City of Richmond

Report to Council

To:	Mayor and Councillors ("the Shareholder")	**Date:**	May 22, 2019
From:	Peter Russell, MCIP, RPP Senior Manager, Sustainability and District Energy	**File:**	10-6600-10-01/2019-Vol 01
Re:	**2019 Annual General Meeting Resolution of the Lulu Island Energy Company**		

Staff Recommendation

That the unanimous consent resolutions of the shareholder in Attachment 1 of the Lulu Island Energy Company report dated May 1, 2019, be endorsed.

Peter Russell, MCIP, RPP
Senior Manager, Sustainability and District Energy
(604-276-4130)

Att. 1

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER	
REVIEWED BY SMT	INITIALS:
APPROVED BY CAO	

Richmond

6195790

Lulu Island
ENERGY COMPANY

6911 NO. 3 ROAD
RICHMOND, BC V6Y 2C1

Report

DATE: May 1, 2019

TO: Board of Directors

FROM: Alen Postolka, P.Eng., Manager, District Energy

Re: **2019 Annual General Meeting Resolution of the Lulu Island Energy Company**

Staff Recommendation

That:

1. the Board recommend to Council (the Shareholder) that they approve and adopt the unanimous consent resolutions in Attachment 1 of the staff report dated May 1, 2019 addressing the business that would otherwise be required to be transacted at an annual general meeting;

2. KPMG LLP be appointed as auditors of the Lulu Island Energy Company (LIEC) until LIEC's next annual reference date or until a successor is appointed, at a remuneration to be fixed by the directors (Attachment 2);

3. the following persons be appointed to the offices set opposite their respective names to hold office at the pleasure of the directors (Attachment 3):

   John David Irving – CEO
   Jerry Ming Chong – Chair and CFO
   Cecilia Maria Achiam – Vice Chair and Corporate Secretary
   George Duncan – Special Advisor

4. the Lulu Island Energy Company 2018 Annual Report (Attachment 4) be approved and presented to the shareholder at the Special Council Meeting on June 24, 2019.

Origin

Lulu Island Energy Company Ltd. (LIEC) is required, at least once in every calendar year, within six months of its fiscal year end and no more than 15 months from its last annual reference date to have its sole shareholder, the City of Richmond, endorse consent resolutions addressing the business that would otherwise be required to be transacted at an annual general meeting.

Furthermore, LIEC articles of incorporation require that the Board appoint an auditor and officers of the LIEC, and that the LIEC holds an annual information meeting open to the public, at which the LIEC will present the audited financial statements for the previous fiscal year approved by the Board on April 18, 2019.

This report presents resolutions for LIEC Board's approval to address the above legislated requirements.

Background

LIEC, a corporation wholly-owned by the City of Richmond, was established to provide district energy services for the City. Under direction from Council, and following receipt of the necessary approval from the Inspector of Municipalities, the incorporation of LIEC was completed in August 2013.

In June 2014, the City and LIEC executed a District Energy Utilities Agreement, assigning LIEC the function of establishing and operating district energy systems as well as providing thermal energy services on behalf of the City.

LIEC currently owns and operates the Alexandra District Energy (ADEU) Utilities, Oval Village District Energy (OVDEU), and advances new district energy opportunities. Both the Alexandra and the Oval Village neighbourhoods are experiencing rapid redevelopment, and LIEC has been expanding to meet this increased energy demand, while maintaining exceptional reliability and quality of service.

Analysis

As per Section 10.2 of the LIEC articles of incorporation, in order for the annual general meeting of the LIEC shareholder to be deemed as held, the City of Richmond, as the only shareholder of LIEC, is required to consent by a written resolution under the Business Corporations Act to all of the business that is required to be transacted at a shareholder meeting. The practice of the City is that this is carried out at a Special Council meeting. The details of the annual business that is required to be transacted at this meeting are included in the resolution in Attachment 1.

At the same time, there are also some annual legislated requirements which need to be reviewed and approved by directors of the corporation in accordance with the LIEC articles of incorporation. The details of these requirements are included in Attachments 2 and 3.

2018 LIEC Annual Report (Attachment 4) is presented to the Board for their approval. In summary, LIEC financial statements show positive financial results and good financial health of the company. The International District Energy Association recognized the City of Richmond's Council for its leadership on district energy with the Public Sector Leadership Award. The Association of Energy Engineers Innovative Energy Project of the Year Award recognized LIEC's innovative solution for servicing large format retail stores with low carbon district energy services.

Overall, by the end of 2018, over 3.5 million square feet of residential, commercial, and institutional buildings were serviced by district energy in Richmond.

Financial Impact

None.

Conclusion

The presented resolutions are legislated requirements under the LIEC articles of corporation and Business Corporation Act and it is recommended that they be approved.

Helen Zhao, CPA, CA
Controller
Lulu Island Energy Company
(604-276-4053)

Att. 1: Unanimous Consent Resolutions of the Shareholder of LIEC (REDMS#6174038)
Att. 2: Notice of Appointment of Auditor (REDMS#6174040)
Att. 3: Consent Resolution of the Directors of LIEC – Appointment of Officers (REDMS#6174041)
Att. 4: LIEC 2018 Annual Report

UNANIMOUS RESOLUTIONS OF THE SHAREHOLDER OF

LULU ISLAND ENERGY COMPANY LTD.
(the "Company")

The undersigned, being the sole voting shareholder of the Company, hereby consents to and adopts in writing the following unanimous resolutions:

<u>Annual General Meeting</u>

RESOLVED THAT:

1. the shareholder acknowledges that the financial statements of the Company for the period ended December 31, 2018, and the report of the auditors thereon, have been provided to the shareholder in accordance with the requirements of the British Columbia *Business Corporations Act*;

2. all lawful acts, contracts, proceedings, appointments and payments of money by the directors of the Company since the last annual reference date of the Company, and which have previously been disclosed to the shareholder, are hereby adopted, ratified and confirmed;

3. the number of directors of the Company is hereby fixed at 6;

4. the following persons, each of whom has consented in writing to act as a director, are hereby elected as directors of the Company, to hold office until the next annual general meeting of the Company or unanimous resolutions consented to in lieu of holding an annual general meeting, or until their successors are appointed:

   John David Irving
   Jerry Ming Chong
   Cecilia Maria Achiam
   Joseph Erceg
   Andrew Nazareth
   Kirk Taylor

5. KPMG LLP be appointed as auditors of the Company until the next annual reference date of the Company or until a successor is appointed, at a remuneration to be fixed by the directors; and

6. ______________________ is hereby selected as the annual reference date for the Company for its current annual reference period.

DATED as of ______________________.

CITY OF RICHMOND

Per:________________________________

NOTICE OF APPOINTMENT OF AUDITOR

TO: KPMG LLP
Metrotower II, 2400 - 4710 Kingsway
Burnaby, BC V5H 4N2

Pursuant to Section 204(6) of the British Columbia *Business Corporations Act*, notice is hereby given of your appointment as auditor of Lulu Island Energy Company Ltd. (the "Company"), to hold office until the close of the next annual reference date of the Company, or until a successor is appointed.

DATED as of ____________________.

LULU ISLAND ENERGY COMPANY LTD.

Per: ______________________________

CONSENT RESOLUTION OF THE DIRECTORS OF

LULU ISLAND ENERGY COMPANY LTD.
(the "Company")

The undersigned, being all of the directors of the Company entitled to vote on the resolution, hereby consent to and adopt in writing the following resolution:

Appointment of Officers

RESOLVED THAT the following persons be appointed to the offices set opposite their respective names to hold office at the pleasure of the directors:

Name	Office
John David Irving	CEO
Jerry Ming Chong	Chair and CFO
Cecilia Maria Achiam	Vice Chair and Corporate Secretary
George Duncan	Special Advisor

Execution by Counterparts

This resolution may be consented to by the directors signing separate counterparts of the resolution, which may be delivered by electronic means, and notwithstanding the respective dates of execution of the separate counterparts shall be deemed to be effective as at ____________________.

