



green
economy
north

BRANCHING OUT

2017 Annual Report

A Year of Branching Out

Reaching higher and spreading out broadly, Green Economy North grew steadily in 2017. The program increased in presence and impact, and is set for even more growth in the future. Increasing our membership across a variety of sectors, we sprouted branches in manufacturing, municipalities, and faith communities.

On the surface, these sectors are very different. What ties them together is that they are all leaders in the new Green Economy. Whether the goal upon joining is to increase profits, deliver affordable services, or to reduce the impact of climate change, the efforts that each organization puts towards sustainability will benefit them now and as energy costs continue to rise. Finding ways to reduce energy consumption will help these organizations, and the regional economy, grow and thrive.

We have celebrated incredible growth in our network, adding dozens of new members including Greater Sudbury Utilities and Fisher-Wavy. We also hosted several successful events, including our first Evening of Recognition, and our second Business Forum featuring Karen Clarke-Whistler, Chief Environment Officer for TD Bank Group.

Other noteworthy successes in 2017 include:

- Over 20 new greenhouse gas (GHG) inventories, which help members understand their impact on the environment, implement improvements, and set reduction targets for the future
- Dozens of new Sustainability Action Plans and GHG reduction projects
- Six new GHG reduction targets
- Businesses on-path toward Green Economy North certification

The impact of all of these actions has been a direct annual reduction of 154 tonnes of CO₂ emissions, which is the equivalent of taking 30 cars off the road. There is potential for so much more as we continue to grow our network.

We are fiercely proud of the impact Green Economy North members are having on their own practices, and the leadership they are showing in their industries. We are excited to maintain our position as the fastest growing program of its kind. We are eager to continue to branch out as we build the Green Economy in Sudbury and Northeastern Ontario.



Rebecca Danard

Rebecca Danard
Executive Director

R. Eberhardt

Richard Eberhardt
Program Director

L. Benford

Leigha Benford
Communications Director



Green Economy North is one of seven Green Economy Hubs across Ontario supporting networks of businesses to set and achieve sustainability targets. Together, we're demonstrating a more sustainable economy is possible.



Build the Green Economy with Us

As the cost of consuming fossil fuels continues to increase, we need to change how business is done. Investments in new technology, advanced conservation efforts, and renewable energy options are realistic and accessible. Your business, and others world-wide, are on a journey toward the new Green Economy. We can help get you there faster, and stronger.

Your business can succeed in this transition. We invite you to join 240 organizations from all parts of Ontario, including right here in the Northeast. Members of our program receive key support and resources in a time of change.

We start with a detailed profile of how your organization uses energy. This includes the risk you'll face with increased carbon pricing, and any existing opportunities for improvement. After this step, small and medium-sized businesses can actively study their energy usage beyond the surface cost.

Our team of energy management and planning professionals provide on-the-ground assessments of your operations. Identifying and planning conservation projects, assembling internal sustainability teams, and accessing cost-saving government incentives will help you manage your costs and carbon footprint.

Setting a target is a key step in Green Economy North membership. By setting a reduction target, backed by a comprehensive action plan, businesses have a formal goal to work toward. Our member support team helps you deliver on projects as you measure.

We are building a movement, one business at time. By bringing a network of organizations together, taking action, and saving money, we are strengthening the Green Economy in Northeastern Ontario, and helping our members thrive.



Wow. 20 new members. Six new carbon reduction targets. Dozens of action plans and projects completed. We're proud, but I can't say surprised, of these branches sprouting across Sudbury and beyond. Because we've also been alongside you all these past few years, as you've been nurturing the roots of your community's transition to a more sustainable economy.

Meanwhile, other communities across the province continue to branch out alongside you - over 240 organizations strong now, across seven Green Economy Hubs. Each of which now have members with targets set, just as is the case here. And we - formerly Sustainability CoLab - have even changed our name to better reflect what we're all working towards together: Green Economy Canada.

So here's to strong roots, healthy branches, and the fruit they bear - because we all know, the best is still yet to come.

