Creating Better Places to Inspire Life

2011 ENVIRONMENTAL REPORT

minto

beinspired

Environmental Policy

Minto believes that it has a corporate responsibility to the environment and that actively pursuing green initiatives is compatible with its growth and prosperity.

Through industry leadership, innovation, verification, reporting and employee engagement, Minto and its customers will continue to lower resource use and environmental impact.

Greenberg Family Business Values

We are committed to creating a healthier planet. Where practical and cost efficient, we will reduce our consumption of natural resources, minimize waste, and help reduce greenhouse gas emissions.

beinspired

LIFESTYLE

Our ability to create a way of life that people aspire to that includes comfort, work/life balance, health and well being

INNOVATION

Our dedication to challenging the status quo and finding a better way, delivering solutions that work

DESIGN

Our passion for creating places that inspire people both aesthetically and functionally

SUSTAINABILITY

Our recognition that all actions today have consequences for the future and we will create communities that inspire life

QUALITY

Our committment to building communities that stand the test of time

VALUE

Our ability to anticipate and meet the needs of our customers efficiently; more benefits for less relative cost

TABLE OF CONTENTS

MESSAGE FROM THE CEO

> “Creating a healthier planet has long been an integral part of Minto’s values.”
>
> Roger Greenberg
> Chief Executive Officer

One of the undoubted benefits of releasing an Environmental Report each year is giving readers the opportunity to share in Minto’s continued commitment to the environment and our tangible successes in making a difference through the products we provide and the experiences we offer. Creating a healthier planet has long been an integral part of Minto’s values. As Minto has grown, the shared awareness of environmental impacts and the importance of maintaining a strong culture of conservation, waste reduction, and the investigation and implementation of innovative technologies has become even more engrained in our business, resulting in outstanding environmental achievements like the ones you will find in this year’s Report.

Moving forward, Minto’s conservation efforts in the areas of waste, electricity, natural gas, water and land use will inevitably expand – the kind of research, performance and awareness that have led to Minto’s position as an industry leader in green buildings are the result of incredibly devoted employees who keep our environmental impacts and opportunities for continuous improvement at the forefront of discussion. Our employees are, and have always been, the engine behind inspiring change. This collective belief in a better way translates into inspiring experiences and spaces for our customers.

Some 2011 highlights that speak to this truth are:

- Minto was rated one of Aon Hewitt’s top “Green 30” employers – a group of Canadian organizations rated highly by their employees in regards to their environmental stewardship.
- Minto was honoured as the Ontario GREEN Builder of the Year for the second year in a row and third time in four years – an accolade that recognizes our outstanding green culture and commitment to reducing environmental impact.
- Minto’s 180 Kent in Ottawa was certified BOMA BESt Level 4 in late 2011, making it the first building in Ottawa to receive the highest rating in the commercial building environmental certification system, and one that was commended for its highly progressive design and exceptional operational maintenance by Minto employees.
- More awareness and conservation campaigns from our enthusiastic group of Green Champions – including the Green Office Certification program and helping launch Minto Place’s Simply Compost organics collection initiative in Ottawa.

I would like to acknowledge and thank employees across each operating group for continuing to play a vital role in our ongoing efforts to help create better places to inspire life – I look forward to future Environmental Reports and the strides we will continue to make.

Roger Greenberg
Chief Executive Officer

2011 HIGHLIGHTS

Carbon

Per square foot carbon emissions decreased **2.4%***

Water

Water consumption per square foot decreased **5.6%***

Waste

Total construction waste decreased **22%***

Certifications

100% of new developments achieved third party certification

Employee Engagement

Strong employee participation in annual Green Office Certification, Earth Week, and Freecycle lead by internal Green Champions

2008 2010 2011

2011 Ontario GREEN Builder of the Year
Ontario Home Builders' Association

THE GREEN 30 2011

Ranked in Top 30 Green Organizations in Canada
Decided by employees and awarded by *Aon Hewitt*

FRPO 2011 MAC AWARD WINNER

Environmental Award of Excellence for Minto's Richgrove Village
Federation of Rental-Housing Providers of Ontario

*All decreases expressed are 2011 reductions versus 2009 base year.

ABOUT MINTO

Established in 1955, Minto is a fully integrated real estate, development, construction and property management company with operations in Toronto, Ottawa, London and Florida. For over 56 years, Minto has been dedicated to providing better products, services and experiences to its customers – delivering superior innovation, lifestyle, design, sustainability and quality within its entire building and operations portfolio.

Minto has continuously upheld its reputation of delivering value; building over 70,000 new homes, managing a commercial portfolio of more than 2 million square feet and 14,000 residential rentals, as well as operating a state-of-the-art hotel and collection of executive furnished suites.

As a third party verified leader in the green building industry, Minto exceeds building and operating standards while providing customers and employees with comfortable, efficient and modern spaces to inspire life. By designing, building and operating with innovative technologies to reduce resource consumption, as well as continuing to track and report on energy and water savings – Minto has committed to always providing the better option that will empower those we serve to help make the world a better place.

