

# 2015

## ANNUAL REPORT



**EMPOWERING CUSTOMERS TO HELP  
BUILD OUR SUSTAINABLE COMMUNITIES**





## OUR CORPORATE PHILOSOPHY

### 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 market place 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.

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# BOARD CHAIR & CEO MESSAGE



## EMPOWERING CUSTOMERS TO HELP BUILD OUR SUSTAINABLE COMMUNITIES

At Essex Power, we believe the stakes are high when it comes to “our environment” and we must work as a team with our communities to help them become sustainable leaders and serve as a standard for others to follow.

Gary McNamara, Chair, Essex Power Corp and President, AMO and Ray Tracey, President and CEO, Essex Power, and Chair, Electricity Distributors Association

*As the world confronts the increasing challenges of Global Warming, we believe it will be the sustainable communities that will have the greatest effect in reducing and hopefully reversing the negative impacts that threaten our environment and our way of life in our communities.*

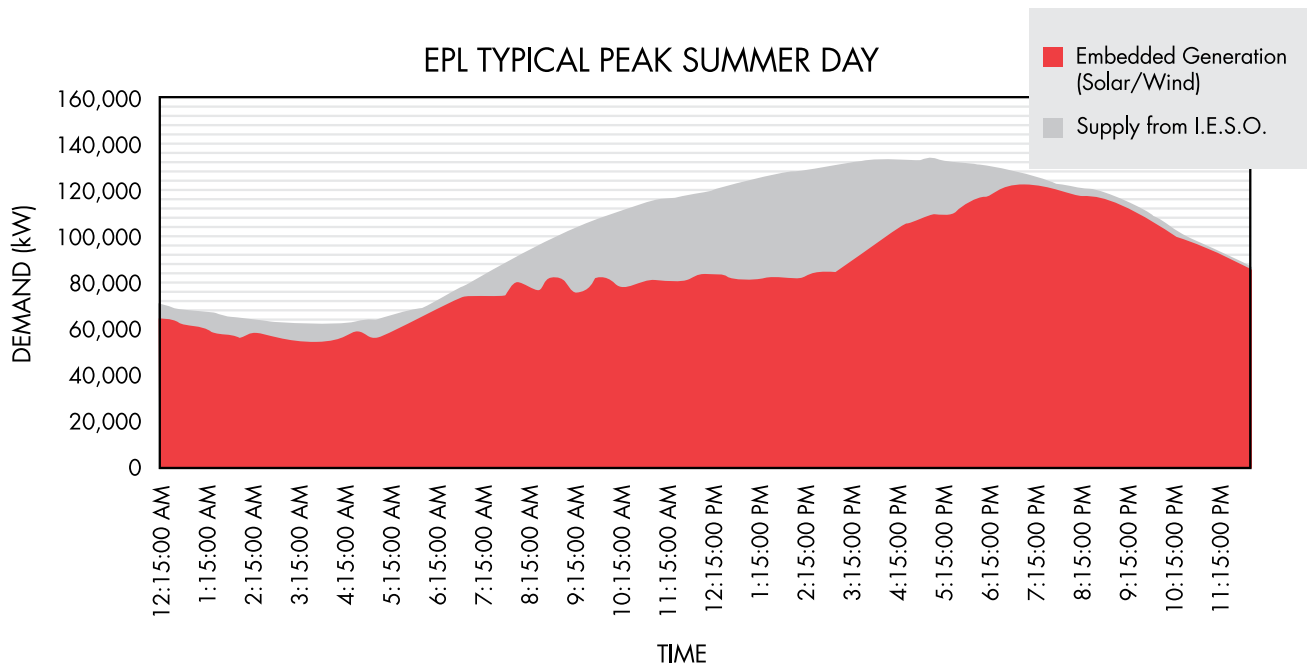
At Essex Power, we are empowering our customers to help build these more sustainable communities. Reducing the carbon footprint of the community requires the engagement of everyone and as a key stakeholder, Essex Power’s role is to enable new technologies and spark new innovation to help reduce our communities’ reliance on carbon based technologies.

While the Province and the Ontario electricity sector have made huge strides in significantly reducing carbon utilization across the Generation mix that supplies Ontario by eliminating coal and introducing

new renewable generation resources such as solar and wind, there is still more to do.

