

really lucky, they really believe in you. Mark Ruffalo **PLUG IN\*** Start where you are. Use what you have. Do what you can. Arthur Ashe **COLLABORATION\*** We are facing a global climate crisis that is deepening. We are entering a period of consequences. Al Gore **FIRST\*** Don't think what's the cheapest way to do it or what's the fastest way to do it... think what's the most amazing way to do it. Sir Richard Branson **FOUNDATION\*** Success is a science: if you have the conditions, you get the results. Oscar Wilde **ACTION\*** The universe doesn't give you what you ask for with



# TRANSFORMATION

2016 Report →

If you want to bring a fundamental change in people's belief and behavior... you need to create a community around them, where those new beliefs can be practiced and expressed and nurtured.

Malcolm Gladwell



# THE NEIGHBOURHOOD GROUP

BY NEIGHBOURS, FOR NEIGHBOURS

*Where it all comes from...*

## LOCAL TASTES WAY BETTER!



### FIELD TRIPS

IT'S IMPORTANT FOR US TO KNOW WHERE OUR FOOD COMES FROM.

OUR SUPPLIERS

### Cleaner planet

#### CARS RUNNING ON FRYER OIL?

ALL OUR FRYER OIL IS COLLECTED AND CONVERTED TO BIO-DIESEL!



#### WASTE REDUCTION

WE'VE DONE NUMEROUS STUDIES TO REDUCE ENERGY & KITCHEN WASTE. OUR VEGETABLE PEELS EVEN GO TO A LOCAL PIG FARMER NOW!



#### PROTECTING OUR WATERWAYS

SINCE 1990 WE'VE BEEN RAISING MONEY TO PROTECT OUR LOCAL WATERWAYS. TO DATE WE'VE RAISED OVER \$100,000 FOR VARIOUS CONSERVATION ORGANIZATIONS.



### *It's all in the details*

#### OVER 2000 TREES PLANTED TO DATE!



STAFF SHIRTS ARE ORGANIC COTTON AND TORONTO MADE AT ME TO WE WHERE A TREE IS PLANTED FOR EVERY SHIRT BOUGHT.

#### CUCUMBERS IN WATER?



REFRESHING FLAVOUR AND AVAILABLE LOCALLY YEAR-ROUND WE REDUCE THE AMOUNT OF LEMONS AND LIMES (AND MILES TRAVELLED!)

#### 100% RECYCLED

OUR NAPKINS ARE 100% RECYCLED AND BIODEGRADABLE! (UNLIKE SOME THAT ARE ACTUALLY DYED BROWN TO APPEAR RECYCLED!)



### *Still not convinced?*



#### OVER 80% LOCALLY SOURCED FOODS & BEVERAGES

#### GREEN LEADERSHIP AWARD FOR CANADA



FROM FOODSERVICE AND HOSPITALITY MAGAZINE

#### SUSTAINABLE FISH

WE ARE MEMBERS OF OCEAN WISE AND THE FIRST RESTAURANT IN THE WORLD TO HAVE OUR FISH DNA-CERTIFIED!



2

*great restaurants. 3 locations*



BOREALIS KITCHENER IS IN AN OLD SCHOOLHOUSE!



DID YOU KNOW, TABLES IN BOREALIS GUELPH ARE MADE FROM AN OLD WALNUT TREE THAT FELL IN FRONT OF THE WOOL!



SOLAR PANELS

BOREALISGRILLE.CA

WOOLWICHARROW.CA



## EMISSIONS COMMITTED & REDUCED

MEMBER PROGRAMS

COMMITTED TO DATE

52,599

TONNES OF GHG



CARBON REDUCTION

23

Member Targets Set

WASTE DIVERSION

3

Member Targets Set



WATER REDUCTION

3

Member Targets Set

EQUIVALENT TO

9,528

Cars off the Road

REDUCED TO DATE

42,444

TONNES OF GHG

## MEMBERSHIP

SWR PROGRAMS

TOTAL MEMBERS

28

TRAVELWISE

TOTAL MEMBERS

75

REGIONAL SUSTAINABILITY  
INITIATIVE



TOTAL FTE

36,907

Workforce

LARGEST EMPLOYERS

7 / 10

Members in the Region

## REGIONAL EMISSIONS

COMMITTED

842k

TONNES OF GHG REDUCED



24

Actions

REDUCTION

6%

Community Target

## OUTREACH

SWR SOCIAL MEDIA

SOCIAL MEDIA IMPRESSIONS

436k

ACROSS ALL CHANNELS



FOLLOWERS

7,760

Across all Channels

ENGAGEMENTS

6,330

Across all Channels

## EVENTS

HELD IN 2016

OVER

969

ATTENDEES AT PUBLIC EVENTS



MEMBER ENGAGEMENT

39

Events

SPEAKERS

17

Events

## VOLUNTEERS

REGIONAL

DIRECTLY INVOLVED

78

VOLUNTEERS



EVOLV1

175

Experts Collaborating

VOLUNTEER HOURS

20,000+

Logged in 2016

## ELECTRIC VEHICLES

IN WATERLOO REGION

279

EVs ON THE ROAD



EV TEST DRIVES

84

Approximately

REGIONAL

42

Public Charging Heads



**2016 was a pivotal year at Sustainable Waterloo Region.** Wider changes in regional, provincial, federal, and international movements contributed to a year of hope, a year of progress, and a year of creation.

## COMMUNITY\*

It is the community that has enabled Sustainable Waterloo Region (SWR) to move in the direction of a sustainable, prosperous future. We pride ourselves on being a community-building organization; one that supports, encourages, promotes and celebrates all the great things happening in our corporate and organizational community. That support has come back to us tenfold.

\* *Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has.* **Margaret Mead**

In 2016, with our community and partners, we:



Developed and launched the **Regional Sustainability Initiative**. This new program is the next step in developing sustainable businesses and organizations, and we have achieved unprecedented growth and engagement.



Set a collective mode split target with the members of **TravelWise**. Together, they are committed to making change, getting cars off the road and making our workforce healthier and happier.



Completed the feasibility study for **evolv1**, the regenerative, multi-tenant office building. Design has begun, and a business model has been found to make this building a replicable project.



Re-inventoried the community carbon foot-print through the work of the partners in **ClimateActionWR**. In 2017, we look forward to sharing our collective progress.



Grew the number of electric vehicles (EVs) and charging stations in the region. Our trajectory for **technology adoption** has us on track to reach the goal of 1,000 EVs in the region by 2020.

**ACTION\***

**Yet, the work is not done.**

We have made great strides together, and we are motivated to press this positive momentum onward. We are proud to be your community partner, your catalyst for scaling the impact actions. We are motivated to help not only reduce the effects of organizations on the environment, but also to make sustained change. We are happy to be working with you to steer transformative change at this pivotal moment, in order to create the community we all want to live in.

**Tova Davidson**  
Executive Director  
Sustainable Waterloo Region

**Barry Colbert Ph.D.**  
Board Chair  
Sustainable Waterloo Region

\* The universe doesn't give you what you ask for with your thoughts; it gives you what you demand with your actions. **Dr. Steve Maraboli**



The environment and the economy are really two sides of the same coin. If we cannot sustain the environment, we cannot sustain ourselves.

Wangari Maathai



The Regional Sustainability Initiative is an organization-focused target-setting program where leading organizations set carbon, waste, and/or water reduction targets. Evolving from the Regional Carbon Initiative, the program fosters the development of the local clean economy. Members are encouraged to take an overall operational approach that integrates sustainability throughout the entire organization. Participating organizations receive one-on-one support, tools, resources, networking, and training to secure the foundation of a successful action plan.



TravelWise provides sustainable commuting solutions to employees in Waterloo Region with the ultimate goal of reducing the number of single-occupancy vehicles traveling on our roads. In addition to offering discounted Grand River Transit (GRT) transit passes and an Emergency Ride Home reimbursement program to employees, TravelWise provides an online carpool matching tool, fun promotional events, and customized commuting reports to member organizations.



ChargeWR collaborates with organizations in Waterloo Region to plan and implement activities that increase the number of electric vehicles (EVs) and charging stations in the region. Working with partners, the goal is to reach 1,000 EVs by 2020.



ClimateActionWR is collaboration between local organizations and community members focused on climate change mitigation. Led by Reep Green Solutions and Sustainable Waterloo Region, this program coordinates the activities of the Climate Action Plan. It establishes cross-sector dialogue, facilitates collaborative opportunities, and monitors and measures progress toward the achievement of our community's greenhouse gas emission reduction target of 6% below 2010 levels by 2020.



A unique project envisioned by Sustainable Waterloo Region, The Cora Group, The David Johnston R+T Park and EY Canada. The Cora Group will begin development of this first of its kind, net positive, multi-tenant sustainable building in 2017. SWR is working with a variety of community partners on the creation of a sustainability innovation hub to foster the development of the local clean economy and build a culture of sustainability in the building.

## PROGRAMS\*

\* All around the world, in the country and the towns; There's a growing global chorus and it's ringing in the halls; Do it for the children, do it for yourself; Everyone is needed, everyone can help. [Raffi](#)



# FOUNDATION\*

## Targets Create Focused Action

One of the foundational principles for Sustainable Waterloo Region is the idea of reporting, and better yet, targets. It is a fundamental business practice that you measure 'what matters' and you manage 'what you measure'. This principle is woven through all of our programs and projects. By measuring and setting targets on environmental factors, organizations can not only reduce their impact, but do so in a way that is good for business. In 2016, we upped the game in measurement and target setting, setting a program-wide target in TravelWise, and in the development and launch of the Regional Sustainability Initiative.

## It Takes a Community

One person alone in an organization cannot reduce its environmental impact. One organization alone cannot mitigate climate change. Change takes a community; it takes many helping hands, many voices, and new ideas for new challenges.

In 2016, there are so many places and so many ways that SWR has worked to create that community. The development process and subsequent launch of the Regional Sustainability Initiative was fueled by community collaboration, and we now have the framework to support a greater breadth of organizations in their pursuit of sustainability. Progress in the evol1 project has been made possible by the incredible commitment of community partners. ClimateActionWR is, by definition, a program that brings together the community to work towards the future we all want.

SWR sends out big kudos to everyone involved in the sustainability network in our community!



### The Susty Pros informal networking group

is one example of how a network can be created. This group was the brain child of Mat Thijssen, former SWR staffer and now University of Waterloo Sustainability Coordinator and SWR volunteer. They meet every two months to talk about the challenges and the rewards of driving sustainability in an organization or in the community.





