



RACE TO REDUCE

OVER THE FINISH LINE

RACE, REDUCE, REPEAT:
CREATING SUSTAINABLE CHANGE IN
CANADA'S OFFICE SECTOR

CivicAction's Race to Reduce mobilized the commercial office sector to reduce energy use and carbon emissions in the Greater Toronto and Hamilton Area (GTHA), while saving millions of dollars in costs. One of the largest regional voluntary energy reduction challenges in the world, it encouraged GTHA landlords and tenants to work together to reduce energy use within their respective buildings while contributing to a meaningful collective reduction of 12.1% over four years (2011-2014), charging past the program's four-year target of 10%.

This report was made possible through the support of



This project was funded in part through the Conservation Fund of the



Coaches Corner

- a Final Message From the Chairs

CivicAction’s Race to Reduce voluntary smart energy office challenge has been an unequivocal success in the Greater Toronto and Hamilton Area (GTHA). We have surpassed targets and expectations and earned accolades from leading real estate and environmental organizations locally and internationally.

Participants surged over the finish line at the final Race to Reduce Awards ceremony on November 5, 2015 in Toronto.

At this milestone event, we were thrilled to announce a 12.1% collective energy reduction - blasting past the 10% target that we set when we launched the Race four years ago.

While achieving the target was a feat in itself, this multi-award-winning program, its leadership groups, and hundreds of Race participants have demonstrated so much more:

- unprecedented collaboration among landlords and tenants toward a common goal drives real energy savings
- the difference it makes to embed energy benchmarking and annual energy reporting as “business as usual”
- the competitive spirit that’s unleashed by celebrating the highest achievers and sparking the imagination by demonstrating “what is possible”

Still, we need to do more as we continue to welcome residents and office workers to the region amidst an abiding appetite for energy.

When the Race was launched in 2011, there were very real barriers to greater energy reduction: the lack of a business case for energy reduction measures; lack of a common

measurement platform; and few collaborative discussions among the buildings’ landlords and tenants. Those barriers have been dramatically reduced through the work of the utilities and their financial incentives, the adoption of ENERGY STAR Portfolio Manager as a national benchmarking tool, and voluntary energy reduction programs such as the Race to Reduce.

And while the leaders in the region’s commercial office sector have reduced energy and reaped the environmental and economic rewards, many buildings are not yet at that stage. Our hope is that potential new market drivers such as the provincial mandatory energy reporting and cap and trade system, coupled with advances in building systems and reporting technology, will drive the sector to new energy efficiency heights.

As we “cross the finish line” of this incredible journey, we tip our batons to the passion and hard work of the hundreds, if not thousands of people involved in pioneering a new way of fueling our buildings and economy while sustaining our environment.

In closing, we challenge the commercial building office sector to build on the learnings and momentum generated over the past four years to continue to work together to improve their buildings’ environmental performance. The reasons are compelling. Simply put, there is no down-side to reducing carbon, reducing costs, and giving us all cleaner air to breath.

Sincerely yours,



Sevaun Palvetzian

Sevaun Palvetzian,
CEO, CivicAction



R Phillips

Rod Phillips,
Chair, CivicAction



Brad Henderson

Brad Henderson,
former Senior Managing
Regional Director, CBRE Limited,
Co-chair (2012–present)



Roger Johnson

Roger Johnson,
Senior Vice President
TD Bank Group,
Co-chair (2013–present)



L Mantia

Linda Mantia,
Executive Vice President
of Digital, Payments & Cards
RBC Financial Group,
Co-Chair (Founding)



Michael Thornburrow

Michael Thornburrow,
Senior Vice President,
Corporate Real Estate,
BMO Financial Group,
Co-Chair (Founding)

The Race Course

While at times challenging, the course of the Race ultimately led to multiple wins for its participants, the Toronto region, and the commercial real estate community across Canada. Dollars saved, better relations between landlords and tenants, engaged employees, the sharing of industry best-practices, cleaner air and fewer carbon emissions are just a few of the Race's positive outcomes.

2010

JANUARY 2010

The Commercial Building Energy Initiative (CBEI) Leadership Council makes a formal commitment to work together to make office towers more energy efficient and reduce overall carbon output.

JULY 2010

Real Property Association of Canada (REALpac) is chosen as the energy measurement tool and analysis provider for the corporate challenge in development.

2012

JULY 2012

ENERGY STAR Portfolio Manager is selected as the new energy measurement tool to meet the Race's expanded analytical requirements and provide additional flexibility and functionality.

