

# Annual Report 2018

Environment & Energy Division



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## 2018 ACHIEVEMENTS

- \$300 million Green Bond issued to support TransformTO initiatives
- \$35 million in energy-efficiency upgrades at Toronto Community Housing
- 79 green and cool roofs completed with support from Eco-Roof Incentive Program
- 172 residential retrofits supported by Home Energy Loan Program to date
- 7 community projects supported by Waste Reduction Community Grants
- 2,000 commuters took the Smart Commute Challenge
- 5,598 new Live Green Perks members
- 4,612 hours of service provided by Live Green Volunteers
- 12,000 twitter followers @LiveGreenTO
- 80,000 votes cast for Toronto's Greenest Choice
- 185,937 participants joined the spring cleanup, Clean Toronto Together
- 404 residents interviewed in a Climate Action Perception Survey
- 100+ development applications reviewed in partnership with City Planning
- 20+ energy strategy reports reviewed for large sites
- \$180,000 received through saveONenergy for EED-led retrofits at Metro Hall

# MISSION & VALUES

The EED leads the development and implementation of innovative environmental and energy policies and programs, and inspires citizens, businesses, organizations, and other stakeholders to work with City staff to make Toronto one of the most environmentally sustainable cities in the world.

## Mission

We lead, coordinate and are accountable for achieving the City's environmental and energy sustainability outcomes.

## Three Pillars – A Balanced Approach

Long-term environmental sustainability requires a balanced approach that delivers economic benefits, environmental benefits, and energy resilience. By supporting these three pillars, we continue to build the foundation of a sustainable city.

### Economic Benefit

- Attract and retain businesses
- Retain energy dollars in the local economy
- Create “green” jobs
- Generate cost savings/revenue through existing City assets

### Energy Resilience

- Increase energy security and ensure adequate supply
- Promote electricity conservation and peak demand reductions
- Promote local distributed energy generation and embedded energy solutions

### Environmental Benefit

- Reduce greenhouse gas emissions
- Improve air quality
- Reduce the release of harmful emissions

# STRATEGIC PLAN

With the goal of making Toronto one of the most sustainable cities in the world, the EED facilitates the development and implementation of strategic community and corporate-wide environmental and energy policies and programs that advance the City's environmental and energy goals.

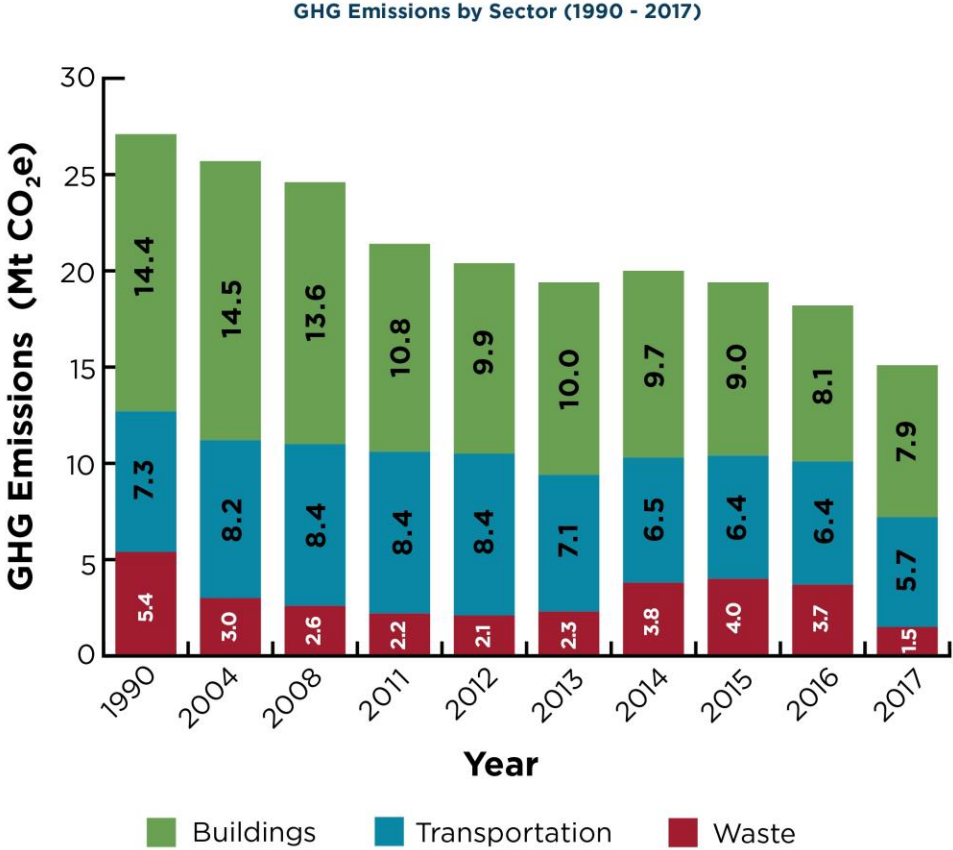
Our strategic plan is guided by four key objectives:

- Energy conservation and demand management
- Reducing emissions to the environment
- Energy security and supply
- Improving Toronto's resilience



# REDUCING GREENHOUSE GAS EMISSIONS

The EED led the development of the City’s TransformTO climate action strategy. We collaborate with City Divisions, Agencies, Corporations, and external stakeholders to deliver innovative programs, research and initiatives to achieve Toronto's greenhouse gas emission reduction goals, improve our health, grow our economy, and improve social equity.



Toronto's local GHG emissions are down 44 per cent since 1990, as of 2017. Toronto still emits 15 mega tonnes of greenhouse gas emissions annually.

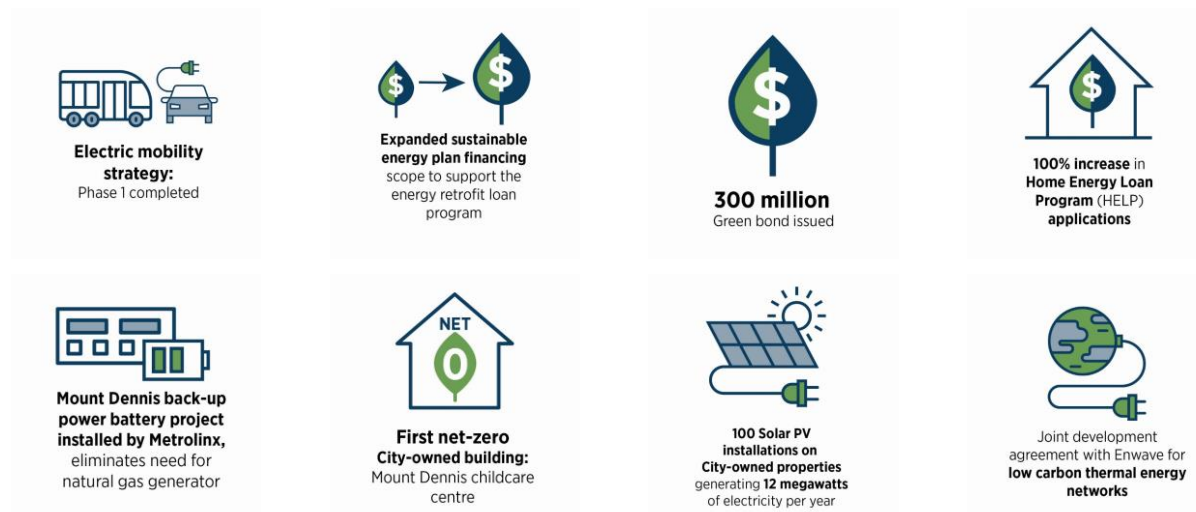
# TransformTO: Climate action for a healthy, equitable, prosperous Toronto

TransformTO identifies a series of short- and long-term actions to reduce community-wide greenhouse gas emissions in key sectors – buildings, transportation and waste. These long-term goals, unanimously adopted by City Council in 2017, guide the actions we collectively need to take to achieve a low-carbon future.



## Key Initiatives Advancing TransformTO

The EED contributes to many key initiatives to transform Toronto buildings, transportation and waste systems to support a low-carbon city. Notable achievements include the first net-zero City-owned building, new community grants for climate action, retrofits at 21 Toronto Community Housing buildings, and the \$300 million green bond issued in 2018.





## Sustainable Energy Plan Financing and Energy Retrofit Loans

In July 2018, City Council approved the expansion of the Sustainable Energy Plan Financing mechanism to include privately-owned commercial, industrial and multi-residential buildings, including condominiums.

Through the Energy Retrofit Loan program, funded by Sustainable Energy Plan Financing, the City offers low-interest loans to support retrofits in buildings across Toronto, including energy conservation, renewable energy, and greenhouse gas reduction projects. Since 2013, the City has provided approximately \$53M in energy retrofit loans.

### Project profiles:

- The **YMCA** received \$12 million to finance the installation of low-carbon resilient energy systems comprised of roof-top and wall-mounted solar energy generation and battery storage systems; 48 electric vehicle charging stations; and high-efficiency combined heat and power systems. Annual CO<sub>2</sub> emissions reductions are expected to be about 2,600 tonnes per year.
- **Toronto Community Housing** received over \$35 million in financing to undertake comprehensive energy retrofits in nine TCHC buildings, included lighting retrofits, heating and domestic hot water system upgrades, window replacements, exterior walls over cladding, the installation of occupancy sensors and water conservation measures. These deep energy retrofit projects will save approximately \$1.9 million, 5,300,000ekWh, and avoid 3,500 tonnes of CO<sub>2</sub> emissions per year.