## Multi-Level Focus on Climate Change

# THE BIGGER PICTURE

There is a movement afoot. The environment and climate change became a central focus of all levels of government in 2016:

- On October 5, 126 parties ratified the Paris Agreement to keep the temperature increase below 2°C
- A pan-Canadian agreement on clean growth and climate change was signed by most provinces, which takes a collective approach to climate change mitigation
- Cap and Trade was announced in Ontario and the program design unveiled, to be launched in 2017
- The Ontario ClimateAction Plan was released, focusing on transportation, workplaces and homes

SWR is proud to be a regional leader in this movement toward a sustainable, lower carbon future.



## Ontario Cap and Trade

With carbon regulations coming to Ontario in the form of Cap and Trade in January 2017, SWR worked to support the Waterloo Region community to understand and get ready for this new regulation. Cap and Trade will no doubt be top of mind for organizations. So what is it all about?

### The cap

How many tonnes of greenhouse gases (GHGs) can be emitted, and it lowers each year

### The trade

Companies with emissions that exceed the cap can buy credits from firms that reduced their emissions below the cap

### The proceeds

Funds generated from the sale of credits go to a "Green Bank", which invests in programs laid out in the Ontario Climate Change Action Plan

### The costs

As of December 2016, carbon was trading at \$18/ t CO<sub>2</sub>

### The participants

Organizations with facilities that generate more than 25K tonnes of GHGs annually are "capped emitters" and are required to participate by law; facilities generating between >10K and <25K can participate voluntarily

### The market

In the first year, the auction will only include Ontario organizations; in 2018 it is expected to join to the Western Climate Initiative (Quebec and California)

## Looking Beyond Carbon

GHG reductions are not the only area getting attention. On June 1, the Province of Ontario passed the Waste-Free Ontario Act.

SWR recognizes the need to create a low carbon future, and we also recognize the impacts of waste and water. In 2016, we integrated both of these in the Regional Sustainability Initiative and in evolv1. Target setting in waste reduction and water footprint means that the network is looking at environmental sustainability more holistically.

## Creating Internal Momentum

In order to create truly embedded sustainability, efforts must be made to integrate it into all parts of an organization. That is why all our programs are looking at behaviour change, processes, policies, and best practices to encourage and develop a stronger foundation for sustainability.

SWR programs work to engage employees in the sustainability solution. Challenges and competitions like TravelWise's Carpool Month and the Regional Sustainability Initiative's Carbon Cleanse get everyone involved. It is magnified by experiences and shared learning, such as EV test drives and workshop events targeted at employees from specific departments. It is advanced through research with our post-secondary partners on how to encourage sustainable behaviour.

By building a culture of sustainability through engaged and committed teams, organizations can more easily meet their goals. Then they influence behaviours beyond the walls of their business, into the homes and personal lives of their teams and stakeholders.

The Waste-Free Ontario Act is an important step in creating Ontario's circular economy — a system in which products are never discarded, but reintroduced and reused or recycled into new products. Managing our resources more effectively will benefit Ontarians, our environment and economy and support our efforts to fight climate change.

**GLEN R. MURRAY,**  
ONTARIO MINISTER OF  
THE ENVIRONMENT AND  
CLIMATE CHANGE

# CANADA'S \* FIRST

SWR has been working since 2013 to realize a vision to see a leading-edge sustainable building constructed in Waterloo Region – a vision built on our collective local commitment to, and leadership in, sustainability. Collaborating with the Cora Group, David Johnston Research + Technology Park, and EY Canada, this year we turned a corner, bringing the feasibility study to completion and showing that net-positive impact and financial feasibility can go hand-in-hand. The Cora Group now plans to develop evolv1, Canada’s first financially replicable net-positive multi-tenant building.

## evolv1 is designed to:

- 1

Produce **105% of the energy** used on-site by employing passive and active design strategies and on-site solar generation.
- 2

Provide **improved indoor air quality** for its occupants through mechanical and biological filtration.
- 3

Contribute positively to the **water balance** of the community by reducing use in the building, harvesting rainwater for grey-water uses, and increasing infiltration on-site.
- 4

Strive for high levels of **waste diversion** through construction, and zero operational waste-to-landfill through programming that engages the building’s citizens.



PARTNERS:



ENABLING SUPPORT:







Guest Writer

## Overcoming the Performance Gap

Dr. Manuel Riemer  
Wilfrid Laurier University

**Buildings currently account for 40% of global energy use, and 38% of global GHG emissions (UNEP, 2012).** The evol1 project presents a unique opportunity to study the design, implementation, and operation of a cutting-edge green building designed to significantly reduce its environmental impact compared to current standards. In fact, the goal is for the building to be net-positive. This goal cannot be accomplished, however, without the cooperation of the building citizens; that is, those who manage, occupy, and visit the building. Past experiences with green buildings have shown that they fall short of their performance targets due to the building citizens' actions and decisions, such as setting building temperatures too high, leaving windows open during cold periods, or buying take-out food in non-compostable containers. Thus, it is not sufficient to design and build a high-performance building; one must also engage the building citizens in a positive culture of sustainability. Ideally, this should happen even before the building is built. To this end, in collaboration with the evol1 citizens and national partners, such as the Building Operators and Managers Association of Canada (BOMA), we have built a multi-disciplinary team with the goal of developing an evidence-based approach for this type of engagement and building management. With the right support, there is great potential for producing meaningful leading-edge knowledge that will help Canada to better meet its sustainability goals.

\* Don't think what's the cheapest way to do it or what's the fastest way to do it... think what's the most amazing way to do it. Sir Richard Branson





## Unprecedented Growth

**By almost any metric, 2016 was the most successful year in our program history.** The Regional Sustainability Initiative evolved from the Regional Carbon Initiative, a carbon reduction-focused program, to one that more fully encompasses sustainability, including waste diversion and water footprint reduction targets. As a result, more than ever before, community members joined the program network and set targets. The new program also moved beyond targets by partnering with B Lab to develop a Waterloo Region focused environmental impact assessment to measure our members' internal capacity for action year over year.

The new Regional Sustainability Initiative launched at the equally new and rebranded Walper Hotel in downtown Kitchener. It was a festive evening of networking and information sharing amongst environmental professionals from across southern Ontario. New waste targets from AET Group and Wilfrid Laurier University were presented, as well as new water targets from St. John the Evangelist Church and AET Group. Additionally, we were proud to share that both AET and Waterloo North Hydro became the first 'tri-target' members! Both raised the bar and set carbon, waste, and water targets.

Let's not forget that the program still focuses on reducing carbon footprints to mitigate climate change. There were four new carbon targets set in 2016.

# The Regional Sustainability Initiative

is a member-based program where sustainability leaders take real action and set tangible reduction targets in either carbon, waste and/or water.

## IMPACT\*

We support members by offering customized reporting, one-on-one support, employee engagement, communications, and more. These pages give examples of how sustainability-focused organizations are primed to take advantage of the growing low-carbon economy.

## MEMBERSHIP

REGIONAL SUSTAINABILITY INITIATIVE PROGRAM

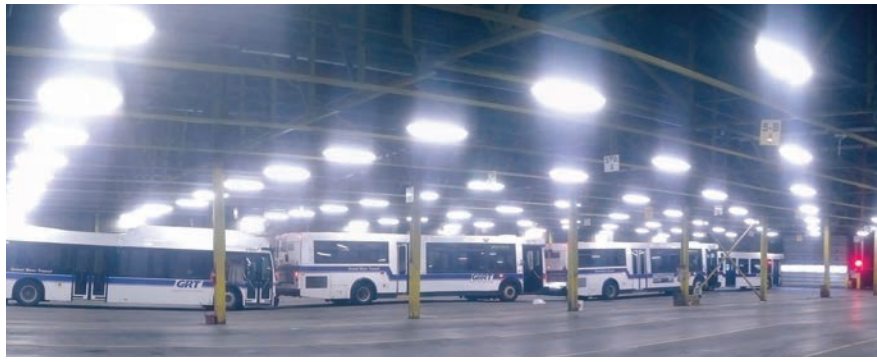
With the addition of 14 new members and 10 new targets set, the Regional Sustainability Initiative's unprecedented growth in 2016 is one illustration of Waterloo Region's commitment to environmental sustainability. Here are the four new carbon targets.

1	WATERLOO CATHOLIC DISTRICT SCHOOL BOARD	TARGET 20%	TONNES 1,725
2	DAVID JOHNSTON RESEARCH + TECHNOLOGY PARK	TARGET 40%	TONNES 1,034
3	ST. PAUL'S UNIVERSITY COLLEGE	TARGET 40%	TONNES 180
4	S2E TECHNOLOGIES INC.	TARGET 100%	TONNES 5

\* Progress is impossible without change, and those who cannot change their minds cannot change anything. **George Bernard Shaw**



01. LED lighting retrofit at a GRT facility provides excellent light quality with decreased energy costs.
02. Building and domestic hot water heating with a wall hung 260,000 Btu/h boiler at Waterloo North Hydro.
03. At Toyota Boshoku, by installing relatively inexpensive controls, the exhaust fan now only runs when necessary and this has resulted in annual CO<sub>2</sub> reduction of 2.4%.
04. VeriForm's operator Nathan Graham monitors steel cutting using the new ultra efficient fan motor to remove the cutting smoke.



01



02



03



04

# Members in Action

## Regional Municipality of Waterloo

### Replacing, Retrofitting, Re-commissioning of Equipment

The Region of Waterloo completed significant equipment upgrades, lighting retrofits, and recommissioning of its buildings in 2016 that **reduced GHG emissions by 1,000 tonnes (about 2%)**.

500 furnaces in Regional housing units were replaced with high efficiency models, reducing natural gas consumption by **90,000 cubic metres** and avoiding **170 tonnes** of annual GHGs.

Large LED retrofits across 14 Regional buildings **reduced power consumption by 2,700 megawatt hours (MWh); approximately 155 tonnes of GHG emissions**.

Two buildings were successfully recommissioned, **reducing 350,000 cubic metres of natural gas and 400 MWh of electricity**, together avoiding **690 tonnes** of annual GHGs.

## VeriForm

### Experimentation & Efficiency

VeriForm is a program alumni who, despite being Carbon Neutral since 2015 and becoming **Canada's 4th company to implement the ISO 50001 energy management system**, is not resting on their laurels. They installed an ultra-efficient fan motor on a dust collector in their steel plate cutting division to **cut electrical demand by 3.8 kilowatts (kW)**. There were two positive outcomes from this installation. First, they were able to slow down the fan motor, reducing heat loss from the exhausted air, **saving 5,508 kilowatt hours (kWh) per year**. Second, rebalancing the fan motor for the slower speed meant smoother operation, leading to a longer fan life with much lower maintenance costs. Smooth thinking.