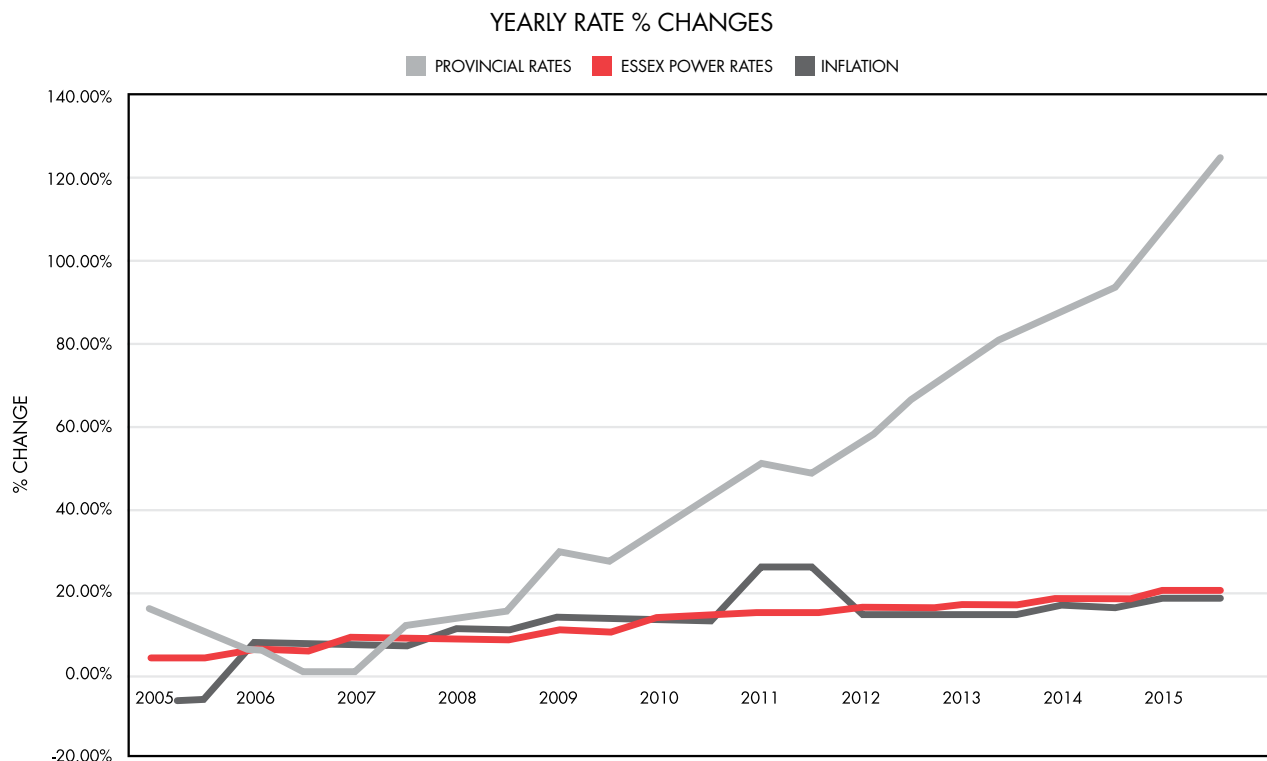
The following power demand curve for Essex Powerline’s aggregated summer peak day shows that local embedded renewable generation (in grey) is now playing a major role in contributing to the overall supply mix of servicing our four service territories in Amherstburg, LaSalle, Leamington and Tecumseh. During the mid-day peak period as much as 33% percent of our needed supply is being produced locally through mostly renewable resources!





Essex Powerlines, Essex Power's regulated Local Distribution Company (LDC), continues to play a pivotal role in providing tools to our **30,000** customers through Conservation and Demand Management programs to reduce energy usage or usage patterns that can reduce their overall electricity bill cost. This makes good business sense but more important it is good for our environment.

Reducing the carbon footprint of the Generation supply mix for Ontario has come at a price for Ontarians. While Essex Powerlines' local distribution cost increases have remained at or below inflation, the rest of the provincial charges for electricity have clearly risen at rates that are pushing the boundaries of "utility affordability".



Essex Power remains committed to finding new ways of helping our customers to deal with the price pressures they are feeling. We are looking at “behind the meter” opportunities for residents and businesses to use less or even self-generate their own power needs more affordably.