____
JOHN DAVID IRVING

____
JERRY MING CHONG

____
CECILIA MARIA ACHIAM

____
JOSEPH ERCEG

____
ANDREW NAZARETH

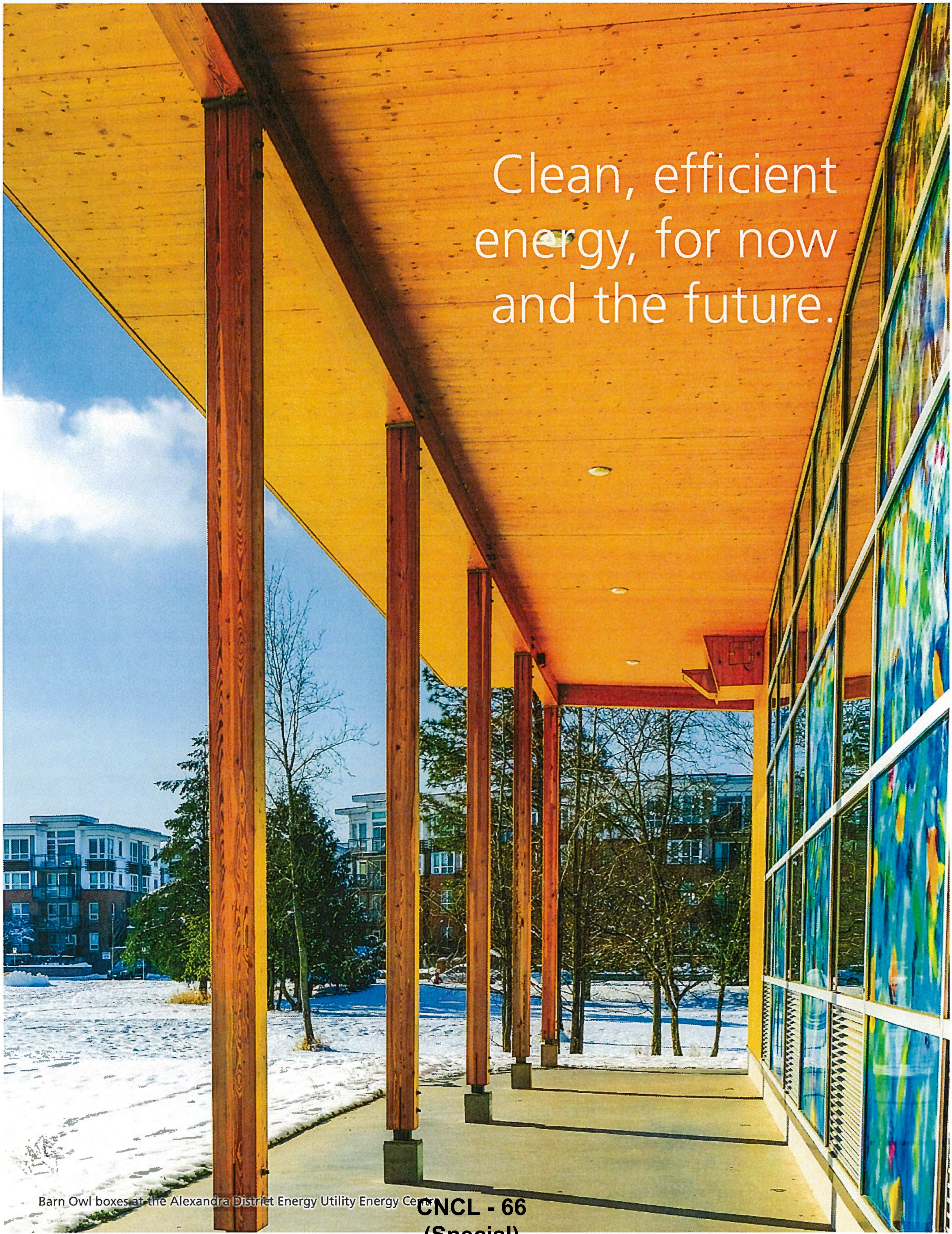
____
KIRK TAYLOR

Attachment 4

Lulu Island
ENERGY COMPANY

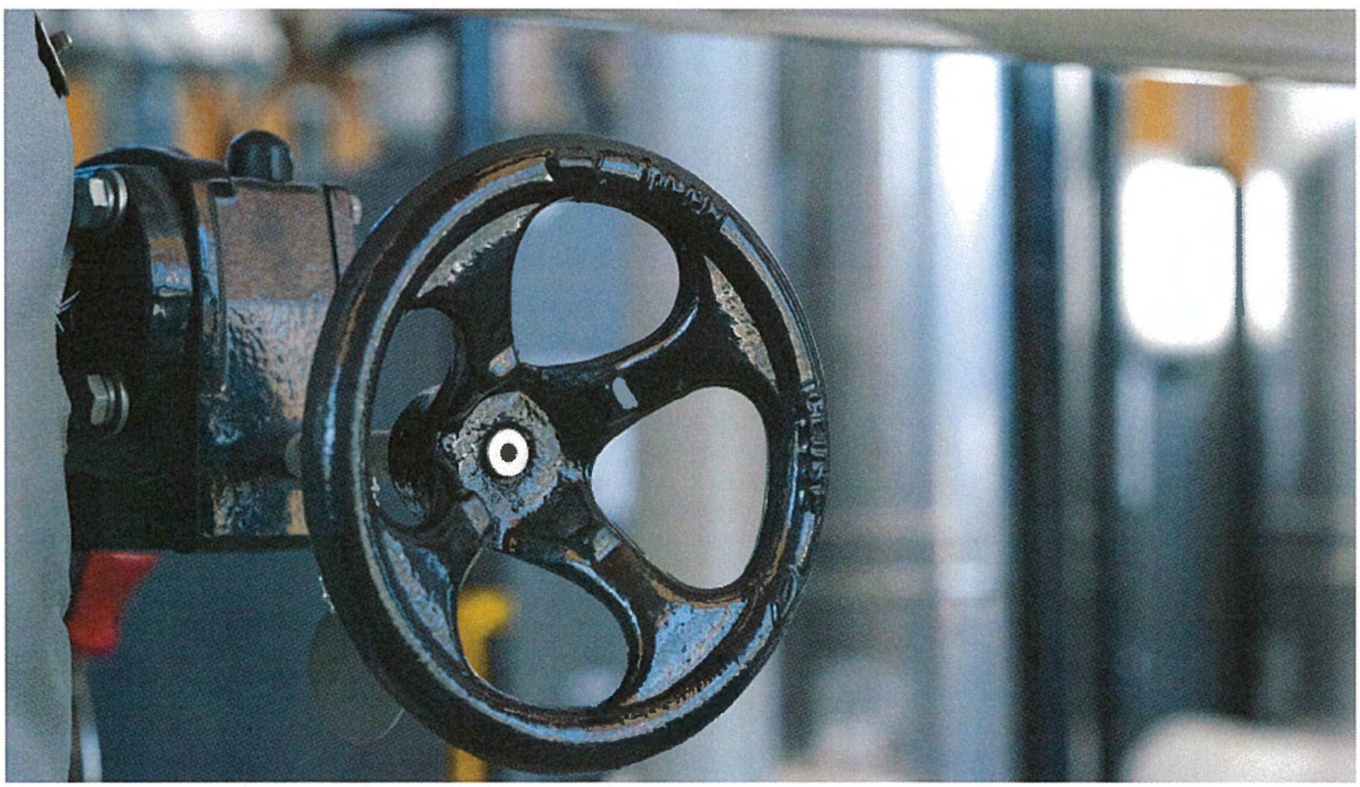
2018 | Annual Report

Clean, efficient energy, for now and the future.



Barn Owl boxes at the Alexandra District Energy Utility Energy Centre

CONTENTS



Equipment inside the Alexandra District Energy Utility Energy Centre

MESSAGE FROM THE BOARD CHAIR

The Lulu Island Energy Company (LIEC) continues to deliver on the City of Richmond's vision to become a sustainable, low carbon community. Of note in 2018, the company continued to expand the Alexandra and Oval Village District Energy Utilities, and introduced a new service area in Richmond's City Centre. Residents in the City Centre area will now be able to receive their energy services from low carbon energy sources at competitive prices. All of these important changes are summarized in this year's annual report.

2018's work by the company solidified LIEC's district energy business as an important contributor in achieving the City of Richmond's vision. In this context, I present the 2018 Annual Report to our shareholder, the City of Richmond, as a record of the company's financial performance and customer service excellence.

Robert Gonzalez
Chair, Lulu Island Energy Company

MESSAGE FROM THE CHIEF EXECUTIVE OFFICER

In 2018, the Oval Village District Energy Utility (OVDEU) service area was expanded to include 3 new developments. The Alexandra District Energy Utility (ADEU) distribution pipes were extended to be able to service new buildings in the West Cambie neighborhood, and the design of two new geo-exchange fields to secure the availability of a low carbon energy source to service future customers was completed. The International District Energy Association recognized the City of Richmond's Council for its leadership on district energy with the Public Sector Leadership Award. The Association of Energy Engineers Innovative Energy Project of the Year Award recognized LIEC's innovative solution for servicing large format retail stores with low carbon district energy services.

In 2018, six developments amounting to approximately 4.29 Million square feet, a 150% growth in connected space, were incorporated into the service area and will be serviced by low carbon energy systems in the coming years. I am pleased to report that the Lulu Island Energy Company continues to be Richmond's solution for delivering "clean, efficient energy for now and the future." This report provides a summary of the outcomes of the company's hard work with its partners and customers in 2018 and its excellent financial standing.

John Irving
CEO, Lulu Island Energy Company

The Alexandra District Energy Utility distribution network used to deliver energy to customer's homes

ABOUT THE COMPANY AND DISTRICT ENERGY IN RICHMOND

LIEC is a wholly-owned municipal corporation, established to operate district energy utility systems in the City of Richmond on the City's behalf.

The goals of LIEC are to:

- establish a highly efficient district energy network providing heating and, in some cases cooling services to buildings at competitive rates;
- provide reliable, resilient local energy for the benefit of its customers;
- operate and maintain low carbon energy systems;
- position the City of Richmond to be a national and international leader in district energy utilities;
- develop and manage effective partnerships; and
- sustain long term financial viability.

LIEC was incorporated in August 2013. At December 31, 2018, LIEC had tangible capital assets of $32,360,749 relating to the development of the Alexandra and Oval Village District Energy Utilities. For the year ended December 31, 2018, LIEC had revenues of $4,611,087 related to meter billing fees, service fees, connection fees, and energy model review fees, and total expenses of $3,120,455.

Did you know?

LIEC delivers thermal energy services which include heating and cooling directly to customer's homes.
LIEC does not generate or distribute electricity used for household appliances and equipment.

Oval Village District Energy Utility Interim Energy Centre
Public art feature: *Underwater (2017)* by Andrea Sirois

SPOTLIGHT ON 2018: PROGRESS REPORT

Oval Village District Energy Utility (OVDEU) Service Area Expansion

The OVDEU was the first district energy project in development under LIEC's direct oversight following Richmond City Council's adoption of the OVDEU Service Area Bylaw in April 2014. In October 2014, LIEC entered into a Concession Agreement with Corix Utilities to design, construct, finance, operate and maintain the system. In 2018, the OVDEU service area was expanded to include three new developments, increasing the expected full build-out to include 23 connections. As of 2018, the OVDEU provided energy services to eight buildings in the Oval Village through energy generated at two interim energy centres. These energy centres provide 11MW of heating capacity, and provided a reliability of 99.8% in 2018. These facilities will be in operation until there are enough buildings connected to the system to justify the costs of constructing a major energy plant that is envisioned to extract renewable thermal energy from the Gilbert Trunk sanitary force main sewer. Similar technologies are in operation today in the City of Richmond's Gateway Theatre, Vancouver's Neighbourhood Energy Utility, and in cities throughout Europe.

Alexandra District Energy Utility (ADEU) New Infrastructure

ADEU currently provides energy to nine buildings (five multi-unit residential buildings, the Jamatkhana Temple, the Central at Garden City (two large commercial buildings), and Richmond's Fire Hall No. 3) connecting over 1,400 residential units and over 300,000 sq. ft. of non-residential floor area (1.6 million sq. ft. total). In 2018, the ADEU system's distribution pipes were extended along McKim Way to be able to service new developments, and design was completed for two new geo-exchange fields to ensure the system will be able to provide the same share of renewable energy to future customers. As of December 31, 2018, the ADEU system delivered 23,687 MWh of energy to customers for space heating, cooling and domestic hot water heating. While some electricity is consumed for pumping and equipment operations, almost 100% of this energy was produced locally from the geo-exchange fields located in the greenway corridor and West Cambie Park. The backup and peaking natural gas boilers and cooling towers in the energy centre have operated only for a few days throughout the system's operation to date.