## Waterloo North Hydro

### Geothermal Reconfiguration

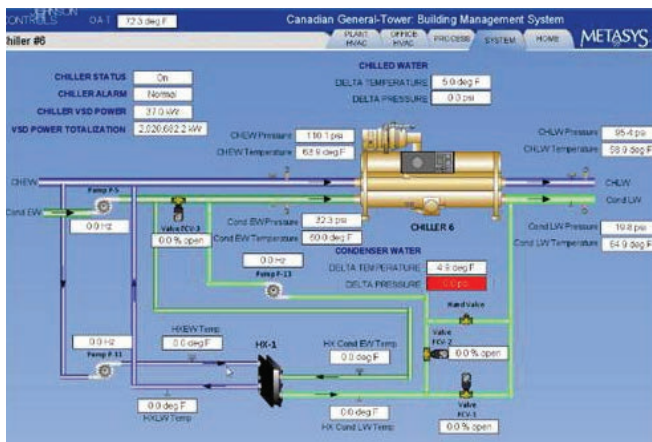
Waterloo North Hydro reconfigured their existing geothermal system to match their actual usage, proving that **energy efficiency rebate programs aren't just for their customers**. Consequently, they **reduced fuel usage by up to one half**, and extended the lifespan of existing equipment.

## Toyota Boshoku

### Micro 'Off-Time' a found treasure

After a company-wide, multi-disciplinary energy reduction 'treasure hunt', Toyota Boshoku found that by turning off localized exhaust fans for as little as one minute when not in use, they reap significant rewards. The new 'demand-based' control **reduced the weekly operating hours of the fans from 121 to 76**. When considering the avoided air temperature controls, this gem **saves them around \$8,000 a year in energy costs and 2.4% of their CO<sub>2</sub> emissions**. Now that's Kaizen!





SUSTAINABLE WATERLOO REGION  
2016 Report

05

06

05. CGT project uses free cooling effect from cooling towers to reduce energy.
06. 500 kW photovoltaic roof on the City of Kitchener Operations Facility.
07. A planter box bioswale captures, cleans and stores water that infiltrates to the groundwater and allows for transpiration via plants in front of AET.
08. Insulated duct work carrying pre-heated air from solar wall and energy recover ventilator on the common exhaust at WLU.



07



08

## Canadian General Tower

### Chiller Plant Free Cooling

Canadian General Tower was able to use the free cooling effect from their cooling towers to reduce the overall energy consumption of the plant's chilled water system. Since implementing this project, they have been able to turn off a chiller completely during the cold season, resulting in an **estimated annual electrical cost savings of \$70,000**, and estimated **annual kWh saving of 1.9%** of the facility's overall electricity consumption.

## City of Kitchener

### Upgrades to Community Centers

The City of Kitchener completed an LED light retrofitting at City Hall, the Kitchener Memorial Auditorium Complex, the Grand River Arena, the Operations Facility, and other community centers, achieving a collective **reduction of 99 tonnes of GHGs**. Upgrades to dehumidifiers and heat exchange systems and increasing insulation saved an **additional 34 tonnes of GHGs**, and **total cost savings of \$115,000**.

The solar roof on the Kitchener Operations building produced more green energy in 2016 than any other year since it was installed in 2012, **offsetting 55 tonnes CO<sub>2</sub>**, and **generating \$500,000 in revenue**.

## Wilfrid Laurier University

### Energy Efficiency Dashboard

Laurier's Energy Efficiency Program (LEEP) **completed Phase 1** projects in 2016. The scope of work included **two solar thermal walls**, conversion from electric heat to a high-efficiency hydronic system, lighting retrofits, low flow water fixtures, building waste heat recovery, demand control ventilation, HVAC retro-commissioning, and sub-metering with integration to a cloud-based dashboard. Students, staff and the public can **check the dashboard for campus buildings' energy use in real time**. Talk about transparency!

## AET

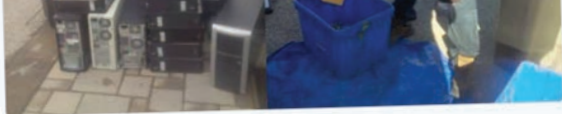
### Stormwater Project

AET has been pushing towards a more comprehensive assessment of sustainability and managing their onsite stormwater. They were able to improve the quality of the water and reduce the overall volume flowing from their property without sacrificing any parking spaces. **70% of the stormwater** on AET's property **will be captured** in this new system, which includes a **500 litre stone forebay** that filters debris, and a planter box bioswale designed to catch, soak up, and **treat 1,300 litres of stormwater** flowing from their rooftop and parking lot. A **2,400 litre rain garden** captures excess water and allows it to infiltrate and recharge groundwater before it can flow into the storm drain. **The estimated diversion per year is 205,000 litres**.



Sustainable Waterloo Region is one of eight social enterprises across Ontario convening networks of businesses setting sustainability targets with the support of Sustainability CoLab. Together we're demonstrating that a more sustainable economy is possible.



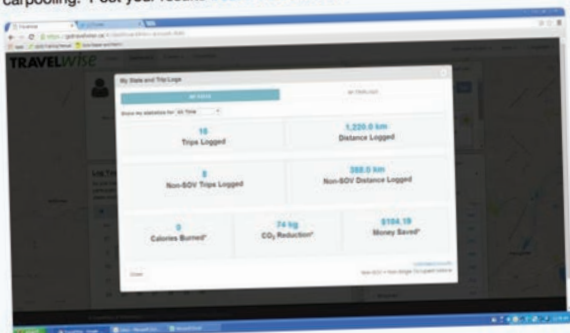


2 4



**Ryan Bourner** @BournRyan · 8 Apr 2016

My @TravelWiseWR stats for commuting week. 74 kg reduction from carpooling. Post your results #carboncleansewr



2 2 8



**Athena Software** @athena\_software · 7 Apr 2016

Super-happy to find out we tied for 2nd in the @SustainableWat #CarbonCleanseWR e-waste drive last week!

1 1 3



**AET Group** @AETGroup · 6 Apr 2016

Despite the cold wet weather, consider biking or walking to reduce carbon from commuting #carboncleansewr



2 5



**Matt Dil** @MattDil · 1 Apr 2016

I think it's safe to say our E-Waste drive @MMGroupLimited was a success. @SustainableWat #carboncleansewr



1 2 5



**William Baird** @Wbaird25 · 31 Mar 2016

Our 2nd litterless potluck lunch was a success for #carboncleansewr lots of great food and coworkers !!! @AETGroup



# 2016 CARBON CLEANSE

In the weeks leading up to the 2015 Evening of Recognition, nine member organizations got their green on by participating in the second annual Carbon Cleanse. Each of the four weeks had a different theme: heat, electricity, waste and transportation. These nine organizations voluntarily accepted the challenges, earning points through participation, and sharing their activities through social media.

One 2016 challenge involved a collaboration with Tech Wreckers, which facilitated an e-waste drive. The challenges highlighted the many ways environmentally conscious habits can be improved, as carbon reduction requires not only better technology and processes, but also a deep cultural buy-in and behavioural change.

The 2016 Carbon Cleanse winners were:

- 1<sup>ST</sup> **AET Group**
- 2<sup>ND</sup> **United Way Kitchener Waterloo & Area**
- 3<sup>RD</sup> **Waterloo Catholic District School Board**

With the launch of the Regional Sustainability Initiative, 2017's competition will expand to include water, allowing more organizations and their employees to get involved.

The 2016 Carbon Cleanse participants were:

AET Group	United Way Kitchener Waterloo & Area
Athena Software	
Crawford & Company	WalterFedy
David Johnston	Waterloo Catholic District School Board
R&T Park	
MMM Group Limited	Township of Wilmot

## Community Recognition for Member Action

# Overcoming the Performance Gap

It's not just the Regional Sustainability Initiative team that is proud of our members' success. Others are paying attention, too.

### Accelerated Systems Inc.

Recipient of the **Mind to Market Award** from the Ontario Centres of Excellence, based on their **innovative technology that does not contain finite rare-earth metals**.

### Borealis Bar & Grille

Recipient of the **2016 Restaurateur of the Year in Canada** (Bob Desautels) from Canadian Restaurant News for leadership in social and environmental initiatives.

### Enviro-Stewards

The Food Waste Prevention toolkit that Enviro-Stewards helped develop for Provision Coalition received a **2016 Clean15 Award**. They were also rated as a **Best for the World Company by B Lab for the third time**.

### Grosche

**Best for the World** from B Lab for **top 10% B Corp environment score**.

### Home Hardware

Recipient of the **Leaders in Sustainability Award** from Call2Recycle, in recognition of their **battery recycling** at their corporate facility, and **encouraging stores across Canada to participate** in the program.

### Kuntz Electroplating Inc. (KEI)

Recipient of the **Energy Efficiency Award** from Energy+. The award is for KEI's **Save on Energy program** implementations such as re-lamping, updated HVAC equipment, and variable frequency drives.

## In Ontario, carbon Cap and Trade kicks off in 2017.

# Cap & Trade

For those participating, much of the heavy lifting happened in 2016 and earlier. In an environment of increasing energy prices, there are some serious savings to be found for those savvy enough to look for them. It's no surprise therefore, that two of our manufacturing members crunched the numbers and decided to voluntarily opt-in to the program. After all, Regional Sustainability Initiative members look to sustainability for a competitive advantage.

Both KEI and CGT are corporate community members that have seen the benefit of sustainability and are consequently well-positioned to take advantage of this business opportunity.

### Canadian General Tower (CGT)

is an ISO 14001 producer of coated fabrics and films for automotive and industrial applications. The Cap and Trade program offered such an opportunity for potential cost savings that they hired a consultant to review the opportunity, and found that opting in was a no-brainer. In 2016, CGT focused on identifying projects to cap their carbon emissions and will be implementing those projects in 2017.

### Kuntz Electroplating Inc. (KEI)

has long included sustainability in their corporate beliefs and business practices. As an industry leader they have an ongoing commitment to sustainable growth environmentally, socially and economically. KEI was the first surface finisher in North America to receive dual certification for ISO 9001 and ISO 14001 and have a fully engaged sustainability team that works diligently on sustainable initiatives. Cap and trade fits well with their portfolio of actions.

### Mennonite Central Committee

Recipient of the **The Sustainable Kitchener Award** from the City of Kitchener, based on their multi-use head office that incorporates a **45,000 litre rainwater harvesting system, an air exchange system, and a complete energy modelling study to maximize energy efficiencies**.