Essex Power has committed to 21st century technologies to enhance customer choice and allow for more technology and innovation to exist across the grid. Essex Powerlines and Essex Energy will be collaborating with the IESO and new storage provider partners to install grid level storage capacity within our distribution system. This will allow us to more effectively balance our load curve and take full advantage of both embedded renewable generation and off-peak lower energy prices.

Essex Power is also developing and installing a grid level intelligence system to enable a vast array of new technologies to be connected to the grid or behind the meter. The joint project between Essex Powerlines and Essex Energy will allow us to communicate with smart devices such as, smart meters, electric cars and their charging stations, intelligent thermostats like NEST, grid storage, automated switching devices, embedded generation and many other new technologies. We will use this grid level intelligence to help optimize how the grid can be managed in the most effective way to

balance the supply-load mix to maximize efficiency and the reduction of carbon in the supply mix of electricity needed by our power our customers’ needs.

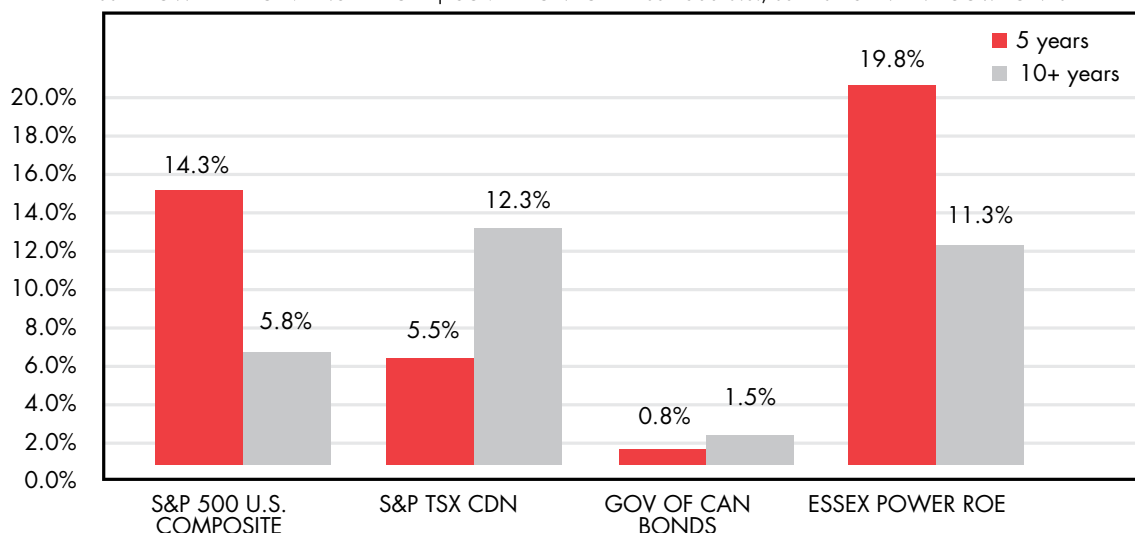


At the same time, we will be helping residents and businesses reduce the impacts on their electricity bills. We will be providing choice and enabling them to decide what technologies will best help them to reduce their electricity costs.

Essex Power’s 2015 corporate performance remains very strong yet at the same time we maintained responsible and affordable distribution rates. Essex Powerlines distribution charge as part of the overall utility bill has dropped from 25%

down to **19%** over the last ten years. Essex Power maintains this strong corporate performance through a balance business approach by having operating interest in both regulated and unregulated sectors. As our local communities begin to rebound and grow out of the recession, Essex Power is well prepared to service this growth with capital reinvestments now reaching **\$38 M** and the modernization of the entire distribution system across ALL four service areas to a single distribution voltage of 27.6 kV thus eliminating our entire end of life step down substations and substantially upgrading distribution lines and transformers. This has resulted in a much more reliable grid and with increased capacity to serve both our load and embedded generation customers.