- Mike Morrice, Executive Director
Green Economy Canada



Measure



Manage



Reduce



Save



Certification
Coming 2018



City of Greater Sudbury Business Energy and Emissions Profile (BEEP)

In March 2017, Green Economy North presented Sudbury's first Business Energy and Emissions Profile (BEEP). The BEEP focused on the energy demands of 3,000 small and medium-sized businesses.



Sudbury's BEEP revealed that these businesses are emitting 250,000 tonnes of CO₂e annually, which is the equivalent of having 54,000 cars on the road. Green Economy North aims to reduce this by 20% over 10 years.

The Business Energy and Emissions Profile is available as both an interactive dashboard and a comprehensive report, and can be accessed at: www.greeneconomynorth.ca/beep.



Greening the Innovators

Manufacturers in Sudbury's mining supply cluster are taking sustainability seriously

Greater Sudbury boasts a world-renowned mining service, supply, and manufacturing cluster. At one time, refined ore was the only product leaving Sudbury. Now, locally designed mining vehicles, ventilation systems, automation and process machinery are shipped to mining operators all over the world.

These innovative businesses are revolutionizing the mining industry, and helping to lead the transition to the new Green Economy. Three such businesses are active in the Walden Industrial Park. They are all natural leaders in environmental sustainability, and all are continually working toward improvement.

Morin Industrial Coatings Ltd. is an excellent example of this effort. Morin provides industrial sandblasting and painting for a wide range of mining equipment and implements. To reduce their environmental impact, Morin specifically built a new state-of-the-art facility in the Walden Industrial Park. By moving to a recyclable blast media, conducting all blasting

indoors in a controlled environment, and containing contaminants, Morin is setting a new standard in finishing. They have diverted thousands of tonnes of material from landfill, virtually eliminated fugitive pollutants, and reduced greenhouse gas emissions from transportation.





Morin Industrial Coatings Ltd.

“These innovative businesses are revolutionizing the mining industry, and helping to lead the transition to the new Green Economy.”

Stainless Steel Technology manufactures a variety of components for the mining environment, particularly heavy conveyances for moving ore and people up and down the mine shaft. A major innovation developed at Stainless Steel Technology is their drop tower. This gives them the ability to pre-test mining cages and buckets for safety in the mining environment before shipping their products

worldwide. This work avoids costly return shipping, and avoids extra environmental costs as well.

Neighbours in the Walden Industrial Park, Rock-Tech rebuilt a vacant warehouse into a pristine mining utility manufacturing shop. Producing rockbreakers, scissorlifts, and personnel carriers for underground duty, Rock-Tech’s machines are exported around the world. CEO Ricky Lemieux and his team invested in the facility with the intention of minimizing heating costs and increasing energy efficiency. This work earned them the innovation award at the Chamber of Commerce Bell Business awards, and an inaugural Environmental Champion award from Green Economy North.

Working alongside Green Economy North’s member support team, these energy intensive businesses have identified financial savings, greenhouse gas emissions reductions, and have plans for greater investments to come.

“Morin wants to pass on to future generations a business that can achieve goals, meet time lines, and reduce environmental impact.”

– Rick Morin, President,
Morin Industrial Coatings Ltd.



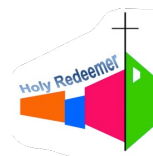
The Sustainability Advantage for Sudbury’s Industrial and Mining Sector

Green Economy North hosted guest speaker Emily Thorn Corthay, Director of Energy Optimization and Management at Hatch, for a special session focused on the mining service industry. Corthay presented the business case for energy management, and discussed how businesses can respond effectively to the new Cap and Trade program.



MILESTONE 1 On-Boarding

Members at Milestone 1 are learning about the Green Economy North program, meeting the community, learning about the tools available to them, and beginning to identify their immediate sustainability goals.



MILESTONE 2 Developing

Members at Milestone 2 are starting to gather data about their sustainability performance. Data includes electricity usage, heating, waste, water, and fleet. They will establish and measure against their baseline year after year.