### WalterFedy

Recipient of the **2016 Environment & Sustainability Award** from the Greater Kitchener-Waterloo Chamber of Commerce for **ongoing work in the community**.

**In addition to awards,** three members are considered the best corporate citizens in Canada from Corporate Knights.

### Special shout-out to:

Sun Life Financial	#9
WSP Global Inc.	#15
Stantec	#47

# MEMBER AWARDS

## Rookie of the Year



This award recognizes the most active and accomplished new member of the Regional Sustainability Initiative in 2016. In their first year, s2e Technologies Inc. set an ambitious 100% GHG reduction target, completed the Environmental Impact Assessment and had representation at all SWR events. Their new office space was designed to be a high energy efficiency working space.

## Most Active Member



This award recognizes the most active and involved member in the Regional Sustainability Initiative in 2016. For the third year in a row, this award goes to AET. They showed enthusiastic participation in the program and became the first tri-target member, setting targets in GHG, waste and water. AET has the top Leaderboard score, won the Carbon Cleanse, and attended every SWR event in 2016.

## Greatest GHG Reduction



This award recognizes the member of the Regional Sustainability Initiative that has reduced the most emissions in 2016 relative to their size. This year's award goes to Mennonite Central Committee for **reducing their GHG emissions by 9%**. Reductions can be attributed to solar panel installation on their head office building at 50 Kent Ave. in Kitchener.



# MEMBERS

## OBSERVING

This is where organizations are starting the journey, meeting the community, and learning about the tools available to them.

## CAPACITY BUILDING

At this stage organizations are starting a green team, creating action plans, and establishing their baseline.

## REPORTING

These organizations are refining their action plans and sharing their e-score.



## PLEDGING

Pledging members have set GHG, waste, and/or water reduction targets and report annually on their achievements in sustainability.

### Greenhouse Gas

### Waste

### Water

Gold



Silver



Bronze



Other  
GHG Targets



# PLEDGING MEMBERS 2016

AS OF DECEMBER 31<sup>ST</sup>, 2016

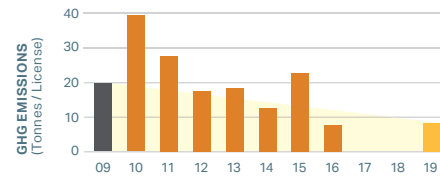
## MEMBER PROGRESS

This page shows the progress of our Pledging Partners.  
Key terms to know are:

- ABSOLUTE EMISSIONS**  
Total GHG emissions produced by the organization
- INTENSITY EMISSIONS**  
GHG emissions divided by a particular growth indicator
- SCOPE 3 REPORTING**  
Indirect sources of GHG emissions captured in their target
- KEY PROJECTS**  
Areas where members have reduced their GHG emissions



Absolute reduction to date:  
-13 TONNES



GOLD

GHG  
REDUCTION TARGET  
(INTENSITY)  
**60%**  
FROM 2009

### SCOPE 3 REPORTING

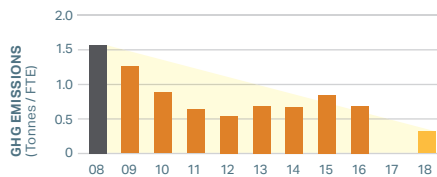
Air, Employee Commuting, Vehicle Business Travel, Waste

### KEY PROJECTS

 Strategic Client Partnerships  Carpooling Incentives  Review of Purchasing Policy



Absolute reduction to date:  
-3 TONNES



GOLD

GHG  
REDUCTION TARGET  
(INTENSITY)  
**80%**  
FROM 2008

### SCOPE 3 REPORTING

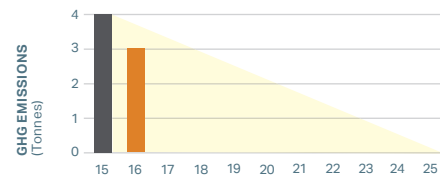
N/A

### KEY PROJECTS

 Green Bin System  Living Wall Maintenance  Rainwater Harvesting



Absolute reduction to date:  
1 TONNE



GOLD

GHG  
REDUCTION TARGET  
(ABSOLUTE)  
**100%**  
FROM 2015

### SCOPE 3 REPORTING

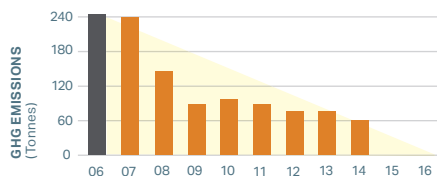
N/A

### KEY PROJECTS

 Green Wall  Utility Submetering



Absolute reduction to date:  
242 TONNES



GOLD

GHG  
REDUCTION TARGET  
(ABSOLUTE)  
**100%**  
FROM 2006

### SCOPE 3 REPORTING

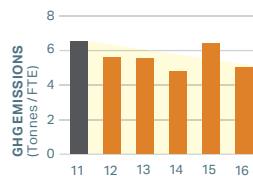
Air, Employee Commuting, Vehicle Business Travel, Waste, Water

### KEY PROJECTS

 Adjustment to Variable Frequency Drive Systems  Upgrade to Dust Control Motor  Daylight Sensors



Absolute reduction to date:  
-30 TONNES



SILVER

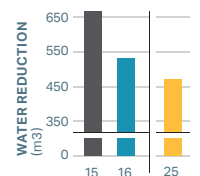
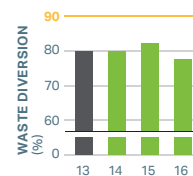
GHG  
REDUCTION TARGET  
(INTENSITY)  
**40%**  
FROM 2011

GOLD

WASTE  
DIVERSION TARGET  
**90%**  
BY 2023

GOLD

WATER  
REDUCTION TARGET  
**30%**  
BY 2025



### SCOPE 3 REPORTING

Air, Employee Commuting, Vehicle Business Travel, Waste

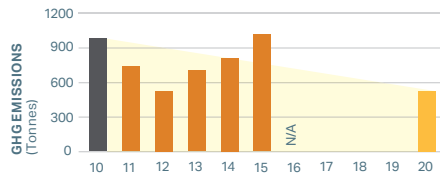
### KEY PROJECTS

 Fleet Upgrades  100% Renewable Energy  Green Office Addition





Absolute reduction to date:  
**-56 TONNES**



SCOPE 3 REPORTING  
Waste, Water

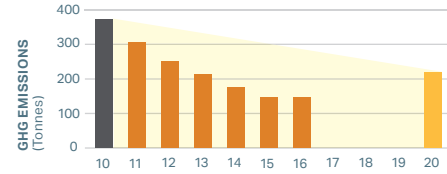
KEY PROJECTS

- Waste Diversion
- Energy Management System

SILVER  
GHG  
REDUCTION TARGET  
(ABSOLUTE)  
**40%**  
FROM 2010



Absolute reduction to date:  
**227 TONNES**



SCOPE 3 REPORTING  
Air, Waste, Water

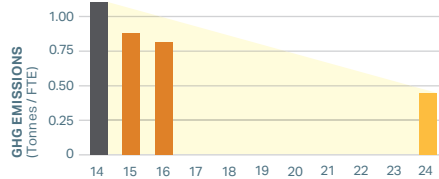
KEY PROJECTS

- Paperless Office
- Renewal Energy Credits and Offsets
- Reduced printer energy use

SILVER  
GHG  
REDUCTION TARGET  
(ABSOLUTE)  
**40%**  
FROM 2010



Absolute reduction to date:  
**238 TONNES**



SCOPE 3 REPORTING  
N/A

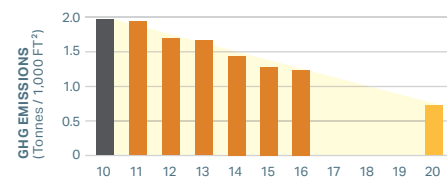
KEY PROJECTS

- Park wide green team

SILVER  
GHG  
REDUCTION TARGET  
(INTENSITY)  
**40%**  
FROM 2014



Absolute reduction to date:  
**95 TONNES**



SCOPE 3 REPORTING  
Water

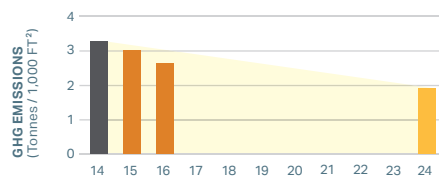
KEY PROJECTS

- Solar Panels

SILVER  
GHG  
REDUCTION TARGET  
(INTENSITY)  
**40%**  
FROM 2010



Absolute reduction to date:  
**84 TONNES**



SCOPE 3 REPORTING  
Air, Water

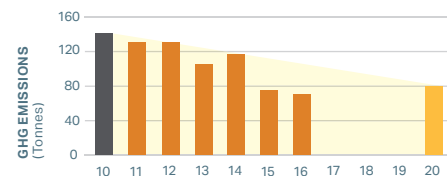
KEY PROJECTS

- Boiler Replacement
- Lighting Retrofit

SILVER  
GHG  
REDUCTION TARGET  
(INTENSITY)  
**40%**  
FROM 2014



Absolute reduction to date:  
**62 TONNES**



SCOPE 3 REPORTING  
Vehicle Business Travel

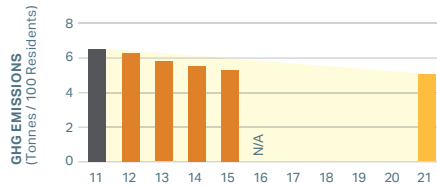
KEY PROJECTS

- LEED Silver Building

SILVER  
GHG  
REDUCTION TARGET  
(ABSOLUTE)  
**40%**  
FROM 2010



Absolute reduction to date:  
**806 TONNES**



SCOPE 3 REPORTING  
Air, Vehicle Business Travel

KEY PROJECTS

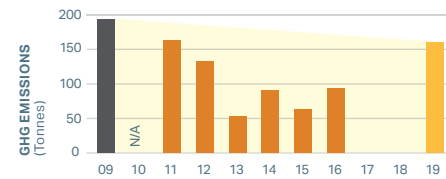
Solar Panels Lighting Retrofit & Occupancy Sensors Chiller Unit Replacement

