

Report on Progress

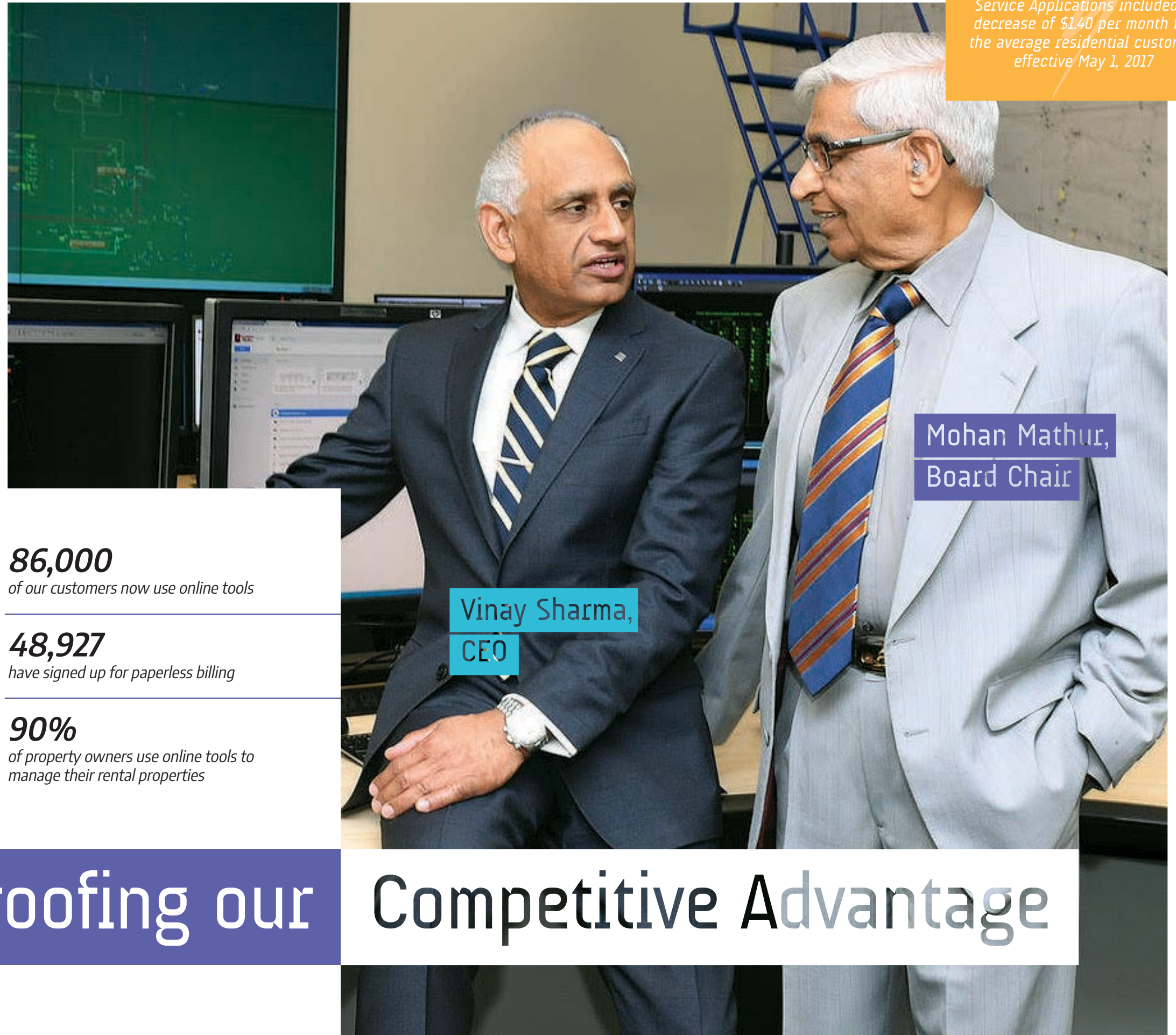


2017

Approval of the 2017 Cost of Service Applications included a decrease of \$1.40 per month for the average residential customer effective May 1, 2017

London Hydro's focus has and will always be on performing the fundamentals well, which are distributing electricity safely, reliably and servicing our customers efficiently. We have remained focused on our strategy of being the best utility that we can be and we are preparing well for future changes that are coming fast and furious.