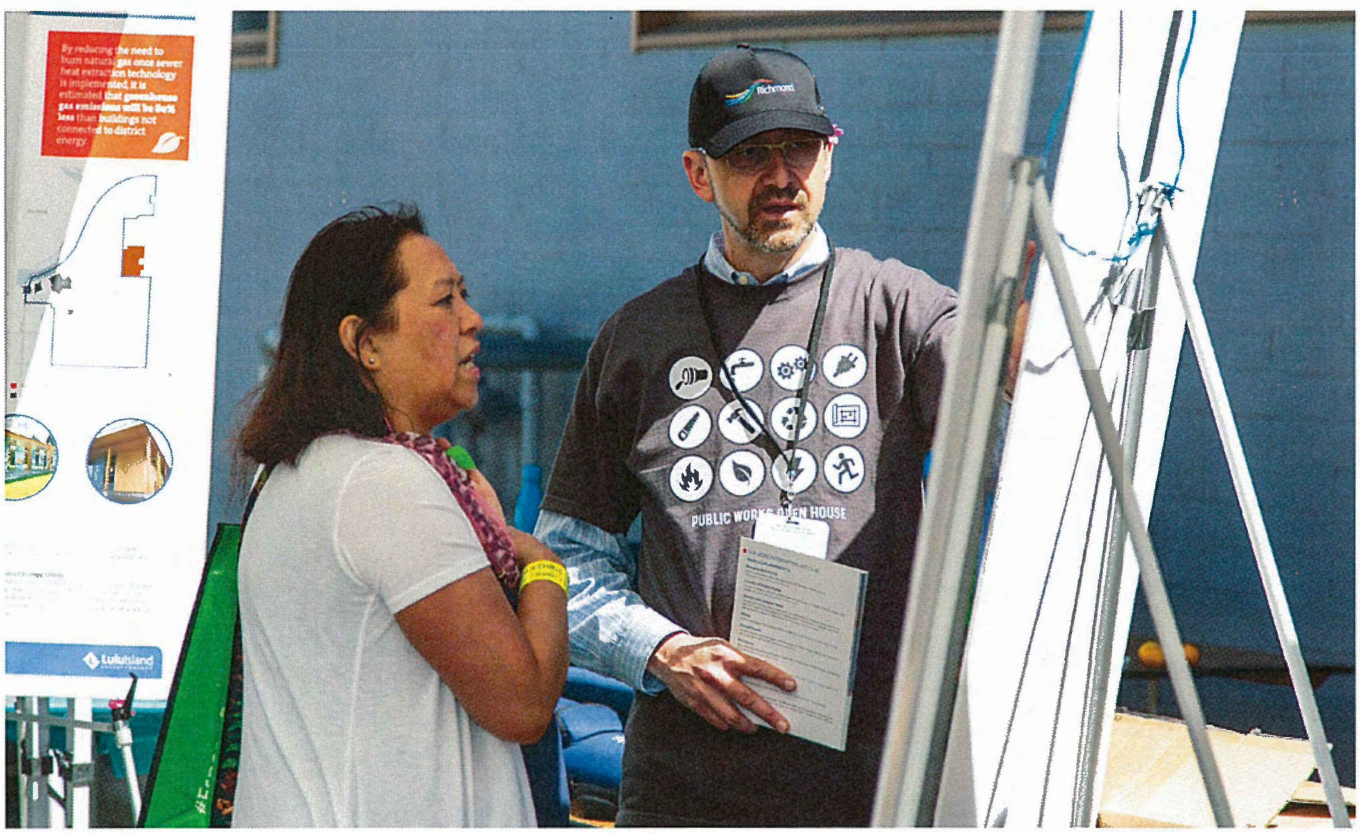
District Energy in the City Centre Area

In 2017, though an open procurement process, LIEC partnered with a lead proponent to develop a feasibility plan to design, build, finance and operate a district energy utility within the City Centre area. While the City Centre DEU (CCDEU) due diligence process has progressed, LIEC has introduced a servicing strategy to expand LIEC's customer base while enabling immediate implementation of GHG emissions reduction for upcoming developments throughout the City Centre area. This servicing strategy requires developments in the City Centre area undergoing rezoning to utilize onsite low-carbon energy plants to the City or LIEC so that LIEC can provide immediate heating, cooling, and domestic hot water heating service to these customers. LIEC and City staff collaborated to develop the City Centre DEU Bylaw No. 9895, which Council adopted in September 2018. In 2018, six developments have been incorporated into the Bylaw No. 9895 service area, amounting to approximately 4.29 million sq. ft. The majority of this space is residential use, with some commercial and retail components as well.

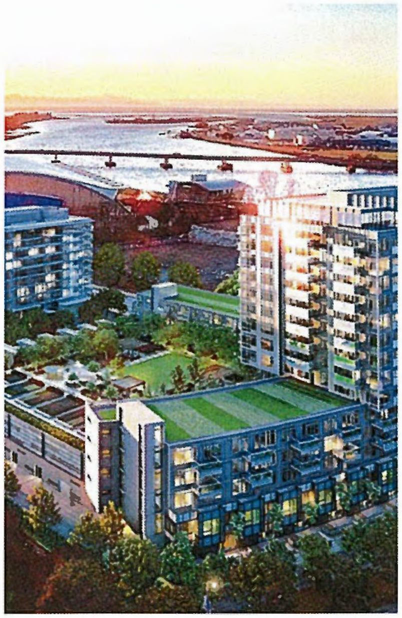
To learn more about the Barn Owl please visit LIEC's website at www.luluislandenergy.ca

Ongoing Communications to Customers and Richmond Residents

LIEC continues to distribute communication materials to residents and new customers in Richmond to create awareness about its energy utility services. Buyers of new condominium apartments serviced by LIEC in the Oval Village and Alexandra service areas received information packages about rate structures and services. Furthermore, LIEC put efforts in developing and maintaining updated information on websites; and web content and videos support LIECs public engagement goals. In 2018, the company had a major presence at Richmond's well attended annual Public Works Open House. At LIEC's booth, residents were invited to take a photo with Ali the Barn Owl, LIEC's mascot, to share what they are doing to address climate change.



LIEC at the 2018 Public Works Open House



The River Park Place 2 development will be connected to the Oval Village District Energy Utility in 2019, providing 298 residential units with domestic hot water and heating services

LOOKING FORWARD IN 2019: WORK PLAN

Ongoing Development in the Oval Village Area

Rapid development activity continues in the Oval Village within and adjacent to the DEU service area. For this reason, LIEC intends to continue to monitor development activity and potentially bring forward to Richmond City Council recommendations for a broader expansion of the service area. This move will provide certainty to new developers about the City's expectations for connecting to OVDEU. In 2018, the service area was expanded to include three new properties which will now connect to the system. LIEC and Corix work hard to meet the needs of the OVDEU's customers. By leveraging expertise in design, construction and operation of district energy utilities, the OVDEU team 2019 will ensure the delivery of 2019 expansion projects on time, while continuing to provide resilient and reliable energy services to our customers.

	Anticipated Occupancy
River Park Place 2	2019
Cascade City	2020
Lot 12	2020
Riva – Building 4	2021
Riva – Building 5/6	2021

Alexandra District Energy Utility Expansion

After rapid growth in 2018, expansion and development in the West Cambie Neighbourhood continues. Four new buildings are connecting to ADEU in 2019. These new developments will increase the connected floor by over 600,000 sq. ft., bringing the total serviced area to 2.3 million sq. ft. and 13 connected buildings. Efficient planning allowed for the prior installation of the distribution piping for these buildings, so these new connections will be completed with no impact to the public roadways. Additionally, preliminary infrastructure will be installed under the Alexandra Park in 2019 to ensure the ADEU infrastructure is able to meet the needs of the multiple new developments which are scheduled for completion in 2019 and beyond.

	Anticipated Occupancy
Trafalgar Square	2019
Spark	2019
Westmark	2019
Berkeley House	2020
Spark Alexandra	2021
4008 Stolberg St	2022

New District Energy Services in City Centre

In addition to advancing the CCDEU due diligence activities with the preferred proponent, LIEC staff plans to expand the City Centre DEU Bylaw No. 9895 service area to incorporate and secure additional upcoming developments. LIEC staff will work closely with the developments providing onsite energy plants to ensure the plants are designed and constructed to meet high quality standards. It is anticipated that construction of the first developments under this servicing strategy will begin in 2020.

New distribution piping being installed in the Alexandra District Energy Utility service area to connect the Westmark and Berkeley House buildings

Covered deck for public use at the Alexandra District Energy Utility Energy Centre

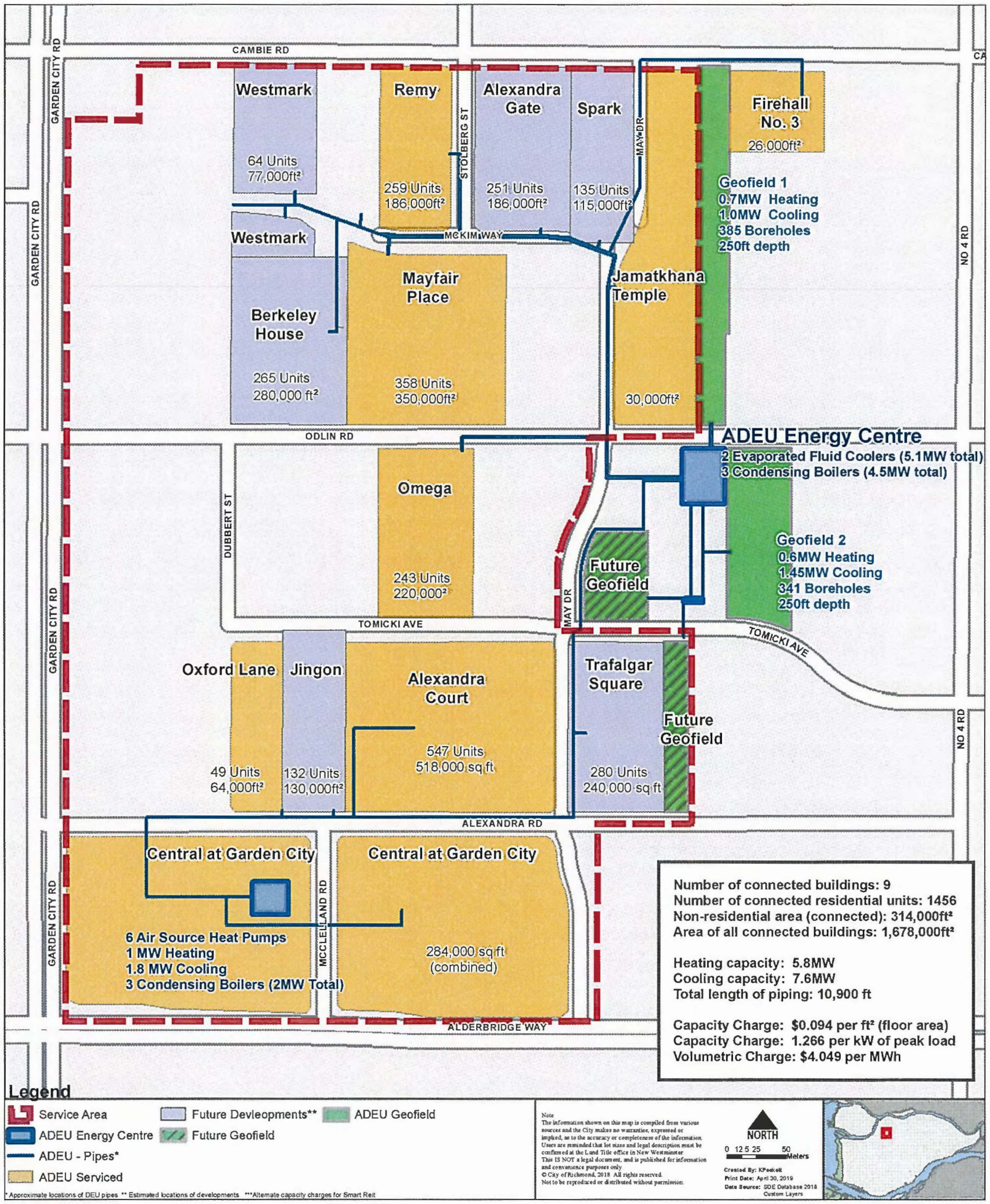
ALEXANDRA DISTRICT ENERGY UTILITY

ADEU has been operating since 2012 as a sustainable energy system which provides a centralized energy source for heating, cooling and domestic hot water heating for residential and commercial customers located in the Alexandra/West Cambie neighbourhood. ADEU assists in meeting the community-wide greenhouse gas emission reduction targets adopted as part of Richmond's Sustainability Framework by providing buildings with renewable low carbon energy through geo-exchange technology.