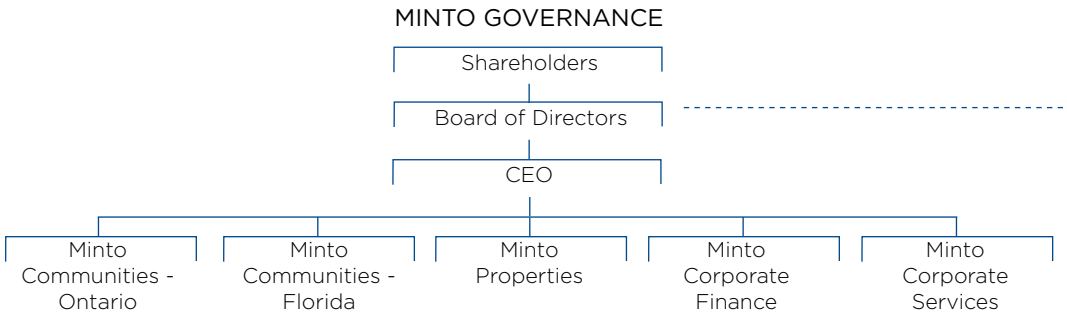
ABOUT THIS REPORT

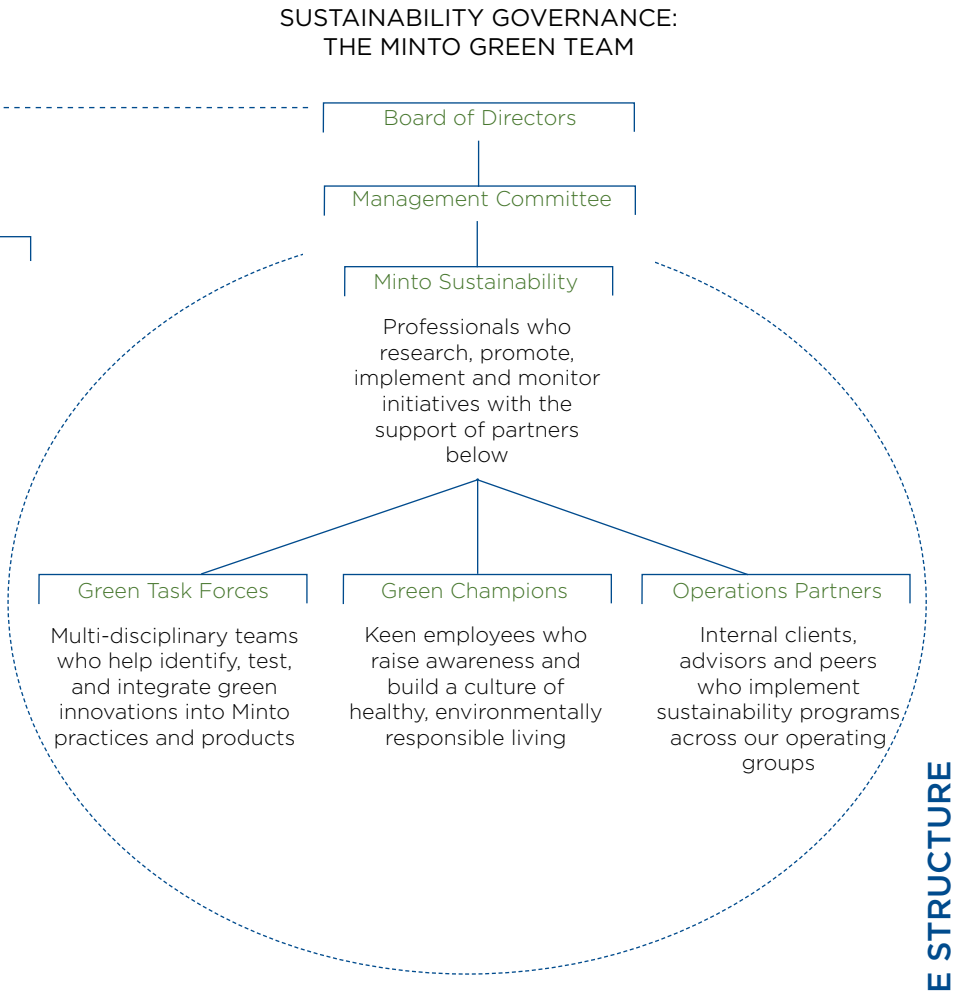
This Report summarizes Minto's 2011 environmental performance. Data from this Report covers the period from January to December 2011 unless otherwise stated.

Environmental performance is measured in carbon emissions, natural gas consumption, electricity consumption, water consumption, construction waste generated and diverted, third party certifications, land use and employee related travel emissions. Performance is reported both as totals and per square foot intensities.

The chosen base year is 2009; this is in accordance with the Greenhouse Gas Protocol's[1] accounting and reporting principles of accuracy, transparency and consistency over time. Each subsequent year's performance is compared to 2009 with two exclusions: waste and employee travel related emissions, due to insufficient data availability.

[1]For a definition, see Glossary section.





GOVERNANCE STRUCTURE

In 2011, Minto underwent an organizational restructuring. The results of this realignment saw the establishment of three distinct operating groups: Minto Properties, Minto Communities - Ontario, and Minto Communities – Florida; supported by Minto Corporate Finance and Minto Corporate Services. Minto Communities - Ontario and Communities - Florida build low rise and high rise residential units and are the chief contributors to Minto's construction waste and land use performance. With a portfolio of managed properties including commercial space, rental homes, hotel suites and furnished suites - the majority of water consumption and air emissions come from Minto Properties' operations.

Minto is governed by a Board of Directors and managed by a CEO and Management Committee. Sustainability initiatives are led by a dedicated team of sustainability professionals and supported across the organization through cross-functional groups – Green Task Forces, Green Champions and internal clients - all part of Minto's Green Team. Green Team initiatives are noticeable across the organization, delivering environmental stewardship, impact reductions, and cultural awareness and change.

This structure provides the commitment, discipline and focus required to effectively plan, manage and evaluate Minto's sustainability performance but it also, through the Green Team, creates an environment that encourages grass roots innovation and a culture that is truly engaged in executing Minto's sustainability values and belief in a better way.

Sustainability Feature: Lake Water Fed Irrigation

Olympia, Wellington, FL

- Surface water is drawn from the lake and dispersed throughout the community grounds
- Timers ensure water use is controlled
- Conserves Florida's natural aquifers
- Decreases water bills of homeowners

Photo: Olympia, Florida

ENVIRONMENTAL PERFORMANCE

Photo: Harbour Isle, targeting LEED® certification, currently under construction, Anna Maria Sound, Florida

Sustainability Feature: High Efficiency Boilers

Cherryhill Village, London, ON

Minto purchased Cherryhill Village in early 2011. Shortly thereafter, Minto invested over $1 million to conduct a major boiler retrofit as part of an overall plan to decrease energy consumption in the residential apartment buildings, retail mall and office space.

A combination of condensing and non-condensing boilers was installed across the complex. Condensing boilers use the waste heat from the exhaust air to preheat the cold water entering the boiler and they operate at 95%+ efficiency. The non-condensing boilers are also highly efficient, and operate at 85% efficiency. This is a strong improvement over the previous boilers that operated between 70-85% efficiency. The new boilers also have the ability to modulate their operation resulting in lower standby losses.

Photo: Cherryhill Village, London, ON

"Although people might not notice a boiler retrofit – it's efficient upgrades like these that result in a more comfortable temperature and living environment for residents."

Manuel Rebelo
Project Manager

CARBON PERFORMANCE

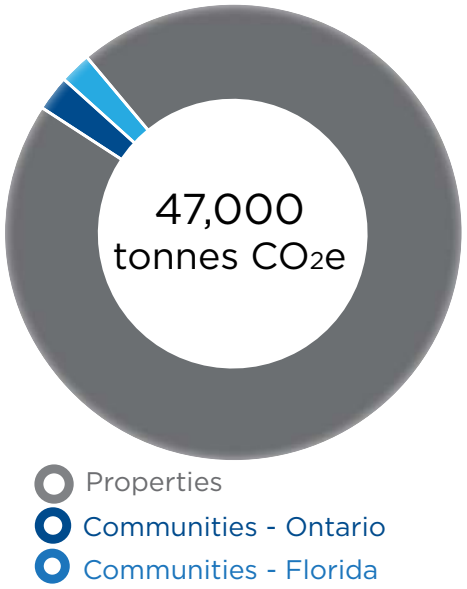
In 2011, an overall decrease of **1%** in carbon footprint was recorded from the base year 2009 – with total emissions decreasing to 47,000 metric tonnes of CO_2 equivalent. This decrease resulted primarily from an extensive boiler retrofit at Minto's recent apartment acquisition, Cherryhill Village in London, Ontario. Across our Properties portfolio, carbon emissions per square foot decreased by **2.4%**[1].

