



20 ANNUAL 18 REPORT

Connecting to our **Communities.**

Mission

Essex Power Corporation is a dynamic energy company that provides safe, reliable, and economical energy supply and services to our customers. Our commitment to innovation, performance management, and leading by example has built the foundation at Essex Power and our affiliates to establish a diverse set of energy products and services that are valued by our customers.

At Essex Power, Your Power is Our Priority.

Vision

Essex Power Corporation's vision is to be an Energy Provider that utilizes "best in class" people, processes, and technology to lead the marketplace in sustainable energy solutions. Our customers will receive the greatest value by integrating an economic and environmental balance to the products and services we will deliver to them. As an Energy Provider, we will be a community leader in ensuring that environmental stewardship is a vital component of our services to increase customer awareness of proper energy utilization and management.



If you have questions regarding the content of this annual report please contact us at info@essexpower.ca

OUR CORPORATE PHILOSOPHY



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BOARD CHAIR & CEO MESSAGE

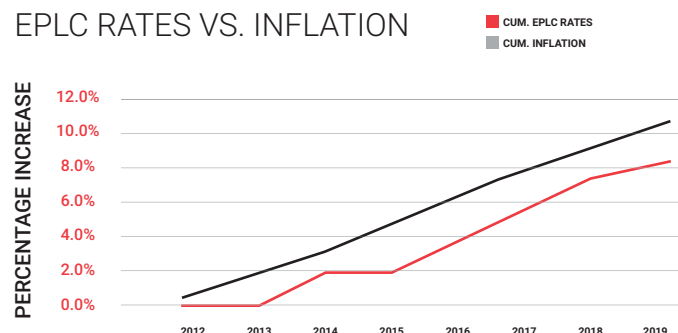
Both Essex Power and our shareholders' commitment to continuously improve both the municipal and electrical infrastructure is only part of our mission to foster sustainable and thriving communities. In 2018, we remained on a steady course to balance the three pillars of our foundation: Environmental Stewardship, Social Responsibility and Economic Commitment, helping to create sustainable and responsible value for our customers, communities and shareholders. This is precisely how **Essex Power is Connected to Our Communities.**

In 2018, Essex Power delivered and exceeded its corporate commitments to our customers, our communities we service and our shareholders. We are proud to share our 2018 successes in this report.

Our goal since inception for our regulated affiliate, Essex Powerlines, was to propose reasonable rates in-line with the rate of inflation while maintaining consistent levels of spending on infrastructure and services. Continually meeting and exceeding our goal ensures capacity for community growth, an enhanced customer experience and overall system reliability. 2018 marked the successful completion of EPL's Cost of Service proceeding, which represents a regulatory process that is completed at least every five years to ensure a utility's cost structure is appropriate. EPLC is pleased to report that it completed this process, which resulted in a **bill decrease for all customer classes.** These bill

decreases are the clear result of multiple initiatives including a reduction to distribution system losses.

EPLC RATES VS. INFLATION



Essex Powerlines experienced a capital spend of approximately **\$3.6 million** in asset refurbishments, conversions, expansions, trucks, equipment and general system improvements. EPL will continue to implement various proposed projects that have been outlined in the Cost of Service application, which will result in customer benefits through enhanced reliability, system resiliency, improved customer service and overall affordability.

Moreover, EPL's investment in a **Single Voltage Utility** will likely result in **over \$4,000,000 in savings** to our customers over the course of the next 10 years! In 2018, EPL instituted a **24-hour, 7 days a week Operations Control Centre.** The control centre will use state-of-the-art SmartMap technology developed locally by our affiliate, Essex Energy and hosted by Utilismart, to help our crews on the ground by providing real-time data, reducing outage time, and creating a safer environment for our workers and the public. The newly instituted Operations

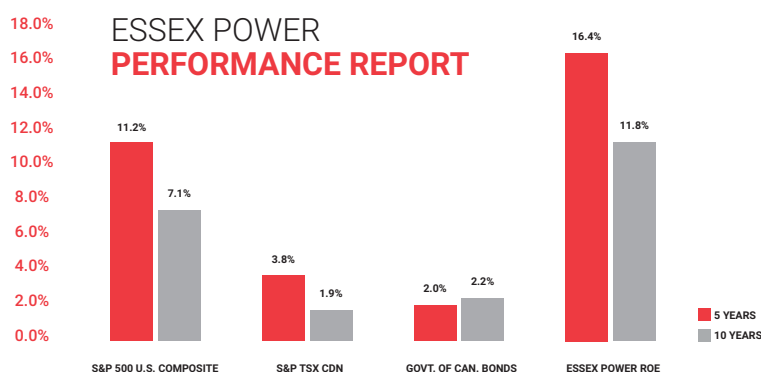
Control Centre is one more piece that adds to our vision of the “self-healing” grid.