ESSEX POWER PERFORMANCE REPORT | COMPARISON TO THE S&P 500 U.S., S&P TSX CDN AND GOV. BONDS

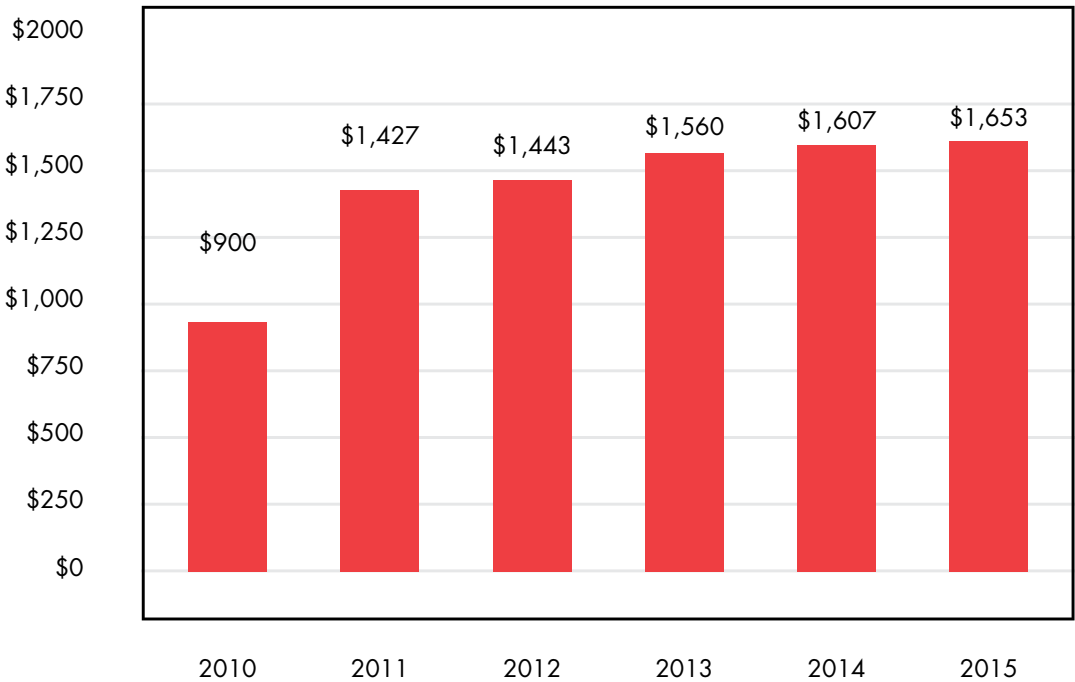




Essex Powerlines dividend stream and corporate returns remain very strong and continue to outperform market investments comparisons. Shareholder equity has grown substantially as a result of this consistent corporate performance. Outperforming the market in corporate performance and maintaining fair 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 **\$1,591,000** cash dividend in 2015 which is a **3% increase** from last year and the overall corporate return was **16.8 %**. The past five year dividend cash flow to our shareholders has been **\$7,690,000** enabling our Shareholders to strategically re-invest and build our sustainable communities even stronger.

COMMON SHARES AND SPECIAL SHARES DIVIDENDS (THOUSANDS)



As Canada's most renowned astronaut **Chris Hadfield** said:



*Ultimately, leadership is not about glorious crowning acts. It's about keeping your team focused on a goal and motivated to do their best to achieve it, especially when the stakes are high and the consequences really matter.*



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

**Gary McNamara**  
Chair, Essex Power Corporation

# 2015 FAST FACTS

Essex Powerlines (Regulated)

## \$47,589,018 ASSETS

Total Assets	\$47,589,018
Overhead lines	188 km
Underground cable	261 km
Transformers	3,074
Poles	6,276
Fleet Vehicles	24
Summer Peak Demand	121,803 kW
Winter Peak Demand	80,880 kW

## 28,949 CUSTOMERS

Total Electricity Customers	28,949
Total Electricity Consumed	488,521,550 kWh
Number of Residential Customer Accounts	26,713
Total Electricity Consumption	246,568,730 kWh
Number of Commercial & Industrial Accounts	2,236
Total Electricity Consumption	236,952,820 kWh

## \$1,591,000 TOTAL COMMON DIVIDENDS

Common Dividends for Year	2015	2014	2013	2012
Amherstburg	226,877	220,317	213,900	199,640
LaSalle	529,007	513,712	498,750	465,500
Leamington	414,456	402,472	390,750	364,700
Tecumseh	420,660	408,498	396,600	370,160
Total Common Dividends	1,591,000	1,545,000	1,500,000	1,400,000