	Carbon Emissions (tonnes CO_2e)				
	2009 (Base Year)	**2010**	**Change** (vs Base Year)	**2011**	**Change** (vs Base Year)
Properties	44,300	40,000	▼ 9.7%	44,900	▲ 1.2%
Apartments	36,800	32,600	▼	35,900	▼
Commercial	5,110	5,030	▼	6,200	▲
Hospitality	2,480	2,420	▼	2,780	▲
Communities - Ontario	3,120	1,650	▼ 47%	1,170	▼ 63%
Ottawa	2,770	870	▼	868	▼
Toronto	345	777	▲	300	▼
Communities - Florida	31	1,440	▲	988	▲
Total Carbon	**47,500**	**43,100**	**▼ 9.2%**	**47,000**	**▼ 1.0%**
Intensity[1] (kg·CO_2e/sq.ft.)	**4.41**	**3.98**	**▼ 9.8%**	**4.30**	**▼ 2.4%**

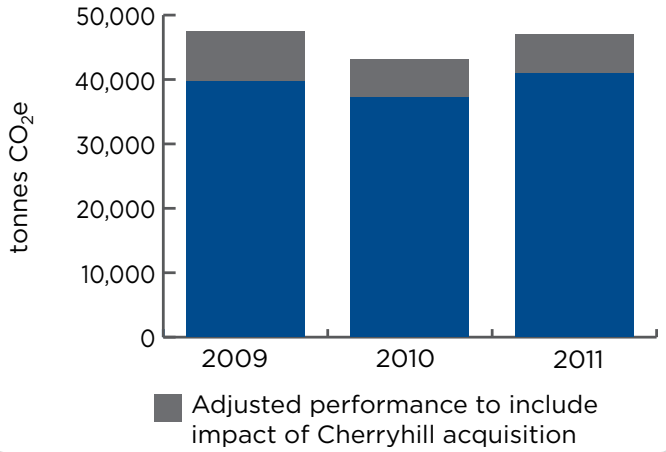
To accommodate structural changes[2] such as new developments or acquisitions, the total carbon footprint, inclusively from the 2009 base year to 2011, has been recalculated. This recalculation is in accordance with GHG Protocol Corporate Accounting and Reporting Standard. The Total Minto Carbon Emissions diagram on the right illustrates this recalculation. Going forward, the base year will be adjusted to include any large structural changes.

A notable performance highlight is the 63% reduction in emissions from construction activity in Communities - Ontario's operations; this substantial reduction occurs across all performance aspects, due largely to a decrease in the number of homes in the construction stage in 2011. In addition, warmer winter temperatures and varying construction schedules contributed to lower emissions compared to 2009.

2011 Total Carbon Emissions



Total Minto Carbon Emissions



[1]Our carbon emissions intensity figures are from Minto Properties Inc., which accounted for 95% of Minto's total CO_2e emissions in 2011.
[2]For a definition, see Glossary section.

Sustainability Feature: Earth Tubes

Pilot Project, Ottawa, ON

Minto is testing earth tube technology as part of a pilot project designed to assess their suitability in newly constructed single family homes. If deemed successful, earth tubes will be offered in new developments as either standard construction or design centre upgrades.

Earth tubes are a passive means of heating and cooling a home's ventilation air by taking advantage of the thermal energy stored in the ground. A fresh air intake pipe is run underground around the perimeter of the house to either heat or cool incoming air, and therefore reduces the amount of energy required for heating and cooling a home.

Coupled with a Heat Recovery Ventilator, this technology is expected to raise the air temperature by as much as 30°C/86°F in the winter and cool it as much as 10°C/50°F in the summer. The technology has the added benefit of dehumidifying incoming air in the summer for increased occupant comfort.

Photo: Earth Tube Pilot Installation

"Pilot projects are essential to determine the performance and effectiveness of promising technologies and practices. Research like this helps ensure reliability and keeps Minto ahead of the pack."

Brad Herritt
Innovation Researcher

NATURAL GAS PERFORMANCE

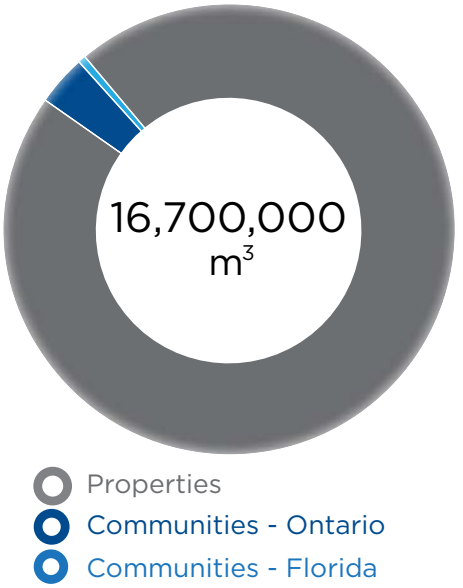
In 2011 Minto's natural gas consumption decreased **7.9%** from the 2009 base year and the per square foot intensity decreased by **6.5%**.

Extensive upgrades to Minto's Cherryhill Village in London, a large complex representing 20% of Minto's apartment portfolio, is responsible for a substantial reduction in 2011. High efficiency boilers were installed in 2011 and upgrades to the building automation control systems are scheduled to finish in early 2012. The full impact from the Cherryhill retrofits is expected to amount to a 12.5% annual reduction in natural gas for the complex.

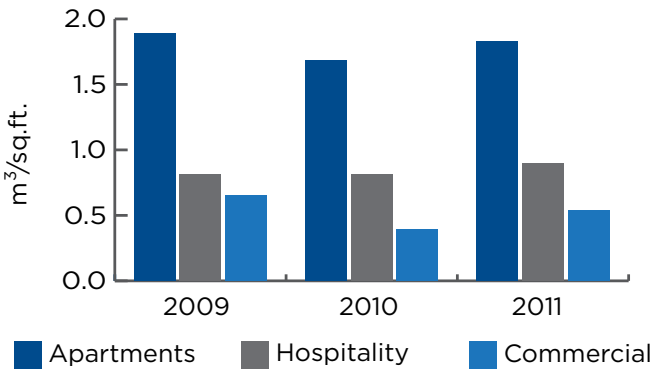
	Natural Gas (000's m^3)				
	2009 (Base Year)	**2010**	**Change** (vs Base Year)	**2011**	**Change** (vs Base Year)
Properties	16,700	14,600	▼ 12%	16,200	▼ 3.1%
Apartments	15,400	13,600	▼	14,700	▼
Hospitality	672	667	▼	745	▲
Commercial	609	425	▼	683	▲
Communities - Ontario	1,470	562	▼ 62%	539	▼ 63%
Ottawa	1,330	325	▼	394	▼
Toronto	143	237	▲	145	▲
Communities - Florida	-	11.9		1.01	
Total Natural Gas	**18,100**	**15,200**	**▼ 16%**	**16,700**	**▼ 7.9%**
Intensity (m^3/sq.ft.)	**1.66**	**1.46**	**▼ 12%**	**1.55**	**▼ 6.5%**

Minto commercial and hospitality properties saw minor increases in natural gas consumption. These natural fluctuations are to be expected for natural gas consumption and are driven by weather and occupancy.

2011 Total Natural Gas Consumption



Natural Gas Intensity in Minto Properties



Sustainability Feature: Photovoltaic System

Pilot Project, Ottawa, ON

Designed as a Minto renewable energy pilot project, a 9.45 kW solar photovoltaic (PV) system was installed in the Parkwood Hills community on Meadowlands Drive in 2010 and was fully operational in 2011. This form of alternative energy uses solar panels to convert sunlight into electricity, and is metered and monitored by Minto to evaluate performance.