Our unregulated affiliate, Essex Energy, flourished in 2018 by continuing to push boundaries and offer a wide variety of unique services in the rapidly changing energy sector. Essex Energy has grown into this success by developing in-house expertise for a diverse range of technical offerings within the sector. The company has evolved into a well-recognized and respected, leading edge 21st century smart grid service provider across Ontario.

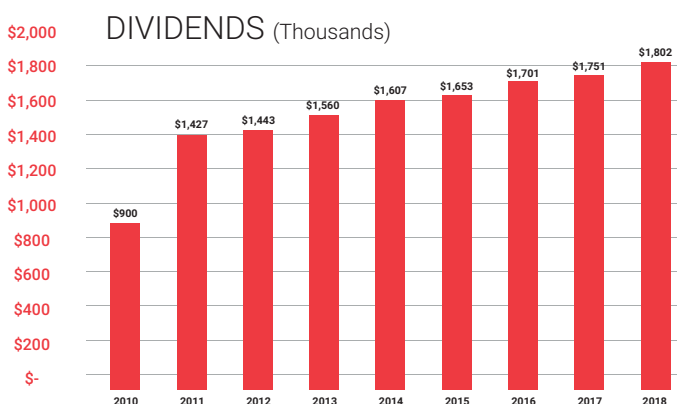
In 2018, our unregulated companies Utilismart Corporation and WattsWorth Analysis Inc. had yet another successful year. At Utilismart, our team has diligently worked on our **Big Data project**, allowing the integration of data from multiple sources to create a holistic data platform, making information accessible for key decision makers. Similarly, WattsWorth has further developed its Retail Settlement Variance Account (“RSVA”) analytics tool for utilities. Both projects provide clients with unprecedented data and decision-making capabilities, helping energy consumers and producers with their complex needs.

COMMON SHARES & SPECIAL DIVIDENDS (Thousands)

Essex Power’s dividend stream and corporate returns remains very strong and continue to outperform aggressive market comparisons. Shareholder value has grown substantially as a result of this consistent corporate performance. Outperforming the market in corporate performance and maintaining fair and reasonable distribution rates allows Essex Power Shareholders to have a win-win situation as a local owner of an integrated Energy business.



Essex Power issued **\$1,801,709** cash dividend in 2018, which is a **3% increase** from last year and the overall corporate return was **15.2%**. The past five-year dividend cash flow to our Shareholders enabled strategic re-investment to help build our sustainable communities.



[Signature]

Gary McNamara
CHAIR, Essex Power Corporation

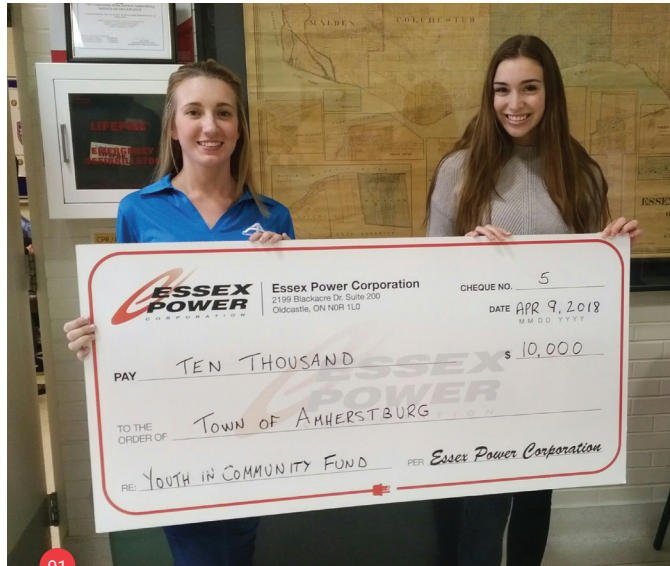


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Raymond J. Tracey, P.Eng
PRESIDENT & C.E.O., Essex Power Corporation

COMMUNITY SUPPORT AT A GLANCE

Community engagement and philanthropic support remained at the heart of Essex Power's corporate philosophy in 2018. Essex Power continued to embrace the power of local hydro by supporting our community through various charitable donations and employee involvement. 2018 marked the fifth year of our **"Youth in Community Fund"** providing each of our Shareholders with \$10,000 in funding to be used towards youth-oriented programming and initiatives. To date, **\$200,000** has been provided to the youth of our communities.