## \$300 million Green Bond

In 2018, the City of Toronto issued its inaugural green bond (debenture) of \$300 million to finance low-carbon transit-related investments. Toronto is one of the first municipalities in Canada to issue a bond to raise the capital required to deliver projects in support its climate action strategy.

The issue attracted interest from over 30 investors and the City achieved the lowest interest-rate since amalgamation, resulting in \$600,000 in savings.

Bonds are Toronto's primary means of raising funds from the capital markets. The funds raised through this first bond issuance will focus exclusively on TTC transit projects to support their expansion and delivery.

Future offerings will support a broad range of initiatives that mitigate, and help us adapt to, the effects of a changing climate, including: renewable energy, energy efficiency, green buildings, water and waste water management, pollution prevention and control, and the circular economy.

## Electric Mobility Strategy

In 2018, the EED in partnership with the City's Electric Vehicle Working Group initiated the development of an Electric Mobility Strategy for Toronto. The strategy will support current and future electric mobility adoption and identify actions that the City can take to establish itself as a global leader in electric mobility.

The strategy will support the achievement of a key TransformTO goal: 100% of transportation will use low-carbon energy sources by 2050. A broad group of industry stakeholders was engaged in help identify opportunities and develop the strategy.

### 2018 Highlights:

- Assessment Phase Report completed
- Strategy Framework completed in consultation with external stakeholders
- Over 75 stakeholders participated in two engagement workshops



EED operated Plug-In Hybrid Vehicle (PHEV)

## Leveraging Public and Private Funding

EED led a coordinated cross-corporate effort to leverage funds for over 50 City greenhouse gas mitigation proposals. Funds were received from the Government of Canada, Natural Resources Canada, the Province of Ontario, the Federation of Canadian Municipalities, the Independent Electricity System Operator, and C40 Cities.

The funding, ranging from \$50,000 to \$135 million per project, will support of new and enhanced capital projects, demonstrations, research, and technical studies.

The funds will be applied to:

- support the battery electric bus program at TTC
- provide cycling infrastructure
- spur social housing energy retrofits
- expand the Home Energy Loan Program
- deliver the Toronto's Greenest Neighbourhood initiative to advance home energy efficiency
- undertake corporate buildings energy retrofits
- support engineering design for net-zero communities in Toronto.

## Better Buildings Partnership

Through the Better Buildings Partnership (BBP) the City offers programs and services to promote energy efficiency retrofits and emissions reductions in homes and buildings across Toronto.

Buildings are the single largest source of greenhouse gas emissions in Toronto, accounting for 52 per cent of emissions in 2017. To meet the City's TransformTO goal of an 80 per cent reduction in greenhouse gas emissions, 100 per cent of existing homes and buildings in Toronto must be retrofitted by 2050.

In 2018, key initiatives included the Energy Retrofit Loan program; stakeholder engagement and needs assessment for energy-efficiency retrofits in buildings; energy use benchmarking in academic and health care sites; and deep-retrofit program design. The City's Home Energy Loan Program, which offers low-interest loans to support the retrofit of single-family homes, was also integrated into the BBP.

## Stakeholder Engagement

In 2018, EED engaged a variety of building industry stakeholders through three major initiatives:

- a multi-sector survey to assess the needs of landlords, building owners and property managers and identify drivers of energy efficiency investments, perceived barriers, and potential solutions
- a benchmarking study with schools and long-term care facilities to provide baseline data on building energy use and demonstrate opportunities for energy efficiency and GHG reduction projects
- a series of workshops with over 20 industry experts including architects, property owners and managers, construction leaders, engineers and environmental non-profit organizations to inform program design for deep retrofits

## Energy & Water Reporting and Benchmarking

Through the BBP, the City actively promotes the Province of Ontario's Energy & Water Reporting and Benchmarking (EWRB) legislation and provides building owners with support to meet the reporting requirements. This support and promotion contributed to the achievement of an 82 per cent compliance rate in Toronto in 2018, the first year of reporting.

The energy and water data reported will help to inform City program design and EED's efforts to support underperforming buildings and market segments to improve performance and reduce GHG emissions.