London Hydro's employees – 325 strong – recognize and understand very well the future need to become a 'digital utility'. Our employee leaders have helped London Hydro develop a strong footprint of seminal technologies such as Green Button standards and systems to be ready to serve the future needs of our customers as well as that of the industry.



86,000
of our customers now use online tools

48,927
have signed up for paperless billing

90%
of property owners use online tools to manage their rental properties

Vinay Sharma,
CEO

Mohan Mathur,
Board Chair

Future-Proofing our Competitive Advantage

Industrial strength customer service

London Hydro strives to help all of our customers understand and better manage their electricity usage. Results from London Hydro's commercial and industrial customers' survey highlight the quality of service and reliability they expect - and receive - from London Hydro.



86%
Say London Hydro
is easy to do
business with



Overall customer satisfaction

91% Say our representatives
are knowledgeable,
professional and courteous



92%
Provides consistent,
reliable energy

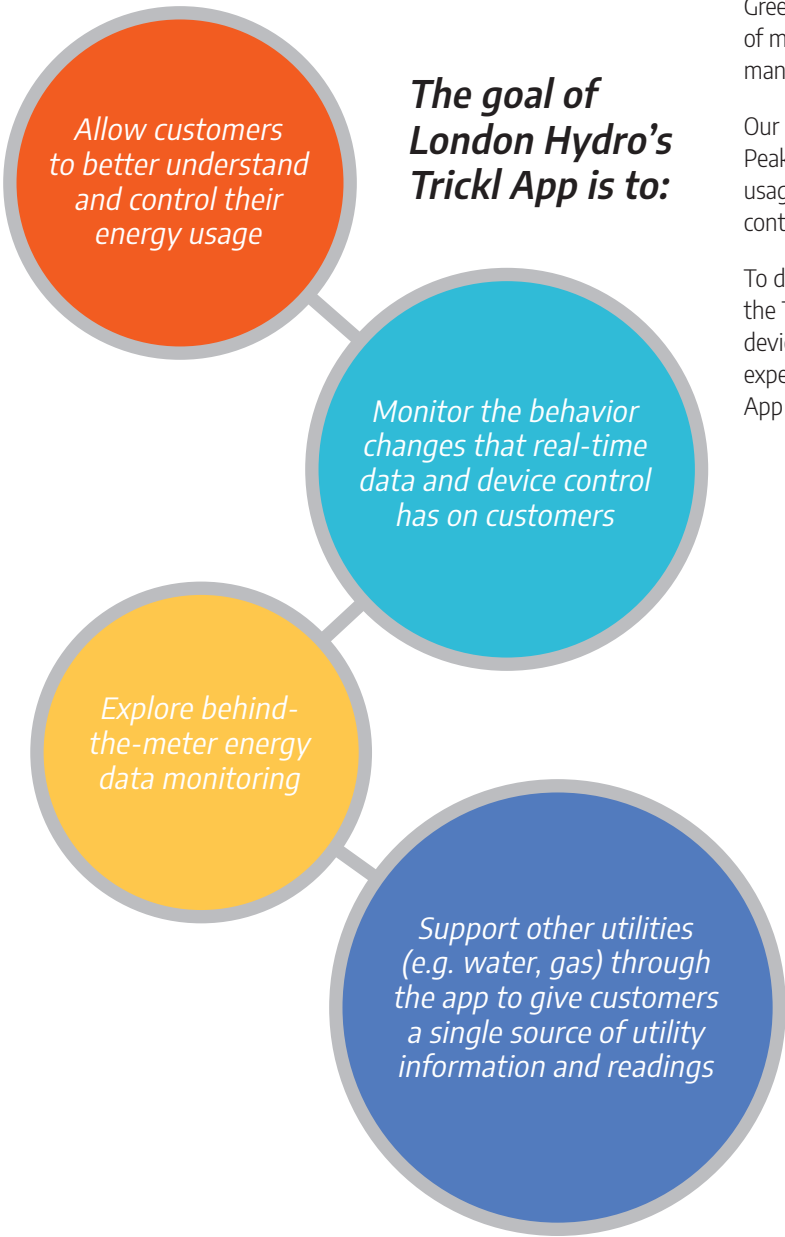
88%
Provides excellent
