focused heavily on the role we play as a municipality in preserving the environment. Stewardship for our natural resources, urban forests and overall "greenness" of our city remains critically important today.

Throughout the pages of this publication, you will see some of the successes we have already realized to reduce our environmental impact and improve our practices. Information on our current projects and initiatives, as well as some of our goals and targets, are also available.

Congratulations to all the staff and the many hardworking volunteers who have taken on the challenge of environmental stewardship throughout our city. The positive results of your efforts will benefit residents, visitors and future generations of Kitchener citizens!

Sincerely, Carl Zehr
Mayor, City of Kitchener

CAO's Message



Protecting and preserving the local environment has continually ranked among residents' top priorities - and the City of Kitchener has paid attention. Through numerous public consultations on a variety of environmental issues, you've continually told city council and staff that you want us to focus our plans, our efforts and our dollars on safeguarding our environment.

What you may not realize is that this way of thinking is nothing new for Kitchener. As your city staff, one of the ways that we put our commitment to community stewardship to work is through protecting our environment.

In fact, between staff's commitment to building environmental philosophy into their planning and actions, and city council's vision and guidance, we have ensured that corporate and community priorities remain in-sync, and that the city is playing its part in the charge to become a greener city.

In the following pages, you will read stories that provide a detailed look at all of the green progress we've made - and what we have on the go now.

Sincerely, Carla Ladd

CAO, City of
Kitchener

Reduce, Reuse, Recycle

Birthplace of the Blue Box

Separate the garbage from the recyclables. Place the recyclables in the Blue Box. Put the Blue Box at the curb to be collected.

This is a weekly – and extremely worthwhile – routine for many of us, as we all strive to do our parts to preserve the environment and reduce the amount of waste that ends up in our area landfills.

But have you ever wondered who came up with the novel concept of placing various items made of glass, paper, cardboard and plastic in a large blue bin?

The answer is closer than you think. It all started here, in Kitchener! It all started with Nyle Ludolph, who worked for Laidlaw Waste Systems. Ludolph believed waste could be managed better, and with the support of his employer, he worked on research that eventually led to the development of the Blue Box.

The prototype for the Blue Box was cardboard, and it was used for a pilot project in the Kitchener Auditorium neighbourhood in 1981. In September 1983, recycling was introduced citywide.

Today, approximately five million households in Ontario have access to recycling – that's 99 per cent of Ontario's population, diverting hundreds of thousands of tons of recyclables from landfills provincewide.

The Blue-Box program has also expanded in various forms throughout Canada and to countries around the world, serving more than 40 million households globally.

This is a shining example of how Kitchener – and the innovation and creativity of the residents of this community – has made a tremendous impact and shown great leadership in the environmental movement – and on the global stage.



Kitchener resident Lillian Croal uses the first Blue Box - created in Kitchener - in 1983.



Energy Management

Decades of dedication save money and planet

Energy management is at the top of the priority lists of many people these days, from home and business owners to heads of government. The City of Kitchener is no different.

...Kitchener has been managing its energy consumption and cultivating what are now considered by many as best practices for nearly three decades.

A number of city staff members dedicate their careers to finding new and better ways to conserve energy. After all, the benefits are abundant, with environmental stewardship and vast cost savings as the most significant advantages.

But few people may realize Kitchener was actually on the leading edge of the municipal movement toward improved energy practices. While other municipalities have made energy management a chief concern over the last 10 years, Kitchener has been managing its energy consumption and cultivating what are now considered by many as best practices for nearly three decades. Today, that dedication results in more than \$1.2 million annually in cost savings for the city

In 1980, protecting the environment didn't play as much of a role in the city's objectives. All of the energy initiatives the city developed were based primarily around one goal: to save money.

"It was all budget-driven at that time," said Laurier Proulx, the city's former director of facilities management, who is now construction manager of the consolidated maintenance facility project. "We were looking for ways to save money, plain and simple."

One of the first energy management projects the city initiated in 1980 involved converting a number of its facilities – including the Breithaupt centre, The Aud and the Bramm Street maintenance yards – from oil to natural-gas heating systems.

"Gas is a cleaner burning fuel than oil; it produces lower levels of greenhouse gases or GHG emissions," explained energy project manager Mario Petricevic. "And at that time, the cost of energy was going up fast – we had an energy crisis on our hands; it was less expensive to burn natural gas than oil."



Having enough foresight to gauge what the long-term savings of additional energy management initiatives could be, the city pursued other projects over the next few years including:

- Destratification fans in various facilities
- Lighting controls, such as timers on lighting systems in city-owned parking lots
- Storm windows in numerous facilities, which succeeded in retaining heat during the winter
- Solar covers on indoor and outdoor swimming pools

In 1986, the city took energy conservation at one of its swimming pools one step further, installing solar panels at the Breithaupt centre to heat the pool water.

“We are still using those (solar panels) today,” Petricevic said.

1990s By the early 1990s, the corporation had introduced new power-saving techniques, including automated building control systems to better control the heating, air conditioning and ventilation in many of its facilities; and staff members were starting to get their feet wet in the area of lighting retrofits – the installation of more energy-efficient lighting technology.

“We used – and continue to use – the most recommended technologies of the day for our lighting retrofits,” Petricevic said.

In fact, since 2003 alone, the city has retrofitted the lighting systems in more than 40 of its facilities.

“In 2007, city hall was measured to be spending \$2.24 per square foot on energy costs; it’s an incredibly efficient building,” Proulx said. “And as far as our lighting is concerned, the new lighting technology we have invested in has reduced our power usage to 75 cents per hour per floor of city hall. It doesn’t get much better than that.”

...since 2003 alone, the city has retrofitted the lighting systems in more than 40 of its facilities.

2000s Since 2000, other cutting-edge – and cost-cutting – technologies have been implemented, including variable frequency drives, which possess sensors that reduce the amount of power that’s going toward any of the city’s motors and capacitor banks, reducing inefficient power use.