BRONZE

GHG  
REDUCTION TARGET  
(INTENSITY)  
**22%**  
FROM 2011



Absolute reduction to date:  
**99 TONNES**



SCOPE 3 REPORTING  
Vehicle Business Travel, Water

KEY PROJECTS

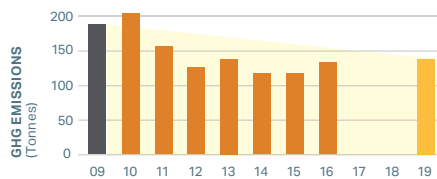
Paperless Office Desk Sharing

BRONZE

GHG  
REDUCTION TARGET  
(ABSOLUTE)  
**20%**  
FROM 2009



Absolute reduction to date:  
**43 TONNES**



SCOPE 3 REPORTING  
Air, Waste, Water

KEY PROJECTS

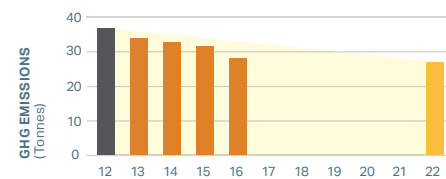
LEED Gold Building Onsite Garden & Composting E-waste & Battery Recycling

BRONZE

GHG  
REDUCTION TARGET  
(ABSOLUTE)  
**20%**  
FROM 2009



Absolute reduction to date:  
**8 TONNES**



SCOPE 3 REPORTING  
Air, Waste, Water

KEY PROJECTS

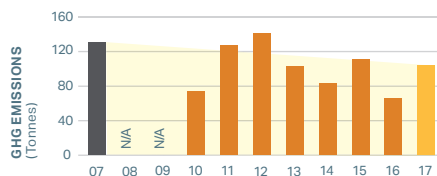
Recycling Work from Home Policy E-waste Recycling

BRONZE

GHG  
REDUCTION TARGET  
(ABSOLUTE)  
**25%**  
FROM 2012



Absolute reduction to date:  
**66 TONNES**



SCOPE 3 REPORTING  
Air, Vehicle Business Travel

KEY PROJECTS

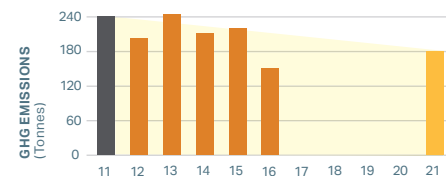
Solar Panels Renewable Energy Credits & Offsets

BRONZE

GHG  
REDUCTION TARGET  
(ABSOLUTE)  
**20%**  
FROM 2007



Absolute reduction to date:  
**89 TONNES**



SCOPE 3 REPORTING  
Air, Waste, Water

KEY PROJECTS

Solar Window Film HVAC Controls

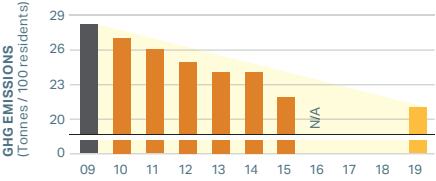
BRONZE

GHG  
REDUCTION TARGET  
(ABSOLUTE)  
**25%**  
FROM 2011



Region of Waterloo

Absolute reduction to date:  
**12,090 TONNES**



SCOPE 3 REPORTING  
Vehicle Business Travel

KEY PROJECTS

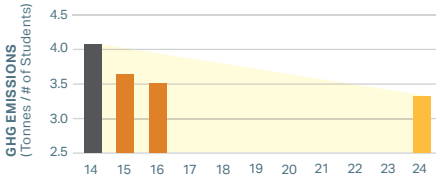
- Building Re-Commissioning
- Lighting Retrofit
- Furnace Upgrades

BRONZE

GHG  
REDUCTION TARGET  
(INTENSITY)  
**24%**  
FROM 2009



Absolute reduction to date:  
**1,397 TONNES**



SCOPE 3 REPORTING  
N/A

KEY PROJECTS

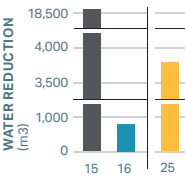
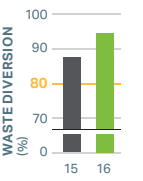
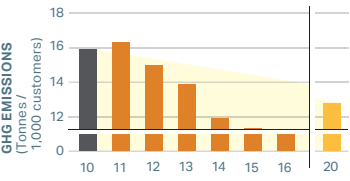
- Lighting Retrofit
- Upgraded Heat Pumps & Boilers
- Replace Windows & Doors

BRONZE

GHG  
REDUCTION TARGET  
(INTENSITY)  
**20%**  
FROM 2014



Absolute reduction to date:  
**211 TONNES**



SCOPE 3 REPORTING  
N/A

KEY PROJECTS

- LEED Silver Building
- Reconfiguration of Geothermal System
- Hybrid & Electric Fleet

BRONZE

GHG  
REDUCTION TARGET  
(INTENSITY)  
**20%**  
FROM 2010

GOLD

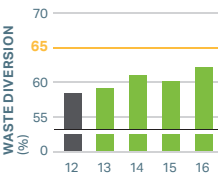
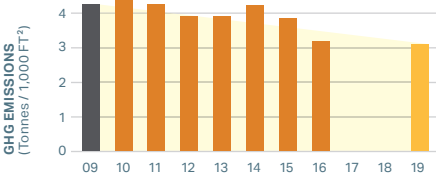
WASTE  
TARGET  
**80%**  
BY 2025

GOLD

WATER  
REDUCTION TARGET  
**80%**  
BY 2025



Absolute reduction to date:  
**1,574 TONNES**



SCOPE 3 REPORTING  
Air, Vehicle Business Travel, Waste, Water

KEY PROJECTS

- Energy Retrofit
- Community Access Bikeshare Station
- Solar Panels

BRONZE

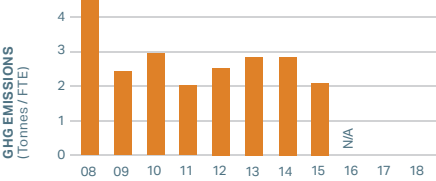
GHG  
REDUCTION TARGET  
(INTENSITY)  
**25%**  
FROM 2009

BRONZE

WASTE  
TARGET  
**65%**  
BY 2022

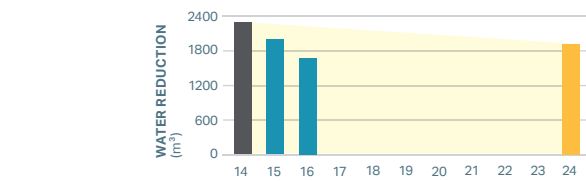


Absolute reduction to date:  
**71 TONNES**



NOTE  
As a result of the recent joining of WSP and MMM Group, data for 2016 are unavailable and this organization will be re-setting their baseline.

TARGET RESET



SCOPE 3 REPORTING  
N/A


KEY PROJECTS

N/A

SILVER

WATER  
REDUCTION TARGET  
**20%**  
BY 2024





Employees who indicated that they walk or cycle as their primary mode of transportation reported a higher level of satisfaction with their commute compared to drivers.

**ARE YOU +/-**  
**10**km

More than half of the workforce served by TravelWise live within 10 km of their work location. This presents a great opportunity to promote active transportation options such as walking and cycling to employees.

TravelWise offers member organizations **tools and services** to help employees find innovative and sustainable transportation options that reduce the number of single-occupancy vehicles traveling on our roads.

TravelWise is delivered through a public-private partnership between the Region of Waterloo and Sustainable Waterloo Region.

## PARTNERSHIP\*

### Members

AS OF DECEMBER 31<sup>ST</sup>, 2016



\* *The one great thing about a continuing collaboration is that they know you. And if you're really lucky, they really believe in you. **Mark Ruffalo***



# COMMUNITY EVENTS

### Bike Month Stats



**Positive Effects**

Represents a total saving of  
**6.6 tonnes CO<sub>2</sub>**



**How far?**

That's the equivalent of biking  
from Waterloo Region to **Sydney,**  
**Australia** and back home again.



**Bike Month Highlights:**

Together with the University of Waterloo (UW), TravelWise informed and thanked cyclists, tying thank you notes on 750 bikes parked on campus during Bike Month. The campaign was a great way to reach cyclists directly, and inform them about campus initiatives that support biking. UW also hosted two Bike-to-Work Breakfasts, including free tune-ups, to celebrate cyclists during the month.



01



02

## #BikeWR Month

June is the perfect time to take advantage of warmer weather and kick off summer with Bike Month. In 2016, TravelWise celebrated by hosting 15 'Bike-to-Work Breakfasts' at member workplaces. Cyclists enjoyed snacks and refreshments as they rolled into work at the end of their morning commute. Free bike tune-ups were also available while attendees ate breakfast and met fellow cyclists who shared common experiences. Community Access Bikeshare, the City of Kitchener, and Tour de Grand were among the many community groups that set up bright and early to show their support and provide valuable cycling resources.



Scott Weldon's Kindergarten Class  
Sheppard Public School

In 2016, the Inter-Municipal Partnership for Active Transportation (IMPACT) launched **BikeWR.com**, a central source for all things cycling in Waterloo Region. The site serves as a useful channel for finding and sharing bike-related events, bike maps, and safety resources for new and advanced cyclists in the Region. Twitter users can also use #BikeWR to find and share bike updates from around the community.



- 01. Bike Month launch event at the City of Cambridge.
- 02. Bike-to-Work Breakfast at the Tannery.
- 03. Bike-to-Work Breakfast and tune-up at University of Waterloo.



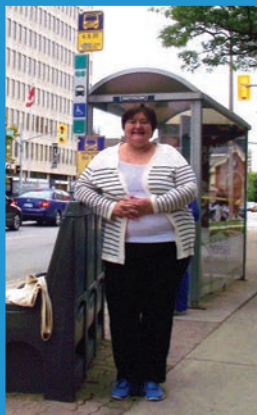
## Commuters of Waterloo Region

#CommutersWR

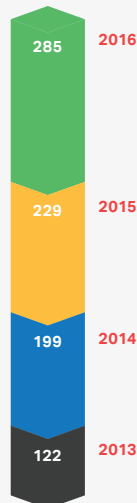


"Throughout the warmer months I primarily bike to work. One of the decisions my wife and I made when we moved back to the downtown core was not to have two vehicles. I sold my vehicle and have been biking since I started at vidyard.

In the morning, biking helps me get a bit of exercise before I get to work. At the end of the day, a bike ride is a great way to clear my head. I go through Victoria park. It's quite enjoyable and scenic... a good way to start the day and to reset at the end of the day.