## Home Energy Loan Program

The Home Energy Loan Program (HELP) offers Toronto homeowners competitive rates on low-interest loans of up to \$75,000 to cover the cost of home energy improvements and retrofits. Eligible improvements include energy-efficient heating and cooling systems, windows, doors, insulation, renewable energy technologies and more. Energy-efficient homes increase household comfort, reduce energy costs, and reduce greenhouse gas emissions.

Since 2016, homeowner applications have increased more than 100 per cent, with over 347 applications submitted in 2017 and 2018. The average project value also increased from \$18,000 to \$28,000.

To date, HELP has disbursed over \$3.3 million in loans, averaging \$19,402 per applicant. Participating homeowners have reduced their energy bills by \$560 per year, on average. Homeowners that accessed the HELP program in 2018 reduced their total average annual greenhouse gas emissions from 9.7 tonnes to 6.8 tonnes.



Since 2014, 172 home energy retrofits have been completed with funding from HELP; 64 of those were completed in 2017 and 2018.

## Tracking and Reporting Progress

Quantifying progress towards Toronto's long-term greenhouse gas emissions goals is an important component of ongoing environmental decision-making. Through community-wide and project-specific measurement, EED tracks the City's progress and helps the City to understand which actions have the most meaningful impacts on future greenhouse gas emissions.

Since 2011, the City of Toronto, through the EED, has been disclosing its progress towards its long-term carbon reduction target through a robust reporting framework to the CDP (formerly the Carbon Disclosure Project). Through the framework, over 100 variables are tracked to consistently measure how cities are acting together to reduce greenhouse gas emissions.



The City of Toronto received an "A" score in CDP's first ranking of 596 global cities' actions to cut emissions and set climate strategies, based on its 2018 emissions inventory. This "A" score places Toronto in the "Leadership" category with only 7 per cent of cities worldwide.

# RESILIENT CITY

The EED is developing and implementing innovative resiliency policies and programs to address climate change and make Toronto one of the most environmentally sustainable cities in the world.



## Food System Climate Change Risk Assessment

In 2018, EED supported Toronto Public Health to complete a high-level vulnerability assessment of the impact of climate change on Toronto's food system. The study, the first of its kind in Canada, involved workshops and 49 interviews with stakeholders from public and private sector organizations essential to the food supply chain within 160 km of downtown Toronto. Findings reveal that while extreme weather events could potentially disrupt Toronto's food supply, the current risk, especially on a massive scale, is relatively low.

The study highlights the need for a concerted effort across the food system to address key vulnerabilities that could impact food access. A prolonged, widespread electrical power disruption was considered to be the largest risk. City Council adopted the study findings and the staff report recommendations were integrated into the City's Resilience Strategy, including actions for City divisions to:

- better understand the “last mile” of the food distribution system and overall food environment;
- incorporate a food lens into emergency planning and climate hazard mapping at the municipal and provincial levels;
- build resilience of critical food infrastructure, including the Ontario Food Terminal; and
- support vulnerable neighbourhoods in planning for and taking action on food emergencies.

## Climate & the City's Annual Financial Reporting

In 2018, City Council directed EED to work with City financial staff and examine the recommendations from the G20 Financial Stability Board's "Task Force on Climate Related Financial Disclosure" (TCFD). This work helped initiate a joint project with the Chartered Professional Accountants of Canada to develop a guidance document for cities disclosing climate-related financial information in annual financial reporting.

## Eco-Roof Incentive Program

Since 2009, the Eco-Roof Incentive Program, delivered by the EED, has supported the installation of 423 eco-roofs representing 815,995 square metres of roof space, equivalent to about 100 football fields. Each year, these roofs reduce energy consumption by 1,683 megawatt-hours (MWh), avoid 306 tonnes of greenhouse gas emissions, and divert over 14.8 million litres of storm water.

The program, which supports the installation of green and cool roofs on residential, industrial, commercial and institutional buildings, is fully funded by developers who opt to pay cash-in-lieu of constructing a green roof, as required by the Green Roof By-law.

### 2018 Highlights:

- 87 eco-roof projects approved (131,297 square metres)
- 79 projects completed: 68 cool roofs, 11 green roofs (103,436 square metres)
- 153 megawatt-hours (MWh) per year of energy saved
- 29 tonnes of GHG emissions reduced per year
- 754,611 litres of storm water diverted



Green Roof installed by Eco-roof Incentive Program participant

## Toronto's Pollinator Strategy

With the goal of protecting the more than 360 species of bees and more than 100 species of butterflies and other pollinators found in Toronto, the EED developed Toronto's first Pollinator Protection Strategy in partnership with expert stakeholders and the input of about 7,000 residents.

The strategy, unanimously adopted by City Council in April 2018, identifies guiding principles, six priorities, and 30 actions that the City and community can take to protect our diverse native pollinators.



