



2022 | Annual Report



The new Alexandra Park, completed in 2022, home to the award-winning Alexandra District Energy Permanent Energy Centre.

CONTENTS

Message from the Board Chair.....	2
Message from the Chief Executive Officer	3
About the Lulu Island Energy Company	5
Spotlight on 2022: Progress Report	6
Looking Forward: 2023 Work Plan.....	9
Alexandra District Energy Utility Service Area	11
City Centre District Energy Utility	15
Appendix A: Awards & Recognition	22
Appendix B: Lulu Island Energy Company Milestone Timeline	26
Appendix C: Management’s Discussion and Analysis.....	27
Appendix D: Financial Statements of Lulu Island Energy Company Ltd.....	30



Oval Village's interim energy centre



■ MESSAGE FROM THE BOARD CHAIR

The Lulu Island Energy Company (LIEC) achieved a major milestone in the Fall of 2022 with the execution of a significant financing agreement with the Canada Infrastructure Bank for the expansion of the City Centre District Energy Utility (CCDEU). With the execution of the agreement, Richmond City Council subsequently adopted a significantly broader CCDEU service area. The agreement will allow LIEC to expedite the provision of district energy service in City Centre with its partner, Corix Utilities Inc. The agreement sets the foundation for the next 30 years of district energy infrastructure expansion in which the connected floor area to the system will grow to approximately 50M ft². Lingered economical impacts, caused by the pandemic, did not hinder district energy development as district energy utility service areas expanded in 2022. As expected, the LIEC team focused on supporting new connections to the district energy network and excellent customer service. All of these important events are summarized in this year's annual report.

2022's accomplishments have solidified LIEC as a national leader in the district energy space. I present the 2022 Annual Report to our shareholder, the City of Richmond, as a record of the company's financial performance and customer service excellence.

A handwritten signature in black ink, appearing to read 'Jerry Chong', written in a cursive style.

Jerry Chong

Chair, Lulu Island Energy Company

MESSAGE FROM THE CHIEF EXECUTIVE OFFICER

In 2022, LIEC expanded existing service areas and concurrently finalized the major City Centre District Energy Utility (CCDEU) project agreement with its utility operating partner, Corix Utilities (Corix), and the Canada Infrastructure Bank (CIB). The 30-year agreement encompasses the expansion and operation of the CCDEU to ensure the delivery of clean, efficient energy to LIEC's customers. Heating, cooling and domestic hot water services were consistently maintained to customers throughout the year, despite weather events such as the November cold snap, which saw the third-coolest temperatures on record for that period.

LIEC continued to grow service areas by connecting new customers to the district energy network in 2022. The Oval Village District Energy Utility (OVDEU) continued expansion with the addition of two mixed-use developments, comprising over 570,000 ft² of serviced floor space, which will be connected to the future permanent sewer heat recovery energy centre. Completion of the permanent energy centre project is estimated for early 2028.

The CCDEU added the first development serviced by low carbon, on-site energy plants, totalling 550,000 ft² of serviced floor space. This milestone connection, coupled with the execution of the CCDEU project agreement, marks the beginning of CCDEU's development and the provision of clean, efficient energy to more Richmond community members.

I am pleased to report that LIEC 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 2022.



John Irving
CEO, Lulu Island Energy Company



LULU ISLAND ENERGY COMPANY: 2022 DISTRICT ENERGY UTILITIES



LIEC OPERATIONS

ALEXANDRA DISTRICT ENERGY UTILITY

Est. 2012

Customer Revenue
\$2,857,251

2.3M ft²
of serviced
floor area

PROJECT AGREEMENT OPERATIONS

OVAL VILLAGE DISTRICT ENERGY UTILITY

Est. 2015

Customer Revenue
\$3,068,672

3.5M ft²
of serviced
floor area

CITY CENTRE DISTRICT ENERGY UTILITY

Est. 2022

Customer Revenue
\$700,586

790,000 ft²
of serviced
floor area

Richmond's City Centre landscape with the increased inclusion of district energy serviced buildings. Fiorella located at 3600 Sexsmith Road.

ABOUT THE LULU ISLAND ENERGY COMPANY

LIEC is a wholly-owned municipal corporation incorporated in August 2013. LIEC was 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.

On December 31, 2022, LIEC had tangible capital assets of \$45,745,053, revenues of \$8,126,098, and expenses of \$6,745,478.

Lulu Island Energy Company provided heating, cooling and domestic hot water to 6.7M ft² of floor space in 2022.