Essex Power also recognized opportunities to augment customer relations and give back to their community through environmental responsibility initiatives this past year. Two separate paperless billing campaigns were conducted, with proceeds directly benefitting the community. The first **Go Green, Plant a Tree** campaign

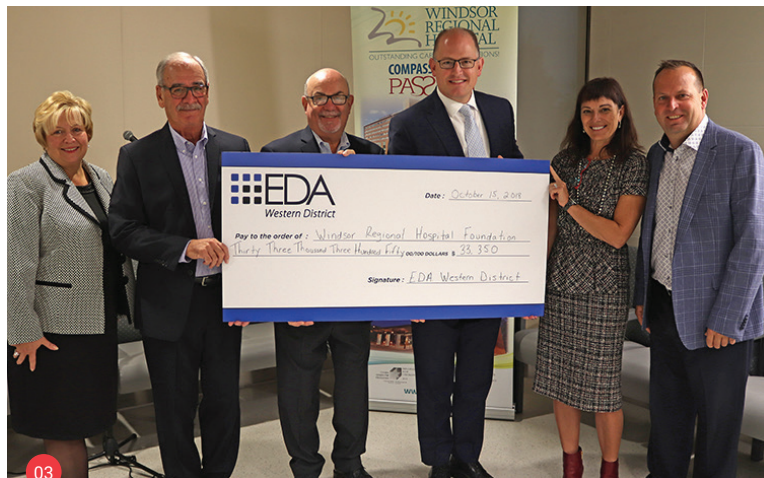


recognized paperless billing signups by planting trees in each of the municipalities we serve. The campaign resulted in **1000 trees being planted** amongst each of our four communities. The second campaign, **Let's CAN Hunger Together!** was a joint initiative with ENWIN Utilities that recognized paperless billing signups by donating \$10 to local food banks for each customer that signed up at each utility. The final donation was then given to five local food banks, including **Amherstburg Food & Fellowship Mission, LaSalle St. Andrew's Anglican Church Food Bank, Tecumseh Goodfellows, Leamington Salvation Army, and the Downtown Mission of Windsor.** A total of **\$8810** was raised through customer signups. Inspired by the communities' contribution, Essex Power and its employees banded together to collect additional canned goods and monetary donations. Through employee and corporate donations, an additional **\$4200** was raised and donated, as well as **6000 canned goods** that were distributed to our local food banks. This is the 8th year that Essex Power and its employees have donated to local food banks within the communities we serve.

This past year, Essex Power placed a strong emphasis on collaborating with neighboring LDCs to



01. Youth in the Community Fund, Town of Amherstburg
02. Go Green, Plant a Tree Campaign
03. Windsor Regional Hospital Foundation Donation
04. Let's CAN Hunger Together! canned good donation
05. EPL employees volunteering at Amherstburg Food & Fellowship Mission



provide value added programs that resulted in positive outcomes for the community. As such, Essex Power joined forces with ENWIN Utilities to co-host the EDA Western District 6th Annual Charity Golf Tournament. Through our combined involvement, **\$66,700** was raised and equally donated to **Windsor Regional Hospital Foundation** and **Ronald McDonald House Charities**. Essex Power continues to show our support for the community we serve whether its through cooperative education programs, local charities or our local community festivals.



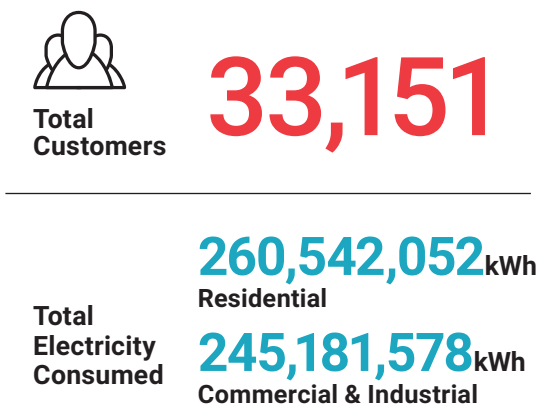
To date, \$200,000 has been provided to the youth of our communities.

04

03

05

2018 FAST FACTS



250
New Service
Installed



1,178
Overhead
Transformers



1,936
Underground
Transformers



27
Fleet Vehicles



188 Km
Overhead Lines

269 Km Underground
Cable



ESSEX POWERLINES 2018 HIGHLIGHTS



One of Essex Powerlines' ("EPL") main achievements in 2018 involved obtaining a cost of service decision and order from the Ontario Energy Board with respect to future customer rates (which essentially sets our income parameters for the next 5 years or more). This customer rate setting process fell in line with our historical and Board supported mandate to keep EPL hydro distribution rates at or below the rate of inflation. Through the hard work of all involved, not just in the preparation of the rate application, but also in ensuring the efficient operation of and prudent operation of EPL, we were able to achieve our proposed overall **RATE DECREASE** amongst all EPL customer rate classes. This unique achievement has contributed to EPL being recognized as one of the most cost-efficient utilities on a per customer basis in the Province of Ontario.