These systems go hand in hand, Petricevic said.

“Motors are most efficient when running at full load and become less efficient and waste energy as the loads drop off,” he explained.

Typically, the local hydro utility will charge their customers a penalty for inefficient use of power, which means dollars out of the city’s coffers.

“We are very fortunate that our city had the foresight in 1980 to implement an energy management program,” Petricevic said. “Here we are – almost 30 years later – and we can still say with confidence that our municipality continues to be one of the leaders in the field of energy management.”



Strategic Plan for the Environment

Our guide to making every day Earth Day

It is one thing to say you're going to preserve the environment...but it's quite another to chart a course – or better yet, a comprehensive plan – and follow through with action.

That's exactly what the City of Kitchener has done with its strategic plan for the environment – a living document, last updated in 2008, which guides the development of its current and future environmental initiatives, and identifies objectives and priorities for action in key areas of focus. In fact, Kitchener is one of the first municipalities in the province to have a comprehensive environmental plan of this kind.

"Our main objective through our strategic plan for the environment is to ensure our environment is ecologically sound and supportive of the health, safety and well-being of our residents," said Barbara Steiner, a senior environmental planner with the City of Kitchener, who helped bring the updated plan to life.

...one of the first municipalities in the province to have a comprehensive environmental plan of this kind.

Kitchener residents have made it clear through years of surveys, public workshops and consultations, including two Environics surveys and the Who-are-you,-Kitchener? campaign, that they believe the environment should be an important factor in every decision the city makes in planning Kitchener's future.

A number of priority areas have been incorporated into the updated plan and are the focus of the development of environmental initiatives and priorities for the city, as well as the community at large. Those areas include natural heritage systems and recreational amenity areas, water resources, air quality, land resource and growth management, energy systems, resource consumption and waste management, and environmental education and public awareness.

"We continually aim to identify and implement policies and practices which reflect community values and impact positively on our local environment," Steiner said.

For more information or to read the city's strategic plan for the environment, please visit www.kitchener.ca



Kitchener's Strategic Plan for the Environment guides the development of the city's current and future environmental initiatives relating to, among other areas, environmental education and public awareness.



Major Strategies

Walking the green talk

Not only has the City of Kitchener developed an entire strategy around preserving and protecting the local environment, in the form of its strategic plan for the environment; the city has extended its green commitment to all of its other major strategies too.

By way of numerous public consultations, meetings and workshops in recent years, residents made their collective voice heard, and the city has answered the call, building the community's priorities into every major strategy thereafter.

City of Kitchener Strategic Plan

Topping the list is Kitchener's strategic plan – a comprehensive, 20-year blueprint for the future that guides and aligns the city's work and spending with our community's six key priorities for the future.

Not surprisingly, Kitchener citizens care deeply about the environment and they have identified its preservation and protection as one of six key priorities for the future. Through extensive community consultation in recent years, thousands of citizens also helped to develop their vision for the Kitchener's environment.

“Our shared vision is for Kitchener to be a community that focuses significant energy and resources on becoming more environmentally friendly through investments in things like bike trails, improved transit systems, tougher environmental bylaws and stricter growth management policies that limit sprawl.”

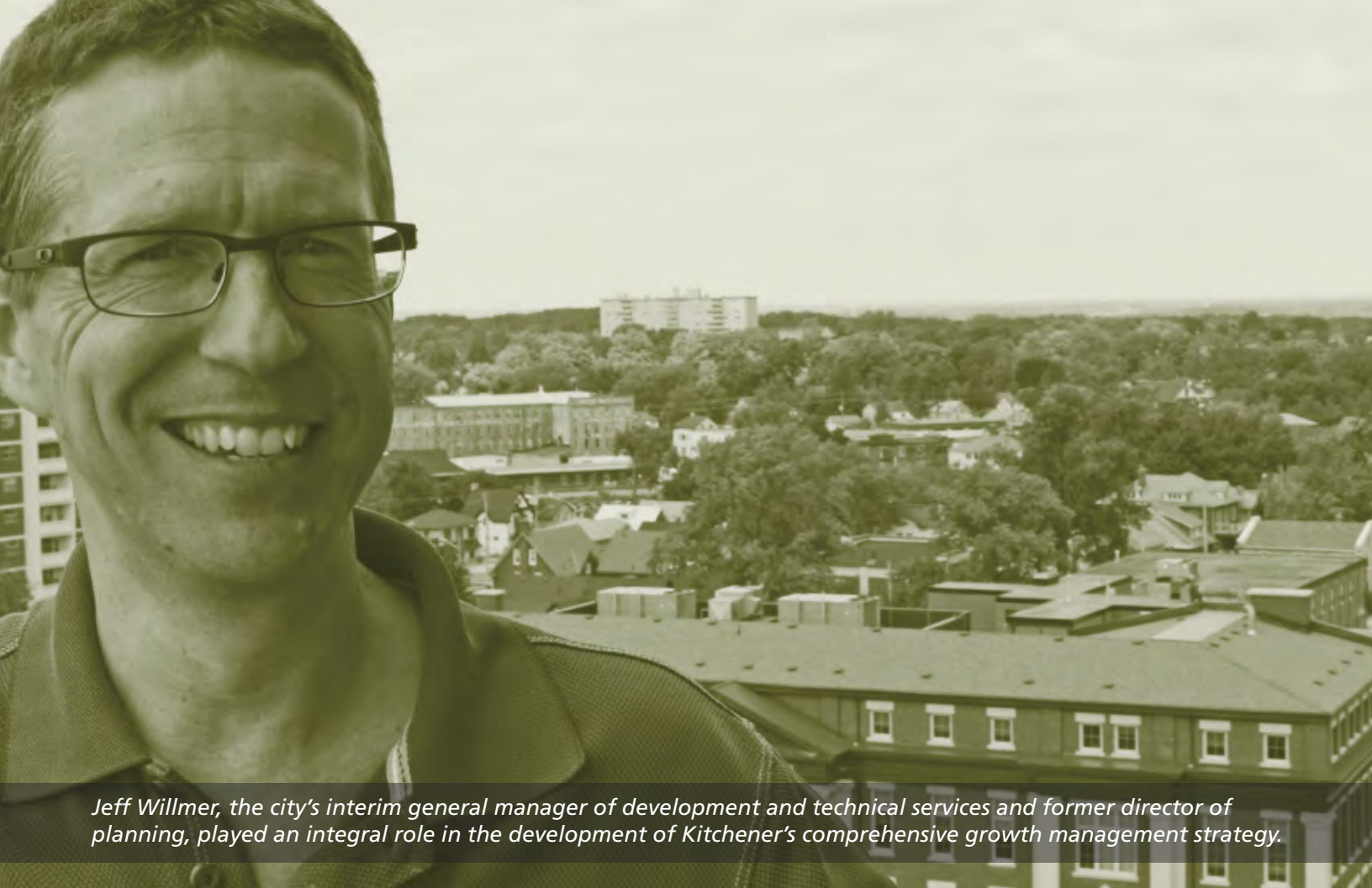
Today, the strategic plan's directions put action behind the vision and priorities. The plan calls for embracing the community's commitment to ensuring more sustainable development in the future – development that balances the needs of a growing city with the need to protect our natural environment. It also ensures that environmental considerations are important factors in every decision that the city makes – and that we continue to provide leadership in conserving, protecting and improving the environment for the benefit of all Kitchener residents.