quality services

89%
Billing accuracy



89%
Quickly handles outages
and restores power

Taking a swipe at real-time energy control



London Hydro is on its way to becoming a digital utility. For the past several years, London Hydro has been an integral part of the development and promotion of the Green Button platform, a solution that could be used at utilities across the province. The Green Button platform has enabled the design and implementation of many digital tools to help customers better understand and manage their energy usage.

Our digital platform enables London Hydro to test the Critical Peak Pricing plan to help monitor change in behaviour and energy usage. The pilot program is designed to give customers greater control and help Ontario's power system run more efficiently.

To dovetail with the pilot program, London Hydro developed the Trickl App to test real-time energy usage monitoring and device control. Benefits and feedback from the pilot customers' experience will help to make enhancements before offering the App to all customers.

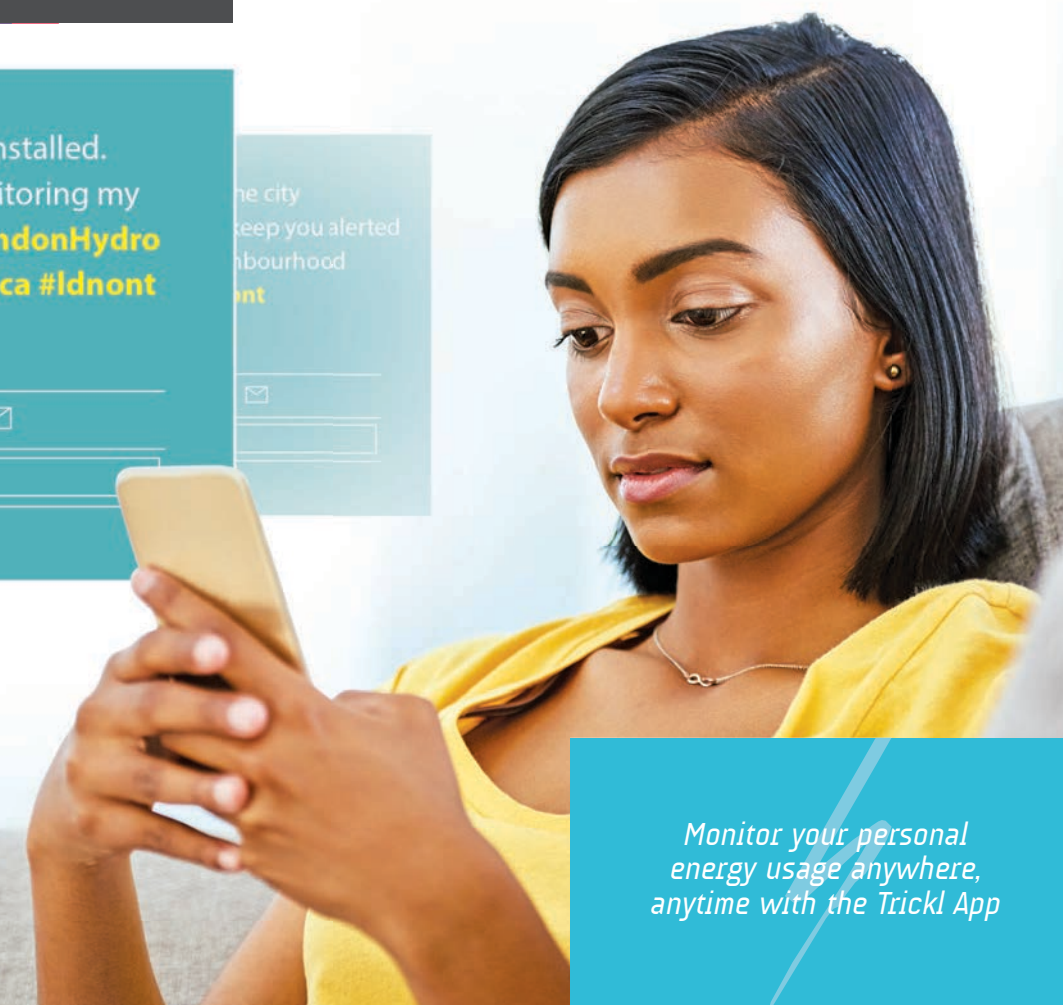


A little trickl makes a big impact

Customer excitement exceeded our expectations.