In 2018, EPL also continued its transformative journey into a digital utility through three (3) critical activities. Firstly, EPL began its strategic partnership with fellow GridSmartCity® partner, **Oakville Hydro**, to bring 21st Century Control Room services and monitoring to EPL. With an implementation date of early June 2019, this initiative will help **improve outage response time, data accuracy, and overall customer services**. Further, EPL continued its enhanced efforts and reinforcements in cyber security to comply with the OEB's Cyber Security Framework. Finally, EPL continued its push for a **Self-Healing Grid** by installing five (5) additional automatic reclosers (which now total to more than 20) throughout our distribution system, helping reduce outage times, improve efficiency and save our customers money.

This past year EPL continued to ensure that all customer and EPL capital work was designed, managed, planned and scheduled for completion by the operations department on a priority schedule basis. Residential growth has been increasing significantly over the last few years. In 2018



In 2018, EPL continued to build on its involvement with **GridSmartCity®**. The GSC Cooperative draws its strength from its individual local distribution company (LDCs) members and the communities in which we operate. The 14 member LDCs manage approximately **\$2.7 billion** in assets, serving close to **737,500 customers** across more than **25 communities**. As a member of GSC, EPL exchanges information on many critical initiatives, such as material standardization and purchasing evaluation, best practices and synergies in cyber security, and implementation of new technologies and communication strategies, to name a few. These initiatives allow EPL and other members to achieve efficiencies and innovation within the evolving industry.

EPL continued to experience an active growth period with respect to pre-serviced lots and individual metered apartments and condominiums. Historical growth has been in LaSalle but recently some subdivisions have been serviced in Amherstburg and Leamington. In 2019 EPL is forecasting continued growth levels in most of our service territories. Furthermore, the construction of a **new Leamington TS** by Hydro One is, for the most part, complete and all EPL customers in Leamington are now connected to the new TS feeders.

Finally, in keeping with our commitment to our Shareholders' communities, EPL employees engaged in successful events including, but not limited to, Earth Day tree planting at various shareholder community parks, food bank volunteering, holiday can drive collecting and distribution and the Goodfellow's. The betterment of our Shareholders' communities remains the focus of EPL both from an operational and community perspective.

ESSEX ENERGY 2018 HIGHLIGHTS



2018 was a year that saw continued success for Essex Energy (“EE”). The company continued to push the boundaries in Ontario with its Distributed Energy Resources (“DER”) portfolio of assets and services as well as its unique blend of Smart Grid engineering and consulting services. EE has grown into this success by developing in-house expertise for a diverse range of technical offerings within the energy sector. The company has evolved into a well-recognized and respected, leading edge 21st century smart grid service provider across Ontario.

While EE’s growing list of clients has expanded throughout the province – including the provincial government itself – it is important to note that it still plays a critical role facilitating technology development for Essex Power Corporation’s affiliates. Since its inception, this has always been a core function for the company. This includes, but is not limited to, services such as:

- Engineering / SmartMAP software support / Conservation (*Essex Powerlines*)
- Software development (SmartMAP) / product support / sales (*Utilismart Corporation*)
- Street light design and maintenance / meter services (*Essex Power Services*)
- Energy consulting (*WattsWorth Analysis Inc.*)
- Solar PV asset management (*EE Solar Partners Inc. & ASI SPE 106 Inc.*)

These intercompany roles are critical to the success of Essex Power Corporation’s group of companies and will generate 35-40% of EE’s revenue. SmartMAP initiatives have been key to supporting further aggressive growth for Utilismart in both the Canadian and US markets.

Beyond EE’s intercompany role, its growing DER business added key capital investments in solar PV systems in 2018. These included solar PV systems on a quarry in Rosseau, ON and on Essex Powerlines’ operations facility in Oldcastle, ON. The solar PV system on EPL’s operation facility is the first of its kind in the province, using a 3rd party ownership model and is predicted to be fully commissioned by early 2019.

DER’s were not the only investment EE undertook in 2018. The company’s top smart grid software application, SmartMAP, was also the focus of a significant re-versioning to enhance its scalability and ease-of-use in preparation for the onboarding of many new customers in collaboration with Utilismart. The future is bright for utility analytics and SmartMAP promises to fill this need in the market in 2019 and beyond.

Engineering consulting and technical services also saw success in 2018. EE continued to support the local greenhouse community as they expand, triggering a need for support related to unique generation and large load connections. EE filled this role, supporting the associated economic growth in the region.

Finally, Essex Energy’s contribution to the province’s Conservation and Demand Management (“CDM”) goals has been tremendous through the years, and 2018 was no exception. EE helped Essex Powerlines meet and exceed their 2020 target—two years ahead of schedule—which resulted in an incentive award of more than \$500,000 for the group! Another example of the power of collaboration between Essex Power’s unique group of companies.