Kitchener Growth Management Strategy

Public input over the course of more than a year helped the city identify six main goals at the heart of this comprehensive strategy – with two being to enhance the city's valued natural and cultural heritage resources, and ensure greater transportation choice for residents.

“Conservation of our natural environment is vital to the quality of life of the Kitchener of tomorrow. Additionally, the conservation of historical resources is needed to contribute to understanding and enhancing our cultural identity,” said Brandon Sloan, the city's interim manager of long-range planning. “The city is engaged in significant efforts to enhance both our natural and cultural heritage. As we grow, the linkage between these elements and the location and design of new growth is ever more important”.

Under the goal of enhancing the city's valued natural and cultural heritage resources, the city aims to, among many things, conserve significant natural heritage features, systems and networks; provide local solutions to



Jeff Willmer, the city's interim general manager of development and technical services and former director of planning, played an integral role in the development of Kitchener's comprehensive growth management strategy.

help improve air and water quality; implement energy conservation measures for the municipality and promote the benefits to the community; and ensure new development limits its impact on water/wastewater systems.

In ensuring greater transportation choices for residents, the city aims to, among many things, focus intensification to support the central transit corridor/rapid-transit system; and incorporate cycling planning and infrastructure for destination travel.

Doing so is also a significant draw for the critical talent needed to support Kitchener's new economy.

Economic development strategy

Six years ago, the city created its cutting-edge \$110-million economic development investment fund (EDIF) which immediately began to stimulate private-sector investment in Kitchener's downtown.

Much has been said about the incredible economic success of the fund, but what many people don't realize is that this massive downtown revitalization has also been good for the environment.

As a direct result of EDIF, many vacant buildings and properties are being cleaned up and restored to good use. For example, the fund has led to the clean up of 8.8 acres of formerly contaminated downtown lands. In their place, some new developments – featuring hundreds of new residential units and new commercial and work spaces – have already come to life, while several others are currently still being developed.

Naturally, bringing more people downtown to live, work and play, facilitates greener lifestyles where the close proximity of amenities sees people walking, biking, taking public transit and meeting friends or enjoying art in places which were once covered by abandoned industrial buildings.



Air Quality Report

Environment committee has us breathing easier

Kitchener's environment committee was challenged by city council more than four years ago, to develop a long-term comprehensive plan for local air quality. The group – made up of city staff and residents from across the community – put their heads together and created the original Air Quality in Kitchener report in 2006.

The report contained 50 recommended actions to improve Kitchener's air quality to be implemented by all departments within the city's administration as well as by the citizens of the city of Kitchener.

Every year since, five recommendations from the plan have been identified as “best bets” for the coming year – objectives for the city and the community to work on together.

Recently, an updated version of the plan – entitled Air Quality in Kitchener – 2010 was endorsed by city council.

The latest version builds on the 50 recommended actions that were included in the 2006 report, and also recommends some new ones – all aimed at helping improve local air quality.

The plan proposes both short-term and long-term recommended actions. Some actions can be undertaken now, such as continuing to encourage energy and water conservation, improving public awareness and knowledge of air quality issues and providing businesses with the tools and incentives to make more energy-efficient decisions. Other initiatives require effort over a number of years, such as investing in more energy-efficient technologies.

The overall objectives of the 2010 Air Quality in Kitchener report are:

- To provide a vision of a responsible, innovative, healthy and energy-efficient community.
- To strike the balance needed to enable our local economy to flourish even as we reduce our polluting emissions.
- To advance these goals without placing an unreasonable burden on the city in an attempt to make the successful transition to a less polluting, healthy community.



Cycling Master Plan

Shifting gears to become bike friendly

Cycling is fast becoming a choice mode of both exercise and transportation for many in our community. To address this growing trend and build on its benefits, the City of Kitchener has developed a new cycling master plan.

The master plan is designed to guide city council, staff, the cycling advisory committee and residents on the development of cycling policy, programs and infrastructure over the next two decades.

The plan, which city council approved in August 2010, targets the development of a network of approximately 114 kilometres of bikeway over the next 20 years.

“It’s difficult to articulate the number of benefits cycling provides as active transportation – from personal health and environmental preservation, to reducing demand on roadways and other related resources and infrastructure,” said Ron Schirm, the city’s supervisor of crossing guards who helped develop the plan. “Ultimately, having a plan like this will increase the quality of life of our residents.”