## Corporate Bus Pass Sales



## #TransitWR Showcase

For the first time ever, in 2016, TravelWise organized a campaign to promote transit in Waterloo Region. The Transit Showcase took place during Oktoberfest, allowing riders to take advantage of free transit routes available during the festival. Members were equipped with tools to raise awareness about the Grand River Transit (GRT) Corporate Pass discount, and employees were encouraged to showcase their transit trips by submitting artistic, transit-related photos to a photo contest. Pictures are worth 1,000 words, and with over 20 submissions, TravelWise learned a lot about what a typical day looks like in the life of a transit user! Thank you to all who submitted photos – we look forward to seeing even more in 2017.

## Carpool Month Highlight:

For the second year in a row, **BlackBerry** took the lead in Carpool Month participation. This was due, in a large part, to BlackBerry's TravelWise champion, Jen McLaughlin. Jen was the epitome of the perfect carpooler during Carpool Month and her colleagues followed her lead, planning ahead to schedule carpools, encouraging others to tag along, and using an electric vehicle to get around! A big shout out to BlackBerry (and Jen specifically) for winning the Carpool Month Engagement Award in 2016.



## Carpool Month



TravelWise data indicates that it takes community building and close relationships to develop successful carpools. Based on this knowledge and feedback from members, TravelWise decided to extend Carpool Week to Carpool Month in 2016. The month-long campaign was designed to help employees find a carpool match on gotravelwise.ca, understand the positive impact of their choice, and have fun while doing it! At the end of the month, carpoolers were encouraged to send along carpool selfies or even carpool karaoke videos. Check them out on Twitter or post your own using #CarpoolWR or #CarpoolSelfieWR.

## Gotravelwise.ca

Gotravelwise.ca is an online tool used to find carpool matches and log trips. The tool also calculates the users' impact of using sustainable transportation. Since the tool launched in July 2014, there are more than 1,800 users and over 4,000 trips have been logged. To date, approximately 51 tonnes of CO<sub>2</sub> and \$73,000 have been saved by those who have logged their trips.

Since July 2014  
1,896 users have saved  
51.7 tonnes CO<sub>2</sub>

40,488

Trips Logged

354.7k

Alternative Distance  
Logged (km)

# EMPLOYEE TRAVEL SURVEY RESULTS

Carpooling continues to be the most common sustainable choice for employees. The average 2016 mode split results for employees served by TravelWise show that more than 30% of trips during the 2016 survey period were made using a sustainable form of transportation.

## THE DAILY COMMUTE

We asked – Why do employees drive? Here is what we heard back from over 2500 drivers.

FASTER THAN ALTERNATIVES

**22%**

PERSONAL TRIPS BEFORE, DURING OR AFTER

**21%**

MORE CONVENIENT AND COMFORTABLE

**18%**

VEHICLE NEEDED FOR BUSINESS TRAVEL

**12%**

DROP-OFF OR PICK-UP KIDS

**9%**

TRANSIT OPTIONS AREN'T AVAILABLE

**6%**

When asked what motivated employees to drive alone to work, the top three factors selected were: speed, personal trips before and after work, and convenience. The strategies that TravelWise, workplaces and the community-at-large develop to support sustainable commuting options will require solutions to overcome these barriers.

## Telework and Flex Time Policies

A “telework” or “work from home” policy can be implemented for employees who may not need to be on site to complete their job duties. Workplaces that encourage teleworking are removing the need for their employees to commute altogether, which is more convenient and accommodating for those who have personal obligations before and after work. Similarly, flex-time policies allow employees to adjust their schedules around other responsibilities such as childcare or volunteering in the community.

Telework and flex-time policies are often advertised in job descriptions and can give employers a competitive advantage when recruiting new employees. Offering telework options is cost effective, avoiding overhead costs and achieving greater employee retention.

An employer can go above and beyond by providing resources that support employees to work from home. This can include teleconferencing technology that allows workers to meet online, networks that make work documents and emails accessible, and in some cases, reimbursement for home office supplies.

## Flexible Parking

Flexible parking can be structured in many ways but usually involves having passes available on an as-needed basis, or by having part-time passes available that are only valid for a few days a month. Both of these approaches help to overcome an ‘all or nothing’ barrier when it comes to sustainable commuting. As an example, instead of purchasing a monthly parking pass and feeling compelled to drive every day, employees can drive on days they feel it is necessary, and use an alternative mode of commute during the rest of the month.

Providing flex passes can reduce parking demand and subsequently ease pressure on organizations to accommodate parking needs. Offering flex parking options can also mitigate concerns if monthly parking prices are increased.



## All Meetings Cancelled this Wednesday

As a member of TravelWise, SWR endeavours to provide supportive commuting options. For instance, SWR has declared “No Meeting Wednesdays”, meaning that employees are encouraged to leave Wednesdays open, allowing them to complete work at home on a flexible work schedule. This is particularly valuable for employees who have a longer commute.

**Yes**

## Employees Interested in Purchasing an EV or PHEV

New this year, TravelWise asked employees to indicate their interest in purchasing an EV or Plug-in Hybrid Electric Vehicle (PHEV) in the next five years. The results yielded an overwhelmingly positive response, with **15%** of employees indicating that they would like their next vehicle to be an EV or PHEV, and another **64%** showing interest.

For more information on electric vehicles in Waterloo Region, see pages 26 and 27.





## TravelWise Mode Split Target

In 2016, TravelWise decided to take stronger action toward achieving results. Members agreed that as a program, **TravelWise should set a realistic goal of reducing drive-alone trips by 5% from 2015 over the next five years.** This would mean reducing drive-alone trips from 72% to 67% by the 2020 target year. If the goal is reached, sustainable trips should comprise at least 33% of all trips made by employees served by TravelWise in 2020.

**The 5% target was established to align well with Climate Action WR's 6% emission reduction target by 2020.** It was also determined that a 1% shift towards sustainable commuting each year would be a realistic goal for participating organizations.



TravelWise will inspire members to set individual targets and take actions that support their employees, ultimately gaining them recognition as leaders in Waterloo Region and beyond.



### How will we get there?

Now that a mode split target has been set, TravelWise plans to map the road ahead by providing a new milestone framework to help organizations build capacity and achieve results. The milestones closely reflect the framework established by the Regional Sustainability Initiative. This promotes action planning and implementation models that can be streamlined, shared and replicated easily between members.

**TravelWise will continue to work closely with organizations** to identify opportunities that encourage drivers to try more sustainable options and sustainable commuters to keep up the good work. Going forward, a key focus of the program will be to develop effective peer learning opportunities for members, as well as new resources that build the case for supporting employees with their commute.

## MEMBER AWARDS

### Leadership and Innovation



This award recognizes an organization that has demonstrated a strong commitment and found creative solutions to encourage sustainable transportation among their employees. This year's award goes to the City of Kitchener for developing a suite of customized sustainable commuting resources for employees, and for organizing interactive events, such as their Wellness Fair, that raised awareness about sustainable commuting. The City of Kitchener also coordinated bike rides between City Hall and the Kitchener Operations Facility to encourage more sustainable business travel.

### Most Active Member



This award recognizes the most active and engaged member of 2016. This year's award goes to the University of Waterloo for their enthusiastic involvement in campaigns such as Bike Month, where they logged 2,253 bike trips on [gotravelwise.ca](http://gotravelwise.ca), representing more than 10,000 kilometres travelled. UW also had strong participation in TravelWise quarterly meetings, and almost doubled their Employee Travel Survey response rate in 2016.

### Greatest Increase in Sustainable Commuting



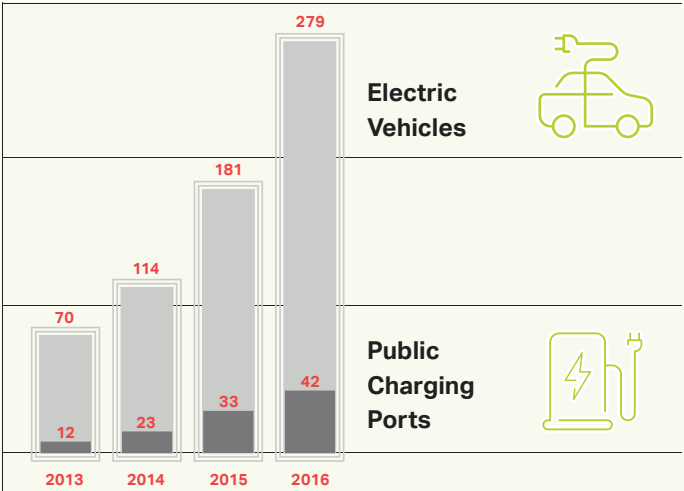
This award recognizes an organization where employees have made the greatest strides in using sustainable transportation to commute to work. In 2016, employees at Wilfrid Laurier University (WLU) decreased their number of driving trips more than any other organization. Cycling and carpooling increased the most, likely due to highly effective communication strategies, improved bike facilities, and new events and programs to encourage cycling during the summer months.





# PLUG IN\*

Throughout 2016, our federal and provincial governments strongly supported Electric Vehicles (EVs) and charging stations, by encouraging mandates, strategies, and actions. To ensure Waterloo Region continues to play a leadership role in EV adoption, ChargeWR continued to build and support our network of local champions. This year, the network put forward over \$3 million worth of funding requests for EV charging infrastructure in Waterloo Region through the Electric Vehicle Chargers Ontario and Electric Vehicle Infrastructure Demonstrations programs. ChargeWR and this community of support will continue to serve our transition to a low-carbon transportation system, looking forward to EV and charging station funding programs yet to be launched, and working with more champions.



**Fuel Savings**  
Annual savings of more than **\$1.8M** in fuel costs\*



**Lowered Emissions**  
Annual equivalent of **3,215 tonnes** CO<sub>2</sub> emissions avoided\*

\*Source: <http://www.brucepower.com/resources-and-publications/nuclear-education/sustainability-calculator/>





## A Community of Champions

In September of 2014, Waterloo Region Voltec was founded with a small but dedicated group of Chevy Volt owners in the region. A year later, the **Waterloo Region Electric Vehicle Association** was born, inviting all EV owners and enthusiasts to join in. They are dedicated to EV education and promotion in and around the Region. They host and attend many EV events within Southern Ontario, and in 2016 sponsored the placement of a new level two charging stations in Kitchener for public use.

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Please feel free to contact them at  
[WRVoltec@gmail.com](mailto:WRVoltec@gmail.com) or on their Twitter and  
Facebook feeds @WRVoltec @WREVAGroup.



ClimateActionWR is a collaboration between local organizations and community members focused on climate change mitigation. Led by Reep Green Solutions and Sustainable Waterloo Region, this program coordinates the activities of the Climate Action Plan.