In 2018, City Council declared Toronto's Official Bee - a green metallic sweat bee known as *Agapostemon virescens*.



# GREENING CITY OPERATIONS

With a commitment to lead by example, the City's TransformTO climate action strategy includes goals to reduce emissions from the City's own operations:

**100%**   
of new City-owned buildings will be built to be near-zero GHG emissions by 2026

**100%**   
of existing City-owned buildings will be retrofitted to be 40% more energy efficient, on average, by 2040

**24 MEGAWATTS**   
of renewable energy capacity will be installed on City-owned facilities and lands by 2020

**45%**   
of City-owned vehicles will be low-carbon by 2030

 **1.5 MILLION**  
gigajoules of energy will be generated from biogas by 2030

**100%**   
of City-owned facilities will achieve zero waste status by 2030

The City has a number of programs and initiatives in place to reduce energy use in its facilities and ultimately meet its greenhouse gas emissions reduction target of 80 per cent by 2050.

## Energy Conservation and Demand Management

The EED manages energy efficiency retrofits of City buildings and works with other divisions to reduce emissions from its operations by:

- carrying out deep energy retrofits in City-owned facilities;
- setting specifications and standards for low-carbon energy solutions;
- leveraging financing solutions that enable energy savings;
- guiding new construction projects to adhere to zero carbon building standards and certifications;
- installing renewables, including solar PV and geo-exchange systems at City facilities where feasible; and
- integrating Building Automation Systems (BAS).

## Demand Response

With the goal of reducing electricity consumption in City-owned buildings during periods of peak demand, the EED coordinates the City's involvement in the Independent Electricity System Operator's (IESO) Demand Response Program, working with City Agencies, Corporations and Divisions to identify potential sites.

Participating in Demand Response generates revenue for the City, optimizes its assets, and contributes to Toronto's overall energy security and resilience. In 2018, 22 City sites participated, reducing electrical consumption by approximately 5.5 megawatts and generating an estimated \$390,000 in revenue.



The High Level Pumping Station near Avenue Road and Dupont is one of 22 City-owned sites that generate revenue through Demand Response.

## Building Automation Systems

Building Automation Systems help to optimize a building's performance by providing automatic centralized monitoring and control of building systems, primarily heating, cooling and lighting.

The EED manages centralized Building Automation System (BAS) servers; executes BAS retrofit projects; and provides expertise and support to City Divisions by providing standardized specifications, reviewing HVAC design/specs/drawings, performing

diagnostics/troubleshooting, and preparing, awarding and supporting maintenance contracts.

### 2018 Highlights:

- \$90,218 in SaveOnEnergy incentives received for a Metro Hall retrofit which reduces electricity consumption by 902,183 kWh annually
- BAS replaced at East York Civic Centre; started construction on multi-year BAS replacement and energy upgrades project at City Hall
- upgraded pneumatic to digital controls at EMS Headquarters, 4330 Dufferin Street
- upgraded and connected seven community centres with ice rinks to the City network for remote access and monitoring
- designed and awarded 5-year BAS contract for maintenance, technical and emergency services in 106 buildings, including 12 blanket contracts valued at over \$4 million
- designed and kicked-off a BAS retro-commissioning pilot project at Police Division 42 at 242 Milner Avenue
- prepared project scope and RFQ for multiple projects: Etobicoke Civic Centre, 2 Civic Centre Court, and the Police Intelligence Unit

## Energy Conservation

EED carries out a large-scale lighting retrofits at civic buildings. The transition to light emitting diode (LED) technology results in significant energy and cost savings.

### 2018 Highlights:

Locations	Project cost	Annual Electricity Savings (kWh)
EMS Headquarters	\$235,964	185,196
22 EMS stations	\$466,681	286,070
East York Civic Centre	\$271,804	201,753
York Civic Centre	\$271,221	199,120
Metro Hall and City Hall	\$2,100,000	1,442,505
North York Civic Centre	\$667,530	854,114
18 Dyas Road	\$247,195	145,000
Scarborough Civic Centre	\$1,027,460	977,327
Waterfront Neighbourhood Centre	\$216,948	204,222
Old City Hall	\$443,195	386,702

## Deep Energy Retrofits

Using the Energy Service Company (ESCO) model to achieve significant energy reductions at key facilities, private sector industry leaders specializing in energy auditing, project design, and construction services will serve as a one-stop-shop for delivering energy savings. Currently, EED is working with Parks, Forestry and Recreation to pilot a deep energy retrofit project, with plans to roll out the project delivery model across other City sites and Divisions once proven successful.