The cycling master plan has been in the making for a number of years, as a follow-up to a bikeway study that was conducted in 1998.

Since then a cycling advisory committee, made up of city staff and residents, has been established, and co-funding through the Ministry of Transportation has enabled the city to pursue the development of a cycling master plan at a considerable cost savings.

The plan identifies immediate and shorter-term needs and goals, as well as policy and direction, to assist staff in making significant improvements in bicycle infrastructure and programming; and promote cycling not only for recreation, but as a viable transportation alternative over the long term.

“Our goal is to provide an environment that addresses the needs of not only those who already cycle consistently, but the majority of people who would like to cycle but may lack comfort or a feeling of safety doing so. This is a barrier our master plan will hopefully allow us to overcome.”

Kitchener is en route to becoming a more bicycle-friendly city.



Facility operator technician James Allen is one of the many staff responsible to overseeing operations at Activa Sportsplex – the city's premier facility designed and built to LEED gold standard. Some of the features within the facility that Allen and others help maintain include a green roof, an environmental heat-recovery system and a rain-collection system.

Building a greener community from the ground up

You may have heard through the news in the last couple of years that the City of Kitchener has built or plans to build new facilities, including a sportsplex, community centre, fire hall and a consolidated maintenance facility. While all of these buildings will enhance quality of life for residents across the community – did you know they will serve to protect the environment too?

These facilities are or will be built to Leadership in Energy and Environmental Design (LEED) standard, or contain LEED features, enabling them to operate in a more environmentally friendly manner.

More than two years ago, Kitchener city council made a bold statement on putting the environment first, setting a new standard for future construction of new city-owned buildings. Since that day, all new municipal buildings larger than approximately 5,330 square feet are to be built to LEED gold standard – a direction that has put Kitchener in a very select group of Canadian communities for setting such high environmental objectives for its facilities.

In addition to the LEED policy for new buildings, similar sustainable design and construction standards for renovation and retrofit projects in existing city facilities will be implemented on a case-by-case basis.

LEED is the most recognized and accepted North American standard for rating the environmental friendliness of the design, construction, operation and sustainability of buildings. The benefits of building to LEED standard include cost savings; as well a reduction in energy usage, which supports council's dedication to environmental sustainability.

In addition to significantly supporting the environment, building new city facilities to LEED Gold standard also results in operating-cost savings; and a lesser burden on the city's existing infrastructure – as well as the demand for large-scale infrastructure such as waste transfer facilities, and water supply and treatment infrastructure and their related development and operational costs.

"Having a LEED Gold standard for all new facilities of a certain size certainly raises the bar and sets us apart from other municipalities of similar size – and even larger," said Mario Petricevic, the city's energy management project manager. "It just goes to show once again how devoted city council – and city staff -- are to protecting, preserving and celebrating the environment, and saving taxpayers significant long-term operational costs."

"...Kitchener has been heading in this direction for many years now. Our list of green or 'greener' facilities speaks for itself."



A number of city facilities -- including Rockway and Doon Valley golf courses, which are managed by Gary Hastings (right) and supervised by Todd Doering -- have been either built, enhanced, renovated or operated with the environment in mind.

Rockway Golf Course



While Rockway Golf Course was built before LEED came into effect, this city facility has received an honour just as prestigious. Rockway has been certified as an Audubon Co-operative Sanctuary – a prestigious environmental honour that recognizes the course’s outstanding efforts to protect the ecological systems on its property.

This mark of distinction – presented by the Audubon Cooperative Sanctuary System (ACSS), a program administered by Audubon International – made Rockway only the 36th golf course in Ontario to receive this highly respected certification, and only the 679th course in the world.

Attention was especially given to six strategic areas of environmental management required for certification. Those areas include environmental planning; wildlife and habitat management; water conservation; water quality; chemical use reduction and safety; and outreach and education.

Doon Valley Golf Course



After an extensive renovation that included the construction of new holes, Doon Valley golf course opened its new 18-hole course in 2010, along with a nine-hole course. In total, 10 new holes were constructed at Doon Valley and two existing holes were reconstructed resulting in a 27-hole course.

The eight new holes situated on the Cambridge side of Highway 401 feature a variety of water hazards that blend in to the natural environment. Constructed with a minimal impact on the environment, the holes were designed to ensure maximum protection of all the significant natural and heritage features there.

The new course incorporates expansive wetland areas, some of which were created during construction. Interpretive signs drawing both caution and attention to the bird and turtle nesting sites, significant wildlife habitats and special plant communities will be installed.



Activa Sportsplex

Thousands of families have made use of the Activa Sportsplex since its grand opening in 2008. Featuring two Olympic-sized ice pads, a walking track, a boxing facility and a number of meeting rooms, the sportsplex has filled a great need for a recreational facility of its kind in Kitchener's south end.

Even more, Activa Sportsplex includes a number of environmentally friendly features and functions, which has enabled the facility to secure a LEED Gold ranking -- the second highest rank a building can attain.

Examples include of the building's environmentally friendly features include:

- A green roof.
- Recycled rubber flooring and recycled plastic benches.
- A heat-recovery system that reuses the heat from the ice refrigeration system to provide heat to other areas of the complex.
- The use of light colours combined with neutral lighting allowed for a reduction in electrical requirements for lighting.
- Landscaping includes drought tolerant material, native plant species and low maintenance grass.
- The latest and most energy efficient lighting technology.
- A rain collection system that reuses water collected from the roof for use in toilets and for resurfacing the ice pads.

The environmental components of this facility are estimated to save the city an estimated \$125,000 per year in operating costs.

Fire Hall 7

Kitchener's newest fire station, known as #7, located on Huron Road in the city's south end, also boasts a number of LEED components, equivalent to LEED silver standards.