AUGUST 2012

MMM Group is selected as the Race's independent energy analysis partner.

NOVEMBER 2012

Two years of funding for the Race is secured through the Ontario Power Authority's Conservation Fund.

At the second annual Race to Reduce Awards a total of 61 awards are handed out, including a new Building Performance Award for Greatest Energy Reduction 2010-2011. Collective energy reduction efforts are 1.9%, almost double the original 1% reduction goal for Year 1 of the Race (based on the 2011 building data pool).

2011

MAY 2011

CivicAction officially launches the four-year Race to Reduce, challenging landlords and tenants in the Toronto region to reduce their energy use by at least 10% over four years.

NOVEMBER 2011

In the first six months, more than 380 landlords and tenants register, representing 51.6 million square feet of office space — about 25% of the total office space across the region.

The inaugural Race to Reduce Awards program is launched and over 200 building owners, managers, tenants and employees attend the event. Winners agree to publicize their buildings' energy use to encourage other racers.

2014

APRIL 2014

The Race to Reduce garners industry acclaim, capturing Green Award of the Year at the NAIOP Greater Toronto chapter's Real Estate Excellence awards.

DECEMBER 2014

20 organizations are recognized at the third annual Race to Reduce Awards. Landlords and tenants deliver a 3.9% collective energy reduction over three years (based on the 2013 building data pool).

196 buildings are registered in the Race (69 million sq. ft. or 42% of the region's office space).

Race to Reduce in-market activity concludes after four years.

2013

DECEMBER 2013

14 organizations are recognized at the third annual Race to Reduce Awards. 175 buildings are registered (67 million sq. ft. or 32% of the region's office space).

Participants reduce collective energy use by 4.3% in Year 2 of the Race (based on the 2012 building data pool).

2015

APRIL 2015

The Race to Reduce is the Canadian winner of the National Energy Globe Awards.

SEPTEMBER 2015

The Race to Reduce moves on to be named one of three finalists for the Energy Globe World Awards (Air category) among a pool of 1700 submissions across 177 countries!

The Race to Reduce is recognized as one of Clean50's Top 15 projects.

NOVEMBER 2015

The four-year collective energy reduction results are announced at the final Race to Reduce awards!

Race participants surpass their 10% goal, reducing their collective energy use by 12.1% (almost 193 million ekWh) over 4 years (2014 building data pool vs. 2010 baseline).

Over 80 organizations are recognized at these final Awards.

BOMA Toronto announces their commitment to building on the momentum of the program and developing the next iteration of the Race to Reduce.

Manitoba Hydro announces its support of a Race to Reduce in Winnipeg.

Management case study published by Ivey School of Business at The University of Western Ontario.

“Collaborative initiatives like CivicAction’s Race to Reduce set important targets for us to strive towards. It’s a great example of the private sector taking a proactive approach to reducing their carbon emissions and pushing themselves to do better.”

*— The Honourable Glen Murray,
Ontario Minister of the Environment and Climate Change*

CivicAction's Race to Reduce

4-year smart energy office challenge results (2011-2014)

12.1%

**collective energy
reduction**

surging past the 10%
collective reduction goal

EQUIVALENT TO:



193 million ekWh
(equivalent kilowatt hours)

AND

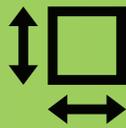


4200 cars off the road

AND



\$13.7 million
in savings



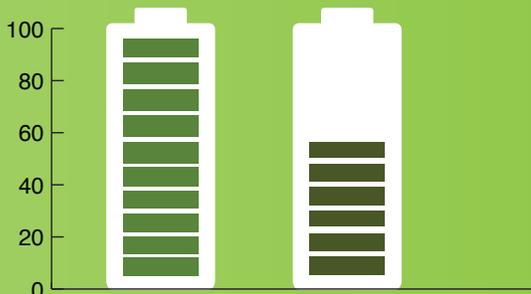
69 million sq. ft. = 42%

of the Toronto region's office stock
participated in the Race to Reduce



196 buildings registered in the Race

64 achieved 10+% energy savings



Average Portfolio Manager
ENERGY STAR score across 17
Lowest Energy Use (2014)
award winners: 95.5, 37+ points
above the Canadian national
average.