Development commences in the city centre to aid in reducing GHG emissions.

■ SPOTLIGHT ON 2022: PROGRESS REPORT

LIEC achieved a major milestone in 2022 for approval of City Centre District Energy Utility expansion

Up to
\$175M
funding from CIB

Over **170**
New 
Residential and
Mixed-use commercial
development sites

Eliminate
over
1M
tonnes GHG
emissions by
full buildout

50 
million ft²
service area
by 2050

30
Year Deal

City Centre District Energy Utility Expansion Approved

The City Centre District Energy Utility (CCDEU) expansion was approved by City Council in 2022 after years of rigorous due diligence, planning and negotiations. Canada Infrastructure Bank (CIB), LIEC and City Centre Energy Limited Partnership (Corix), a wholly owned subsidiary of Corix Utilities Inc. entered into a tri-party agreement (Project Agreement) in which CIB will provide \$175 million in financing towards development and expansion of CCDEU. Under the agreement, Corix will design, build, finance, operate and maintain the infrastructure.

While development of the CCDEU system is underway, LIEC has continued implementing the interim servicing strategy to expand LIEC's customer base and enable immediate implementation of GHG emissions reduction for upcoming developments throughout the City Centre area. This servicing strategy has involved developments in the City Centre area to utilize onsite low-carbon energy plants so that LIEC can provide immediate heating, cooling, and domestic hot water heating service to these customers. The first two CCDEU developments under this strategy, The Paramount by Keltic and Fiorella by Polygon, were connected in 2022 and are now being serviced by onsite energy plants which utilize low carbon technology. These sites comprise approximately 790,000 ft² of floor space and 730 residential units.

Oval Village District Energy Utility (OVDEU) Merged into CCDEU Project Agreement

As part of the CCDEU expansion negotiations, the OVDEU's concession liability has been included into the CCDEU Project Agreement, such that further expansion of the OVDEU system will be designed, built, financed, operated and maintained under the CCDEU Project Agreement. OVDEU customers will not notice this administrative change.

For 2022, the OVDEU's three interim energy centres provided heating and domestic hot water energy services to 13 buildings in the Oval Village connecting approximately 3,000 units and just over 3.5M ft² of floor space. Two new developments were connected: Aspac's Hollybridge and Hummingbird developments, adding approximately 590,000 ft² of serviced floor area. The interim energy centres, complete with 15MW of heating capacity, provided a reliability of 99.5%. A permanent energy centre is scheduled to be completed by 2028 and will replace the interim energy centres currently servicing the OVDEU. The permanent energy centre will extract renewable thermal energy from the Gilbert Trunk sanitary force main sewer to provide clean energy to Richmond residents in the service area.

Alexandra District Energy Utility (ADEU)

LIEC's flagship geo-exchange system now provides energy services to 13 buildings (10 multi-unit residential buildings, the Jamatkhana Temple, the Central at Garden City development and Richmond's Fire Hall No. 3) connecting over 2,200 residential units, over 300,000 ft² of total floor area. As of December 31, 2022, the ADEU system delivered 58,578 MWh of energy to customers for space heating, cooling, domestic hot water heating. More than 85% of this energy delivered was low carbon energy from the local geo-exchange fields. The replacement of defective distribution piping along McKim Way and the implementation of a new emergency response plan to improve response times in case of a spill were successfully completed in 2022. The implementation of a new supervisory control and data acquisition (SCADA) system and a remote video monitoring system were also completed in 2022. This has allowed LIEC to improve its remote operation capabilities, lower operating costs and improving system reliability.

Historic Cold Snap: LIEC Meets High Heating Demand

In November, demand for heat was a top priority for Richmond residents as temperatures dipped as low as -2.7 C during a severe cold snap. ADEU and CCDEU provided uninterrupted service to customers during this weather event, despite the significant demand for heat. The CCDEU's first two connections, The Paramount and Fiorella, met 100% of the heating demand required during the frigid week. The CCDEU and ADEU provide resilient and reliable service to customers through unprecedented temperature fluctuations.

Barn Owl Box Update at the ADEU

Barn owls continue to nest in the ADEU boxes, making Alexandra Park their central hub for hunting. Motion sensor cameras captured a male owl dropping off voles and mice for a brooding female. These boxes provide a safe home for barn owls, as well as nearby access to community parks for hunting. LIEC is not only committed to providing clean energy to Richmond residents but also to taking measures to ensure community wildlife is protected in the process.