Environmental features included in the design of the building, which also opened in 2008, are:

- A heat island effect roof.
- Light pollution reduction measures.
- Innovation in cistern design.

During the facility's construction, a number of green waste-management methods were also implemented.



Consolidated maintenance facility

Infrastructure stimulus funding from the federal and provincial governments, in the amount of more than \$9 million, has allowed the city to design and build its new consolidated maintenance facility (CMF), located on Goodrich Drive, to LEED silver standard.

Among the LEED components that have been included in the design and construction of the CMF are:

- A geothermal heat recovery system.
- Low-flow fixtures.
- Expanded drainage.
- Improved lighting.
- Building system controls.

The facility is scheduled to open next spring.

CMF solar roof

Kitchener will be installing a 500-kW/h solar-energy system on the roof of the new consolidated maintenance facility (CMF).

The city will own, operate and maintain the solar-energy system – consisting of 2,500 photovoltaic solar panels, with each producing 200 W of power – and sell all generated power to the Ontario Power Authority (OPA) under a 20-year contract.

In addition to the wide range of environmental benefits owning and operating an alternative power provider will bring, doing so will also diversify the city's electricity supply through the application of leading-edge energy-generation technology – in a cost effective manner.

Kingsdale community centre

Another soon-to-be new addition to the city's list of green facilities is the brand-new Kingsdale community centre – slated to open next spring.

The city is attempting to achieve LEED gold standard in the construction of the centre. Some of the green components that have been included in the design and construction are:

- Alternative transportation accommodations (i.e. bicycle storage and change rooms)
- Heat island effect on roof
- Light pollution reduction
- Water-efficient landscaping; no or limited watering required
- Water-use reduction (i.e. low-flush toilets)
- Construction waste management
- Recycled content of building materials
- Low VOC emitting materials

The facility is scheduled to open next spring.



Energy management project manager Mario Petricevic took a leading role in the planning and construction of Kitchener's first facility to be built to LEED gold standard, Activa Sportsplex.



LEAF Program

Spurring grassroots action through smart investments

It has been more than three years since Kitchener city council underscored the city's commitment to protecting and conserving the environment through the creation of the \$5-million Local Environmental Action Fund (LEAF). Since then, and following two successful LEAF grant application processes, a variety of green projects have been completed – or are in the midst of taking place, as a result of this municipal stimulus program, as well as a resolute commitment from residents across the community to make Kitchener a cleaner, greener place to live.



“We have approved some very creative, innovative funding proposals – projects that have taken a unique perspective on celebrating the local environment.”

“We have reviewed and, in many cases, approved some very creative, innovative funding proposals – projects that have taken a unique perspective on celebrating the local environment,” said Barbara Steiner, senior environmental planner and administrator of the LEAF program.

The goal of Kitchener's LEAF program is to reduce or repair our city's impact on the environment; and to enhance the community's ability to live sustainably into the future.

Projects or programs funded by LEAF must:

- Contribute to the reduction of greenhouse gases produced by the city's own operations and/or the community at large.
- Increase public awareness of the environmental impact of the actions of municipal governments, communities, businesses, families and/or individuals, and promote changed behaviour at this local level.

- Provide a long-term, sustainable benefit to Kitchener.

Funded projects and programs must also accomplish one or more of the following:

- Contribute to enhanced local air quality.
- Result in reduced energy use, increased energy efficiency, increased use of alternative energy sources.
- Increase city ownership of significant natural lands where other techniques for acquisition have not succeeded.
- Provide capital enhancements to city-owned and city-managed natural lands over and above what would occur as part of normal city procedures.
- Facilitate capital improvements that will make existing communities more complete and residents of those communities less dependent on the automobile.

For more information about how to apply, visit www.kitchener.ca/leaf.



Trinity Village retirement community, located on Kingsway Drive in the Fairview neighbourhood, received \$31,075 through the city's Local Environmental Action Fund (LEAF) program to construct a green roof atop its Gathering Place.

Past LEAF grant recipients

- Sandhills public school; GREEN – Sandhills' greening project; \$2,000.
- King Edward public school; Schoolground greening and playground improvement; \$3,210.
- Kitchener Master Gardeners; Pesticide-free workshops; \$4,244.
- Southridge public school; Schoolground greening; \$4,680.
- Community Renewable Energy Waterloo (CREW); Power Saving Network; \$5,000
- Waterloo Stewardship Network; Classroom trees from seed; \$6,500.
- Grand River Conservation Authority; Restoration of Pioneer Tower floodplain forest; \$8,500.
- Waterloo Region District School Board; Huron Natural Area interpreter; \$12,000.
- Waterloo-Wellington Children's Groundwater Festival; Only Tap Water Delivers program; \$12,900.
- Emmanuel Bible College; Forest restoration, rain gardens, bio-swales; \$18,740.
- J.W. Gerth public school; Schoolyard greening; \$20,000.
- Waterloo Stewardship Network; School stewardship program; \$20,000.
- Grand River CarShare; Public awareness and social marketing campaign to promote and increase car sharing in Kitchener; \$25,000.
- Trinity Village; Green roof addition; \$31,075.
- Sustainable Waterloo; The CO2 Initiative: a carbon-reduction project for the high-tech sector; \$35,000.
- World Wide Opportunities for Women; Home Energy Saver Project: A Green Multicultural Initiative; \$49,900.
- Waterloo Region Green Solutions (Residential Energy Efficiency Project); REEP House; \$60,000.
- City of Kitchener Green City committee; City hall waste reduction initiative; (up to) \$74,700.
- City of Kitchener community services department, Westmount neighbourhood association, Friends of Laurentian Wetland, W.T. Townshend public school and Kitchener-Waterloo Field Naturalists; Master plan and applied pilot projects for sustainable urban forest in Kitchener; \$37,416 for Westmount neighbourhood association's street trees and \$37,716 for Laurentian wetland.
- Kitchener-Waterloo Collegiate and Vocational School; Green Industries Education Centre; \$220,000.
- Community Renewable Energy Waterloo (CREW) with city's building division; Kitchener green housing incentive program; \$500,000.