The system consists of 42 photovoltaic solar collectors mounted on a south-facing roof structure. The wood frame construction application on homes and town homes demonstrates the feasibility of mounting this type of technology on a pitched low rise roof. A revenue meter provides data on electricity production and income generated.

In 2011, Minto's PV system produced 9,000 kWh of clean energy, which equates to over 6,000 kg of avoided CO_2 emissions.

"In addition to building more sustainable new communities, it's exciting to see the kind of innovative technologies we can install to improve the efficiencies and lower the carbon footprint in existing homes as well."

Paul Berthiaume
Manager Compliance and Preventative Maintenance

Photo: Parkwood Hills, Ottawa, ON

ELECTRICITY PERFORMANCE

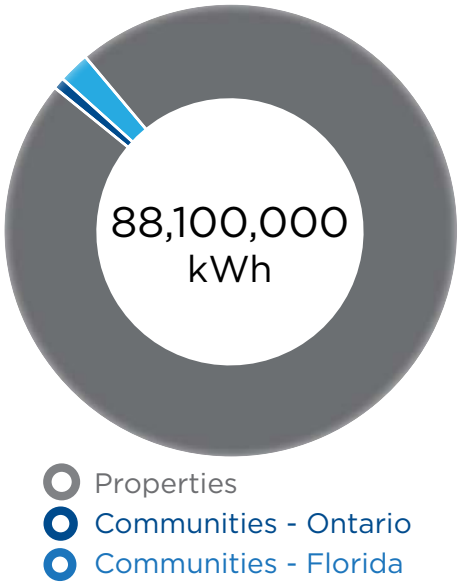
Minto's 2011 total electricity consumption increased by **12%** from the 2009 base year. A steady increase in electricity consumption occurred for 180 Kent Street as the commercial development progressed from new construction to full occupancy in 2011. 180 Kent Street represents 25% of Minto's commercial portfolio and is responsible for 4.9% of the 11% increase in electricity consumption in the Properties' portfolio.

	Electricity (000's kWh)				
	2009 (BaseYear)	2010	Change (vs Base Year)	2011	Change (vs Base Year)
Properties	76,700	73,500	▼ 4.2%	86,400	▲ 11%
Apartments	46,200	41,800	▼	48,400	▲
Hospitality	7,170	6,830	▼	8,130	▲
Commercial	23,300	24,900	▲	28,900	▲
Communities - Ontario	2,100	3,480	▲ 65%	915	▼ 56%
Ottawa	1,650	1,530	▼	751	▼
Toronto	452	1,950	▲	165	▼
Communities - Florida	55.8	2,550	▲	1,770	▲
Total Electricity	**78,900**	**79,600**	**▲ 0.84%**	**88,100**	**▲ 12%**
Intensity (kWh/sq.ft.)	**7.63**	**7.31**	**▼ 4.2%**	**8.19**	**▲ 7.4%**

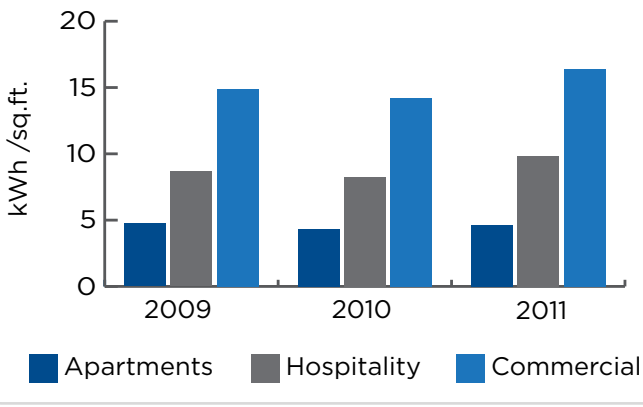
Various initiatives are in place to reduce electricity consumption across Minto's commercial portfolio including replacing halogen with LED lighting. LED bulbs are up to 85% more efficient than the current installed halogen bulbs.

Anticipating increased consumer interest, the underground parking area at Minto775 King West, a new condominium in Toronto, is being constructed with the capacity to provide residents with electric vehicle charging stations; another way Minto continues to innovate to create better places.

2011 Total Electricity Consumption



Electricity Intensity in Minto Properties



Sustainability Feature: Water Efficiency

Spring at MintoGardens, Toronto, ON

- Rainwater collected from the property feeds the irrigation system
- Drip irrigation and drought tolerant plants reduce water demand
- Reduces pressure on city's stormwater infrastructure
- Reduces amount of pollutants entering stormwater systems
- Decreases consumption of municipal water and reduces utility costs for residents

Photo: Outdoor Amenities, Spring at MintoGardens, Toronto, ON

WATER PERFORMANCE

Major retrofits of new acquisitions in Toronto were key contributors to Minto's total water consumption decrease of **1.5%** since the 2009 base year. Water saving retrofits include high efficiency fixtures and appliances.

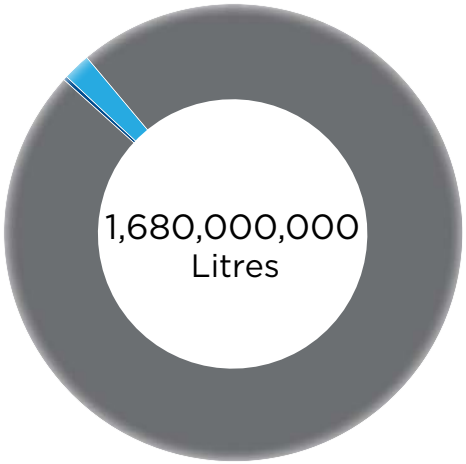
Water use in Minto's commercial properties had a substantial increase attributed to 180 Kent Street reaching full occupancy in 2011. Minto's hospitality portfolio also saw an increase in water use in 2011, due to varying occupancy rates and occupant behaviour.

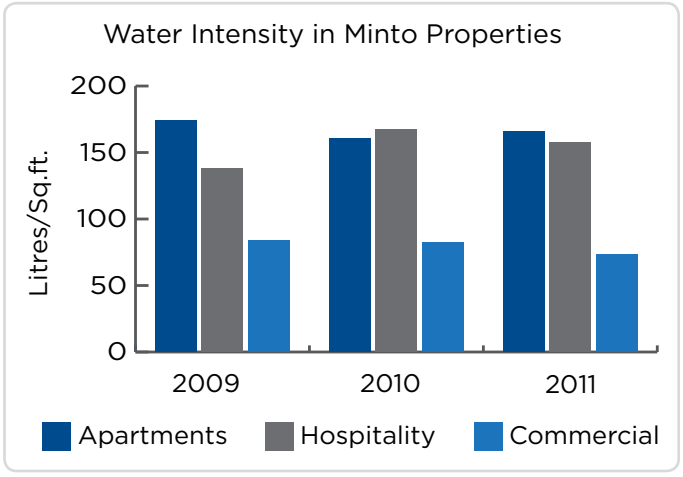
Water Consumption (000's L)

	2009 (Base Year)	2010	Change (vs Base Year)	2011	Change (vs Base Year)
Properties	1,680,000	1,620,000	▼ 3.7%	1,650,000	▼ 1.7%
Apartments	1,480,000	1,380,000	▼	1,420,000	▼
Hospitality	110,000	134,000	▲	129,000	▲
Commercial	89,100	109,000	▲	105,000	▲
Communities - Ontario	7,420	8,650	▲ 17%	4,490	▼ 39%
Ottawa	7,300	8,440	▲	4,490	▼
Toronto	118,000	210	▼		–
Communities - Florida	22,300	22,200	▼ 0.1%	28,400	▲ 28%
Total Water	**1,710,000**	**1,650,000**	**▼ 3.5%**	**1,680,000**	**▼ 1.5%**
Intensity (L/sq.ft.)	**157.6**	**149.0**	**▼ 5.4%**	**148.7**	**▼ 5.6%**

Completed in 2011, Richgrove Seniors Affordable Housing apartment building in Toronto's west end is highly efficient in its water use – like many other Minto projects it features a rainwater harvesting system for landscaping needs that reduces potable water use for irrigation by over 50%.