London Hydro has utilized modern technology to develop the Trickl App that puts the device control in the hands of the customer. Here are some of the Trickl Apps features:

- Monitor real-time data on energy consumption
- Take proactive action to reduce consumption
- Operates on iPhone™ or Android devices
- Enables customers to participate in critical peak events
- Provides tips on energy conservation



Monitor your personal energy usage anywhere, anytime with the Trickl App



Paperless Billing

30,000 ways to save

London and Middlesex Housing Corporation (LMHC), the Social Housing provider for London and Middlesex county and London Hydro worked together to reduce energy usage for not only LMHC but also their clients. They are caretakers of over 3100 residences in both high rise buildings and several townhouse complexes. London Hydro proposed, and LMHC accepted a multilayer energy efficiency upgrade program to upgrade all in suite interior lighting to LED lamps. The approach consisted of leveraging out SaveOnEnergy programs and London Hydro's expertise in the Multi Res sector.

The project, the most concerted effort in Ontario for Social Housing, included London Hydro as the project managers and contractors, reducing the burden on LMHC and allowing for upgrades to lighting fixtures, replacing lamps, and minor electrical upgrades where needed. The program reduced maintenance costs by moving to a single lamp solution. In the townhomes, clients' dated and inefficient refrigerators, freezers and air conditioners were also upgraded. Started in late 2016, the project was completed in 2017. Over 30,000 lamps were replaced and several hundred appliances were upgraded.

Paperless billing has resulted in efficiency gains of \$1.5 million



Making a big difference together

The LMHC project morphed into a province wide LED in-suite program fronted by London Hydro. The in-suite LED upgrade was executed in over 30 LDC jurisdictions, for what is believed to be the largest in-suite lamp upgrade in North America. Leveraging out London Hydro's long history of Multi-Unit Residential Building (MURB) work, London's landlords and others signed on quickly and by working together installed 1,172,746 LED lamps while recycling all of the outgoing CFLs and incandescent lamps. Installations continue to this day as others discover the success of this offering. London's property managers should be commended for their participation and include Sifton, Drewlo Holdings, Capreit (Toronto based), Tricar and several others.

Sifton a long standing leader in new technology and upgrades, made it a corporate wide event, with inclusion of their tenants for a great celebration. Incentives managed by London Hydro amounted to \$7,531,101 upon completion for several hundred buildings throughout London and Ontario.

Through the Home Assistance Program, London Hydro's Conservation team assisted 860 qualified lower income customers in providing energy efficiency upgrades.

Number of Apartment Buildings	642
Number of Tenant Suites	59,132
Number of LED Lamps Installed	1,172,746
Gross Annual Energy Savings (kWh)	124,210,361
Incentives provided	\$7,531,101

In 2017, we replaced 55,000 light bulbs in our Residential Division and London Hydro coordinated with other local utilities to insure we were able to offer the same program in each city. London Hydro understands Sifton's commitment to reducing our carbon footprint and help us identify ways we can achieve that goal in our Residential portfolio.

Theresa Lapensée
Operations Manager
London Residential Rentals
Sifton Properties Limited

Through the Home Assistance Program, London Hydro's Conservation team assisted 860 lower income customers in providing energy efficiency upgrades.