LEAF Fund Recipient Spotlight

Grant recipients unearth creativity

A green roof on a new addition at Trinity Village retirement community would never have been possible without a Local Environmental Action Fund (LEAF) grant from the City of Kitchener.

“The project wouldn’t have happened without the grant. We wouldn’t have been able to afford it,” said Caroline Verleyen, the president and chief executive officer of Lutheran Homes Kitchener-Waterloo.

Trinity Village was one of 13 successful applications to receive a LEAF grant in 2009. The \$5 million fund provides funding for projects that help make Kitchener more sustainable through the reduction of greenhouse gases; energy conservation and promoting environmental awareness.

“We were building a new 3,500-square-foot addition to our care centre, and we wanted this space to be green,” said Verleyen, adding the unique roofing system they used, is comprised of three layers of mesh; a moisture-absorbing batting; covered with mesh, and planted with sedum.

The grant also required Trinity Village to promote education and awareness of the roof, and the environmental benefits.

“When we have open houses, we have a sign that we put in the lobby inviting people up to the third floor to observe the green roof,” said Verleyen.

In 2009, World Wide Opportunities for Women (WWOW) also received a LEAF grant, to conduct 200 green home energy audits for new Canadians over the next year. WWOW will also conduct workshops and displays at events, as part of its Home Energy Saver Program (HESP).

“The original idea for the HESP program goes back over 10 years ago when through our relationships with new Canadian families, particularly those coming from tropical climates,” said Sandy Hoy, who sits on the WWOW board. “We found that many families were not familiar with Canadian heating systems and had high energy use and bills.”

WWOW will identify potential homes for audit through outreach to ethnic communities through community leaders and groups, displays and brochures at community events, and presentations to ESL classes and neighbourhood community centres where there is a high number of newcomers.

For both Hoy and Verleyen, the commitment to environmental initiatives is much deeper than a single project.

“We believe the environmental movement should be an ‘everybody movement,’ including women, men and children from diverse backgrounds,” said Hoy.

Verleyen agrees. “We have a green team at Trinity Village who keep environmental issues in mind. The green roof project reinforced our whole philosophy to reduce our footprint,” she said. “It is something that delivers a consistent message to our staff and residents about our priorities.”

For more information on LEAF, visit www.kitchener.ca/leaf.



LEAF Fund Recipient Spotlight

Earth warriors show conservation is contagious

The City of Kitchener not only talks the talk when it comes to preserving the environment and operating in a more sustainable manner; staff also walk the talk, in the form of the Green City committee.

This highly motivated group of city staff, who came together in mid 2007 to develop ways for the organization to be “greener,” has introduced a wide variety of innovative concepts to help protect our planet.

The first initiative the group undertook in 2008 was a waste audit to compare how much waste, recycling materials and compostable materials go to the landfill from city hall.

Based on waste audit results gathered, the total annual waste generated was estimated to be 66,769 kg, of which approximately 53.80 per cent (35,923 kg/yr) was diverted through recycling, while 46.20 per cent (30,846 kg/yr) is landfilled.

With financial support provided through the city’s Local Environmental Action Fund (LEAF) program, Green City decided to face the results of the audit head-on by undertaking a city-hall-wide waste reduction initiative.

The committee used the funding to purchase 28 durable, easy-to-clean receptacles – made from 100 per cent recycled materials – to be placed around city hall. In doing so, all individual garbage cans that many staff had at their desks or in their office areas were removed.

As of January 2010, city hall staff had new recycling, garbage and compost options for disposing of waste. Instead of throwing banana peels, sandwich crusts or tissues in the garbage, staff were now composting them.

“For some people, using the new receptacles was definitely a shift in their way of thinking; but overall, the program has been received very well. Most people are eager to do their part,” said Denise Keelan, chair of the Green City committee. “Having to walk to the new receptacles is not only a greener thing to do, it’s also a bit of activity for people and a nice, momentary break from what they’re doing.”

Green City plans to conduct another waste audit this fall to determine how much of a difference has been made since the receptacles were installed.

In the meantime, the group continues to encourage staff across the corporation to be mindful of the habits, reminding them to look at their work routines through a greener lens.

“For example, if city employees printed just one less page of paper a day for a year, we would save nearly 270,000 pieces of paper – more than 32 trees worth – at a cost savings of approximately \$2,160,” Keelan said.



CEIG Program

A little assistance can go a long way

Two heads are always better than one; and when it comes to protecting the environment, the more the merrier. The City of Kitchener knows this is true. That's why the municipality encourages residents and organizations across the city to step up and take the lead on some innovative and extremely beneficial projects. The city may even help fund them, through its community environment improvement grant (CEIG) program.

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"The program was created to foster a sense of environmental stewardship throughout our city," said Carrie Musselman, a senior environmental planner with the city, "and it has certainly done so with flying colours. To date, more than 25 green projects have come to life as a result of the CEIG program."

CEIG's objectives are to:

- Increase awareness of how we view and treat air, water and land resources, and encourage solutions to improve the quality of these resources.
- Promote healthy lifestyle practices.
- Foster a sense of environmental stewardship.
- Promote and initiate the development of short term, intermediate and long-term community-based environmental programs.
- Support environmental research.
- CEIG assists organizations, associations or groups working towards building a cleaner, healthier more environmentally sustainable Kitchener.

Visit www.kitchener.ca for more information.



Carrie Musselman, a senior environmental planner with the city, has great passion for the environment. As the administrator of funds through the community environmental improvement grant (CEIG) program, she looks for similar passion in community groups who apply for assistance.