COLLABORATION\*

ClimateActionWR establishes cross-sector dialogue, facilitates collaborative opportunities, and monitors and measures progress toward the achievement of our community’s greenhouse gas (GHG) emission reduction target of 6% below 2010 levels by 2020.

ClimateActionWR STAKEHOLDERS:	PROGRAM LEAD	MANAGEMENT COMMITTEE	PROGRAM FUNDER	ACTION OWNER
Reep Green Solutions	●	●		●
Sustainable Waterloo Region	●	●		●
Region of Waterloo		●	●	●
City of Cambridge		●	●	●
City of Kitchener		●	●	●
City of Waterloo		●	●	●
Energy+				●
Kitchener-Wilmot Hydro				●
Waterloo North Hydro				●
Kitchener Utilities				●
Union Gas				●
Community Access BikeShare				●
Community CarShare				●

\* We are facing a global climate crisis. It is deepening. We are entering a period of consequences. [Al Gore](#)





# Local Synergies with Ontario's Climate Change Action Plan

With the community Climate Action Plan acting as a direction for our collective efforts, and Ontario's plan in place to support this plan, Waterloo Region is poised to further its sustainability efforts and meet our reduction target by 2020. Here are some examples of the synergies we have found:

Our community Climate Action Plan sets a target to support the adoption of 1,000 electric vehicles (EVs) across the Region by 2020; the Province's plan is 14,000 EVs province-wide by 2020. ChargeWR supports these goals locally through events, social marketing, and leadership on EV charging infrastructure installations.

The Province of Ontario lists electric-vehicle-ready homes and workplaces as a priority for land use planning. The City of Kitchener has proposed a by-law that sets out minimum EV or EV-ready parking spaces for some commercial facilities and apartments.

TravelWise provides support and services to help employers find commuting solutions for their employees in order to reduce single occupancy vehicles on our roads. Included in the provincial plan are grants for large employers and municipalities to reduce the number of single-passenger vehicle trips, which could lead to an increase in TravelWise memberships, and ultimately a reduction in emissions.

The Regional Sustainability Initiative supports its members to implement cost-effective emission reduction projects, including the installation of anti-idling technologies in fleets – an initiative the Province may support under its new Green Commercial Vehicle Program.

Low-carbon standards for new buildings are outlined in the Province's plan, but here in Waterloo Region local partners are looking to go further and make net-positive the standard with evolV1.

A Home Energy Rating and Disclosure program was listed in the Province's plan, which would require an energy audit and associated rating for homes at the time of sale. Having performed more than 15,000 home energy evaluations since 1999, Reep Green Solutions has advocated for this program as a way to inspire more people to upgrade their homes.



# LOCAL MOMENTUM

## Imagining a Decarbonized Waterloo Region

**In November 2016, local experts from diverse disciplines and organizations came together to envision how Waterloo Region could decarbonize by 2050.** Through the forum, participants identified four challenges that all sectors should focus on to achieve this goal. It was clear at this event that the short term changes our community is making now, towards our 6% reduction goal by 2020, lay the foundation for changes into the future.

Hosted by Heather Douglas, Associate Professor at the University of Waterloo, and supported by the Balsillie School of International Affairs and Waterloo Institute for Sustainable Energy (WISE), the event asked participants to plan energy systems for Waterloo Region that are free of GHG emissions.

### Four challenges emerged:

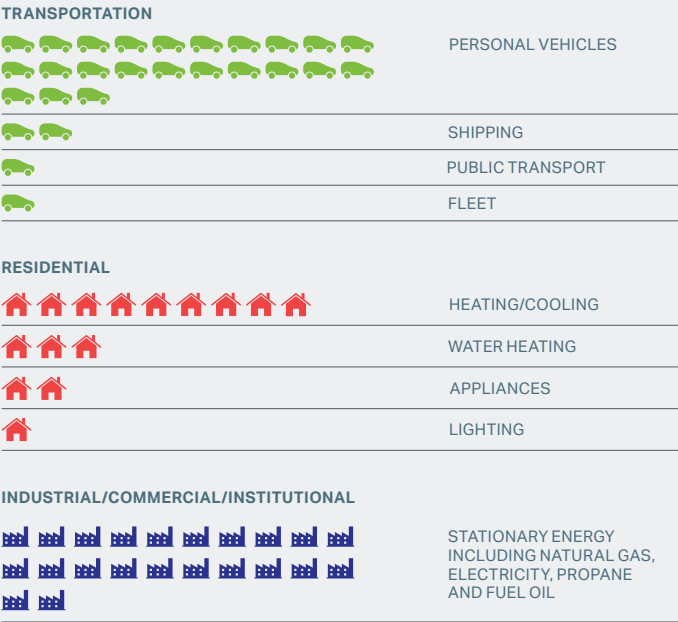
- Eliminating fossil fuel-based transportation
- Dramatically reducing the energy needs of the built environment
- Maximizing local renewable power generation
- Replacing conventional natural gas as a source of energy for heating

As the two-day event wrapped up, participants shared their ideas for policies that would support a transition to a decarbonized future. On the local level, the ideas were reflected in our community’s Climate Action Plan.

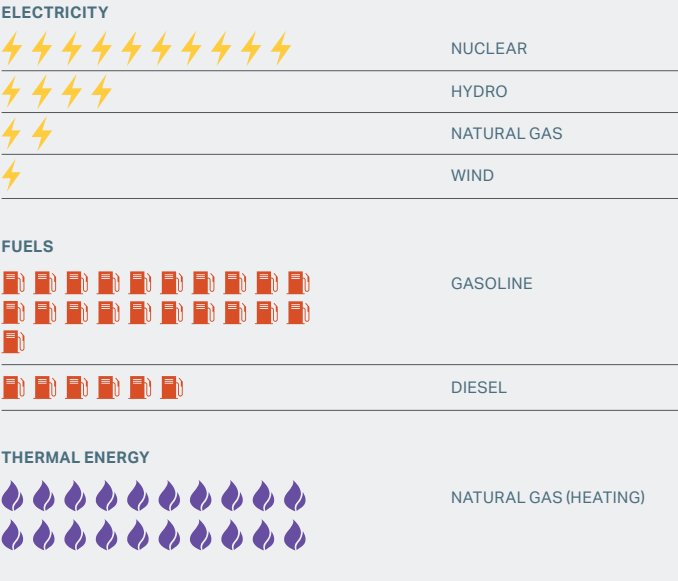
### What does that mean?

Our community Climate Action Plan is about more than achieving a 6% reduction in GHGs by 2020. The 6% reduction is an admirable milestone to work towards, but it cannot be the end of our efforts.

## Current Energy Use (IN WATERLOO REGION)



## Current Energy Sources (IN WATERLOO REGION)



1 ICON = 1 PJ OF ENERGY = 1 Quadrillion Joules; 278 Gigawatt Hours; 948 Billion BTUs

# WATERLOO REGION CLIMATE TOWN HALL DRAWS CROWD

On August 18, 2016 over 300 people came to Kitchener City Hall to provide input to the Government of Canada in its development of a national climate change plan to meet our global commitments. **The message of the Town Hall was clear: Waterloo Region citizens want action on climate change now!** A true showing of the power of democracy, Kitchener City Hall Rotunda was filled with the voices of citizens having their say and sharing their passion.

The event, organized by nearly a dozen local community organizations, drew crowds from diverse groups and across the political spectrum and included all five of Waterloo Region's Members of Parliament.

At the event, a diversity of ideas and approaches to deal with climate change emerged, and many of these could be tackled at a local level. The synergies with our own community Climate Action Plan were resounding, including:

- Encouraging walkable cities and transit investment
- Supporting high density and mixed-use planning
- Reducing the prevalence of parking lots
- Retrofitting existing homes to near net-zero
- Increasing local food production, and much more



01



02



03

01. A large crowd gathered at the Town Hall.

From left to right:  
MP Marwan Tabbara, MP Bardish Chagger House Leader and Minister for Small Business and Tourism, MP Raj Saini, MP Bryan May and MP Harold Albrecht.

02. Town Hall attendees share their ideas to tackle climate change.



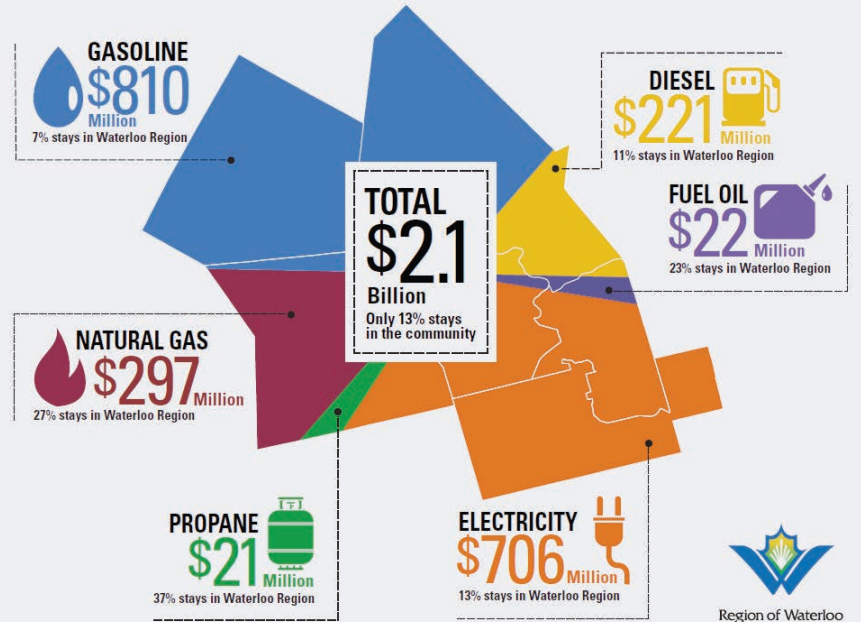
## LOCAL ACTION

Big Ideas in Waterloo Region

### Cross-Sector: Community Energy Investment Strategy

The Region of Waterloo—alongside the Cities of Cambridge, Kitchener, and Waterloo, and the utilities Energy+, Kitchener Utilities, Kitchener-Wilmot Hydro, Waterloo North Hydro and Union Gas—is working to develop a Community Energy Investment Strategy. This strategy considers opportunities to invest in energy efficiency and local energy generation in order to support strong local economic development and lower local energy costs, while meeting our community GHG reduction target.

## How much did we spend on energy in 2014 within Waterloo region?



### Workplaces: Bring Smart Thermostats to Small Business

Energy+, Kitchener-Wilmot Hydro, Waterloo North Hydro, and Union Gas have partnered with ecobee to deliver an innovative smart thermostat pilot program for small businesses. The objective of this pilot is to evaluate the potential energy savings available from the use of smart thermostats. The pilot provides customers with smart thermostats, as well as information and tools through a web and mobile application to manage and control their heating and cooling systems.