Little Current United Church



MILESTONE 3 Reporting

Members at Milestone 3 are reporting publicly on their sustainability metrics. They are preparing detailed action plans and working toward setting a target.



SUDBURY
INTEGRATED NICKEL
OPERATIONS
A GLENORE COMPANY



TOTAL IMPACT

154

Total tonnes of CO₂e reduced by reporting members in 2017

Equivalent to taking

30

cars off the road

Total kilowatt-hours reduced by reporting members in 2017

520,770

Equivalent to switching

12,971

incandescent lamps to LEDs

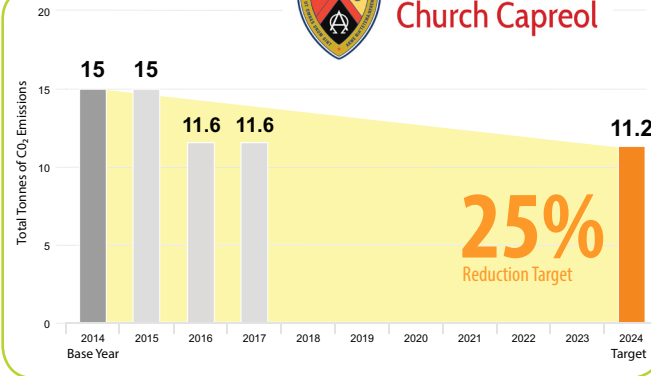


MILESTONE 4 Targeting

Members at Milestone 4 have set their public reduction targets, and report annually on their sustainability achievements.