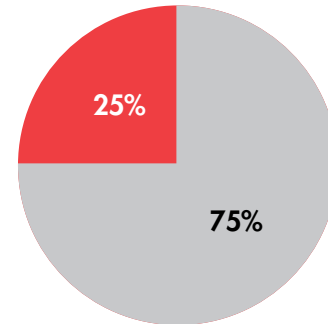
Community Renewable Energy Projects

## \$61,709 TOTAL SPECIAL DIVIDENDS

Special Dividends (GS) for Year	2015	2014	2013	2012
Amherstburg	17,804	17,804	17,804	
LaSalle	17,729	17,729	15,870	14,542
Tecumseh	26,176	26,176	26,176	26,176
Total Special Dividends	61,709	61,709	58,850	40,718

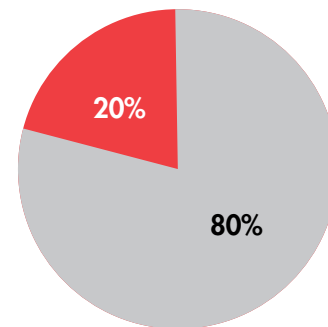
ELECTRICITY BILL BREAKDOWN - 2005

PROVINCIALY CONTROLLED ESSEX POWERLINES CONTROLLED



ELECTRICITY BILL BREAKDOWN - 2015

PROVINCIALY CONTROLLED ESSEX POWERLINES CONTROLLED





A background image showing rows of solar panels stretching across a field under a cloudy sky.

## ESSEX ENERGY HIGHLIGHTS

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In 2015, Essex Energy commissioned over **1430kW** of solar PV generation capacity in Ontario. As of the end of 2015, the cumulative total of clean, emission-free energy that has been produced by renewable generators developed by Essex Energy surpassed **8.2 GWh** including over **145 sites**. This is a great accomplishment by the dedicated and socially responsible staff of the company.

The effort to carbon neutralize three large quarries in the Muskoka region through the deployment of 1.8MW of solar PV facilities that began in 2014 continued in 2015 as Essex Energy completed engineering and broke ground on the sites.

To complement Essex Energy's renewable generation fleet, the company has moved in to the grid-tied energy storage sector. In 2015, Essex Energy, in partnership with others, was awarded a contract through Ontario's Independent Electrical System Operator to construct flow battery storage technology facilities totaling 3,000 kW's in the Essex County region and in Essex Powerlines service territory. This is an exciting accomplishment for the Essex Power Group and will ensure the corporation stays at the leading edge of Distributed Energy Resource technology in the province.

Essex Energy's efforts to contribute to the region's economic development were strong in 2015. One significant example of this is the work that the company did in the greenhouse sector to explore options with Provincial Agencies to make more efficient use of the county's rural grid in order to enable more connections for lighting facilities that will result in competitive gains for the industry.

Finally, in 2015, Essex Energy, in partnership with Utilismart Corporation, completed its first major Ontario launch of its industry leading smart grid software suite – SmartMAP. The launch was an overwhelming success and has served as a reference project as Essex Energy and Utilismart Corporation expand sales of this and other cloud-based software in the greater North American market.

# SOLAR HIGHLIGHTS

In 2015, Essex Energy Corporation commissioned solar PV sites at Marmora, Atlas Tube Centre, Lakeshore 34 and CFC Warehouse. With just our large systems, we have saved enough kilowatt hours to power **995** homes for a year!

Project Name	Commissioned Date	Number of Days Running	kWh Savings	Homes Powered per Year
<b>Tecumseh Arena</b>	October 22, 2010	1,899	2,882,446	324
<b>Vollmer Arena</b>	December 21, 2011	1,474	1,579,744	178
<b>Amherstburg Arena</b>	November 19, 2012	1,140	2,470,975	278
<b>Marmora</b>	April 1, 2015	277	244,183	27
<b>Atlas Tube Centre</b>	November 26, 2015	38	26,209	3

In December, Essex Energy Corporation was the recipient of the Fronius SnapINverter Reference Project Competition for the 600kW DC solar PV system at the Atlas Tube Centre. The Atlas Tube Centre was one of the few contracts awarded by the OPA based on the Unconstructed Rooftop Solar Pilot Project.