2011 Total Water Consumption





Stonefield Flats

Largest LEED® for Homes certified multi-family community in Canada

Location: Ottawa, Ontario

Awarded: 2011 Green Development of the Year, Greater Ottawa Home Builders' Association

Features: 160 apartment flats designed to inspire healthier, more environmentally responsible living and reduce homeownership costs

- Heat recovery ventilator circulates fresh air
- Dual flush toilets reduce water consumption
- Low-flow water fixtures
- All-off switch and green plugs save electricity
- 92% efficient furnace
- All individual suites are ENERGY STAR® certified, consuming at least 25% less energy and water than a standard built home, saving residents money

Highlight: Minto's first LEED® Canada for Homes Community

GOHBA Green Development of the Year

Photo: Stonefield Flats, Ottawa, ON

Photo: Stonefield Flats Interior, Ottawa, ON

180 Kent Street

First BOMA BESt Level 4 Certification in Ottawa

Location: 180 Kent Street, Ottawa, ON

Awarded: BOMA BESt (Building Owners and Managers Association – Building Environmental Standards) highest certification, Level 4

Features: Designed to be Ottawa's greenest office building

- Rainwater harvesting system collects water for use in toilets, easing water demand on city resources
- Green roof regulates temperature, decreases pollution, provides habitat
- Waterless urinals installed throughout the building save up to 1.3 million litres of water per year
- Unique HVAC and monitoring system provides superior air quality and reduces carbon emissions by up to 35%
- Design reduces overall utility costs by over 25%
- Living wall features over 6,000 plants

Highlight: Eliminated approximately 825 tonnes of greenhouse gas emissions in 2011 while providing an inspiring, comfortable space for tenants and visitors.

Photo: Living Wall in the Atrium at 180 Kent Street, Ottawa, ON

Photo: 180 Kent Street Exterior, Ottawa, ON

Sustainability Feature: Organic Waste Collection

Minto Place, Ottawa, ON

Located in the heart of Ottawa, Minto Place is comprised of 1.5 million square feet including three office towers, Minto Suite Hotel, an underground parking garage and a retail concourse housing ten food service franchises and nine retail stores.

In 2011, an organic waste recycling program was developed. Implementation rolled out in stages, beginning with select vendors collecting behind-the-counter waste from food preparation. As a pilot project, composting of coffee grinds was introduced to three participating food service tenants. This allowed staff to become familiar with the program and provided an accurate assessment of the capacity required when expanding the program to include all food tenants.

In 2012, a full scale front and back-of-counter food court collection program called *Simply Compost* will launch, allowing all food court patrons and all vendors to compost leftovers and assist in diverting waste from landfills. As one of the only organics collection programs in Ottawa, the *Simply Compost* initiative has the potential to increase the waste diversion rate at Minto Place to over 77%.

Photo: Simply Compost Launch, Minto Place, Ottawa, ON

"Composting is a critical component to waste reduction initiatives. Developing a solid model was crucial to the success of our composting vision. Our hope is that the lessons learned from Simply Compost can be used to develop similar programs in other Minto communities."

Jennifer Larente
Building Services Coordinator

WASTE PERFORMANCE

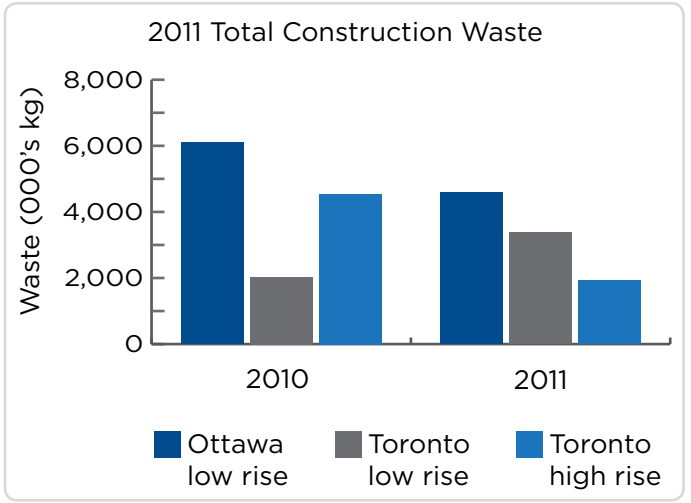
Performance in construction waste management is measured by comparing the total amount of waste generated with the rate of waste diverted from landfill through recycling or reuse. In 2011, Minto's total waste collected decreased by **22%** over the 2010 base year. However, diversion rate dropped by **11%**. These results are attributed to a smaller amount of waste being diverted at our Toronto low rise construction sites.

Construction Waste Performance (000's kg)

	2010 (Base Year)	2011	Change (vs Base Year)
Ottawa Low Rise	6,100	4,580	▼ 25%
- Diversion Rate	*72%*	*75%*	▲
Toronto Low Rise	2,030	3,380	▲ 67%
- Diversion Rate	*48%*	*38%*	▼
Toronto High Rise	4,540	1,920	▼ 58%
- Diversion Rate	*87%*	*78%*	▼
Total Waste	**12,700**	**9,880**	**▼ 22%**
Overall Diversion Rate	***74%***	***63%***	***▼ 11%***

Since early 2011, Minto construction sites have implemented material management procedures to increase diversion rates. Wood over 24" is recycled on site, residual wood is chipped into mulch and remaining concrete and bricks are crushed on site for use as sub-base in roads.

The method of tracking waste data has improved since its inception. To ensure accuracy over time, 2009 waste performance results were omitted from this report due a lack of comparability resulting from different methods of tabulating data. Totals for 2010 and 2011 represent measured consumption data for those years. Construction waste in Florida operations is not measured; however, strategies to reduce waste generation are in place, focusing on optimizing material requirements in the design process.



Renderings are artists' impressions.

CERTIFICATIONS

Minto has a standing commitment to seek third party validation on all new communities built in Ontario and Florida. Since 2009, Minto has built and qualified over 2,100 ENERGY STAR® units and has certified over 1,400 units under various LEED® programs. LEED® and ENERGY STAR® are internationally recognized third party verification programs for sustainable building and energy performance.

Minto's focus on delivering energy and resource efficient homes has resulted in a 30% measured[1] reduction in total energy and water consumption across our low rise communities, which equates to an average utility savings of $800/year for low rise customers.