2018 RENEWABLE HIGHLIGHTS

In 2018, a **500kW ground mounted solar PV system** was commissioned on a quarry in Rosseau, ON and construction of a **100kW roof mounted solar PV system began** in Oldcastle, Ontario. The Rosseau site was developed in partnership with Pic Mobert First Nation. These systems represent an **investment of over \$2 million in clean energy for the province** and value for EE's shareholders.

The solar production of Essex Energy's growing fleet of systems provides enough energy to **power over 500 homes**, contributing approximately **200MWh of clean energy** and saving tonnes of millions of CO2 emissions on an annual basis.

Project Name	Commissioned Date	# of Days Running	kWh Savings	Homes powered/year
Tecumseh Arena	October 28, 2010	2,996	4,546,820	58
Vollmer Arena	December 21, 2011	2,570	2,895,446	43
Libro Center - Amherstburg	November 19, 2012	2,236	4,889,644	84
Marmora and Lake Area	April 1, 2015	1,373	1,038,575	30
Atlas Tube Complex, Lakeshore	November 26, 2016	1,126	2,263,767	76
ASI SPE 106 Inc., Vaughan	June 1, 2016	947	587,247	24
Ullswater Quarry	March 21, 2017	653	1,137,542	71
Port Carling Quarry	July 25, 2017	527	859,500	60



01. Rosseau – Rosseau, ON
02. EPL Op Center - Oldcastle, ON

UTILISMART 2018 HIGHLIGHTS

utilismart™
CORPORATION

Connecting to Our Communities meant many different things for Utilismart Corporation (“UC”) in 2018. Primarily, UC connected with its customers throughout the year, growing its customer base with 6 net new customers in 2018. Even more exciting is where these new customers are located as UC established itself, for the first time, in Alberta and has solid prospects further West across Canada. UC further enhanced its customer offering by also launching its Settlement Manager product on HTML5 and made it accessible on various mobile applications.



UC’s growth potential beyond 2018 lies in its success in the American market and UC remains poised to tackle this challenge in 2019. In its continued effort to expand rapidly, UC has pursued additional partner relationships with AMI vendors, prepay solution providers and analytic software integrators across North America to ensure that our solution is tailored for the broader marketplace. In addition, UC also signed its first Master Service Agreement with a **US Joint Action Agency** that has

60+ utility members! This relationship will hopefully help propel our growth strategy abroad.

Other UC 2018 highlights include the successful completion of our **ISMS surveillance audit**, **7 net new cellular services clients** and the successful completion of our **Big Data project** in partnership with the **Ministry of Energy** and their **Smart Grid Fund**. This innovation project has enabled UC to become a leader in the utility data space and allows UC to handle utility data, in near real-time, from one common data repository. Further, the project allows for the integration of data from multiple sources into one platform that enables better, faster, and cheaper consumption of data by various smart grid applications. As such, this data is available to any number of 3rd party applications, unlocking the ability to leverage the data for all levels of decision-making and analysis.



WATTSWORTH 2018 HIGHLIGHTS



WattsWorth Analysis Inc. (“WW”) spent much of 2018 maintaining its client base, while investing considerable resources in the development of an exciting new offering to a new market segment – **Retail Settlement Variance Account (“RSVA”) analytics** for utilities. The province’s growing regulatory complexity has presented WW with an opportunity to add utilities to its client potential, joining the large loads, generators, and municipalities that it already serves. In 2018, WW added **two new utility customers** to its RSVA offering, with more to come in 2019 and beyond.