### Waterfront Neighbourhood Centre

- \$850,000 in grants and funding received from the IESO and Federation of Canadian Municipalities for an innovative lake-based, geo-exchange system
- Expected benefits include 72 per cent reduction in energy consumption, 80 per cent reduction in GHG emissions, and a 40 per cent reduction in energy costs
- In 2018, an LED lighting retrofit was completed



Waterfront Neighbourhood Centre - 627 Queens Quay West

### EMS Headquarters

- In 2018, LED lighting and BAS upgrades were completed
- In 2019/20 a 360 kW Solar PV carport and ground-based geo-exchange system for heating and cooling will be installed
- When complete, energy use will be reduced by 59 per cent, GHG emissions by 4 per cent, and energy costs by 40 per cent, as compared to 2017

## Solar Photovoltaics (PV)

Over 100 rooftop solar PV systems are now installed on City-owned buildings, generating clean energy, and revenue, through the Feed-In Tariff (FIT) program. Solar PV supports two key TransformTO goals:

- 24MW of renewable energy will be installed on City facilities by 2020
- 75 per cent of Toronto's energy use will come from renewable or low-carbon sources by 2050

Important solar PV systems in planning stage include a building integrated photovoltaic system at the North York Civic Center, and a large scale 735kW solar PV rooftop system at the Ashbridges Bay Water Treatment Plant.

## Up time of 99%

In 2018, the City's solar portfolio generated power for 99 per cent of daylight hours producing \$2.5 million in revenue and a reduction of 536 tonnes of greenhouse gas emissions. While the Provincial Feed-in-Tariff program ended in 2017, the City continues to install rooftop solar through the Net Metering program to generate electricity and offset a portion of the hydro bill.

## Pilot Project Success: Solar + Energy Storage

The City's first Solar PV + energy storage project was installed at EMS Station 46 located in the Woodbine and Danforth area. The system, which offsets 39 per cent of the site's electricity consumption and provides back-up power in the event of a power outage, consists of:

- 10 kW of solar capacity on the south-facing wall and rooftop
- 27kWhr of stored energy in two Tesla Powerwall batteries



EMS Station 46 - 105 Cedarvale Avenue

Based on this innovative demonstration project, the City plans to scale this solution to other facilities, which will improve Toronto's resilience.

## Net Zero Building - Mount Dennis Child Care Centre

In 2018, the EED worked with Children's Services and Facilities Management on the design of Mount Dennis Child Care Centre which is expected to be the first net-zero building in Toronto. EED also worked with PF&R to determine the feasibility of two net-zero community centres and supported City Planning in developing the renewable energy and net-zero requirements for the Toronto Green Standard (Version 3).



Mount Dennis Child Care Centre - 30 Denarda Street

# ENERGY SECURITY and SUPPLY

Toronto's population, which is rising at one of the fastest rates in North America, puts increasing stress on our energy grids and resources. By proactively planning to meet future energy needs and exploring new ways to secure our energy supply – through energy conservation, distributed energy solutions, and strategic partnerships with key stakeholders – EED is working to improve Toronto's energy security.

EED works to accelerate and scale-up implementation of near-zero GHG emissions new development ahead of 2030 through:

- a partnership with City Planning to establish policy frameworks, prepare Community Energy Plans, and review development applications for Toronto Green Standard compliance;
- strategic engagement with industry stakeholders, including real estate and energy developers, architects, engineers, cost consultants, and investors, to identify and problem-solve challenges;
- collaboration with other Divisions on policies and processes to support industry adoption of renewable energy, backup power, and high performance buildings; and
- project development, including Combined Heat and Power plants for resilience, and the strategic development of Low-Carbon Thermal Energy Networks (district energy systems).



The Nest Condos on St. Clair Avenue West is a high performance new construction project designed to Toronto Green Standard Tier 2. Image credit: RAW Design

## Energy Planning & Development Review

EED's New Development Team collaborates with City Planning to integrate energy, emissions, and resilience into all steps of the land-use planning and development review process. In partnership with City Planning, we draft city-wide Official Plan environmental policies, prepare neighbourhood-scale Community Energy Plans, and review Energy Strategy reports and building Energy Models submitted by developers.

### 2018 Highlights:

- finalized the TOcore Downtown Energy Plan
- reviewed 39 energy strategy reports, which identify opportunities to reduce energy use and CO<sub>2</sub> emissions by 51 per cent and 69,000 tonnes per year, respectively
- reviewed 74 Energy Models, including the first proposed near-zero emissions building, which will avoid over 10,000 tonnes of CO<sub>2</sub> compared to the Ontario Building Code
- 16 high-performance new construction projects in Toronto were completed with funding from the Save-on Energy program, avoiding 2 MW of electrical demand and 247 tonnes of CO<sub>2</sub> annually. EED runs the High Performance New Construction program in Toronto, in partnership with Toronto Hydro and the IESO.