THIRD PARTY RECOGNITION

Minto ranked as one of *Aon Hewitt's* Top 30 green employers in Canada as voted by employees

Environmental Award of Excellence for Toronto's Richgrove Village, *Federation of Rental-Housing Providers of Ontario*

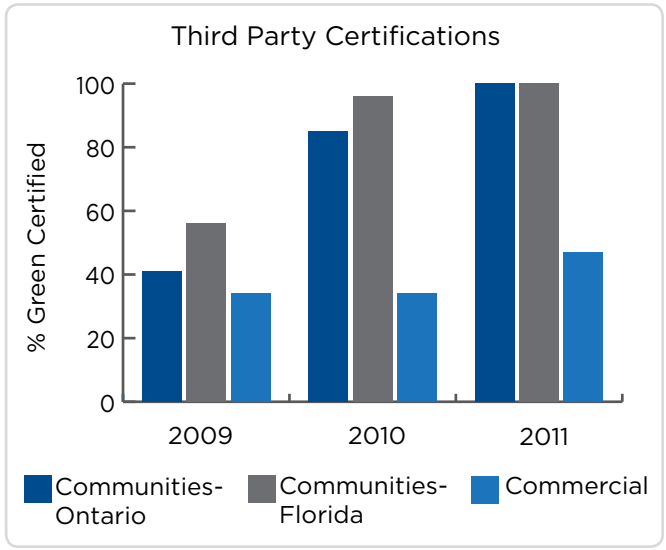
2011 Green Builder of the Year and Leader of the Year award at the *EnerQuality* Awards of Excellence

Three-time winner of the *Ontario Home Builders' Association* GREEN Builder of the Year

> "Third party verifications resonate well with homeowners – not only does it ensure energy savings but it also attests to the quality of Minto's construction because it's verified by an independent industry professional as built to a higher standard."
>
> **Serge Desjardins**
> *Director, Green Initiatives/ Condominium Performance*

Third Party Certifications

	2009		2010		2011	
	Total Certified	Percent Certified	Total Certified	Percent Certified	Total Certified	Percent Certified
Communities - Ontario	491	41%	1,267	85%	925	100%
Ottawa	449	-	726	-	749	-
Toronto	42	-	541	-	176	-
Communities - Florida	117	56%	244	96%	400	100%
Commercial (sq.ft.)	508,000	34%	508,000	34%	876,000	47%



[1]Energy and water estimates based on Sept 2009 – August 2010 average performance of Minto low rise communities compared with *NRCan, Office of Energy: Comprehensive Energy Use Database Tables, 2010 and CMHC, Household Guide to Water Efficiency, 2000, revised 2005.*

Sustainability Feature: Green Roof

Stormwater Management & Air Quality

Contained green space on a structure, commonly known as a “green roof,” has several benefits – including improved stormwater management, air quality, energy savings and increased biodiversity.

Since urban areas have limited capacity to accommodate run-off due to low surface area, green roofs have the potential to reduce total run-off by up to 60%. Plant and soil absorption catch nutrients and pollutants in rain water, decreasing the amount of pollutants running into sewer systems. The addition of a green roof replaces vegetation that may have previously occupied the space, therefore conserving biodiversity.

Another benefit of green roofs is the ability to temper the urban heat island effect – a temperature increase in urban areas caused by replacing vegetation with pavement and buildings. Hard dark surfaces quickly convert sunlight to heat, whereas the vegetation on green roofs helps maintain a lower ambient temperature.

Currently, Minto has built green roofs at MintoMidtown, 180 Kent Street and Richgrove Affordable Senior’s Housing, with five future developments planning to include this feature.

Photo: Minto Suite Hotel Green Roof, Ottawa, ON

LAND USE

Thoughtful community planning can positively impact the environment as well as improve the quality of life for its residents; therefore, the use of land is integral to responsible building. In determining our own best practices, Minto gave great consideration to the LEED® for Neighbourhood Development rating system. Some of the many practices adopted by Minto in community land use developments include co-ordinating natural environment and land uses, transit integration, minimum density requirements, stormwater planning, increased tree cover and elimination of invasive species.

Sustainable Site Design: Quarry Glen

Built on an old quarry, Minto Quarry Glen is a prime example of in-fill construction. Quarry Glen makes efficient use of existing roads, transit routes and underground sewer infrastructure while providing improved connections to existing amenities. These attributes minimize the amount of new roads, sewers and transit lines to be built. Similarly, no significant natural features or wetlands have been disrupted.

To support walkability and transit, Quarry Glen has a compact footprint of 20 units per acre, a density that is well over the minimum required and makes efficient use of the land while also supporting public transit. There is also a pre-existing system of well-connected city-owned pathways that will be utilized and eventually extended to increase connectivity to local amenities.

Stormwater Management: Bioswales

As an innovative addition to Minto's Avalon West community in Ottawa, several bioswales have been incorporated into the design in order to filter pollution from stormwater run-off water. Bioswales are sloped vegetated channels in the landscape that are designed to carry stormwater run-off and decrease the rate at which it leaves the property. The decreased flow rate allows soil to absorb more water, remove pollutants through filtration, and lowers the strain on municipal infrastructure.

Vegetation within the swale – species that were selected based on filtration properties and maintenance requirements – will include a mixture of native low-growing shrubs, perennials, and grasses.

2011 SNAPSHOT

1,700+ sq.ft.
Constructed green roofs to date

12%
Average stormwater run-off reduced by Minto's green roofs

1,900+
Trees planted in 2011

Photo: Example Bioswale

Sustainability Feature: Green Office Program

The Green Office Certification Program is a Minto Green Champion initiative designed to recognize environmental best practices of employees. The program evaluates office environmental performance by identifying areas for improvement, highlighting successful practices and empowering employees to promote a green culture throughout Minto's offices.

Offices are graded by their respective Green Champions according to a standardized checklist that awards points for any number of initiatives including energy savings, waste reduction, recycling, transportation and awareness events.

Looking to the future, office certification will expand to include interested construction sites and sales centres. Several office moves occurred since the program launch in 2010 creating new opportunities to raise awareness of the program and compare practices across newly established employee groups.

This is a great example of a grassroots program that inspires and engages all employees to contribute to a healthy culture at Minto.

There are four levels of green office certification, from one to four "Minto Green Apples." After each evaluation, reports are issued to participating offices and sites with suggested improvements to encourage environmentally-friendly best practices. The 2011 program was a success and all participants deserve sincere congratulations. Results of participating offices in 2011:

180 Kent Street, Ottawa	4
2239 Yonge, Toronto	4
Minto Hospitality Group	3
Coconut Creek, Florida	3
Minto Apartments	3
Baxter, Ottawa	2
Minto Communities, Richmond Hill	2

"The Green Office Certification Program inspires me to make greener choices in my day-to-day activities that better my work and home environments. If everyone at Minto – whether it be a site, rental office or other building – changed one habit in their workplace, we could change a lot!"