Infrastructure Overview

Energy Station	9600 Odlin Road, Richmond, BC V6X 1C9 Satellite Energy Plant (Area A)—4751 McClelland Road, Upper Parkade Richmond BC, V6X 0M5
Service	Residential: Space heating, cooling and domestic hot water Commercial: Space heating and cooling
Technology	ADEU Phases 1 and 2 were commissioned in July 2012. The ADEU will potentially service up to 3100 residential units and 1.1 million sq. ft. of commercial uses at build out in approximately 10 to 15 years. Heating, cooling and domestic hot water are provided to connected residential buildings, and only heating and cooling for commercial and institutional spaces through a hydronic (water) energy delivery system. In heating mode, ground source heat pump technology extracts heat (geothermal energy) from the ground via a network of vertical pipe loops. Built-in backup natural gas-fired boilers provide 100% back up in the event that the ground source heat pumps shut down or fail. This system cools buildings as well. During the summer months, the energy flow is reversed and heat is extracted from buildings and pumped into the ground. In this way, energy that was extracted from the ground for heating buildings is "recharged" allowing heat to be available for the next cold season. Phase 3, completed in 2015 added heating and cooling capacity through the addition of a second geo-exchange field, two cooling towers and three boilers. Further, Phase 4 completed in 2016, brought the addition of a new satellite energy plant at the Central at Garden City (SmartREIT) commercial development. Located on the roof top parkade, this plant utilizes efficient air-source heat pump technology to provide space heating and cooling for the retail spaces within the development. This new energy plant is also interconnected with the current ADEU energy plant allowing for energy sharing with the main ADEU distribution system. Individual buildings connected to the ADEU require smaller sized boilers for increasing the temperature of domestic hot water, reducing the overall cost of maintenance to buildings. The performance of the system is monitored continuously, providing a high level of reliability to customers.
Length of Distribution Network	3,660 m (12,000 ft.) of high-density polyethylene piping 726 vertical closed-loop boreholes, each 250 ft. deep

Alexandra District Energy Utility Service Area Map



CNCL - 77
(Special)

Did you know?

ADEU enables building owners to conserve energy efficiency and improve operating efficiency, thus protecting the environment.

Customers and Energy Rates

Customer energy rates are set in the City of Richmond Service Area Bylaws, which are enacted by City Council. This approach ensures transparency and accountability is maintained for all DE projects in the City. The rate and bylaw provisions are reviewed and approved by Council on an annual basis.

Energy rates are set based on City Council's objective to provide customers with energy costs that are equal to or less than conventional system energy costs, based on the same level of service. In the absence of DE services, a typical building would have in-building equipment that would use a combination of natural gas and/or electricity and result in operational and maintenance expenses. This is the basis for comparing DE rate costs with conventional utility, energy and maintenance costs. DE customer rates in Richmond have met this requirement. As with other energy utilities, this rate includes utility costs related to infrastructure development, operation and maintenance, commodities (e.g. electricity and natural gas) and other administrative costs.

2018 Rate Structure

Each building includes one master meter. Strata corporations are billed on a quarterly basis, at a rate that is comprised of three charges:

- Capacity charge: Charge based on the gross square floor area of the building ($0.094 per sq. ft.);
- Peak Charge: Charge based on the annual peak heating load supplied by the ADEU to the building ($1.266 per kW/month); and
- Volumetric Charge: Charge based on the energy consumed by the building ($4.049 per MWh).

Buildings

Building Name	Use	Area (sq. ft.)
Remy	Residential	186,000
Mayfair Place	Residential	351,000
Omega	Residential	222,000
Alexandra Court	Residential	518,000
Jamatkhana Temple	Institutional	30,000
Oxford Lane	Residential	64,000
Central at Garden City – Walmart	Commercial	160,000
Central at Garden City – Building A/B	Commercial	124,000
Fire Hall #3	Commercial	24,995
	Total:	1,679,995

Customer Service

LIEC provides support 24 hours a day, 7 days a week for ADEU customers. Customers can contact customer service via a telephone hotline 1-844-852-5651.

Energy and Greenhouse Gas Emissions (GHGs)

The driving forces behind the establishment of district energy systems in Richmond were to reduce GHG emissions that cause climate change, develop low carbon renewable energy systems and support local green jobs.

That amount of Energy delivered by the end of 2018 was 23,687 MWh. Greenhouse gas performance by the end of 2018 was 3,550 tonnes of CO_2e avoided, equal to removing 750 cars from City of Richmond roads for one year.

2018 Financial Summary

The total net book value of ADEU capital asset to date is $22.9 million. Revenue from ADEU customers has been gradually increasing in pace with the occupancy of serviced buildings. Revenue from operations for 2018 was $1,820,981 (2017 – $1,714,058). Revenue increased by $106,923, mainly due to full year service of buildings connected in 2017.

Corix Utilities remains engaged as the system operator under contract, to perform functional verification ensuring continuous operation and fine tuning of the system. Total cost of sales (utilities, contract services, depreciation expenses) were $1,137,033 (2017 – $1,098,089). The increase of $38,944 was mainly due to full year maintenance service for buildings connected in 2017.

ADEU financial model has been updated to reflect the current year financial performance. Based on the best estimations and underlying assumptions, the project internal rate of return (IRR) is 8.73% and payback period is 19 years. In the context of a growing customer base, ADEU financial, operational and environmental results show the DEU is progressing as planned.

Oval Village District Energy Utility
Interim Energy Centre
Public art feature: *Underwater (2017)*
by Andrea Sirois

OVAL VILLAGE DISTRICT ENERGY UTILITY

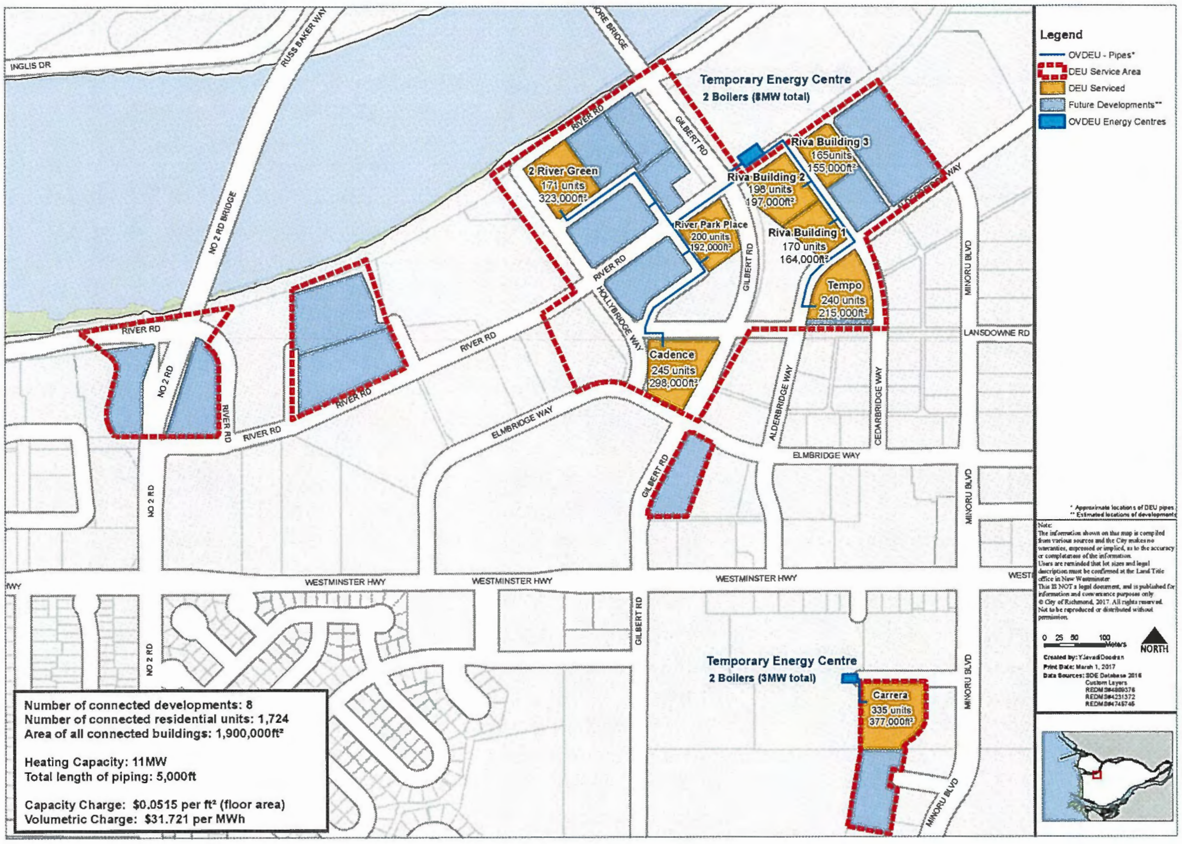
Over 1,600 residential units are receiving energy from the OVDEU. Space heating and domestic hot water heating energy is currently supplied from the two interim energy centres. When enough buildings are connected to the system, a permanent energy centre will be built which will produce low carbon energy, currently planned to be harnessed from the Gilbert Trunk sanitary force main sewer. As with the ADEU, the OVDEU will assist in meeting the community-wide greenhouse gas emission reduction targets adopted as part of Richmond's Sustainability Framework by providing buildings with renewable low carbon energy.

A system overview and service map for the Oval Village District Energy Utility is shown below.

Infrastructure Overview

Energy Station	Interim Energy Centre – 7011 River Parkway, Richmond, BC Interim Energy Centre – 6111 Bowling Green Road, Richmond, BC
Service	Residential: Space heating and domestic hot water
Technology	The OVDEU started operations in 2015, and currently services eight buildings with over 1,600 residential units and over 1.8 million sq. ft. At full build-out the OVDEU will potentially service up to 5,500 residential units and 6.4 million sq. ft. of floor space. Energy for space heating and domestic hot water is provided to connected buildings through a hydronic (water) energy delivery system. Energy generated at two interim energy centres provides 11MW of heating capacity to service these buildings. These interim energy centres currently use high efficiency natural gas boilers to produce energy. The performance of the system is monitored continuously, providing a high level of reliability to customers. These facilities will be in operation until there are enough buildings connected to the system to justify the costs of constructing a major energy plant that will extract heat from the Gilbert Trunk sanitary force main sewer, currently planned for operation in 2025.
Length of Distribution Network	1,200 m (3,900 ft.) insulated steel piping

Oval Village District Energy Utility Service Area Map



Customers and Energy Rates

Customer energy rates are defined in the City of Richmond's Service Area Bylaws, which are enacted by City Council. This approach ensures transparency and accountability is maintained for all DE projects in the City. The rate and bylaw provisions are reviewed and approved by Council on an annual basis.

Energy rates are established based on City Council's objective to provide customers with energy costs that are equal to or less than conventional system energy costs, based on the same level of service. In the absence of DE services, a typical building would have in-building equipment that would use a combination of natural gas and/or electricity and result in operational and maintenance expenses. This is referred to as a "business as usual" (BAU) scenario and is the basis for comparing DE rate costs with conventional utility, energy and maintenance costs. DE customer rates in Richmond have met this requirement. As with other energy utilities, this rate includes utility costs related to infrastructure development, operation and maintenance, commodities (e.g. electricity and natural gas) and other administrative costs such as staffing.