## ESSEX POWERLINES HIGHLIGHTS

In 2015, the focus was on ensuring that Essex Powerlines will continue to be an industry leader with respect to 21st Century Utility processes, systems and technological integration. In addition to continuing towards putting the necessary pieces in place that will allow for a “self-healing” distribution system that can automatically reroute power during an outage and in turn reduce the length of the outage and the cost of rolling trucks out, the main focus was on preparing to empower all our employees through technology, including the use of cutting edge technology such as SmartMap.

In 2015, Essex Powerlines became a single voltage utility. Furthermore, we continued to invest in distribution system capital that will provide increased reliability for our customers. These achievements will enable us to achieve our goals of maximizing shareholder value, improving customer satisfaction and maintaining regulatory compliance.

For 2016 and beyond, EPL will continue developing both short and long term labour strategies that align the needs of our asset replacement and repair with a compliment of line and metering resources.



## UTILISMART HIGHLIGHTS

Utilismart is a Meter Data Management company providing data collection, processing, storage and web-presentment services to engineering, operations, finance and customer service of utilities and municipalities, as well as data for use by the end consumers of electricity, water and natural gas.

Since 2000, Utilismart Corporation has been providing Distribution Utilities, Municipalities, Commercial and Industrial customers with the data that they require to operate efficiently and effectively.

In 2015, Utilismart was successful in upgrading their Information Security Management System to ISO 27001:2013, which exhibits the commitment to data security, reliability and privacy.

Utilismart is also revolutionizing Utility application with the adoption of SmartMAP, a cutting edge Distribution Management System. SmartMAP has been very well received in the market and provides tremendous value to Utilities that have deployed Advanced Metering Infrastructure (AMI).

Utilismart has acquired 12 new customers, stabilized the UDM product, and has launched an expansion into cellular services in Ontario.





# GRI REPORT CONTENT

The Global Reporting Initiative (GRI) is an internationally recognized standardized framework for disclosing an organization's environmental, social and economic performance.

This is Essex Power's fourth filing with the GRI framework and we are proud to say that as a result of our commitment to social sustainability, we have transitioned from a Level C to a Level B. We are happy with our improvements thus far but we are committed to building upon our current successes in order to improve in the future.

## REPORT SCOPE & 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.

Economic Performance is evaluated by the value we create for our stakeholders while facilitating the economic growth of the communities we serve.



The GRI G3.1 Content Index for Application Level B and the Electric Utilities Supplement Content index are available on our website at: [www.essexpower.ca](http://www.essexpower.ca)

We welcome your feedback on our Sustainability Report.

Comments can be directed to: [sustainability@essexpower.ca](mailto:sustainability@essexpower.ca)







## saveONenergy<sup>OM</sup>

In 2015, the IESO and Ontario's Local Distribution Companies transitioned from the former 2011-2014 Conservation framework to the new 2015-2020 Conservation First Framework. Through diligent efforts and engagement with the community and customer base, Essex Powerlines Corporation achieved 108% of its mandated conservation target at the end of 2014. The 2015 year saw a significant change in the structure of how Conservation programs are designed, administered, managed and delivered.

Under the 2015-2020 Conservation First Framework, Ontario's LDCs have greater flexibility, autonomy, and responsibility in pursuit of the challenging conservation targets mandated in the Framework. As of the end of 2015, Essex Powerlines had successfully transitioned to the new Conservation First Framework and is on track to achieve its Conservation targets.



# MAND MANAGEMENT



# \$1,709,211

IN INCENTIVES

Essex Power offered energy retrofit programs to local businesses that injected over **\$1,709,211** into the economy, representing investments made by local residents, businesses and industry in conservation.



## LEAMINGTON

**\$16,256** total incentives

**2.32** kW saved

**14,913.52** kWh saved

**28** lightbulbs turned off for a year

## DIAGEO

**\$20,951.75** total incentives

**47.8** kW saved

**419,035** kWh saved

**797** light bulbs turned off for a year



**\$13,064** total incentives

**8.82** kW saved

**40,657** kWh saved

**77** light bulbs turned off for a year



# SOCIAL PERFORMANCE



Essex Power employees engaged in a friendly “food fight” between two of our sites with the winner being one of our local food banks. St. Andrew’s LaSalle Food Bank received 1918 cans. We are also proud of our employees at Utilismart who donated 90 lbs to the London Food Bank.