Monique Schryburt
Executive Assistant

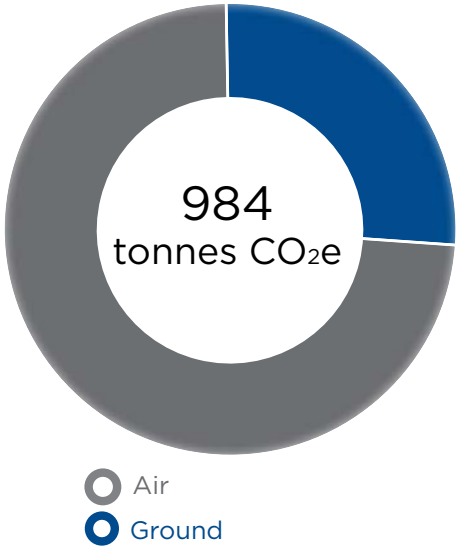
EMPLOYEE IMPACTS

Minto employees continue to be passionate and active in managing the impact of internal business practices on the environment. In 2010, Minto began tracking employee business ground travel. Since 2010, travel-related carbon dioxide emissions per employee have increased from 489 to 707 kg·CO_2 per employee, due largely to the addition of air travel-related emissions in 2011. Air travel emissions increased with operational expansion to London, Ontario.

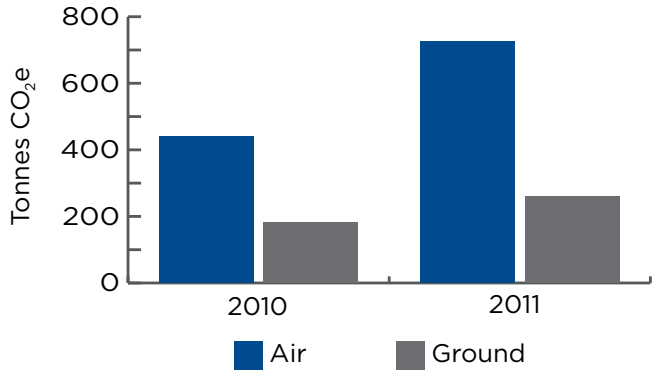
Air Travel	**2010**	**2011**
Total Tonnes CO_2e	439	725
Ground Travel	**2010**	**2011**
Total Tonnes CO_2e	181	259
Mileage	131	199
Taxis	-	3.86
Auto Allowance	49.3	59.7
Total Travel	**2010**	**2011**
Total tonnes CO_2e	619	984
Employee Headcount	1,265	1,393
tonnes CO_2e/employee	0.49	0.71
kg·CO_2e/employee	489	707

To further increase accountability and the accuracy of reporting, in 2011 Minto began tracking emissions associated with employee taxi journeys. Travel related emissions are not included in Minto's total CO_2e calculation as it is classified as an indirect emission resulting from business activity. Tracking employee travel is important for employee awareness and empowerment. This impact illustrates the importance of video conferencing, car pooling and public transit.

2011 Employee Related Travel Emissions



Employee Air and Ground Travel



EMPLOYEE ENGAGEMENT EVENTS

Florida Coastal Clean-up 2011

Ottawa Spring Cleaning 2011

Florida Coastal Clean-up 2011

"The Coastal Clean-up reminds us that our contribution is not over when the building is completed. Our commitment goes on and on. We create one of a kind, innovative communities and can help to keep them clean along the journey!"

Janet Kroll
Manager, Community Services

Ottawa Spring Cleaning 2011

Sweater Day February 2011
From left: John Reid, Kyle Rainbow

> "As a member of the Green Champions, I am able to foster environmentally friendly practices in the work place and influence Minto employees to walk the walk of an environmentally conscious, socially responsible company."
>
> John Reid
> *Land Development Coordinator*

Green Office Certification 2011
From left: Jasmin Brisson, Christie Shayler, Monique Schryburt

Freecycle October 2011
From left: Jasmin Brisson, Christie Shayler, Jessica Huddleston, Deanne Skukowski

Green Office Certification 2011
From left: Janet Kroll, Linda Yonke

INDUSTRY PARTNERSHIPS

EQuilibrium™ Communities Initiative

In collaboration with Canada Mortgage and Housing Corporation and Natural Resources Canada, Minto's Ampersand neighbourhood in Ottawa is the location of focus for research into community-centered strategies to improve energy and environmental performance and develop potential monitoring and performance indicators. Areas of research include district energy systems, land use and stormwater run-off reduction strategies.

District Energy System

Minto conducted thorough research into the viability of incorporating district energy systems into the Ampersand community. District energy systems centralize the production of heating and cooling for a community, creating the potential to reduce the size of infrastructure, emissions and cost. Research for Ampersand focused on finding appropriate energy technology, financing options and ownership arrangements.

A number of potential partnership arrangements were reviewed, along with case study analysis of district energy projects across Canada.

Land Use

Ampersand is a mixed-use, higher density community with opportunities to optimize land use performance by increasing walkability, pedestrian connections, bike routes and transit access.

Site plan research indicates benefits to increased mixed-use, live-work area and open land space. Investigations into proximity to grocery, pharmacy and restaurants are ongoing – aiming for 100% of dwellings within 400m of these amenities.

Proximity to transit with regard to building layout is being reviewed thoroughly to keep residents and jobs close to quality transit. Providing adequate density will create demand for more local destinations.

Stormwater Run-off Reduction

Also under examination is the applicability of community scale storm water reduction and grey water reuse strategies. Feasibility studies looked into permeable pavements, green roofs and landscape best practices.

Asia-Pacific Partnership

In accordance with the Asia Pacific Partnership's vision to accelerate the development and deployment of clean energy technologies, Minto's Ampersand community is demonstrating the feasibility of building zero energy homes on a community scale.

One of the condominium blocks in Ampersand is being constructed as a zero energy block. Another has been built as a reference block serving as the baseline to measure performance of progressive technologies applied in the zero energy block.

In addition to monitoring energy reduction and energy generation, the project aims to gain a more comprehensive understanding of the best practices and barriers to building zero energy communities while also promoting accelerated growth of renewable energy and advanced building material industries in Asia Pacific Partnership countries.

NEXT STEPS

Message from the Vice President, Sustainability

Since 1999, Minto has made major measurable progress in reducing our natural resource consumption, starting with energy and water retrofit projects on our existing buildings and evolving into green building and more sustainable operating and development practices – so far resulting in the elimination of over 18,000 tonnes of greenhouse gas emissions each year!

This is the first year Minto is publishing our environmental objectives and targets to help our customers, employees and other stakeholders see not just where we've been, but where we are going as Minto pursues its business growth strategy.

Our sustainability goal is simple; to be recognized by our customers, employees, communities and peers as a leader in providing quality, healthy spaces with a reduced impact on the environment. We will know we are there when we can demonstrate that our products and operations deliver per square foot greenhouse gas emissions and water consumption performance in the top quartile of comparables in our industry. The challenge is how we get there.

Using 2009 as our base year, we are committing to further minimize the environmental footprint of our buildings and operations by reducing our carbon and water intensity by a minimum of 7.5%, diverting 80% of our construction waste and maintaining our high third party certification standards. Establishing, communicating and delivering on these objectives and targets is critical to our future success, ensuring that as we grow, our employees and customers know that we remain firmly grounded in our commitment to creating a healthier planet and reducing the impact our new and existing buildings have on the environment.