2018 Rate Structure

Each building includes one master meter. Strata corporations are billed on a quarterly basis, at a rate that is comprised of three charges:

- Capacity charge: Charge based on the gross square floor area of the building ($0.0515 per sq. ft.); and
- Volumetric Charge: Charge based on the energy consumed by the building ($31.721 per MWh).

Buildings

Building Name	Use	Area (sq. ft.)
Carrera	Residential	377,404
Riva Building 1	Residential	155,942
Riva Building 2	Residential	196,967
River Park Place 1	Residential	191,662
Cadence	Residential	276,826
Tempo	Residential	214,266
Riva Building 3	Residential	155,829
Lot 9	Residential	323,111
	Total:	1,892,007

Customer Service

LIEC provides support 24 hours a day, 7 days a week to OVDEU customers. Customers can contact customer service via a telephone hotline 1-844-852-5651.

Energy and Greenhouse Gas Emissions (GHGs)

The amount of Energy delivered by the end of 2018 was 29,117 MWh. Greenhouse gas performance by the end of 2018 was 928 tonnes of CO2e avoided, equal to removing 200 cars from City of Richmond roads for one year. At full build-out, the OVDEU system is anticipated to annually reduce GHG emissions by almost 9,000 tonnes of C02 as compared to business as usual.

2018 Financial Summary

In October 2014, LIEC and Corix Utilities executed a Concession Agreement whereby LIEC would own the Oval Village District Energy Utility's (OVDEU) infrastructure, and Corix would design, construct, finance, operate and maintain OVDEU. Payments to Corix under the Concession Agreement are based on Corix's Annual Revenue Requirement, which is based on the utility cost of service rate-setting principles in British Columbia utilizing forward test years.

The total net book value of OVDEU capital asset to date is $9.4 million. Revenue from OVDEU customers has been increasing in pace with the occupancy. Revenue from operations for 2018 was $1,598,048 (2017 – $1,314,712). Revenue increased by $283,636 compared to 2017. The increase was mainly due to full year service for three existing buildings connected in 2017 (Amacon Tempo, Onni Riva 3, and ASPAC 9).

In the context of a growing customer base, OVDEU financial, operational and environmental results show the DEU is progressing as planned.

Did you know?

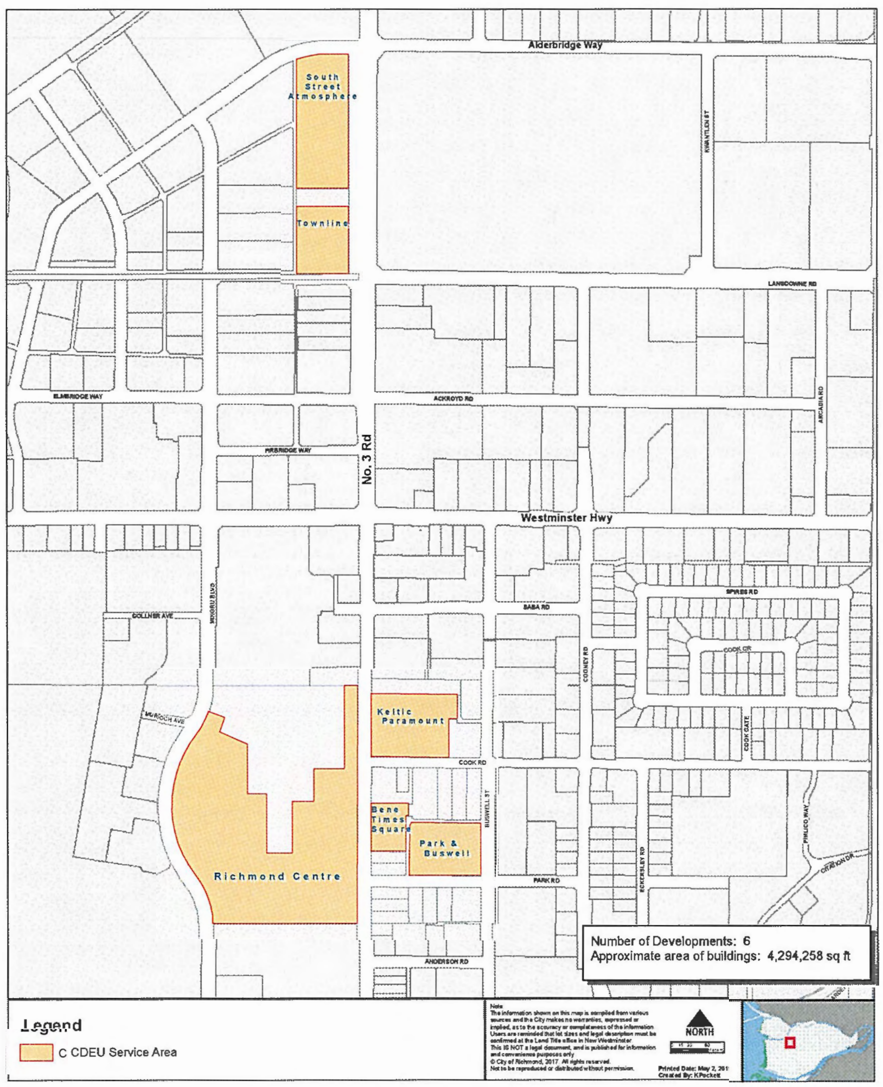
OVDEU provides efficient energy services for space heating and domestic hot water at competitive rates.

The River Green development will be built in several phases. Once completed, over 2.5 million sq. ft. of residential and commercial floor space will be serviced by the Oval Village District Energy Utility

CITY CENTRE DISTRICT ENERGY UTILITY

While the City Centre DEU (CCDEU) due diligence process is in progress, Richmond established the City Centre DEU Bylaw No. 9895 to expand LIEC's customer base and enable immediate GHG emissions reductions. These new developments are building onsite low-carbon energy plants. In 2018, six developments have been incorporated into the Bylaw No. 9895 service area, amounting to approximately 4.29 million sq. ft. It is anticipated that operation of the first low carbon energy plants under this servicing strategy will begin in 2021.

Oval Village District Energy Utility Service Area Map



APPENDIX A—AWARDS & RECOGNITION

Awarding Body	Award	Date	Comments
International District Energy Association	**Public Sector District Energy Leadership Award**	2018	This award recognized the commitment and vision shown by the City of Richmond's Council for its ongoing support for district energy in Richmond.
Association of Energy Engineers	**Canada Region Innovative Energy Project of the Year Award**	2018	This award recognized the ADEU Phase 4 expansion project for its innovative approach to service the Central at Garden City development using renewables and making a significant impact on climate change.
Association of Consulting Engineering Companies	**Canadian Consulting Engineering Award of Excellence**	2017	This award is the most prestigious mark of recognition in Canadian engineering and was given to the Alexandra District Energy Utility expansion project to connect the Central at Garden City development for its high quality of engineering, imagination and innovation.
Association of Energy Engineers	**Canada Region Institutional Energy Management Award**	2017	The Canada Region Institutional Energy Management Award recognizes organizations and companies for their dedication and performance in the energy efficiency and renewable energy industry. This prestigious award recognizes the City for leading the way with its District Energy implementation program.
Canadian Wood Council	**UBCM Community Recognition Award**	2017	This award recognized the leadership in the use of wood, both architecturally and structurally, in the City's Alexandra District Energy Utility building constructed during the Phase 3 expansion. The building construction used local, innovative low carbon wood for structural elements as well as interior and exterior cladding.

LIEC staff at the 2018 International District Energy Association annual conference

Awarding Body	Award	Date	Comments
International District Energy Association	**System of the Year**	2016	IDEA System of the Year is the highest honour IDEA can confer on a district energy system. It recognized the Alexandra District Energy Utility as an exemplary district energy system that provides high-level performance and service that further the goals of the district energy industry.
Union of British Columbia Municipalities	**Community Excellence Award**	2016	The Community Excellence Award recognized the City's district energy program for its exemplary leadership through policies, decision-making and actions that have made a difference for its residents.
Canadian Geo-Exchange Coalition	**Excellence Award**	2014	The Canadian Geo-exchange Coalition Excellence Award recognized the Alexandra District Energy Utility geothermal/geo-exchange system for its quality of installation and design.
Association of Professional Engineers and Geoscientists of British Columbia (APEGBC)	**Sustainability Award**	2014	APEGBC's Sustainability Award was created to recognize the important contribution that engineering and geoscience make to the well being of human life and ecosystems on which we all depend, and was awarded in recognition of the Alexandra District Energy system.
Canadian Consulting Engineer Magazine & the Association of Consulting Engineering Companies – Canada	**Award of Excellence** (Natural Resources, Mining, Industry and Energy Category)	2013	This award is the most prestigious mark of recognition in Canadian engineering and was given to the Alexandra District Energy Utility project for its high quality of engineering, imagination and innovation.

Awarding Body	Award	Date	Comments
Public Works Association of British Columbia	**Project of the Year**	2013	This award is given to a municipality that constructs a major and complex public works or utilities project that meets specific criteria including innovative design with project benefits for the community and environment. It was awarded to the City in recognition of the Alexandra District Energy system
International District Energy Association	**Certificate of Recognition – Innovation Awards**	2013	This program highlighted the Alexandra District Energy System as an example of engineering, technology and operational innovation within the district energy industry.
ENERGY GLOBE Foundation	**Canadian Energy Globe National Award**	2013	The national ENERGY GLOBE Award distinguished the Alexandra District Energy Utility as the best national project for its focus on energy efficiency, renewable energy and the conservation of resources.

APPENDIX B—MANAGEMENT'S DISCUSSION AND ANALYSIS

About the Company

LIEC is a subsidiary of the City of Richmond, established to develop, manage and operate district energy utilities in the City of Richmond on the City's behalf. Under direction from Council, and following receipt of the necessary approval from the Inspector of Municipalities, the incorporation of LIEC was completed in August 2013.

In June 2014, the City and LIEC executed a District Energy Utilities Agreement, assigning LIEC the function of establishing and operating district energy systems as well as providing thermal energy services on behalf of the City. LIEC provides space heating, domestic hot water heating and, optionally, space cooling services to multi-unit residential and commercial customers in the West Cambie and Oval Village neighbourhoods. The company currently owns and operates the Alexandra District Energy Utility (ADEU), Oval Village District Energy Utility (OVDEU), and City Centre District Energy Utility (CCDEU).

The ADEU and OVDEU service areas and the associated operations, assets and liabilities are administered by LIEC. All capital and operating costs are recovered through revenues from meter billings, ensuring that the business is financially sustainable. Both the Alexandra and the Oval Village neighbourhoods are experiencing rapid redevelopment, and LIEC has been growing to meet this increased energy demand, while maintaining exceptional reliability and quality of service.

While the City Centre DEU (CCDEU) due diligence process has continued to progress, LIEC and City staff collaborated to develop the City Centre DEU Bylaw No. 9895 to expand LIEC's customer base and enable immediate GHG emissions reductions in the City Centre area. In 2018, six developments were incorporated into the Bylaw No. 9895 service area, amounting to approximately 4.29 million sq. ft. It is anticipated that construction of the first developments under this servicing strategy will begin in 2019.

Financial Summary

Financial statements (Appendix C) provide information about the financial position, performance and changes in the equity of the company. The financial statements demonstrate accountability by providing information about the company's resources, obligations and financial affairs. The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS").