### Transportation: Miovision is Rethinking Traffic

Miovision leverages big data to improve traffic flow on our roadways. This supports our efforts to curb congestion, and prioritize active and public transit over single occupancy vehicles.



### Homes: Simple Technologies Address Residential Water Use

In 2016, the Regional Municipality of Waterloo piloted a program to give local homeowners water audits for free. Delivered by Reep Green Solutions, residents were given the option to have simple water saving technologies provided or installed at the same time. The program aims to reduce household water consumption across the community from an average of 200 litres to 165 litres per person, per day as a part of the Water Efficiency Master Plan, which is estimated to result in 7,700 tonnes of avoided CO<sub>2</sub>e between 2015 and 2025.



- 01. Waterloo Region trail markers.
- 02. A first look at the new ION train.



# LOCAL POLICY

Local Policy Tackles Climate Change

## Moving Forward

Waterloo Region will be a prosperous, sustainable, and healthy community, where people of all ages and abilities, and the goods supporting our economy, have viable choices about how they move around. Moving Forward (the Region’s Transportation Master Plan) will:

- 1 Optimize the transportation system
- 2 Foster a strong economy
- 3 Promote transportation choice
- 4 Support sustainable development

### By-Laws: Shaping our Transportation Future

What does a low-carbon transportation future look like? Does it include EV’s, public transit, or active transportation trails? City zoning by-laws are likely not the first thing you think of. However, zoning can play an enormous role in shaping transportation choices. The City of Kitchener has taken commendable steps to support a low-carbon future by proposing new maximum parking requirements and lower minimum parking requirements, including exemptions from providing parking in some cases in the downtown core, through their Comprehensive Review of Zoning By-laws.

### Waterloo Hits 1.3 Million

The City of Waterloo measured over 1.3 million active transit trips along their high priority active transportation network. Efforts to prioritize active transportation have included winter maintenance on multi-use trails, wayfinding signs, targeted trail rehabilitation, crossing improvements and significant investment in the 2.4 kilometre Spur Line multi-use trail.

# ALL OUR THANKS GO TO YOU

Volunteers				Office Team
<b>BUSINESS DEVELOPMENT</b>	<b>FINANCE</b>	<b>PUBLIC RELATIONS</b>	<b>STRATEGY &amp; GOVERNANCE</b>	<b>STAFF</b>
Michael Brennan	Andreina Calderon	Cindy Aponte	Marty Finestone	David Alton
Courtney Butler	Manpreet Dhaliwal	Valerie Chong	Janette Kingsbury	Arcy Canumay
Cheryl de la Cruz	John Paul Nyereka	Lexi Halley	Leandra Mariani	Lisa Chapman
Kara Klassen	Julie Vuong	Kelly McMath	Farzana Rahman	Colleen Cooper
Andy Mao		Alexandra Wong		Tova Davidson
Mariah Smith	<b>FUND DEVELOPMENT</b>		<b>TRAVELWISE</b>	Matthew Day
Elizabeth Wong	Danielle Avila	<b>PROGRAM DEVELOPMENT</b>	Taginder Clair	Elizabeth Hilgers
	Eunize Lao	Antonio Alborno	Clayton Coppaway	Danielle Laperriere
<b>CLIMATEACTIONWR</b>	Cindy Luu	Arcy Canumay	Mat Thijssen	Samantha Tavenor
Martin Espina	<b>HUMAN RESOURCES</b>	Mary Granskou	Therese Tisseverasinghe	Allan Taylor
Binesh Lodhi	Samantha Clement	Samiya Hirji	Basak Topcu	Jennifer van Overbeeke
Nila Maran	Karen Rittinger	Christine Jewell		Katie Wall
Amanda Parker	Yvonne Stoll	Janet Kimantas	<b>WEB &amp; IT</b>	
Dan Shaver		Andreas Mertes	Matthew Brodrecht	<b>INTERNS</b>
Juan Sotés	<b>MARKETING</b>	Karina Vigil	Matt Quinn	Martin Espina
	Gladys Abboud	<b>REGIONAL SUSTAINABILITY INITIATIVE</b>	Christine Robson	Selma Fernandez Mac Gregor
<b>EVENTS</b>	Christine Bui	Nicholas Cloet	Paul Sobering	Tait Goos
Manpreet Dhaliwal	Andrew Davidson	Anna Fluder	Gabriel Tan-Chen	Matthew Riepert
Alvin Fan	Lyubava Fartushenko	Tasha-Leigh Gauthier		Mariah Smith
Selma Fernandez Mac Gregor	Lori Gallagher	Patricia Huynh		Luke Stein
Tarana Persaud	Sarah Harwood	Kelsey Koebel		
Luke Stein	Maryam Kafi	Jen Owens		
Steve Yessie	Dave Klassen	Jenna Paton		
	Arun Raj	Tarana Persaud		
	Chris Steingart	Andrea Quinn		
	Brent Wettlaufer	Anam Rahman		
	<b>INNOVATION RESEARCH</b>			
	Amanda Bichel			
	Sheldon Pereira			
	Caitlin Scott			



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<b>Ambassadors</b>  <b>Victoria Alleyene</b> CEO CatalystsX <b>Pat Carr</b> EPS/AB Energy Canada <b>Katie Cheesmond</b> RLB Chartered Professional Accountants <b>Catharine Gerhard</b> Canada's Technology Triangle <b>Fred Lehmann</b> Ontario Construction Secretariat <b>Pete Lewis</b> Tech Wreckers Inc <b>Jeff Quint</b> Waterloo North Hydro <b>Laura Rourke</b> Excellence in Manufacturing Consortium <b>Carol Stewart</b> David Johnston Research + Technology Park, University Of Waterloo  <b>Intern Sponsors</b>  University of Waterloo Faculty of the Environment Wilfrid Laurier University P&G Centre for Business & Sustainability				





# EVENTS

Events are one of the ways that SWR works to create a community that is informed, engaged and inspired. Events are also the way that member organizations connect, share learnings, and find opportunities to support each other and the development of a sustainable community.

2016 saw 20 events serving members and partners across all SWR programs, and included keynote speakers, panels, workshops, peer learning sessions, a program launch, and our Evening of Recognition. We were thrilled to welcome familiar and new faces to events, totalling nearly 1,000 attendees.



## Informed

An organization's environmental impact cannot be isolated from the rest of its functions. In 2016, we started a series of events that emphasized the importance of bringing team members in a variety of functions into the sustainability network. The first of these events took place in November, when we welcomed Howard Chang from Top Drawer Creative to share the importance of storytelling, and the best ways to craft compelling narratives that bring value to the audience.



## Engaged

In 2016, event topics started exploring environmental impact beyond GHGs. March brought attendees together to learn about the technical aspects of waste and water sustainability from experts at Partners in Project Green, and the Ontario Zero Waste Coalition.

September was a highlight of our event season, as we celebrated the launch of the Regional Sustainability Initiative with 140 members from our community. The excitement in the room was palpable, creating momentum, excitement and eventual action by many network members.

## Inspired

Real change, and a commitment to see it through, can be fueled by inspiration, and SWR wants to inspire our community. In 2016, we started off the year with a bang, welcoming David Paterson from GM Canada to talk about how sustainability is transforming their business. We also brought together a panel of experts to share insights on the Paris Agreement, the Ontario Climate Change Strategy and Action Plan, Cap and Trade, and how these influence local organizations. Finally, in October, John Robinson, former Associate Provost, Sustainability at UBC energized attendees with stories of Canada's current most sustainable building, the Centre for Interactive Research on Sustainability.





# SWR AWARDS



## Events spur action

Sometimes at SWR events, big ideas and big collaborations are born. In 2016, the biggest of these is a healthy building study currently underway. At our Recommissioning event in October 2015, the idea for a healthy building study came to be when attendees started discussing links between employee productivity, absenteeism, and indoor air quality. This study now includes a Communitech startup, University of Waterloo students, and local environmental professionals doing air quality studies in eight Regional Sustainability Initiative member buildings and one community building. The power of a network to find real solutions.

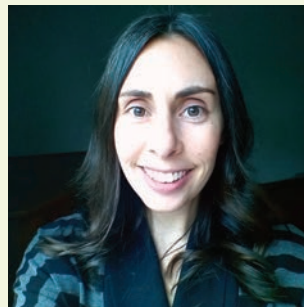
These awards are given to those who have gone above and beyond in 2016 in their efforts to support a more sustainable community. The recipients have provided outstanding support to Sustainable Waterloo Region, our programs, projects, and people.

### SWR Champion of the Year

An individual who has been highly inspiring, involved and supportive of sustainability with SWR and in their organization.

#### This year's champion:

Jennifer McLaughlin, BlackBerry



### SWR Partner of the Year Small Organization

A small to medium size organization that has gone above and beyond in their support of and participation with SWR in that year.

**This year's SWR Partner of the Year Small Organization award goes to:**



### SWR Partner of the Year Large Organization

A large organization that has gone above and beyond in their support of and participation with SWR in that year.

**This year's SWR Partner of the Year Large Organization award goes to:**



### SWR Sustainability Promoter of the Year

An organization that has shown leadership in the development or implementation of sustainability policies and practices.

**This year's Sustainability Promoter of the Year award goes to:**





- \* Get involved with the environment because once you go past the tipping point with the environment, you can't get it back. **Chris Noth**



519-603-2223 | [sustainablewr.ca](http://sustainablewr.ca) | [@sustainablewat](https://twitter.com/sustainablewat)

#### Environmental Impact Statement

**750 copies of the 2016 Report were printed using 364 kg of 100% post-consumer recycled paper. It was also distributed digitally to reduce printed copies.**

By using more sustainable paper we saved:

1,058 kilograms of GHG emissions | 26,259 litres of water | 322 kilograms of solid waste | 1,945 kilowatt hours



Ancient  
Forest  
Friendly™

Environmental impact estimates were made using the Environmental Paper Network Paper Calculator Version 3.2

change, and those who cannot change their minds cannot change anything. **George Bernard Shaw** **COMMUNITY** \* Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has. **Margaret Mead** **PROGRAMS** \* All around the world, in the country and the towns; here's a growing global chorus and it's ringing in the halls for the children, do it for yourself; Everyone is needed, everyone can help. **Raffi** **PARTNERSHIP** \* The one great thing about a continuing collaboration is that they know you. And if you