Outage Notifications

Total Number of customers registered in 2017

7,498

Paperless Billing

Total number of customers registered at the end of 2017	Total number of London Hydro customers registered at the end of 2017
4,507	48,927

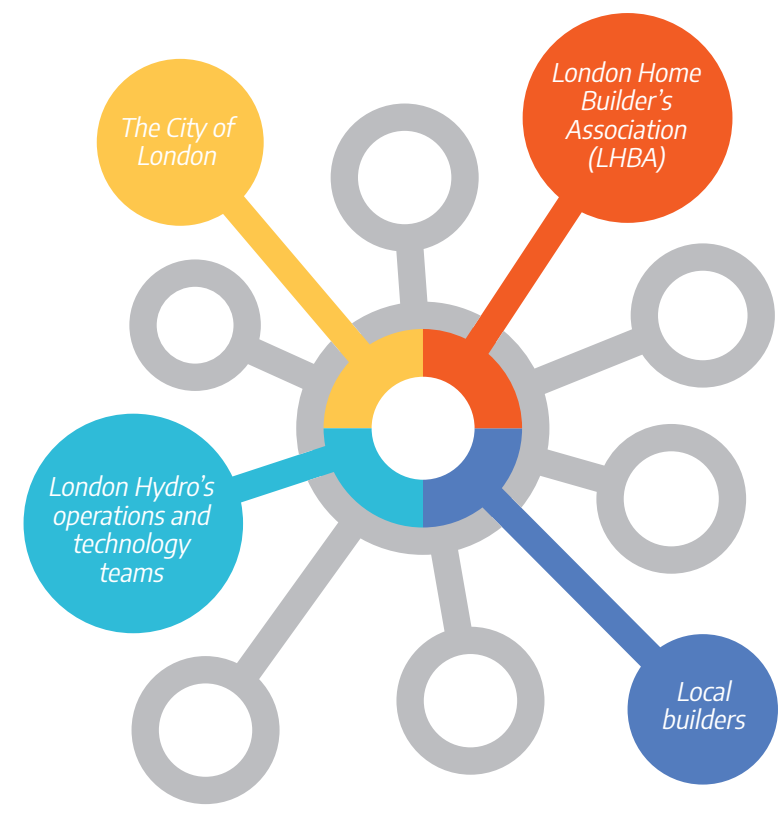
Customer Support

Calls to contact centre in 2017	Total number of email inquiries
173,145	21,841





Connected for Success



Collaboration was key

London Hydro approached the creation of the Builder's Portal collaboratively involving feedback from:

Through focus group sessions with local builders we collectively developed a system that met the needs of everyone involved and substantially reduced the service delivery time by 74%.

The builders portal is a success because it increases productivity and saves time for each of the stakeholders. It is solving old problems with digital technology

Good things often are the result of great communication

The Builder's Portal empowers builders in the London area to conveniently and efficiently manage their residential service connection requests from beginning to end, through an online web-based portal. This service is also available for all London Hydro customers who are building new or renovating existing properties and require the coordination of services.

The project objectives were to:

- Improve the communication process between the three stakeholders - the City of London, London Hydro and the home builders;
- Reduce the service delivery timelines;
- Introduce operational efficiencies through digital automation that removes manual and paper processes.

The Builder's Portal efficiently manages all service connection requests by:

- Automatically creating a service request from the City of London's building permit information;
- Housing all service requests in one place for 24/7, quick and easy review;
- Providing status updates on all active service requests;
- Allowing for the management and assignment of site contacts;
- Communicating all relevant information from the builder to London Hydro;
- Updating service requests according to the builders' preferred communication method.



Service request time was reduced from 23 days to 6.



The Builder's Portal has reduced service delivery time by **74%**, even while accommodating a **50%** increase in service connections



Innovation in Technology Empowers Customers

To further enhance customer experience in using online tools, in 2017, London Hydro made significant improvements to the **Property Management Portal** and the **Interval Data Centre (myIDC)** for small business, commercial and industrial customers.

“Through collaborations with London Hydro and our local energy provider, we are now able to gain access to myIDC services. This allows for a quick look at day-to-day operations, as well as longer term energy analysis which is critical for achieving plant performance.”

John Jekl
Process Engineer
Forest City
Castings Inc.