2016 TARGETS vs. BASE YEAR

Carbon

7.5% Reduction in carbon intensity across operated properties

Water

7.5% Reduction in water intensity across operated properties

Waste

80% Diversion rate in construction waste

Third Party Certifications

35% Commercial space third party certified
100% New communities third party certified

I look forward to being a part of the creativity, skill, diligence and collaboration that I know Minto employees, trades and vendors will bring to the table in the coming years to help us reach our targets and continue to deliver the inspiring spaces that our customers value and have come to expect of Minto.

Alison Minato
Vice President, Sustainability

> "Our sustainability goal is simple; to be recognized by our customers, employees, communities and peers as a leader in providing quality, healthy spaces with a reduced impact on the environment."

GREEN TECHNOLOGIES

Already in widespread use, **Dual Flush Toilets** provide users the option of choosing the conventional 6 litre flush or a small flush of only 3 litres. New developments will begin featuring a proven **3 litre only** toilet that delivers a powerful flush with half the water use.

With one flick of a switch, the **All-Off Switch** located at the front door turns off all fixed lighting and exhaust fans. Minto was the first to use this technology in Minto Yorkville, Toronto.

High performing **Low-Flow Shower heads** are installed to provide a comfortable shower while using up to 25% less water than a standard shower head.

Photo: Construction of Minto Ampersand, Ottawa, ON

Green Plugs provide the convenience of leaving devices plugged in while eliminating phantom power loads from devices on stand-by or left on accidentally.

Motion Sensors are installed in apartment stairwells and feature overlapping sensor coverage to ensure safety. In stairwells alone, this reduces energy consumption by 97%.

Minto installs **Individual Sub-meters** for water use. With water management in the hands of the user, studies have shown over 45% less water is consumed than that of a typical condominium.

Heat Recovery Ventilators provide fresh air into a home while recovering heat from exhausted air, providing a healthier home with increased energy efficiency.

180 Kent Street in Ottawa is the first Minto development to include **Regenerative Elevator Drives** that capture energy usually lost from elevators, and use the motor as a generator during periods of low load.

GREEN FEATURE FIRSTS

In order to increase our environmental performance and create better, more comfortable and efficient homes, Minto is continuously identifying new technologies to incorporate into our buildings. Featured here are some of the first properties to include the highlighted green features.

Radiance at MintoGardens

LEED® certification
Multi-chute recycling
Rainwater harvesting

MintoYorkville

Motion lighting
Individual sub-meters
All-off switch

Minto Roehampton

Rainwater fed toilets
Solar wall

MintoMidtown

Green roof
Bike share program

180 Kent Street

Regenerative elevators
Waterless urinals

Harvest Hills Model Home

LEED® Canada for Homes Silver certification

Stonefield Flats

Drought tolerant plants
Green plugs
LEED® Canada for Homes community certification

Cascada Isle

ENERGY STAR® and FPL BuildSmart® community in Florida

Minto775 King West

3L toilets
Electric vehicle charging infrastructure

GLOSSARY

Carbon Footprint
A measure of the amount of carbon dioxide produced by an individual, government or organization over a specific period of time.

ENERGY STAR®
ENERGY STAR® is an international standard for energy efficient consumer products that originated in the United States. Devices carrying the Energy Star service mark such as buildings and kitchen appliances, generally use 20-30% less energy than required by federal standards.

GHG Protocol
The most broadly used international accounting standard for individuals, governments and organizations to understand where their sources of greenhouse gas emissions stem from – thus providing the ability to measure and manage them. The GHG Protocol, a decade-long partnership between the World Resources Institute and the World Business Council for Sustainable Development, is working with businesses, governments, and environmental groups around the world to build a new generation of credible and effective programs for tackling climate change. The GHG Protocol consists of four separate but linked standards. Minto currently adopts the GHG Protocol Corporate Standard.

Inorganic Growth
As defined by the GHG Protocol Corporate Standard, inorganic growth refers to organizational growth by virtue of a merger or acquisition. Inorganic decline is when an organization's assets/productivity contracts due to a divestment.

Intensity Indicators
A unit of consumption or emissions divided by a business metric (for example, per square foot operated). Intensity indicators provide a better measurement of performance than absolute figures as they enable an organization to measure its GHG performance independent of inorganic growth or decline.

LEED®
Leadership in Energy & Environmental Design - an international rating system for the design, construction and operation of high performance green buildings and neighbourhoods.

OHBA
The Ontario Home Builders' Association was formed in 1962 and provides home builders with a voice in the provincial government, facilitates changes in the industry and provides networking opportunities for home building suppliers and services.

Scope 1, 2 & 3 Emissions
Scope 1: All direct GHG emissions.
Scope 2: Indirect GHG emissions from the use of purchased electricity, heat or steam.
Scope 3: Other indirect emissions, such as the extraction and production of purchased fuels and materials, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities, outsourced activities, waste disposal, etc. Such emissions are currently not included in Minto's overall carbon footprint results.

Structural Changes
The GHG Protocol Corporate Standard defines 'structural changes' as changes that have a significant impact on a company's base year emissions. Structural changes can include: mergers, acquisitions, and divestments; outsourcing and insourcing of emitting activities; changes in calculation methodology or in the accuracy of emission factors; discovery of significant errors, or a number of cumulative errors, that are collectively significant.

Waste Diversion Ratio
The percentage of waste diverted from landfill.

METHODOLOGY

All building performance data was recorded from buildings using the 'operational control' approach from January to December 2011. All figures disclosed are actual totals (unless otherwise stated in the 'Limitations' section) gathered from our various utility and waste management sources and partners.

Carbon Footprint Methodology
Total carbon footprint is calculated based on GHG Protocol Corporate Standard guidelines. The GHG defined 'organizational boundary' has been determined using the 'operational control' approach. Therefore, all emissions from buildings are accounted for where there is daily operational control. Total carbon footprint does not include indirect emissions caused as a result of our business activities such as employee business travel, employee commuting or waste recycling/disposal. The footprint is reported against a baseline year of 2009. The 2009 and 2010 results have been recalculated using actual consumption figures from both calendar years and to account for any inorganic growth or decline that was experienced since 2009.

LIMITATIONS

Due to insufficient data in 2009, 2010 was chosen as a base year for construction waste. 2011 has been set as the base year for employee travel for the same reason. Environmental impacts from employee travel are not included in our scope 1 and 2 emissions and therefore have no effect on our absolute total carbon emissions.

ABOUT THIS PUBLICATION

MINTO SUSTAINABILITY would like to acknowledge the efforts of each operating group for their contribution to this report and thank the following employees for their assistance:

Damien Auriat, Karen Baldock, Paul Baron, Paul Berthiaume, Renee Bobula, Lee Ann Boyce, Jasmin Brisson, Lilliam Costello, Gwen Cox, Dominic Damar, Serge Desjardins, Anthony Di Fonzo, Patt Duncan, Alan Gremillion, Malcolm Jean, Mark Kilfoyle, Janet Kroll, Jennifer Larente, Alex Ludan, Candi Luk, Elizabeth MacFarlane, Jaime McKenna, Norma Mohammad, Susan Morris, Marina O'Hara, John Reid, Manuel Rebelo, Sabina Schleicher, Monique Schryburt, Christie Shayler, Jared Stern, Asma Syed, Bill Webb and Linda Yonke.

beinspired

www.minto.com