LIEC provides information about district energy inside the ADEU plant during the Alexandra Park Opening.

LOOKING FORWARD: 2023 WORK PLAN

Commencement of City Centre District Energy Utility

LIEC, Corix and CIB closed a major financing agreement in 2022 that will provide \$175 million towards CCDEU expansion and delivery of district energy operations in Richmond. In 2022 City Council adopted the CCDEU bylaw expansion which encapsulates Richmond's entire City Centre area. With the CCDEU Project Agreement executed and the CCDEU service area fully established, LIEC is commencing development of the CCDEU system which, by full buildout, is projected to serve approximately 170 development sites and 50M ft² of floor space. While the CCDEU system development is underway, LIEC will continue progressing the interim connection strategy which involves utilizing onsite low carbon energy plants to serve upcoming developments.

The One Park development, comprising over 450,000 ft² of floor space is anticipated to connect via this strategy in 2023, which will mark the third connected CCDEU development. LIEC staff continue to work closely with the developers to ensure infrastructure is designed and constructed to meet LIEC's high quality standards, and is ready to connect to future CCDEU infrastructure.

Building and Address	Use Type	Floor Area (ft ²)	Occupancy
One Park – 8119 Park Road	Mixed	453,850	2023
Richmond Centre (Ph 1) – 6551 No. 3 Road	Mixed	697,210	2024

Ongoing Development in the Oval Village Area

The Oval Village DEU will continue to expand in 2023 as two developments are planned for connection while three begin construction for future connection. While expansion of the OVDEU will be managed under the CCDEU Project Agreement going forward, customers will not be impacted by this change. LIEC continuously monitors development activity and is working diligently with City Centre Energy Limited Partnership (Corix), to ensure OVDEU customers receive quality service and build the necessary infrastructure to service new developments. LIEC is utilizing \$6.2 million in grant funding from CleanBC Communities fund, to develop a sewer heat recovery energy centre (SHR) project which will serve as the permanent energy centre OVDEU and now CCDEU customers. The project will reduce GHG emissions by 9,750 tCO₂e annually, increase service capabilities and be completed by 2028. The service area also expects two new connections in 2023, Riva 4 and One Park, which will add over 500,000 ft² of floor space to be serviced by the OVDEU. The Riva 5, Riva 6 and Park Residences developments will begin construction in 2023 while Interim Energy Centre 3's capacity will be upgraded to support these future connections. The OVDEU team continues to leverage expertise in design, construction and operation of district energy utilities to ensure the efficient delivery of 2023 expansion projects in the service area, and provide resilient and reliable energy services to our existing customers.

Building and Address	Use Type	Floor Area (ft ²)	Occupancy
Riva 4 – 7771 Alderbridge Way	Mixed	153,256	2023
Pathways Lot 7a – 5491 No 2 Road	Residential	59,632	2025

Alexandra District Energy Utility Expansion

Expansion and development in the West Cambie Neighbourhood continues. One new building is expected to connect to ADEU in 2023. This new development will increase the connected floor area by over 200,000 ft², bringing the total serviced area to 2.5M ft² with 14 connected buildings. Efficient planning allowed for the prior installation of distribution piping for this building, so the connection will be completed with no impact on the public roadways. The design for new distribution piping along Dubbert Street to service future developments, upgrades to the plant's controls and fibre optic network infrastructure to increase the system's resiliency and reliability, and planning for the addition of a third cooling tower to increase the cooling capacity of the system will also be in 2023.

Building and Address	Use Type	Floor Area (ft ²)	Occupancy
Primstone Gardens – 4008 Stolberg Street	Residential	200,000	2023



The award-winning ADEU plant.

ALEXANDRA DISTRICT ENERGY UTILITY

ADEU has been operating since 2012 as a low carbon 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 2041 Official Community Plan by providing buildings with renewable low carbon energy through geo-exchange technology.