LIEC's overall financial position improved by $3,450,726 in 2018 with total assets of $43,198,944 (2017 – $39,748,218). Total assets are comprised of current assets (cash, investments, and receivables) totaling $10,838,195 (2017 – $7,715,430) and non-current assets (plant and equipment) of $32,360,749 (2017 – $32,032,788). The current assets increased by $3,122,765, mainly due to income generated from operations and advanced payments from developers for future capital projects. The cash balances are held in a provision account for upcoming development connections.

LIEC's liabilities consist of accounts payables, deferred contributions and concession liabilities. The liabilities increased by $1,960,094 to $13,419,178 (2017 – $11,459,084), mainly due to developer contributions for capital projects.

The deferred contributions are the fees received from developers to recover the cost of the initial connection, including installation of the energy transfer station infrastructure. The concession liabilities are linked to the 30 year concession agreement between LIEC and Corix Utilities Inc. (Corix), where Corix designs, constructs, finances, and maintains the infrastructure for the OVDEU. The concession liabilities are the anticipated cash outflow for future obligations under the agreement for the capital and operating costs of the assets.

The shareholder's equity represents the net worth of the company. It is equal to the total assets minus its total liabilities and measures the company's financial health. In 2018, LIEC's shareholder equity is $29,779,766 (2017 – $28,289,134), which indicates that the company's value has increased by $1,490,631, showing good financial health of the company.

The revenue consists of district energy services and metered billings which reflect the first full year of energy sales to the number of buildings which were connected partway through 2017. The actual sales are based on the actual customers' energy usage and consumption. Overall, 2018 actual revenue of $4,353,243 is in line with the projected revenue.

The cost of sales expenditures are the accumulated total of contract services, utilities (electricity and natural gas), and depreciation expenses. The total cost of sales increased by $38,051 due to more energy sales to customers. Comparing with the 2018 operating budget, the contract expense is below the budget by 23% mainly due to less unscheduled repairs and maintenance. The utility expenses are below the budget by 14%. The main driver is lower projected use of electricity and natural gas in the ADEU service area. Because ADEU is designed to maximize the use of renewable energy sources and peaking boilers are only used when renewable capacity is exceeded, electricity and natural gas use are greatly affected by seasonal heating demand. Moderate winter conditions in 2018 resulted in ADEU being able to meet practically all heating demand using renewable sources, resulting in very low utility consumption. Overall, the cost of sales of $2,174,180 is below the budget by 14%.

The general and administration expenses are expenditures that LIEC incurs to engage in business development activities and includes salaries and benefits, administration expenses, insurance, professional fees. The general and administration expenses are increased by $89,243 over 2017. With district energy assets under LIEC, this is the first year that LIEC set up its own insurance program, resulting in an insurance expense of $65,761 (2017 – Nil). The general and administration expenses also include a fee of $59,758 (2017 – $48,152), paid by LIEC to the City of Richmond for the support provided by the City.

Overall, LIEC's revenues exceeded expenses resulting in a net income of $1,490,632. Comparing to 2017, the net income has increased by $449,077, showing positive financial results of operations.

LIEC's financial sustainability and future growth must be taken into consideration when reviewing its net income. LIEC's success is dependent upon developing in house expertise and securing funds for the future capital replacement as the existing infrastructure components reach end of life. Other important factors are the planning of future projects, which includes research and development, and exploratory reviews on future technology and opportunities. An appropriate amount will be committed within LIEC's equity in order to fund future capital replacements and to ensure long term rate stability for rate payers.

APPENDIX C—FINANCIAL STATEMENTS OF LULU ISLAND ENERGY COMPANY LTD.

Period of incorporation on January 1, 2018 to December 31, 2018

KPMG LLP
Metro Tower I
4710 Kingsway, Suite 2401
Burnaby BC V5H 4M2
Canada
Telephone (604) 527-3600
Fax (604) 527-3636

INDEPENDENT AUDITORS' REPORT

To the City of Richmond

Opinion

We have audited the financial statements of Lulu Island Energy Company Ltd. (the Entity), which comprise:

- the statement of financial position as at December 31, 2018
- the statement of profit or loss and other comprehensive income for the year then ended
- the statement of changes in equity for the year then ended
- the statement of cash flows for the year then ended
- and notes to the financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Entity as at December 31, 2018, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "Auditors' Responsibilities for the Audit of the Financial Statements" section of our auditors' report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards (IFRS), and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

  The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Entity to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

KPMG LLP

Chartered Professional Accountants

Burnaby, Canada
April 18, 2019

LULU ISLAND ENERGY COMPANY LTD.

Statement of Financial Position

December 31, 2018, with comparative information for 2017

	2018	2017
Assets		
Current assets:		
Cash and cash equivalents	$ 1,640,019	$ 710,775
Accounts receivable (note 6)	2,242,644	1,487,917
Other investments (note 7)	6,955,532	5,516,738
	10,838,195	7,715,430
Non-current assets:		
Plant and equipment (note 8)	32,360,749	32,032,788
	$ 43,198,944	$ 39,748,218
Liabilities and Shareholder's Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 414,437	$ 256,582
Current portion of deferred developer contributions (note 9)	106,761	106,761
Current portion of concession liability (note 10)	1,401,328	1,187,000
	1,922,526	1,550,343
Non-current liabilities:		
Deferred developer contributions (note 9)	5,267,876	3,521,677
Concession liability (note 10)	6,228,776	6,387,064
	13,419,178	11,459,084
Shareholder's equity:		
Share capital and contributed surplus (note 14)	27,397,115	27,397,115
Retained earnings	2,382,651	892,019
	29,779,766	28,289,134
	$ 43,198,944	$ 39,748,218

See accompanying notes to financial statements.

Approved on behalf of the Board:

________________ Director ________________ Director

LULU ISLAND ENERGY COMPANY LTD.

Statement of Profit or Loss and Other Comprehensive Income

Year ended December 31, 2018, with comparative information for 2017

	2018	2017
Revenue (note 13)	$ 4,353,243	$ 3,943,769
Cost of sales:		
Operating expenses	1,128,952	1,113,391
Depreciation	1,045,228	1,022,738
	2,174,180	2,136,129
Gross profit	2,179,063	1,807,640
General and administrative expenses	803,121	713,878
Net income before undernoted items	1,375,942	1,093,762
Developer contributions, other income and net finance cost:		
Developer contributions	106,761	99,974
Other income (note 13)	151,083	115,280
Net finance cost (note 5)	(143,154)	(267,462)
	114,690	(52,208)
Net income and comprehensive income	$ 1,490,632	$ 1,041,554

See accompanying notes to financial statements.

LULU ISLAND ENERGY COMPANY LTD.

Statement of Changes in Equity

Year ended December 31, 2018, with comparative information for 2017

	Share capital	Contributed surplus	Retained earnings (deficit)	Shareholder's equity
Balance, January 1, 2017	$ 1	$ 23,157,226	$ (149,535)	$ 23,007,692
Issuance of common shares	4	-	-	4
Net income and comprehensive income	-	-	1,041,554	1,041,554
Contributed surplus (note 13(a))	-	4,239,884	-	4,239,884
Balance, December 31, 2017	5	27,397,110	892,019	28,289,134
Net income and comprehensive income	-	-	1,490,632	1,490,632
Balance, December 31, 2018	$ 5	$ 27,397,110	$ 2,382,651	$ 29,779,766

See accompanying notes to financial statements.

LULU ISLAND ENERGY COMPANY LTD.

Statement of Cash Flows

Year ended December 31, 2018, with comparative information for 2017

	2018	2017
Cash provided by (used in):		
Operations:		
Net income	$ 1,490,632	$ 1,041,554
Adjustments for:		
Depreciation	1,045,228	1,022,738
Recognition of deferred contributions	(106,761)	(99,974)
Finance expense	420,009	332,643
Change in non-cash working capital:		
Accounts receivable	(754,727)	(844,989)
Accounts payable and accrued liabilities	157,855	171,616
Deferred developer contributions	1,852,960	826,977
Net change in cash from operating activities	4,105,196	2,450,565
Investments:		
Additions to plant and equipment	(1,065,437)	(359,428)
Purchase of investments	(1,438,794)	(5,516,738)
Net change in cash from investing activities	(2,504,231)	(5,876,166)
Financing:		
Issuance of common shares	-	4
Contributed surplus	-	4,198,040
Concession liability	(671,721)	(232,026)
Net change in cash from financing activities	(671,721)	3,966,018
Net change in cash	929,244	540,417
Cash and cash equivalents, beginning of year	710,775	170,358
Cash and cash equivalents, end of year	$ 1,640,019	$ 710,775
Non-cash items:		
Transfer of plant and equipment from shareholder	$ -	$ 41,844

See accompanying notes to financial statements.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

1. Incorporation and nature of business:

The Lulu Island Energy Company Ltd. (the "Company") was incorporated on August 19, 2013 under the Business Corporations Act of British Columbia as a municipal corporation wholly-owned by the City of Richmond (the "City"). The address of the Company's registered office is 6911 No. 3 Road, Richmond, British Columbia, V6Y 2C1.

The business of the Company is to develop, manage and operate district energy utilities in the City, including but not limited to energy production, generation or exchange, transmission, distribution, maintenance, marketing and sale to customers, customer service, profit generation and financial management. The Company also provides advisory services for energy and infrastructure.

2. Basis of presentation:

(a) Statement of compliance:

The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRSs") as issued by the International Accounting Standards Board ("IASB").

The financial statements were approved and authorized for issue by the Board of Directors April 18, 2019.

(b) Basis of measurement:

The financial statements have been prepared on the historical cost basis and on a going concern basis.

(c) Presentation of financial statements:

The Company uses a classified statement of financial position. The statement of financial position distinguishes between current and non-current assets and liabilities. Current assets and liabilities are those expected to be recovered within twelve months from the reporting date and non-current assets and liabilities are those where the recovery is expected to occur more than twelve months from the reporting date. The Company classifies the statement of comprehensive income using the function of expense method, which classifies expenses according to their functions, such as cost of sales and general and administrative expenses.

(d) Functional and presentation currency:

The financial statements are presented in Canadian dollars, which is the Company's functional currency.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

2. Basis of presentation (continued):

(e) Use of estimates and judgments:

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements is included in the following notes:

Note 9 - recognition of deferred developer contributions

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included in the following notes:

Note 8 - useful lives of plant and equipment

Note 12 - determination of the future minimum obligations and commitments for the concession liability.

3. Significant accounting policies:

The accounting policies set out below have been applied consistently to all years presented in these financial statements, unless otherwise indicated.

(a) Plant and equipment:

(*i*) Recognition and measurement:

Items of plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses.

Cost includes amounts that are directly attributable to acquisition, construction, development, or betterment of the asset. The cost of self-constructed assets include the cost of materials and direct labor, any other costs directly attributable to bringing the assets to a working condition for their intended use and borrowing costs on qualifying assets.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

3. Significant accounting policies (continued):

(a) Plant and equipment (continued):

(*i*) Recognition and measurement (continued):

Purchased software that is integral to the functionality of the related equipment is capitalized as part of that equipment.

When parts of an item of plant and equipment have different useful lives, they are accounted for as separate items (major components) of plant and equipment.

Gains and losses on disposal of an item of plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of plant and equipment, and are recognized net within other income in profit and loss.