For commercial, industrial and institutional customers, the Global Adjustment charge often represents a significant portion of the overall monthly bill. The provincial government's Industrial Conservation Initiative (an alternative name for Ontario Regulation 429/04 and its amendments) allows qualifying customers to elect the manner in which their Global Adjustment charge is determined (the choice being a surcharge on their monthly energy consumption, or their contribution to the provincial peak electricity demand). It is a complex subject, and London Hydro has been responding with annual informational workshops for eligible customers to provide them with customer-specific information and thereby support their respective decision-making process.

London Hydro also built a custom decision-making support tool with myIDC to help customers choose a favourable rate option. They can also link their peak electricity demand to the provincial system context. This innovative approach helps keep London Hydro companies competitive in the changing Ontario marketplace. In totality, through careful and strategic rate selection along with effective energy management this could result in a substantial cost savings of \$15,000,000 for London businesses.

A guided 'help' feature with tips and tricks helps new users make the most of the myIDC portal.

Through a partnership with 3rd parties, London Hydro was also able to help the City to schedule meter exchanges which enabled the City to upgrade a drive-by metre reading system.

Another major initiative undertaken by the Metering Department in 2017 was the conversion to interval meters for commercial customers. Businesses in London can now view and manage their detailed energy consumption and demand. London Hydro's Metering Department is ISO 9001 registered which means high quality services for all London Hydro customers and others. In fact, London Hydro performed calibration services on over 3,000 meters for other utilities throughout 2017.

With a suite of successful online tools already brought to life, our transformation into a digital utility is well underway

MyLondonHydro

The number of MyLondonHydro users increased by **10%** in 2017 making the total number of London Hydro customers registered, **85,795**. This portal allows customers to manage their account and energy usage, received outage notifications and delegate access to trusted parties.

“Working with the myIDC tool has allowed us to quickly and efficiently obtain accurate information pertaining to the management of Global Adjustment.”

Reid McDonald, P.Eng
Sr. Process Engineer, IPEX

In 2017, there were **over 2,200** property managers representing **over 21,000** rental units in London.

Property Management Portal

This portal allows property owners to proactively manage their services, gain quick access to report and consumption information, assign delegates and coordinate tenant move-in and out dates.





Health and Safety: A cultural commitment

Thirteen years in a row, London Hydro has received the Infrastructure Health & Safety Association (IHSA) President's Award for 250,000 hours without a Lost Time Incident. During 2017, this award level was achieved twice.

London Hydro remains committed to training our staff to work and live safely. London Hydro completed the 11 year IHSA Zero Quest journey by achieving the Platinum Award in 2016, the highest level within the program. As London Hydro continues its journey toward health and safety excellence and enhancing the Health and Safety program, it begins the next journey with a commitment to become certified under the IHSA's Certificate of Recognition (COR) program.



Safety and our Contractor Partners

The Health and Safety Department believes that safety is enhanced by sharing best practices and training. On March 8th London Hydro was pleased to present an educational seminar for local contractors working in proximity to electrical power lines. The objective of this half-day seminar was to facilitate safety awareness and education to help contractors identify and control electrical hazards before they cause injuries.

The seminar provided a unique opportunity for approximately 50 participants in attendance to learn from a group of subject matter experts, representing the Province of Ontario, who shared industry standards, best practices and other information to help prevent electrical accidents.



Storm Response

Unforeseen events provide us with an opportunity to create solutions to address new challenges. On March 20th, a storm caused a utility pole to fall in an industrial park in south London. The tension lines coupled with the weight of the poles caused a domino effect of collapsed poles, leaving six poles down and 230 business customers without power.

Enhancements made to our Emergency Response Plan sets out a clear chain of command and clarifies communications protocol and responsibility of localized emergency incidents using our New Mobile Command Centre for ease of access and community visibility to help resolve issues and gather information pertaining to the localized incident.

When a major storm occurs the new mobile command centre allows London Hydro to coordinate on location and restore power as quickly as possible.