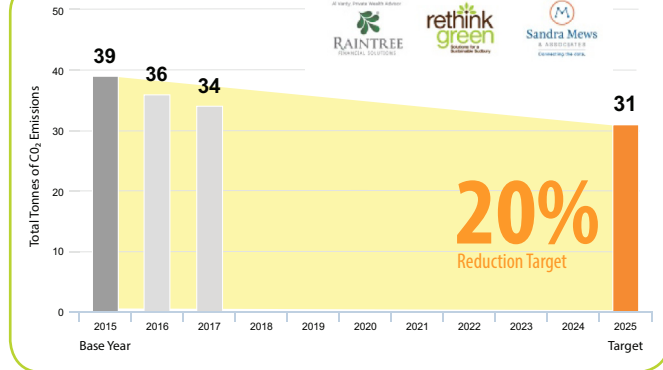


Trinity United Church Capreol

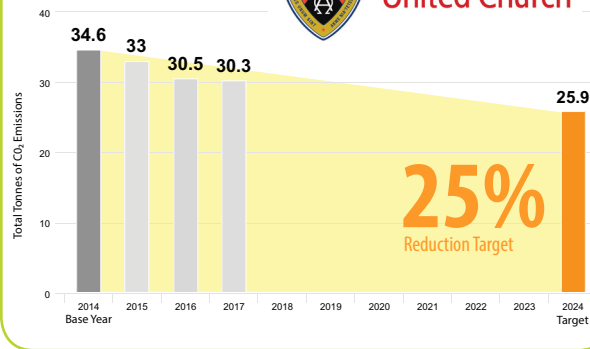


Green Economy North Project Site

176 Larch St

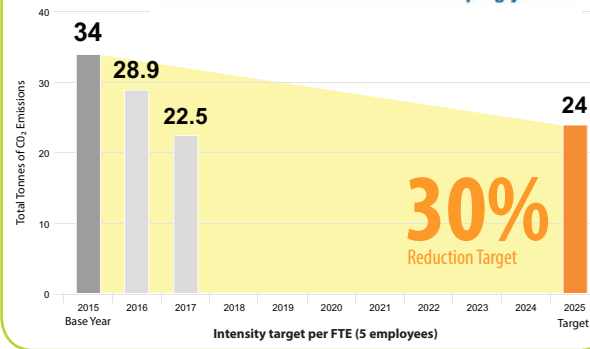


Copper Cliff United Church

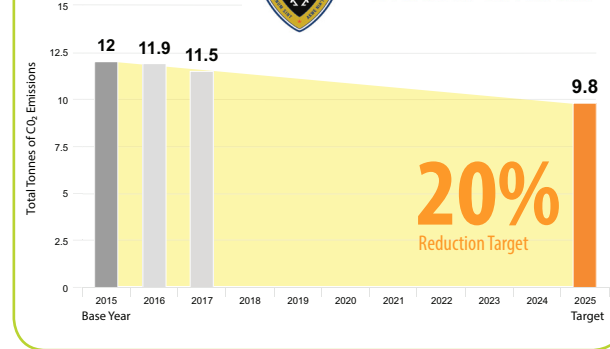


Hiamedia

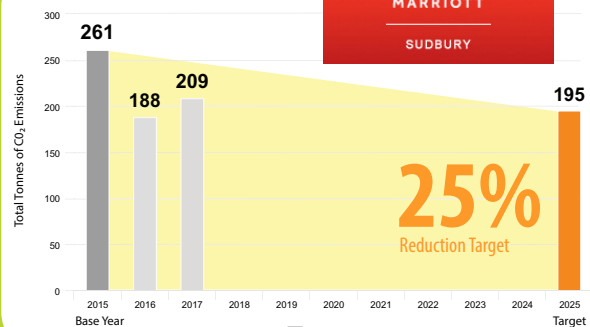
Our business is helping yours.



St. Mark's United Church



TOWNEPLACE SUITES[®] MARRIOTT SUDBURY



Case Study TownePlace Suites



TownePlace Suites by Marriott Sudbury is an all-suites hotel tailored for extended stays in Sudbury's east end. It also offers over 2,100 sq. ft. of meeting room space. The Green Team at TownePlace Suites by Marriott Sudbury connects management and employees to promote a culture of sustainability in all areas of the hotel's operations.

Program highlights include: reducing guest room electricity and water

usage with a housekeeping monitoring checklist; running dishwashers and laundry facilities only for a full load; and diverting waste through innovative recycling and reuse programs. Facility Manager Kevin Moffatt is a sustainability champion within the workplace. Kevin is leading a project to change all light bulbs on the premises to LEDs and anticipates that in 2018, the entire building and parking lot will be upgraded to LED bulbs.

Smart Green Communities

Northeastern municipalities take the lead on conservation and tackling climate change

Local governments have an important role to play in reducing GHG emissions. Upgrades to civic facilities like community centers, town halls, arenas, and outdoor lighting systems can help reduce emissions and lower monthly bills. Despite the known benefit of these types of projects, meeting provincial GHG reduction targets can be a burden for small communities. Changing government regulations, new funding streams, and emerging opportunities can be difficult to navigate.

“The program provides technical direction for emission reduction projects that have good short-term return on investment.”

The new Smart Green Communities initiative of Green Economy North was



developed to help ease the energy squeeze on municipalities. The program provides technical direction for emission reduction projects that have good short-term return on investment.

In addition to our on-going relationship with Wahnapiatae First Nation, Smart Green

identified action areas, including upgrades to lighting, replacement of the hot-water-on-demand system and boiler, and a “smart” valve and control system. These upgrades are expected to reduce GHG emissions by 28 tonnes, or 7% of total municipal emissions.

The Smart Green Communities program also offers support for municipalities that are interested in fostering resilient energy systems through in-depth community energy plans.

Keeping it Local: Identifying a resilient energy system through community energy planning

Community energy plans outline priorities and goals for local energy generation, delivery, conservation, and efficiency. These plans help decision-makers understand current energy needs, and anticipate future patterns of energy demand. Community energy plans emphasize reducing energy use, and

Communities membership has grown to include municipalities on Manitoulin Island and the North Shore of Lake Huron.

Like all Green Economy North members, the municipalities follow the standard *measure, manage, reduce, save* framework. For example, an assessment of the Blind River Arena



outline the actions needed to reduce GHG emissions.

The Smart Green Communities program emphasizes the importance of identifying community energy needs early in the planning process. Green Economy North helps each municipality establish a Green Team, and also helps establish multi-stakeholder leadership teams with community members.