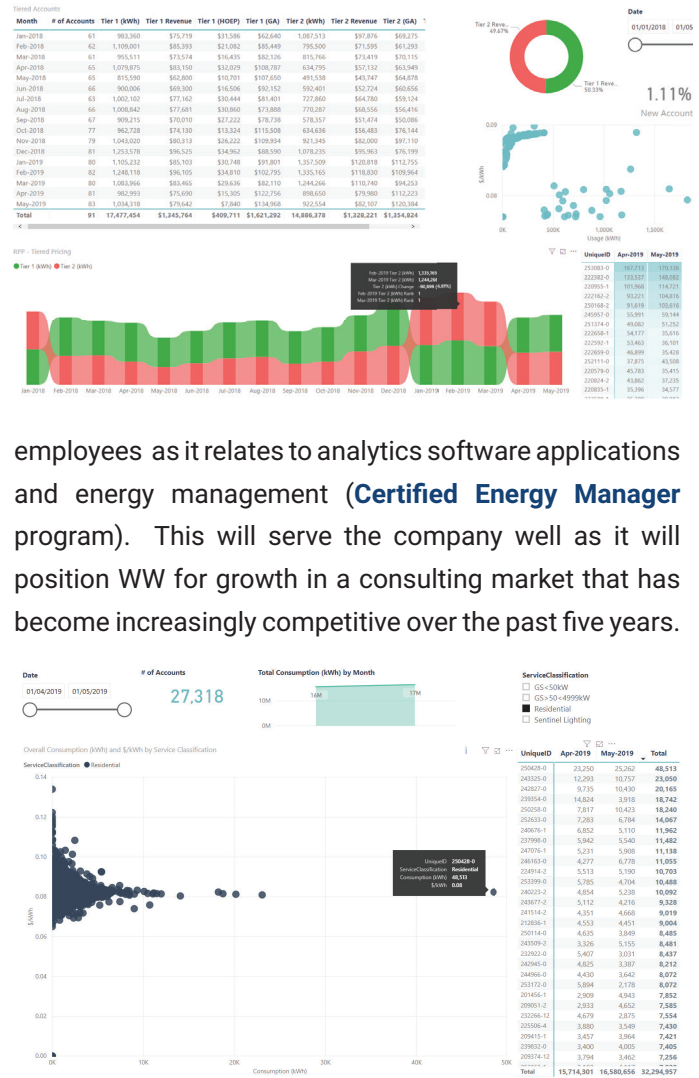
In addition, the continued expansion of the **Industrial Conservation Initiative (“ICI”)** played a role in the slight growth of the overall market for WW’s commercial/industrial client-base, as the company helps large users stay competitive by reducing market exposure. WW advises some of the largest electricity consumers in Ontario in this regard.

Also, in 2018 WW continued to play a more pronounced intercompany role (as compared to previous years) amongst the Essex Power group of companies, providing support for key initiatives such as:

1. RSVA Platinum audit support (Essex Powerlines)
2. RSVA service offering development (Utilismart)
3. Energy Market Sub-consulting (Essex Energy)



In 2018 WW also continued to invest in the training and development of its



Through its extensive marketing efforts and proven delivery model, WattsWorth has become well known in the industry as “the choice” for those energy consumers and generators that have complex needs. This can be credited to the expertise and professionalism of its staff. As Ontario’s energy markets evolve through the **Independent Electricity System Operator’s “Market Renewal”** and other province-led mechanisms, WW will continue to seek out opportunity to expand.



GLOBAL REPORTING INITIATIVE

The Global Reporting Initiative (GRI) is an internationally recognized standardized framework for disclosing an organizations environmental, social, and economic performance. The GRI is a commonly used tool that many organizations in Ontario, Canada, as well as around the world use.



ABOUT GRI

EPC's report focus is on its operations, which leads to the process of defining the report content and topic boundaries. The organization used past reports and several meetings between employees to define the report content. Material topics were decided on by a team who consulted previous reports, current company documents and operations, and future trends.

Essex Power has reported with the new GRI standards required to be adopted by July 2018. Essex Power Corporation has reported in accordance with the Core option, and therefore reported on the required disclosures from GRI 102.



REPORT SCOPE AND BOUNDARIES

Our regulated electricity distribution company, Essex Powerlines, is accountable for providing a safe, reliable, and cost-effective supply of electricity to the municipalities of all our stakeholders and communities. The scope of this report and GRI submission includes all of the Essex Power Group of Companies.

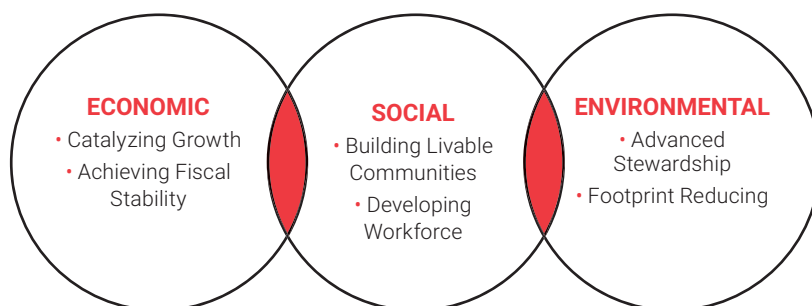
To measure our success and progress in sustainability, we have defined key areas that we see of great importance to achieving success. Essex Power has made sustainability a core foundation for all decision-making and has initiated best practices for managing operational and environmental risk. This report will analyze and measure Essex Power's performance within the three pillars of sustainability.

Environmental stewardship is evaluated by our success in energy conservation, renewable energy investment, waste management, and environmental risk mitigation of our operations.

Social responsibility is evaluated by how we ensure the safety and wellness of people including our employees, our contractors, and our communities. We are committed to providing a safe and respectful workplace where employees are highly valued, treated fairly, provided with challenging and meaningful work, and benefit from opportunities for knowledge growth and career development.