# COMMUNITY INVOLVEMENT

Some of the local organizations that received our support include:

St. Andrew's LaSalle Community Food Bank

Amherstburg Food & Fellowship Mission

Leamington & District Ministerial Food Bank

Tecumseh Goodfellows

Erie Shores Hospice

Windsor & Essex County Crime Stoppers

Taste of Tecumseh

8th Annual LaSalle Fishing Tournament

Bursary for Communications Tech Graduate at General Amherst High School

Law Enforcement Torch Ride – Special Olympics

Amherstburg Minor Soccer Association

St. Anne's High School 2015 AAAA OFSAA Girls Volleyball

Holy Names High School – Knight Vision Robotics



# COMMUNITY INVOLVEMENT



In 2015, Essex Power continued the support of our communities through various charitable donations and employee involvement. 2015 was the second year of our "Youth in Community Fund" with our Shareholders supporting organizations offering activities and projects to the youth in our communities. Once again, each of our Shareholders was provided with **\$10,000** in funding to be used towards youth oriented programming and initiatives Essex Power provided financial support to those programs in our communities that serve as food banks, Amherstburg Food & Fellowship Mission, LaSalle St Andrew's Anglican Church Food Bank, Leamington & District Ministerial Food Bank and the Tecumseh Good fellows. We are proud that our employees are on board with contributing to our communities as well, as an additional **\$800+** employee funded donation was given to the food banks. We had staff active as volunteers in the community including the Goodfellows Paper Drive in Tecumseh. There are numerous organizations throughout our service area EPC continues to support. Essex Power continued



# SHAREHOLDERS



to 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. We participated in the Co Operative Education programs with Universities and Colleges and offered a bursary to local high schools.

In Ray Tracey's role as Chair of the EDA Western District, we worked closely with South Western LDCs to hold the 3<sup>rd</sup> Annual EDA Western District Charity Golf Tournament following the Annual General Meeting. The beneficiary of the tournament Chatham-Kent Hospice is in the process of building a new, first for the community, 10 bed residence. The EDA Western District was thrilled to surpass our fundraising expectations with a final donation of **\$63,000**.



# 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.

## SHAREHOLDERS



(Holdco)  
President & CEO Raymond J. Tracey

### BOARD OF DIRECTORS

Gary McNamara Chair  
Aldo DiCarlo  
Frank C. Ricci  
Joe Graziano  
John Paterson  
Ken Antaya  
Tom Burton  
William Wark



REGULATED

### BOARD OF DIRECTORS

Ken Antaya, Chair  
Aldo DiCarlo  
Robert Pula  
(Independent Member)

General Manager  
Joe Barile

Master  
Service

Agreement for  
resources for street  
lights and other third  
party projects



UNREGULATED

### BOARD OF DIRECTORS\*

Tom Burton  
General Manager  
Steve Ray



third parties

CONTRACTS FOR SERVICES



UNREGULATED

### BOARD OF DIRECTORS

Joe Graziano, Chair  
Tom Burton  
John Paterson

General Manager  
Steve Ray



### BOARD OF DIRECTORS

Marie Campagna, Chair  
Ray Tracey  
Gary McNamara  
Joe Graziano  
President  
John Avdoulos



# NOTES

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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 reliable and safe power to over 28,000 residents and businesses in Amherstburg, LaSalle, Leamington and Tecumseh. Essex Powerlines provides safe, reliable and economical electrical distribution and service to 28,000 customers within four municipalities of Essex County, and has system voltages of 4.16 kV, 8 kV and 27.6 kV. At Essex Powerlines, our corporate vision is to provide the communities of Amherstburg, LaSalle, Leamington, and Tecumseh with safe, reliable, and economical energy supply and service. The foundation to empower our vision is based on a dynamic and progressive workforce that will be industry leaders in providing 'best of class' business solutions in the delivery of service to our customers.



Since 2000 EPS 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 a 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.

Essex Power 2015 Financial Statements are available on our website  
[www.essexpower.ca](http://www.essexpower.ca)

Printed copies of this report may be requested by sending an email to  
[sustainability @essexpower.ca](mailto:sustainability@essexpower.ca)





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