Beyond 2017: Extending horizons and expanding membership

The Smart Green Communities program has already made great strides. Simple online surveys were completed by residents and business operators on Manitoulin Island and the North Shore regarding their current and perceived energy needs. Public information sessions were held to discuss the process of energy planning and generate ideas for next steps, including emission reduction projects.

Funding through Environmental Defense supported the first round of municipal intake, providing funding for the first full year of membership. Second intake of municipality planning is opening April 2018.



Green Economy North
Smart Green Communities



2017 Award Winners

Evening of Recognition April 2017

Ricky Lemieux
Rock-Tech
Environmental Champion

Skye Little
HiaMedia
Environmental Champion

Melanie Cropp
OLG Slots
Environmental Champion

Project Site 176 Larch Street
Most Engaged Green Team

TownePlace Suites
Sustainable Business of the Year



Case Study

Wahnapiatae First Nation

Wahnapiatae First Nation, located north of the City of Greater Sudbury, strives to be a leader in environmental, economic, and cultural sustainability and management. Wahnapiatae's mission is recognizing the sacred responsibility as Anishinaabe to respectfully manage the lands and waters for the prosperity of the community and future generations. The Green Team has distributed LED light bulbs to all households in the community, and started a community gardening program to encourage local food production. Their Sustainable Superheroes program hosts youth workshops on topics of green technologies and sustainable lifestyles.





Understanding your Hydro Bill (and what to do about it)

To kick off 2017, Green Economy North held its first Sustainable Business Workshop: *Understanding your Hydro Bill (and what to do about it)*. Attendees and members heard



from Greater Sudbury Hydro on how to read their bill, what incentives are available, and ways to conserve energy. Event attendees had an opportunity to meet and talk with the Hydro One's Sudbury representative as well as network with other Green Economy North members.



Taking Climate Action Faithfully

The Greening Sacred Spaces program has continued to grow into 2017

As part of the partnership between Green Economy North and the United Church of Canada Manitou Conference, two additional churches joined the program in fall 2017: Little Current United Church and St. Mark's United Church. In addition, we welcomed All Nations Church in spring 2017. These new members join existing members Trinity United Church Capreol, Copper Cliff United Church, and St. Stephen's on the Hill. The Greening Sacred Spaces members are leading by example, suggesting that environmental stewardship and carbon emissions reductions are a way to demonstrate care for all of creation.

Half of all 2017 member targets were set by churches. These commitments include: Copper Cliff United Church's target of a 25% reduction below 2014 levels by 2024; Trinity United Church's target

of a 25% reduction below 2014 levels by 2024; and St. Mark's United Church's target of a 20% reduction below 2015 levels by 2025.

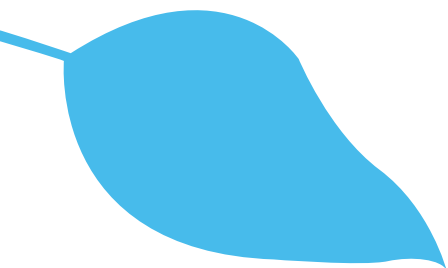
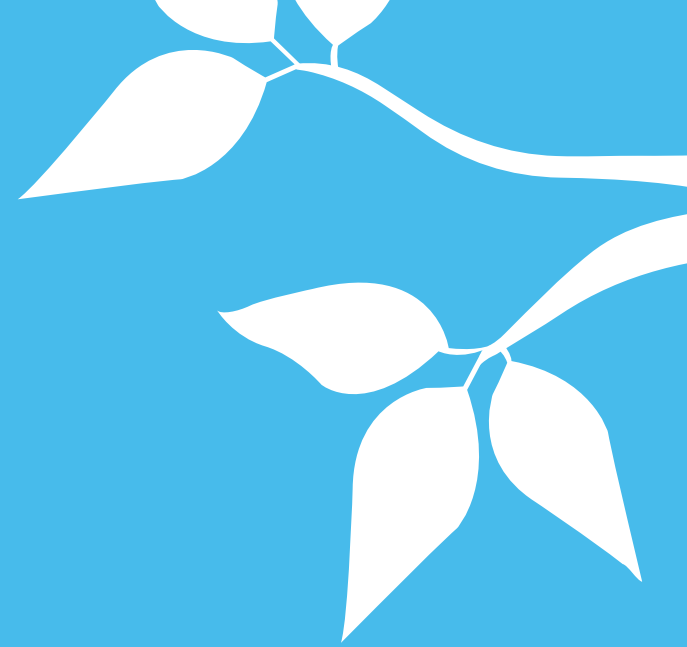
"The Greening Sacred Spaces members are leading by example, suggesting that environmental stewardship and carbon emissions reductions are a way to demonstrate care for all creation."