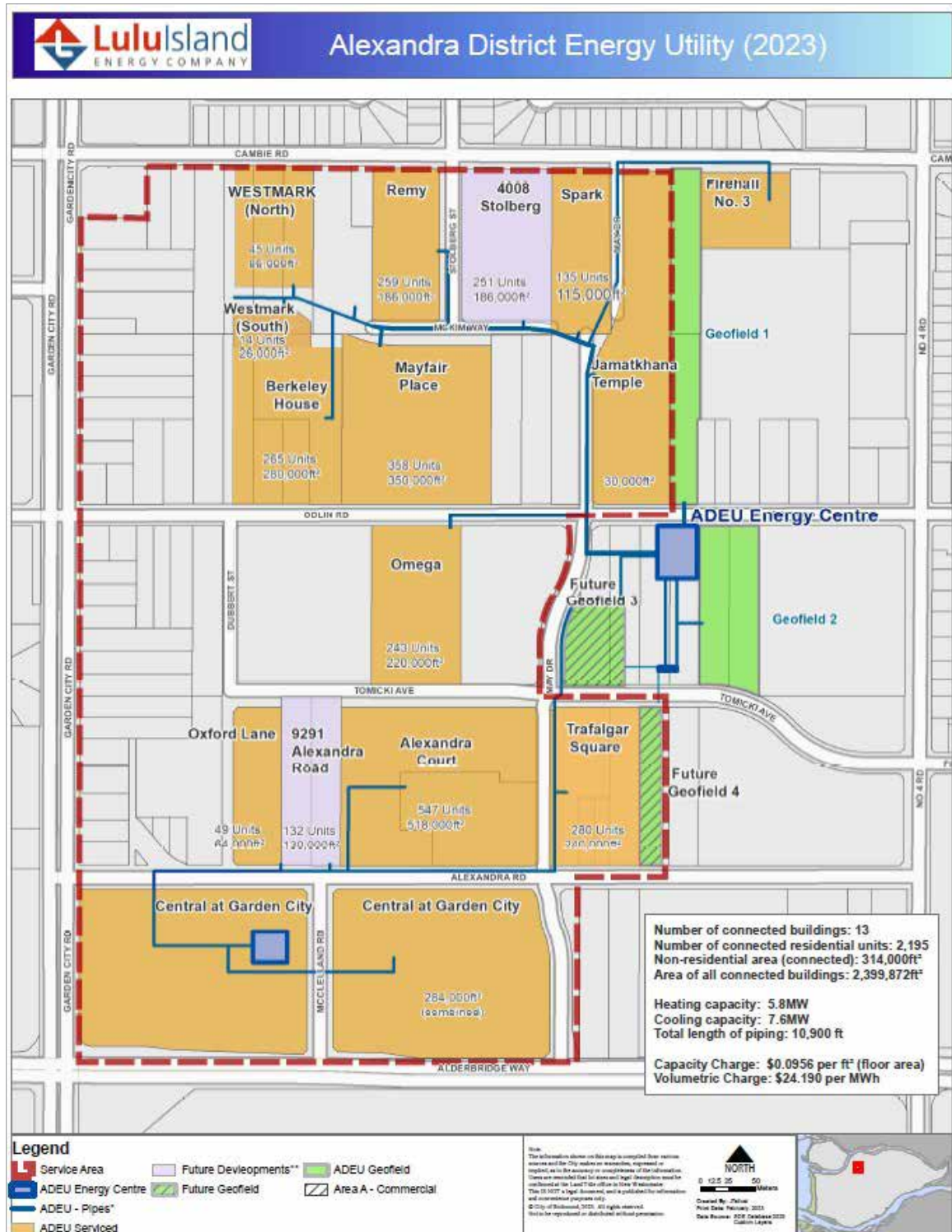
Infrastructure Overview

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	Heating, cooling and domestic hot water are provided to connected residential buildings, and only heating and cooling for large 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 require maintenance. 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. The satellite energy plant located at the Central at Garden City (Smart Centres) commercial development utilizes efficient air-source heat pump technology to provide space heating and cooling for the large commercial customers 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 and reducing the overall cost of maintenance to buildings. The performance of the system is monitored continuously, providing the highest 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



District energy piping inside the ADEU plant.

Alexandra District Energy Utility Service Area Map



Customers and Energy Rates

Customer energy rates are set in the City of Richmond Service Area Bylaws, which are approved by City Council. This approach ensures that transparency and accountability is maintained for all district energy 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.

2022 Rate Structure

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

- Capacity Charge: Charged based on the gross floor area of the building (\$0.1002 per ft²)
- Volumetric Charge: Charge based on the energy consumed by the buildings (\$15.967 per MWh)

Buildings

Building Name	Use	Area (ft ²)
Remy – 4099 Stolberg Street	Residential	186,000
Mayfair Place – 9399 Odlin Road	Residential	351,000
Omega – 9333 Tomicki Avenue	Residential	222,000
Alexandra Court – 9399 Alexandra Road	Residential	518,000
Jamatkhana Temple – 4000 May Drive	Institutional	30,000
Oxford Lane – 4588 Dubbert Street	Residential	64,000
Trafalgar – 9500 Tomicki Avenue	Residential	262,000
Camden Walk – 9211 McKim Way	Residential	110,000
Spark – 4033 May Drive	Residential	115,600
Berkeley House – 9233 Odlin Road	Residential	282,500
Westmark – 9200 McKim Way	Residential	112,000

Air source heat pumps, used in district energy infrastructure, can extract “usable heat” from sub-zero outdoor temperatures.