■ Average 2015 Lowest Energy Use award winners' ENERGY STAR scores
■ Canadian national average ENERGY STAR score

CASE STUDY

RBC AND BENTALL KENNEDY - Mississauga DALI Lighting Control System

Bentall Kennedy and RBC collaborated to implement a new best-in class lighting system at their 820,000 square feet facility in Mississauga to help reduce the environmental impact of the building.

A DALI lighting system incorporates a controller that can monitor and control each light fixture. With each fixture being individually addressed, the system can control and adjust the light output of every fixture based on a number of variables including occupancy, daylight and operating hours. The flexibility offered by this system was of great benefit to this building as its occupants worked varied hours. [Click here](#) for more information.

CASE STUDY

ROGERS - Brampton Campus Lighting Retrofit Project

The Brampton Campus is a Rogers Communications' largest office buildings, comprising one million square feet of office space and housing 5,000 employees. Originally a manufacturing plant, Rogers converted the facilities for office use in January 2006.

In 2011, the Brampton Campus was the primary focus for targeted energy upgrades. This led to a comprehensive lighting retrofit project that resulted in savings of \$375,000. [Click here](#) for more information.

CASE STUDY

BROOKFIELD OFFICE PROPERTIES Tenant Energy Portal

The Tenant Energy Portal is an online, automated system that provides office tenants access to current electricity data. The web-based tool ties in all tenant sub-meters for each building from Brookfield's central metering system. Each tenant has a dedicated account where they can access their metering information independently.

Within the portal, tenants can explore their electricity performance data and identify patterns in their electricity consumption. The tool assists tenants with their energy and carbon reporting initiatives and setting conservation goals within their space. [Click here](#) for more information.

CASE STUDY

OXFORD PROPERTIES GROUP Lighting Optimization

Oxford implemented green teams in several buildings across their office portfolio. Green teams bring together Oxford and customer (tenant) representatives to jointly define a building's sustainability goals, implement best practices, and facilitate dialogue and learning among all parties.

Oxford developed a lighting optimization initiative that focused on amending lighting schedules to match core working hours and reducing after-hours override lighting times. Over 250 tenants across thirteen buildings participated in reviewing and changing their current lighting schedules. The initiative resulted in energy savings of almost 1 million kwh/year. [Click here](#) for more information.

CASE STUDY

RBC AND CADILLAC FAIRVIEW - The RBC Centre, Toronto Double LEED Gold

Completed in 2009, the RBC Centre is a true testament of design and sustainability excellence, and represents unprecedented collaboration and leadership between RBC and Cadillac Fairview. This tenant-landlord team partnered to attain a double LEED Gold certification, making the RBC Centre the largest and most high-performing office building in Canada, at the time, to achieve these industry recognitions. [Click here](#) for more information.

CASE STUDY

BENTALL KENNEDY ForeverGreen Tenant Program

With service as part of its foundation, Bentall Kennedy has been working hard to improve the environmental and social performance of its buildings. This hard work has manifested into a branded corporate responsibility platform with a focus on four key areas, including energy efficiency and carbon emission reductions. [Click here](#) for more information.

CASE STUDY

CADILLAC FAIRVIEW - Toronto-Dominion Centre, Toronto Green Portal

The Toronto-Dominion Centre Green brand represents a new industry standard in environmental sustainability – enabling a future where ‘green is a given’. Offering a new model of environmental transparency for a property within Canada’s commercial real estate industry, the TDC Green Portal was developed for the tenants of the Toronto-Dominion Centre but is also accessible to the general public. [Click here](#) for more information.

CASE STUDY

CREIT - 110 Yonge Street, Toronto Lighting retrofits and cooling system upgrade

Built in 1966, 110 Yonge Street is a 19-storey 150,000 square foot commercial office building that has been designated a historic building within the financial district. In November 2011, a retrofit program was initiated. The program focused on lighting retrofits along with upgrades to the building’s cooling system, resulting in almost 400,000 kWh of energy savings annually. [Click here](#) for more information.

CASE STUDY

STIKEMAN ELLIOTT LLP - Commerce Court West, Toronto Lighting Retrofit

Stikeman Elliott Toronto occupies 174,378 square feet of office space in Commerce Court West, which is a BOMA Best and LEED Gold Certified building. Following the launch of its GoingGreen program in 2008, Stikeman Elliott completed its second lighting retrofit project in early 2011. This significant green initiative resulted in energy savings of over 443,000 KWH/year, which is the average energy requirement to light 40 homes a year. [Click here](#) for more information.

Race to Reduce Partners

These companies have contributed to CivicAction, financially and in-kind, to support our work in driving the Race.



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