Green Teams and sustainability leaders are taking action to meet these targets and broader sustainability objectives through a number of activities. In par-

ticular, improving insulation and heating efficiency are top project choices for saving money and reducing GHG emis-



Window wrapping at Trinity United Church





sions. Steps taken toward these projects include wrapping and/or sealing windows to minimize heat loss, particularly on the coldest days of the year. Window wrapping has also inspired congregation members to take similar actions at home and in their workplaces. Insulation of new water pipes, using magnets to improve gas furnace efficiency, and installing smart thermostats also offer efficiency gains and cost reductions.

Lighting retrofits are another popular project. Switching from conventional fluorescent or incandescent bulbs to LEDs in church sanctuaries or meeting spaces, as well as the conversion of exit signs to LED technology, have also helped members in this group reduce their energy draw and electricity bills.

Finally, behaviour changes and awareness-building are also top of the list for members seeking reductions. Signs reminding guests and congregants to “turn off the lights” or “keep the door closed” go a long way as friendly nudges to be eco-friendly.



Thank You

Founding Partner

Vale

Member Partner

Sudbury INO Glencore

Event Sponsors

Greater Sudbury Hydro Inc - Energy Savers

Laurentian University

TD Canada Trust

Funders

Eco Canada

Ontario Ministry of Environment and Climate Change

Ontario Trillium Foundation

FedNor

Northern Ontario Heritage Fund Corporation

Event Season Speakers

Brad Boychuk, Enviro Energy

Cathy Zheng, Clearresult

Charles Coimbra, Hydro One

Emily Thorn Corthay, Hatch Ltd.

Jill Kirwan, Greater Sudbury Hydro

Jolene Recollet, Wahnapiatae First Nation

Karen Clarke-Whistler, TD Bank

Kelly Scott, Greater Sudbury Chamber of Commerce

Kevin Sherwood, PACS Energy Solutions

Volunteers

Ali El Mohd

Andrew Hunter

Chelsea Serafini

Erik Rothensee

Kaella-Marie Earle

Liam Klemm

Shane Pennant

Victoria Scagnetti

Kirsten Rutland, Greater Sudbury Hydro

Mike Morrice, Green Economy Canada

Sidney Ribaux, Equiterre

Weston Sagle, Greater Sudbury Hydro

Staff

Cassidy McAuliffe

Chirag Ranpariya

Chris Blackmore

Leigha Benford

Miranda Chillelli

Raili Lakanen

Rebecca Danard

Richard Eberhardt

Scott Florence

Board Members

Brett Buchanan

Janet Gasparini

Kyle McCall

Lauren Bromfield

Ted Wilson

Victoria Armit

Interns

Bronwyn Novak

Eric Zundel

Justin Killah

Sydney Little

Annual Report Credit

The 2017 Annual Report was designed by Cassidy McAuliffe, with cover design and design consultation by Terra Designs.



Program Funders & Sponsors:

Ontario
Trillium Foundation



176 Larch Street
Sudbury, Ontario
(705) 674-1685 x.100
www.greeneconomynorth.ca
@greeneconorth



Environmental Impact Statement

500 copies of the 2017 Annual Report were printed using 100% recycled paper. Impact was calculated using www.papercalculator.org.
Impact: 87 kg CO₂e & 2,377 L of water