### Project Profiles: Unilever Precinct & East Harbour Development

The 60-acre Unilever Precinct is one of the first large sites subject to this integrated land use-energy planning framework. EED worked with City Planning to include energy and resilience policies into the Unilever Precinct Secondary Plan. First Gulf is responding to this with its own sustainability-focused development approach for East Harbour. In addition to pursuing a carbon neutral target, East Harbour is also a registered EcoDistrict, which prioritizes equity, resilience, and climate protection.



**Unilever Precinct Secondary Plan**

Image Credit: City of Toronto Planning



**East Harbour Energy Strategy**

Image Credit: First Gulf

## Development of new Low-Carbon Thermal Energy Networks

EED also plays a central role in accelerating and scaling-up implementation of low-carbon thermal energy networks (district energy systems), which is a key solution to reducing emissions in new development. We support energy developers across the City, and we also have a strategic partnership to develop projects in specific locations.

### 2018 Achievements:

- The City and Enwave Energy Corporation signed a Joint Development Agreement to identify and develop 10 low-carbon thermal energy networks in Toronto
- EED initiated the business case for three low-carbon thermal energy network nodes, including the Port Lands, which aims to be Toronto's first net zero community
- Combined heat and power projects completed at the Etobicoke Olympium and Agincourt Community Centre will allow the facilities to operate as Emergency Reception Centres during extended power outages



The district energy system at Exhibition Place provides heating and cooling to the new Hotel X Toronto.

### Project Profile: Low-Carbon Thermal Energy Networks – The Well



'The Well' a new mixed-use community at Front Street West and Spadina Avenue, will house thermal energy storage tanks to provide low carbon cooling and heating services to the site and nearby properties.



# OUTREACH & ENGAGEMENT

Through Live Green Toronto, EED delivers a suite of programs, resources, tools and events to engage and inspire Toronto residents and businesses to help green our city. With a strong focus on social media and extensive cross-divisional and cross-sectoral outreach and engagement, Live Green Toronto raises awareness, generates connections, and contributes a healthier and more resilient city.

In 2018, EED staff and volunteers attended 115 community festivals, trade shows and other public events.

At these events, they engaged with tens of thousands of residents and raise awareness of a variety of City environmental programs and initiatives, including cycling, recycling, waste reduction, pollinators, TransformTO, local food and more.

## 2018 Highlights:

- 115 events attended
- 4,612 volunteer hours of service
- 36% increase in community cleanups as part of Clean Toronto Together
- 12,000 Twitter followers
- 3,100 Instagram followers
- 5,900 Facebook followers



## TransformTO Climate Action Engagement

In 2018, EED staff partnered with over 30 community organizations, not-for-profits, foundations and resident groups on various new projects that support climate action engagement.

We also commissioned a comprehensive survey to capture residents' perceptions on climate change and their willingness to take action. Over 400 telephone interviews were conducted. Residents' input helped to inform the development of climate action priorities, goals and metrics to measure success.

78% of survey respondents are concerned about climate change and its effects on Toronto.

## Toronto's Greenest Neighbourhoods

In June 2018, EED launched Toronto's Greenest Neighbourhoods, a project to encourage homeowners in several Toronto neighbourhoods to make their homes more energy efficient. The program was funded through the Province of Ontario's Partners in Climate Action program. EED staff partnered with three community organizations to deliver outreach and engagement on energy efficiency to homeowners in their communities. Through the project, homeowners could view aerial heat loss images which showed how much heat their homes were losing, and where.

### 2018 Highlights:

- 30+ community events held to promote home energy efficiency
- over 2,000 visitors to the MyHEAT web platform
- 476 houses canvassed

## Live Green@Work

Through Live Green @ Work, the EED encourages City staff to help the City achieve its zero waste and emissions reduction targets. EED educates staff on how to green our workplaces; supports various workplace environmental events and initiatives; coordinates waste audits; educates Facilities Management staff on program changes; and supports a network of Live Green Teams, consisting of 120 volunteers at various City work sites.

### 2018 Highlights:

- 87% of waste diverted at City's largest corporate buildings
- 2,000 binders diverted to school boards
- launched the Live Green@Work intranet site
- engaged City staff in Plastic Free July and the Corporate 20-Minute Makeover
- educated staff through an Open House at Metro Hall

## Live Green Perks

Members of the Live Green Perks program get exclusive discounts and deals on green products and services at more than 450 Toronto businesses, as well as invitations to special events and contests.

Anyone can join the program by downloading the free Live Green Perks app and showing it at the time of purchase to claim a deal at a participating business.