CEIG grant recipients

- Sustainable Cycles - Mothers of the Planet Earth; Mothers of the Planet Earth; \$500.
- Kitchener-Waterloo Urban Harvester; Kitchener-Waterloo Urban Harvester; \$650.
- Olde Berlin Towne Neighbourhood Association; Boulevards in Bloom in Olde Berlin Towne; \$1,000.
- St. Mary's Catholic Church; Mary's Garden; \$1,500.
- St. Teresa Catholic school; Outdoor classroom - Phase 4; \$1,500.
- Forest Heights Community Association; "...a good place for roots..."; \$1,600.
- Kitchener Master Gardeners; Seedy Saturday; \$1,600.
- Our Place Family Resource and Early Years Centre; Our Outdoor Learning Environment; \$1,900.
- Courtland Shelley Community Centre; Courtland Shelley recycling project; \$2,000.
- Opportunities Waterloo Region; Community Garden Fest; \$2,000.
- Kitchener-Waterloo Collegiate and Vocational School; KCI park restoration; \$2,800
- The Green Rocket; The Green Rocket Local: Kitchener; \$2,800
- Queen Elizabeth public school; Creating an outdoor learning environment; \$3,000
- Community Renewable Energy Waterloo (CREW); The Power Saving Network; \$3,000
- Community Renewable Energy Waterloo (CREW); CREW Website / Portal Project; \$3,000



CEIG Grant Recipient Spotlight

Funding allows greenagers to get growing

Mary's Garden

"With help from the City of Kitchener's Community Environment Improvement Grant, TD Canada Trust Friends of the Environment and parishioner donations, a native garden was installed at the front of St. Mary's Church, along Young Street," said Patrick Rittinger, a member of St. Mary's congregation who led the garden project.

"Two large areas of lawn were replaced with native trees, shrubs, grasses, and perennials. This has reduced the need for watering and lawn mowing. No more gas lawn mowers needed here!"

A small group of parishioners did all of the work, but many donated perennials divided from their own garden plants.

"There has been a dramatic increase in insects, butterflies, and songbirds in this area - the evenings are especially filled with bird songs," Rittinger said.

A plaque, as well as a seating area were also installed in the garden. The seating area is used by parishioners for prayer, meditation and socializing, as well as children who play in and around the seats following Sunday masses.

"People have even started taking wedding photos in the garden," Rittinger said. "Employees from the nearby school board offices, St. Louis students and downtown workers can often be found sitting in the garden, enjoying themselves. It provides an oasis in the downtown core."

Rittinger said, the garden has restored habitat and attracted wildlife, as well as people, to an area that was previously unused.

The congregation is now looking to extend its native gardens around to the side of the church facing Duke Street in the coming year.

"The Catholic attitude toward nature is stewardship, and we wanted our church to exemplify this attitude and our commitment to caring for creation to all who pass by and I think we have accomplished this with the city's help," Rittinger said.



Members of St. Mary's Church congregation were awarded \$1,500 to create Mary's Garden - a native garden located in front of the Young Street church.

Community Garden Fest

Community Garden Fest, which took place in the spring of 2009, brought community gardeners and other residents together for fun, family friendly activities, as well as some informative workshops to help people fine-tune their gardening skills, as well as informing them of the benefits that community gardens offer, such as greater food access, recreational opportunities and enhanced community safety.

The event, funded by a CEIG grant, was extremely well attended, according to Carol Popovic, of the Region of Waterloo; and the results are still being felt in neighbourhoods across the city – and the region as a whole.

“Prior to Community Garden Fest, many of our community gardens were having difficulty attracting gardeners and were declining,” Popovic said. “Now, all of our gardens are full to capacity,” she said. “We now have waiting lists at many of the gardens region-wide and we have several people wanting to start new community gardens in their neighbourhoods. We also had new people join our network.

“All in all, when you consider the role the CEIG program played in the success of Community Garden Fest, I think this is a classic example of how partnerships can boost a community.”



ISO: 14001 Green Standard

If it moves - it's green!

When you see a City of Kitchener vehicle around the region – cars, trucks, snow plows, street sweepers, even the machinery used to keep the parks and playgrounds beautiful – you may be interested to know that it's held and maintained to among the highest of environmental standards.

Kitchener's fleet operations have maintained an environmental management system registered to the ISO 14001 standard since 2008 – a practice that keeps the city on the leading edge of municipalities in the province in terms of environmental due diligence.



A practice that keeps the city on the leading edge of municipalities in the province in terms of environmental due diligence.

The ISO 14001 registration – recognized as an international best practice – means that the 1,199 vehicles and equipment utilized in regular city operations, fire equipment, pumping station equipment and equipment used at the city's golf courses, is repaired and maintained to a higher environmental standard.

Annual third-party audits of Kitchener's fleet operations ensure the framework of the environmental management system is maintained, is effective, and is a formal verification of the city's dedicated environmental practices.

"I am extremely proud of the staff in the various operating areas involved in the ISO 14001 registration for the great diligence they've shown to ensure we initially met this extraordinarily high environmental standard, as well as all of the effort they've put in to see that we maintain the standard," said Don Miller, the city's director of fleet operations.

Maintaining its fleet to such high environmental standards allows the city to demonstrate leadership through sustainable initiatives, remain accountable for environmental performance, and practice stewardship by continually reducing environmental impacts.

The city is now in the process of investigating other operating areas within the corporation that could also potentially benefit from the same environmental management system principles and practices.



Don Miller, director of fleet operations, and his staff worked tirelessly to achieve – and now maintain – every city vehicle and piece of equipment to the highest environmental standards.



Green Housing Incentive Program

Build green! Buy green! Save green!

The old adage, “If you build it, they will come,” is one of the beliefs underpinning a new financial incentive program the City of Kitchener, in partnership with Community Renewable Energy Waterloo (CREW), is making available to homebuilders, encouraging them to build “green” homes to a Leadership in Energy and Environmental Design (LEED) standard.