HOW IT WORKS

How we measure our success and progress:



CONSERVATION & DEMAND MANAGEMENT

1,299,923

kWh conserved.

\$1,109,611

in incentives paid out.

115

% of target attained
at the end of 2018

CDM HIGHLIGHT

In 2018, Centerline installed **energy efficient LED lighting** at 4 local facilities including 3 existing facilities on Morton Drive, and their new facility at 6290 Morton Industrial Drive. The total annual savings are **393,056kWh** and the total incentive paid for the project was **\$55,440**. Centerline has been one of the most active participants in Essex Powerlines' **saveONenergy programs**, recognizing the value of the incentives and displaying continued commitment and leadership in energy conservation.



CENTERLINE Efficient LED Lighting

393,056 kWh **Total Annual Savings**

\$55,440 **Incentives**

71 Tonnes of CO² emissions
prevented/year

73 **Cars & light trucks off the road**

44 **Homes' energy use for 1 year**

748 **Lightbulbs turned off for a year**

308 **Acres of forest absorbing CO²**



2018 SOCIAL PERFORMANCE

Essex Power and its employees are proud to be a supportive corporate neighbour.

Here is a sample of some of the worthy causes we joined forces with in 2017 to help build strong, supportive communities in which we serve.



\$40,000 EPL Youth in Community Fund

Each of our Shareholders was provided \$10,000 in funding to be used towards youth oriented programing and initiatives. To date, \$200,000 has been donated.

\$13,000

Donated to local food banks

6,000

Canned goods donated to local food banks



Amherstburg
Food and
Fellowship
Mission



Tecumseh
Goodfellows



The Salvation
Army of Leamington



St. Andrews
LaSalle
Community
Food Bank



The Downtown
Mission of
Windsor



RMHC

Southwestern Ontario

Ronald McDonald House
Southwestern Ontario.

Partners[€] For Life

"Partners for Life" With the Canadian Red Cross; and exceeded our pledged amount of 20 units per year!

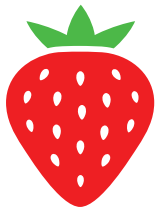


Co-operative education programs

We participated in the co-operative education programs with universities and colleges and offered a bursary to local high schools.

\$5,000

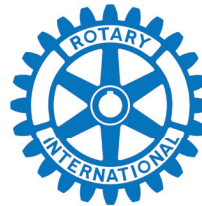
We support the annual community festivals in our municipalities through sponsorships and we continue to provide \$5,000 in in-kind services to each of our Shareholders.



Town of LaSalle
LaSalle Strawberry Festival



Town of Tecumseh
Tecumseh Corn Festival



Town of Amherstburg
Rotary International's Annual Ribfest.



Municipality of Leamington
Music On the 42 Summer Concert Series



Sponsored the annual
Mayor's Charity Golf Tournament
in Tecumseh and Windsor Essex Region



Tecumseh Fire & Rescue Services Combat Challenge Team



Ultimate Fun Firefighter Challenge - Town of Tecumseh



LaSalle Firefighter Association:
Annual Detroit River Walleye Classic Fishing Derby