(*ii*) Subsequent costs:

The cost of replacing a part of an item of plant and equipment is recognized in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Company, and its cost can be measured reliably. The carrying amount of the replaced part is derecognized. The cost of the day-to-day servicing of plant and equipment are recognized in profit or loss as incurred.

(*iii*) Depreciation:

Depreciation is calculated over the depreciable amount, which is the cost of an asset less its residual value.

Depreciation of plant and equipment commences when the asset is deemed available for use and is recognized in profit and loss on a straight-line basis over the estimated useful lives of each part of an item of plant and equipment as follows:

Asset	Useful life - years
Energy plant center	75
Distribution piping	50
General equipment	25

Depreciation methods, useful lives and residual values are reviewed at each financial year end and adjusted if appropriate.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

---

3. Significant accounting policies (continued):

(b) Revenue recognition:

The Company adopted IFRS 15, *Revenue from Contracts with Customers* on January 1, 2018. IFRS 15 replaced IAS 11 *Construction Contracts,* IAS 18 *Revenue* and related interpretations ("IAS 18").

The Company has adopted IFRS 15 using the cumulative effect method (without practical expedients), with the effect of initially applying this standard recognized at the date of initial application, January 1, 2018. Accordingly, the information presented for 2017 has not been restated. It is presented, as previously reported, under IAS 18 and related interpretations.

The standard contains a single model that applies to contracts with customers and two approaches to recognizing revenue: at a point in time or over time. The model features a contract-based five-step analysis of transactions to determine whether, how much and when revenue is recognized. New estimates and judgmental thresholds have been introduced, which may affect the amount and/or timing of revenue recognized. There was no impact as a result of adoption of the standard.

The Company recognizes revenue for the provision of energy and supply of other services. Revenue for the provision of energy is based on meter readings and is billed on a cyclical basis. Revenue is accrued for energy delivered but not yet billed. Revenue for other services is recognized upon completion of service. Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured, regardless of when payment is made. Revenue is measured at the fair value of the consideration received or receivable.

(c) Public-private partnership project:

Public-private partnership ("P3") projects are delivered by private sector partners selected to design, build, finance, and maintain the assets. The cost of the assets under construction are recorded at cost, based on construction progress billings and also includes other costs, if any, incurred directly by the Company.

When deemed available for use, the project assets are amortized over their estimated useful lives. Correspondingly, an obligation for the cost of capital and financing received to date, net of the developer contributions received and repayments, is recorded under concession liabilities (note 10).

(d) Income taxes:

Under Section 149(1) (d) of the Income Tax Act, the Company is exempt from income and capital taxes by virtue of the fact that it is a wholly owned subsidiary of the City. Accordingly, no provision for such taxes has been made in financial statements.

(e) Cash and cash equivalents:

Cash and cash equivalents comprise cash balances and call deposits with original maturities of three months or less. At December 31, 2018 all cash and cash equivalents related to cash balances (2017 – cash balances).

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

3. Significant accounting policies (continued):

(f) Finance income and finance cost:

Finance income comprises interest on funds invested. Interest income is recognized as it accrues in profit or loss, using the effective interest method.

Finance costs comprise interest expense on borrowings and impairment losses recognized on financial assets. Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognized in profit or loss using the effective interest method.

(g) Financial instruments:

The Company adopted IFRS 9, *Financial Instruments* on January 1, 2018.

The Company had adopted IFRS 9 with retrospective application taking exemption from restatement of financial assets and financial liabilities already derecognized on initial application.

IFRS 9 sets out requirements for recognizing and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard replaces IAS 39, *Financial Instruments: Recognition and Measurement* ("IAS 39").

(*i*) Classification and measurement of financial assets and financial liabilities:

IFRS 9 largely retains the existing requirements in IAS 39 for the classification and measurement of financial liabilities at amortized cost using the effective interest method. However, it eliminates the previous IAS 39 categories for financial assets of held to maturity, loans and receivables and available for sale.

The adoption of IFRS 9 has not had a significant effect on the Company's accounting policies related to financial liabilities. The impact of IFRS 9 on the classification and measurement of financial assets is set out below.

Under IFRS 9, on initial recognition, a financial asset is classified as measured at: amortized cost, fair value through other comprehensive income ("FVOCI") - debt instrument, FVOCI - equity instrument, or fair value through profit or loss ("FVTPL"). The classification of financial assets under IFRS 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics.

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

3. Significant accounting policies (continued):

(g) Financial instruments (continued):

(*i*) Classification and measurement of financial assets and financial liabilities (continued):

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Company may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortized cost or FVOCI as described above are measured at FVTPL. On initial recognition, the Company may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortized costs or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

A financial asset (unless it is a trade receivable without a significant financing component that is initially measured at the transaction price) is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition.

The following accounting policies apply to subsequent measurement of financial assets:

- Financial assets at FVTPL: these assets are subsequent measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.
- Financial assets at amortized cost: these assets are subsequently measured at amortized costs using the effective interest method. The amortized cost is reduced by impairment losses (see note 3(g)(ii)). Interest income and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.
- Debt investments at FVOCI: these assets are subsequently measured at fair value. Interest income calculated using the effective interest method and impairment are recognized in profit or loss. Other net gains are recognized in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
- Equity investments at FVOCI: these assets are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in OCI and are never reclassified to profit or loss.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

3. Significant accounting policies (continued):

(g) Financial instruments (continued):

(*i*) Classification and measurement of financial assets and financial liabilities (continued):

The following table show the original measurement categories under IAS 39 and the new measurement categories under IFRS 9 for each class of the Company's financial assets as at January 1, 2018.

	New classification Under IFRS 9	Original classification under IAS 39
Financial assets		
Cash and cash equivalents	Amortized cost	Loans and receivables
Accounts receivable	Amortized cost	Loans and receivables
Other investments	Amortized cost	Loans and receivables
Financial liabilities		
Accounts payable and accrued liabilities	Other financial liabilities	Other financial liabilities
Concession liability	Other financial liabilities	Other financial liabilities

On adoption of IFRS 9, no changes in the carrying amounts of the financial assets have been recorded.

(*ii*) Measurement categories:

The following table shows the carrying values of assets and liabilities for each of these categories at December 31, 2018, and 2017. Unless otherwise noted, the fair values on the instruments approximate their carrying amount due to their short-term nature and / or due to application of market rates of interest.

	2018	2017
Financial Assets:		
Financial assets at amortized cost:		
Cash and cash equivalents	$ 1,640,019	$ 710,775
Accounts receivable	2,242,644	1,487,917
Other investments	6,955,532	5,516,738
	$ 10,838,195	$ 7,715,430
Financial Liabilities:		
Financial liabilities at amortized cost:		
Accounts payable and accrued liabilities	$ 414,437	$ 256,582
Concession liability	7,630,104	7,574,064
	$ 8,044,541	$ 7,830,646

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

3. Significant accounting policies (continued):

(h) Impairment:

(*i*) Financial assets:

IFRS 9 replaces the 'incurred loss' model in IAS 39 with an 'expected credit loss' ("ECL") model. The new impairment model applies to financial assets measured at amortized cost, contract assets and debt investments at FVOCI, but not to investments in equity instruments. Under IFRS 9, credit losses are recognized earlier than under IAS 39.

The financial assets at amortized cost consist of cash and cash equivalents, accounts receivable and other investments.

Under IFRS 9, loss allowances are measured on either of the following bases:

- 12-month ECLs: these are ECLs that result from possible default events within the 12 months after the reporting date; and
- Lifetime EFLs: these are ECLs that result from all possible default events over the expected life of a financial instrument.

The Company measures loss allowances at an amount equal to lifetime ECLs. The Company has elected to measure loss allowances for accounts receivable at an amount equal to lifetime ECLs.

Measurement of ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Company expects to receive).

On adoption of IFRS 9, there was no change to the impairment of the Company's financial assets.

(*ii*) Non-financial assets:

The carrying amounts of the Company's non-financial assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit, or CGU").

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

3. Significant accounting policies (continued):

(h) Impairment (continued):

(*ii*) Non-financial assets (continued):

An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss.

An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

(i) Pension benefits:

The Company and its employees participate in the Municipal Pension Plan, a multi-employer defined benefit plan. Defined contribution plan accounting is applied to this plan because separate information for the Company is unable to be provided to apply defined benefit accounting. The expenses associated with this plan are equal to the actual contributions required by the Company during the reporting period.

(j) Standards issued but not yet effective:

(*i*) IFRS 16 Leases:

On January 13, 2016 the IASB issued IFRS 16 Leases. The new standard is effective for annual periods beginning on or after January 1, 2019. Earlier application is permitted for entities that apply IFRS 15 Revenue from Contracts with Customers at or before the date of initial adoption of IFRS 16. IFRS 16 will replace IAS 17 Leases.

This standard introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. A lessee is required to recognize a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments.

This standard substantially carries forward the lessor accounting requirements of IAS 17, while requiring enhanced disclosures to be provided by lessors.

Other areas of the lease accounting model have been impacted, including the definition of a lease. Transitional provisions have been provided.

The Company intends to adopt IFRS 16 in its financial statements for the annual period beginning on January 1, 2019. The Company has evaluated the standard and the impact of adoption is not expected to have a material impact on the financial statements of the Company.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

4. Personnel expenses:

	2018	2017
Wages and salaries	$ 611,625	$ 578,697
Other payroll expenses	3,713	28,650
	$ 615,338	$ 607,347

5. Net finance cost:

	2018	2017
Finance income:		
Investment interest	$ 149,435	$ 55,587
Bank interest	29,520	6,902
Other	97,900	2,692
	276,855	65,181
Finance cost:		
Finance expense on concession liability	(420,009)	(332,643)
Net finance cost	$ (143,154)	$ (267,462)

6. Accounts receivable:

	2018	2017
Trade receivables (note 13)	$ 1,375,799	$ 373,929
Unbilled trade receivables	852,840	1,094,777
Sales tax receivable	14,005	19,211
	$ 2,242,644	$ 1,487,917

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

7. Other investments:

Investments represent cash term deposits as follows:

Purchase date	Maturity date (interest rate)	2018
May 12, 2018	May 12, 2019 (2.80%)	$ 2,072,391
June 5, 2018	June 5, 2019 (2.80%)	1,016,033
Aug 23, 2018	Aug 23, 2019 (2.85%)	1,515,226
Nov 28, 2018	Feb 26, 2019 (2.30%)	302,442
Nov 28, 2018	Nov 28, 2019 (3.00%)	1,548,656
Dec 07, 2018	June 5, 2019 (2.60%)	500,784
		$ 6,955,532

8. Plant and equipment:

	Energy plant centre	General equipment	Distribution piping	Total
Cost:				
Balance as at January 1, 2017	$ 5,031,915	$ 20,043,182	$ 6,463,548	$ 31,538,645
Additions	-	703,368	1,096,236	1,799,604
Balance as at December 31, 2017	$ 5,031,915	$ 20,746,550	$ 7,559,784	$ 33,338,249
Additions	-	764,247	608,942	1,373,189
Balance as at December 31, 2018	$ 5,031,915	$ 21,510,797	$ 8,168,726	$ 34,711,438
Accumulated depreciation:				
Balance as at January 1, 2017	$ -	$ 237,203	$ 45,520	$ 282,723
Depreciation	67,092	812,936	142,710	1,022,738
Balance as at December 31, 2017	$ 67,092	$ 1,050,139	$ 188,230	$ 1,305,461
Depreciation	67,092	828,882	149,254	1,045,228
Balance as at December 31, 2018	$ 134,184	$ 1,879,021	$ 337,484	$ 2,350,689
Net book value:				
At January 1, 2017	$ 5,031,915	$ 19,805,979	$ 6,418,028	$ 31,255,922
At December 31, 2017	4,964,823	19,696,411	7,371,554	32,032,788
At December 31, 2018	4,897,731	19,631,776	7,831,242	32,360,749

Included in plant and equipment is $1,494,780 (2017 - $127,055) of assets under construction being $788,741 (2017 - $29,957) general equipment and $706,039 (2017 - $97,098) distribution piping. For the year ended December 31, 2018, capitalized borrowing costs related to the construction of the distribution system amounted to be nil (2017 - $43,935).