Doing so not only spells good things for builders, in the form of rebates for every green home they build; but purchasing green homes is also proven to result in long-term cost savings for homebuyers, who will enjoy reduced energy and water bills, as well as health benefits through improved indoor air quality, as a result of the green technology used to build their homes.

Funding for the incentive program, in the amount of \$500,000 over three years – from 2010 through 2012 – was approved by Kitchener city council as part of a Local Environmental Action Fund (LEAF) application made by CREW, in conjunction with the city's building division.

Under the terms of the program, residential dwellings built and certified to LEED standards will receive a financial incentive in the form of a grant. The amount of the grant is incrementally dependent on the LEED performance level. For example, a single-detached dwelling built to a LEED platinum standard would receive a larger grant than a single detached dwelling built to the base LEED certification standard.

Building to LEED standard takes the current ENERGYSTAR standard, required for all new building, to the next level – incorporating greater requirements in more environmental areas, including energy, water and air quality.

“Building new homes to LEED standards will reduce Kitchener’s carbon footprint by approximately 3,600 tonnes of greenhouse gas emissions over three years; provide substantial water and landfill savings; and provide human health benefits, including improved indoor and outdoor air quality through the reduction of fossil-fuel use,” said Craig Waller, of the city’s building division.

He also noted that green homeowners enjoy lower energy and water bills; reduced greenhouse gas emissions; less exposure to mould, mildew and other indoor toxins; and improved quality of life.

And the good news for homebuilders is the grant-application process can be summarized in two easy steps. The builder applies to the city for grant funding before building a new home. The city will then review the application; and when third-party verification of LEED is received, the city will provide the builder with the rebate he/she is entitled to.

“Our goal was to make the application as easy and as seamless as possible,” Waller said. “We anticipate a great deal of interest from homebuilders and homebuyers in our community – and outside of our community. That will spell great things for our local economy – as well as the environment.”



Kitchener Utilities

Greener ways to run your home



Not only has Kitchener Utilities provided the community with cost-effective, quality natural gas and water services for more than 100 years. This longtime utility provider is also committed to offering you green options, so that you can conserve money by conserving energy.

Tankless water heaters

According to Natural Resources Canada, water heating accounts for about 20 per cent of your home's total energy costs.

When you rent a natural-gas tankless water heater from Kitchener Utilities, if you don't increase your hot water consumption and you are currently using a conventional natural gas water heater, you can save up to 25 per cent on your natural-gas usage for hot water heating with the increased energy efficiency.

Tankless water heaters heat your water on demand, so you never run out of hot water. They're energy efficient, so you only pay to heat the hot water you use – because there is no wasted energy to continually heat the water in a storage tank and they use up to 25 per cent less natural gas than conventional water heaters.

When you rent an ENERGYSTAR qualified natural gas tankless water heater from Kitchener Utilities you'll qualify for a \$200 on-bill credit to your account. You may also qualify for rebates through the Ontario Home Energy Savings program. You must have an ecoENERGY home evaluation first, along with a follow up evaluation.

Please Note – Program conditions and excess installation charges may apply. Current Kitchener Utilities rental water heater customers may incur replacement charges to switch to a tankless water heater. To qualify, you must be a registered owner of a residential property in Kitchener using an operating salted water softener in your home.

REEP

Kitchener Utilities also sponsors and promotes Residential Energy Efficiency Project (REEP) – a not-for-profit initiative of the University of Waterloo and Elora Centre for Environmental Excellence that identifies how efficiently your home uses energy – and where it's being wasted.

If you follow the recommendations made on your home's REEP evaluation, you can:

- Improve your home comfort by reducing drafts and improving ventilation.
- Save on your heating bill.
- Help reduce smog and fight climate change by reducing your home's greenhouse gas emissions.
- Qualify for a provincial grant to reward your efforts.



Parks, Trails and Natural Areas

Nurturing nature

The important role parks, trails and natural areas play in Kitchener's quality of life by increasing recreational opportunities, as well as local environmental preservation efforts, was underscored by city council during the 2010 budget process in 2010.

In a bold move, praised by many residents and environmentalists, city councillors opted to take their annual support of our local natural systems a step further by:

“Our natural amenities provide the perfect place for everyone – whether you're on your own, with friends or with family”

- Significantly accelerating the clean-up of Victoria Park lake.
- Immediately increasing funding to parks, trails and sports fields by \$691,000 this year.
- Ramping up spending on the city's parks, trails, natural areas and sports fields by a further \$5 million over the next 10 years, to a total investment of well over \$37 million in Kitchener's green spaces over that time period.

Kitchener boasts more than 1,600 hectares of park system – which includes more than 75 natural areas, and more than 100 kilometres of community trails. Among the most popular natural destinations are Kiwanis Park, McLennan Park, Victoria Park, Homer Watson Park and Huron Natural Area; as well as scenic community trails including Walter Bean Trail, Iron Horse Trail and Dominic Cardillo Trail.

“Our natural amenities provide the perfect place for everyone to live healthier, more active lifestyles,” said Pauline Houston, Kitchener's general manager of community services.

Natural areas program

The city is also committed to building relationships between people and local natural areas. This is done through the Kitchener Natural Areas Program (KNAP).

The program was created to:

- Engage the community in environmental stewardship projects.
- Educate people about Kitchener's natural areas.
- Create opportunities for people to experience nature in the city.

It's easy for residents to get involved in KNAP and make local natural areas a part of everyday life.

Individuals and groups can participate in public events or nature walks; volunteer as natural area stewards; or sign up for a Stewardship Work Day, which feature activities such as tree planting, invasive species control, ecological restoration and monitoring, and natural area/stream clean-ups.

Schools can also participate in our stewardship workdays. These workdays run from two to six hours in length.

For more information on Kitchener's parks, trails and natural areas, please visit www.kitchener.ca.



Natural area coordinator Joshua Shea gives community tours of the 107-hectare Huron Natural Area, located on Trillium Drive.

green kitchener



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