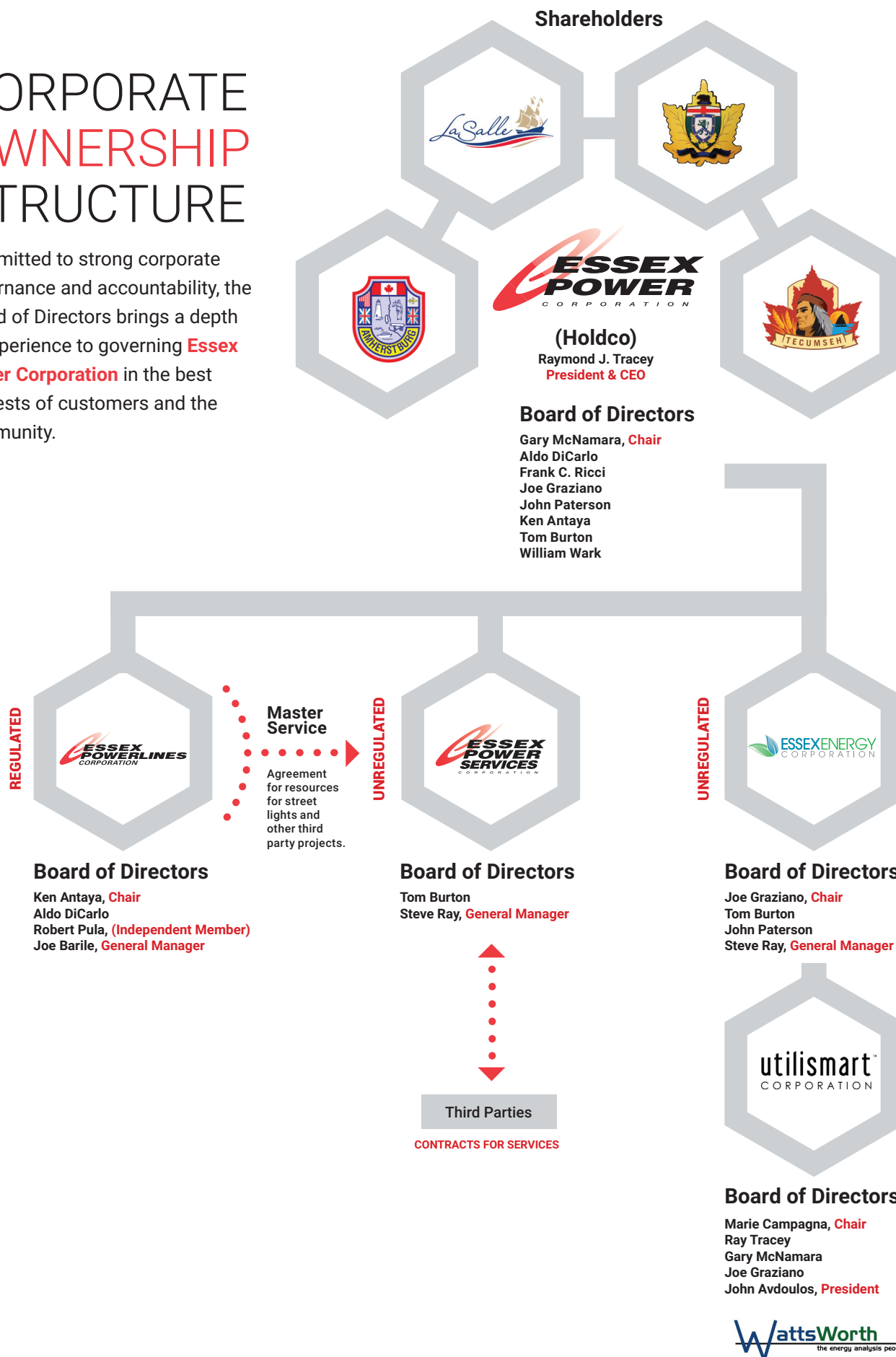


Sponsor our local teams



CORPORATE OWNERSHIP STRUCTURE

Committed to strong corporate governance and accountability, the Board of Directors brings a depth of experience to governing **Essex Power Corporation** in the best interests of customers and the community.





Essex Power Corporation is a dynamic energy company that provides safe, reliable and economical energy supply and services to our customers. Our commitment to innovation, performance management and leading by example has built the foundation for Essex Power and our affiliates to establish a diverse set of energy products and services that are valued by our customers.



Essex Powerlines Corporation, a regulated company, provides safe, reliable and economical electrical distribution and service to over 30,000 residents and businesses in Amherstburg, LaSalle, Leamington, and Tecumseh. The foundation to empower our corporate vision is based on a dynamic and progressive workforce that will be industry leaders in providing 'best in class' business solutions in the delivery of service to our customers.



Since 2000, **Essex Power Services** has been a key streetlight service provider for our communities. Being ISO 9001:2008 certified, our Quality Management System ensures proper business operation utilizing best practices. Essex Power Services was registered with IESO as an MSP (Metering Service Provider) in 2012 and currently maintains a total of 23 wholesale metering installations.



Essex Energy Corporation is a dynamic group of more than 20 engineers, business professionals, certified energy managers and LEED accredited individuals ready to provide your organization with a suite of energy management services. Among a wide array of other energy sector related activities, Essex Energy is directly responsible for the reduction of more than 252,000,000 lifecycle kWh through our conservation initiatives and has built some of Canada's largest solar photovoltaic rooftop systems. Essex Energy is uniquely positioned to assist you in realizing your own triple bottom line.



Since 2002, **Utilismart** has been the industry leader in providing settlement services to utilities throughout Ontario. Our services are built on industry expertise and an in-depth understanding of both the settlement processes in the marketplace and the needs of the customer. Our hosted solutions offer customers an economical, efficient settlement service that has build-in reporting and analysis tools. Our knowledge in this area allows for seamless integration into CIS, Financial, and other customer systems requiring settlement data.



As a Canadian company based in Ontario, **WattsWorth** offers a variety of energy management services to participants in the Ontario market. Our clients include large industrial/commercial companies, electric utilities, electricity generators and municipalities. WattsWorth has over 1-billion kWh consumed annually. In addition to technical expertise and a highly specialized and robust infrastructure, WattsWorth makes a commitment to listen to our clients' requirements and tailor solutions that respect their objectives. WattsWorth has a business manner that reflects high standards of professionalism, attention to detail, and a logical approach to problem solving.



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