London Hydro continues to regard safety of the public and our people as a top priority regardless of the situation



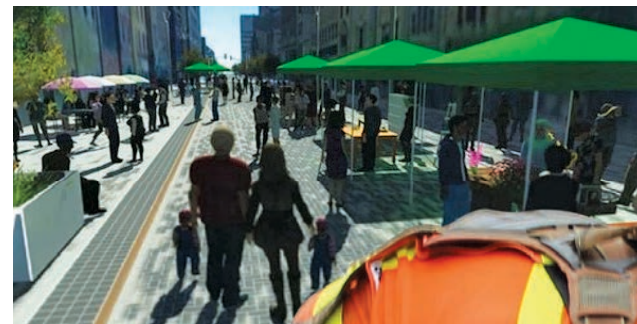


Creating a Smarter Grid

In 2017 London Hydro continued upgrading much of London's underground infrastructure in the City core. Duct systems, maintenance manholes, and cables are being replaced with a modern automated system including major work on Dundas Street in support of the Dundas Place Flex Street project.

In 2017 construction began on a new 115kV/27.6kV, 2x 83MVA Transformer Station (TS) to replace the end of life 13.8kV Nelson TS. New supply cables are being connected to the downtown core through automated sophisticated switchgear that will provide interconnection between the new Nelson TS and Talbot TS. The new downtown supply will be connected to London Hydro's SCADA (Supervisory Control and Data Acquisition) system allowing 24/7 monitoring and control of this advanced infrastructure.

Enhanced automation, remote switching capabilities, contingency supply, and modern technology will have reliability, environmental and safety benefits. London Hydro operators and field staff will be able to quickly and remotely identify problems to ensure a continued supply of reliable power.



Supporting renewable and smart grid technologies

London Hydro has facilitated the connection of more than 366 connected renewable generation projects with a total capacity of over 15.5MW. London Hydro has been actively involved in planning for Distributed Energy Resources (DER's), microgrids and electric vehicles. London Hydro received the support of the City of London to proceed with installing three level 2 dual electric vehicle chargers in the downtown core. These efforts will help ensure that London Hydro is prepared for the future and is active in the evolution of the electrical grid and reliable service while meeting the growing needs of our city for generations to come.

Enhancing emergency preparedness

London Hydro completed work on our new off-site System Operation Centre (SOC) in 2017. Should the primary SOC become inaccessible due to an emergency condition such as a natural disaster, operation can now be relocated to the new off-site SOC. The ability to maintain 24/7 visibility and control of London's distribution system will ensure we are equipped to maintain reliable service for customers even if operations at the main SOC are interrupted.



Investing in where we live

London Hydro has also been replacing older 4kV infrastructure that is common in residential neighbourhoods with a new modernized 27.6kV system. Older 27.6kV cables are also being restored through an advanced process that minimizes the disruption of residential properties. Proactively refurbishing out of date infrastructure in neighbourhoods and throughout the City will enable London Hydro to continue providing safe and reliable service while meeting the growing needs of our city for generations to come.

It's our responsibility to ensure the downtown energy infrastructure is reliable, rock solid and ready to help local business keep pace with progress



Community Support

London Hydro is a longtime supporter of Habitat for Humanity Heartland Ontario, and partnering with organizations like yours is what makes our work possible. In 2017 we completed four homes for families in London – including the Coopers and your donation of light fixtures and LED lightbulbs for these homes is greatly appreciated. Thank you for being an amazing community partner, and helping us build toward our vision of a world where everyone has a safe and decent place to live.

” **Brian Elliot, CEO,**
Habitat for Humanity
Heartland Ontario



The Electricity Distributors Association Western District Power of Golf Fore Charty event organized by London Hydro raised **\$55,516**, which is divided amongst these 4 youth-oriented charities:

- The Cross Cultural Learner Centre (CCLC)
- Youth Opportunities Unlimited
- Teen Challenge
- Big Brothers Big Sisters



The Coopers



London Foodbank - employees donated **1,752** pounds of food that contributed to assisting **24,604** people (**3,669** families).

Once again in 2017, London Hydro donated **\$200,000** to the **Low-income Energy Assistance Program (LEAP)** to help customers that are experiencing financial hardship and are having difficulty paying their electricity bills. This funding assisted over **400** households, affecting over **1,100** people.

The **Employees Community Charity Organization (ECCO)** raised **\$30k** that was distributed to **50** charities selected by London Hydro Employees.

Salvation Army Christmas Hamper Program- employees donated over **300** large toys.





**London
Hydro**