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

9. Deferred developer contributions:

The Company defers contribution amounts received from developers related to the cost of initial connection, including installation of the energy transfer station. The developer contributions are recognized over the useful life of the associated general equipment from the date the respective building is deemed available to use.

The following table summarizes the amounts recognized as at year end:

	2018	2017
Deferred developer contributions, beginning of year	$ 3,628,438	$ 2,785,654
Developer contributions received	1,852,960	1,011,793
Recognized revenue from developer contributions	(106,761)	(169,009)
	5,374,637	3,628,438
Less: current portion of deferred developer contributions	106,761	106,761
Non-current deferred developer contributions	$ 5,267,876	$ 3,521,677

10. Oval Village District Energy Utility ("OVDEU") Concession Agreement:

On October 30, 2014, the Corporation and the OVDEU developer ("the Concessionaire") entered into a 30 year Concession Agreement, which is a public-private partnership project ("P3"), where the Concessionaire will design, construct, finance, operate and maintain the infrastructure for the district energy utility at the Oval Village community. The total estimated concession liability to finance the construction of the OVDEU at full build out is $38,344,000 (2017 - $31,931,000) and will be accrued over time as the services are rendered.

The Concession Agreement is payable monthly in accordance with the Concession Agreement terms. Required concession liability payment obligations are disclosed in note 12.

OVDEU Concession Agreement liability:

	2018	2017
Concession Agreement liability – capital	$ 6,605,178	$ 6,548,070
Concession Agreement liability – non-capital	1,024,926	1,025,994
	7,630,104	7,574,064
Less: current capital portion of concession liability	609,742	551,617
Less: current non-capital portion of concession liability	791,586	635,383
Non-current portion of concession liability	$ 6,228,776	$ 6,387,064

The average finance cost on the concession liability is 5.50% for the year ended December 31, 2018 (2017 - 5.50%).

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

12. Commitments and contingencies (continued):

Public-private partnership commitments (continued):

The information presented below shows the expected committed cash outflow for the next year under the Concession Agreement for the capital and operating costs of the assets. As construction progresses the asset values are recorded as plant and equipment and the corresponding liabilities are recorded as concession agreement liabilities as disclosed in note 10.

	Capital commitment	Operating commitment	Total commitment
2018	$ 609,742	$ 791,586	$ 1,401,328

13. Related party transactions:

Included in these financial statements are transactions with various Crown corporations, ministries, agencies, boards and commissions related to the Company by virtue of common control by the City, the Province of British Columbia or the Government of Canada. The Company has applied the modified disclosure requirements under IAS 24, *Related Party Disclosures*, which is only applicable for government-related entities.

(a) Transactions with City of Richmond

During 2018, the Company received and recognized in revenues $934,215 (2017 - $915,000) for its services of advancing district energy opportunities in the City. Staff and advanced design activities on low carbon district energy initiatives are covered by this fee. With or without the Company, the City would need to fund these costs in order to successfully implement district energy initiatives for the City and position itself at the forefront of tackling local and global environmental challenges our world faces.

In addition, included in revenue for 2018 is $33,482 (2017 – $29,972) for district energy utility services rendered by the Company to the City.

During 2018, the Company received and recognized energy model review fees into other income of $151,083 (2017 - $115,280) relating to district energy permit fees collected by the City for in-building district energy related equipment reviews performed by the Company.

During 2018, $157,085 (2017 – $93,560) of salary and benefit expenses were charged to the City for the costs incurred due to Company staff being assigned to perform project management duties for the City projects. These costs have been charged to the City on a cost recovery basis and are included as a reduction to general and administrative expenses.

The total amount due from City of Richmond as a result of the above transactions as at December 31, 2018 is $1,375,799 (2017 – $360,766) and is included within trade receivables in accounts receivable.

These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

13. Related party transactions (continued):

(b) Key management personnel:

The Company did not enter into any transactions with key management personnel in the year ended December 31, 2018 (2017 - none).

No key management personnel are remunerated by the Company. A fee of $59,758 (2017 - $48,152), included in general and administration expenses, was paid to the City for the day-to-day support that the Company received from the City staff over the year. These costs have been charged to the Company on a cost recovery basis and include an element of re-charge for City key management personnel.

14. Share capital:

At December 31, 2018, the authorized share capital comprised 10,000 (2017 - 10,000) common shares without par value.

As at December 31, 2018, the Company has issued 450 common shares (2017- 450) at $0.01 per share totaling $4.50 (2017 - $4.50) and contributed surplus of $27,397,110 (2017 - $27,397,110).

15. Fair values:

The Company uses the following hierarchy to determine and disclose fair value of financial instruments:

- Level 1 - quoted prices (unadjusted) in active markets for identical assets or liabilities; and
- Level 2 - inputs other than quoted prices that are observable for asset or liability, either directly or indirectly; and
- Level 3 - inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability might be categorized in different levels of fair value hierarchy, then the fair value measurement is categorized in its entirely in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

(a) Financial assets and liabilities not measured at fair value:

The carrying amounts for cash and cash equivalents, accounts receivable, other investments, accounts payable and accrued liabilities approximate their fair values due to their short-term nature.

(b) Non-current financial liabilities:

Subsequent to initial recognition the concession liability is accounted for at amortized cost using the effective interest method. The carrying amount of the concession liability approximates its fair value due to the nature of liabilities accrued and benchmark market rate of interest rate applied (level 3 inputs).

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

16. Financial risk management and financial instruments:

(a) Overview:

The Company has exposure to the following risks from its use of financial instruments:

- Credit risk
- Liquidity risk
- Market risk (interest rate risk).

(b) Risk management framework:

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework. The management reports regularly to the Board of Directors on its activities.

The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. The Company, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

(c) Credit risk:

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Such risks arise principally from certain financial assets held by the Company consisting of its cash and cash equivalents, trade accounts receivables and other investments. The Company assesses these financial assets on a continuous basis for any amounts that are not collectible or realizable. It is management's opinion that the Company is not exposed to significant credit risk from its financial instruments.

(*i*) Trade and unbilled trade receivables:

The Company trades mainly with recognized and creditworthy third parties. It is the Company's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis with the result that the Company's exposure to bad debts is not significant.

The Company establishes an allowance for doubtful accounts that represents its estimate of incurred losses in respect of trade and other receivables based upon factors surrounding the credit risk of specific accounts, historical trends and other information.

At December 31, 2018 and 2017 all trade and other receivables were neither past due (current) nor impaired and related to end-user customers in the City's geographic region or services provided to the City.

(*ii*) Other investments:

Credit risk arising from other financial assets of the Company comprises cash and cash equivalents and other investments. The Company's exposure to credit risk arises from default of the counterparties. The Company manages credit risk through investing only in cash term deposits with established financial institutions which are considered to be low risk.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

16. Financial risk management and financial instruments (continued):

(d) Liquidity risk:

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company's approach to managing liquidity is continually monitoring actual and forecasted cash flows from operations and anticipated investing and financing activities to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Company's reputation.

The Company's terms of business require amounts to be paid from customers within 30-days of the date of invoice. The accounts payable and accrued liabilities and due from the City are in the normal course of operations and paid within the following fiscal year. The commitments under the concession liability are disclosed in note 12.

The information presented below shows the undiscounted contractual maturities of the concession liability, including estimated interest payments.

	Carrying amount	Contractual cash flow	Less than 1 year	1 – 2 years	2 – 5 years
December 31, 2018	$ 7,630,104	$ 8,793,982	$ 1,439,485	$ 1,579,702	$ 5,774,795
December 31, 2017	7,574,064	8,713,553	1,219,206	1,598,346	5,896,001

(e) Market risk:

Market risk is the risk that changes in market prices, such as interest rates and other rate risks, will affect the Company's income or the value of its holdings of financial instruments.

The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

Interest rate risk is the risk that the fair value of future cash flow of a financial instrument will fluctuate because of changes in the market interest rate.

It is management's opinion that the Company is not exposed to significant market (interest rate) risk from its financial instruments.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2018

17. Capital management:

The Company's objective when managing capital is to maintain a strong capital base to sustain future development of the business, so that it can provide return for the shareholder and benefits for other stakeholders.

The Company considers the items included in shareholder's equity and the concession liability as capital. The Company manages the capital structure and makes adjustments to it in the light of changes in economic conditions and the risk characteristics of the underlying assets. In order to maintain or adjust the capital structure, the Company may request additional investment from its shareholder. The Company is not required to meet any debt covenants. The Company is not subject to externally imposed capital requirements. There were no changes in the Company's approach to capital management during the year (2017 - no changes).

18. Pension plan:

The Company and its employees contribute to the Municipal Pension Plan (a jointly trusteed pension plan). The board of trustees, representing plan members and employers, is responsible for administering the plan, including investment of assets and administration of benefits. The plan is a multi-employer defined benefit pension plan. Basic pension benefits are based on a formula. As at December 31, 2017, the plan has about 197,000 active members and approximately 95,000 retired members. Active members include approximately 39,000 contributors from local governments.

Every three years, an actuarial valuation is performed to assess the financial position of the plan and adequacy of plan funding. The actuary determines an appropriate combined employer and member contribution rate to fund the plan. The actuary's calculated contribution rate is based on the entry- age normal cost method, which produces the long-term rate of member and employer contributions sufficient to provide benefits for average future entrants to the plan. This rate may be adjusted for the amortization of any actuarial funding surplus and will be adjusted for the amortization of any unfunded actuarial liability.

The most recent valuation for the Municipal Pension Plan as at December 31, 2015, indicated a $2,224 million funding surplus for basic pension benefits on a going concern basis. As a result of the 2015 basic account actuarial valuation surplus and pursuant to the joint trustee agreement, $1,927 million was transferred to the rate stabilization account and $297 million of the surplus ensured the required contribution rates remained unchanged.

The Company paid $63,598 (2017 - $40,148) for employer contributions to the Plan in 2018.
The next valuation will be at December 31, 2018, with results available in 2019. Employers participating in the plan record their pension expense as the amount of employer contributions made during the fiscal year (defined contribution pension plan accounting).

19. Comparative information:

Certain 2017 comparative information has been reclassified to conform to the financial statement presentation adopted for 2018.

Lulu Island Energy Company
6911 No. 3 Road, Richmond, BC V6Y 2C1
Telephone: 604-276-4000
www.luluislandenergy.ca