As an added incentive to join the program, Live Green Toronto plants a tree for every 20 deals an individual claims with the app.



## 2018 Highlights:

- 5,598 new Live Green Perks members
- 5,113 new app registrations
- 3,151 new sign-ups for the Live Green Toronto newsletter
- 24 new businesses participating

## Waste Reduction Community Grants

Launched in 2018, the City's Waste Reduction Community Grants, managed by the EED, provide funds for innovative community-based projects that reduce residential waste and increase participation in the City's waste diversion programs. The program is a partnership between Solid Waste Management Services and the EED.

The grants will provide up to \$150,000 in funding per year in 2018, 2019 and 2020. A priority is to support projects that address waste reduction in multi-residential buildings, multi-lingual communities, and Neighbourhood Improvement Areas.

## 2018 Highlights:

- 80 Expressions of Interest submitted
- 14 applicants invited to submit a full application
- \$116,088 in funding was awarded to seven projects



In 2018, the Junction Farmers' Market was awarded \$12,488 to become a zero-waste market through the City's Waste Reduction Community Grants.

## Clean Toronto Together

Through Clean Toronto Together, the City of Toronto's annual spring cleanup, the EED engages almost 200,000 residents, students, businesses, organizations and community groups to help clean up public spaces across Toronto. Clean Toronto Together is the largest municipal cleanup campaign in Canada.



Mayor Tory and the Live Green Toronto team kick off the 2018 spring cleanup at Nathan Phillips Square.

### 2018 Highlights:

- 300,000 twitter impressions #cleantoronto
- 185,937 participants 453 cleanup events, up 26 per cent over 2017
- 491 TDSB and TCDSB schools participated
- 242 corporate cleanups with 6,714 volunteers

## Toronto's Greenest Choice

Toronto's Greenest Choice (*formerly Best of Live Green Toronto*) is an annual campaign that invites Toronto residents to vote for the places, spaces and businesses that are helping to make Toronto one of the greenest cities in North America.

Over a two-week period in September, Toronto residents cast over 80,000 votes in 25 categories, including Toronto's favourite beach, bike shop, bird, coffee, bike trail, and farmers' market.



## Live Green Toronto Volunteers

Each year, a group of 1,500 dedicated Live Green Toronto Volunteers, who together speak more than 110 languages, engage with more than 100,000 residents at community events across the city. The EED provides extensive training to volunteers on a wide range of topics, including: climate change, waste, water and energy efficiency, water and soil pollution, air quality, sustainable transportation, green buildings and development, environmental bylaws, local food, pollinators and more.

### 2018 Highlights:

- 4,612 hours of volunteer service provided
- 147 tradeshow and community events attended
- 20 training sessions held

## Smart Commute Toronto

Delivered by the EED in partnership with Metrolinx, the Smart Commute program engages and works with local businesses and organizations to promote sustainable commuting options (e.g. carpooling, cycling, and public transit) to their employees. With the goal of reducing single-occupant vehicle trips, the program helps to ease gridlock, improve air quality and reduce greenhouse gas emissions.



Mayor Tory and EED staff celebrate Bike to Work Day, May 2018

### 2018 Highlights:

- 83 client organizations on board, with over 350,000 employees/commuters
- 4 major campaigns delivered: Carpool Week, Bike to Work Day, Bike Month, Smart Commute Month
- 30 workshops and clinics delivered
- secured funds from the Ontario Municipal Commuter Cycling Program to build trip-end cycling infrastructure at City worksites

# NEW INITIATIVES FOR 2019

## TransformTO Climate Action Engagement

In 2019, EED will invite community partners to a collaborative workshop to discuss new and innovative approaches and ideas to support and encourage neighbourhood-level climate action in Toronto. Community leaders from diverse backgrounds will be engaged to ensure their voices are heard and that barriers to climate action participation can be reduced.

## Neighbourhood Climate Action Grants

In the fall of 2019, a new Neighbourhood Climate Action Grants program, managed by the EED, will be launched to fund resident-led projects in the City's Neighbourhood Improvement Areas. Projects eligible for funding will include those that reduce greenhouse gas emissions; educate and engage the public on climate change and climate action; and advance the principles, priorities and actions of TransformTO and the Toronto Strong Neighbourhoods Strategy.

## PollinateTO Community Grants

Through this new grants program, developed and managed by the EED, up to \$5,000 will be available to support community-led projects that create pollinator habitat and educate and engage the community. Projects eligible for funding will include pollinator gardens and rain gardens, projects that involve multiple pollinator gardens on residential streets, and pollinator gardens on school grounds.



City of Toronto Pollinator Garden, Budapest Park