Rapid development continues in the OVDEU: Riva 2 located at 5311 Cedarbridge Way.

Building Name	Use	Area (ft ²)
Central at Garden City – Walmart – 9251 Alderbridge Way	Commercial	160,000
Central at Garden City – Building A/B – 4751 McClelland Road	Commercial	124,000
City of Richmond Fire Hall #3 – 9660 Cambie Road	Institutional	24,995

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.

The amount of energy delivered by the end of 2022 was 58,578 MWh. Greenhouse gas performance by the end of 2022 was 10,089 tonnes of CO₂ avoided, equal to removing over 2,950 cars from City of Richmond roads for one year.

2022 Financial Summary

The total net book value of ADEU's capital asset at December 31, 2022 is \$22,990,301. Revenue from ADEU customers has been gradually increasing in pace with the occupancy of serviced buildings and new connected buildings. Revenue from operations for 2022 is \$2,857,251 (2021 – \$2,744,222). Revenue increased by \$113,029, mainly due to additional energy use during summer and additional service for three buildings that were not fully occupied in prior years (Trafalgar, Westmark and Berkeley House).

Corix Utilities Inc. 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) are \$1,557,977 (2021 – \$1,392,628). The increase of \$165,349 is mainly due to the additional operations and maintenance work as a result of more buildings being serviced and additional energy sales provided to customers.

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

With the CCDEU Project Agreement executed and the CCDEU service area fully established, LIEC is commencing development of the CCDEU system which, by full buildout, is projected to serve approximately 170 development sites and 50M ft² of floor space. While the CCDEU system development is underway, LIEC will continue progressing the interim connection strategy which involves utilizing onsite low carbon energy plants to serve upcoming developments. The first two CCDEU developments under this strategy, The Paramount by Keltic and Fiorella by Polygon, were connected in 2022 and are now being serviced by onsite energy plants which utilize low carbon technology. These sites comprise approximately 790,000 ft² of floor space and 730 residential units. The One Park development, comprising over 450,000 ft² of floor space is anticipated to connect via this strategy in 2023, which will mark the third connected CCDEU development. LIEC staff continue to work closely with the developers to ensure infrastructure is designed and constructed to meet LIEC's high quality standards, and is ready to connect to future CCDEU infrastructure.



Today, over 3,000 residential units (13 buildings) are receiving energy from the OVDEU. At full build-out the OVDEU will service up to 5,500 residential units and 6.4M ft² of floor space. Space heating and domestic hot water heating energy is currently supplied from three interim energy centres (IECs). A permanent, sewer heat recovery energy centre, planned for 2028, is under development to replace the IECs and produce low carbon energy harnessed from the Gilbert Trunk sanitary force main sewer. Similar to the ADEU, the OVDEU will assist in meeting the community-wide greenhouse gas emission reduction targets adopted as part of Richmond's 2041 Official Community Plan (OCP) by providing buildings with renewable low carbon energy.



2022 Rate Structure

CCDEU Service Area

Strata corporations are billed on a quarterly basis, at a rate that is comprised of two charges:

- Capacity charge: Charge based on the gross square floor area of the building (\$0.0693 per ft²)
- Volumetric Charge: Charge based on the energy consumed by the building (\$42.573 per MWh)

OVDEU Service Area

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

- Capacity charge: Charge based on the gross square floor area of the building (\$0.0594 per ft²)
- Volumetric Charge: Charge based on the energy consumed by the building (\$36.575 per MWh)



The number of district energy serviced buildings in Richmond continue to grow. The Paramount located at 6340 No. 3 Road.

Infrastructure Overview

CCDEU

Energy Station	The Paramount Onsite Energy Plant – 6340 No. 3 Road, Richmond, BC Fiorella Onsite Energy Plant – 3699 Sexsmith Road, Richmond BC
Service	Space heating, cooling, and domestic hot water heating
Technology	Energy for space heating, cooling, and domestic hot water is currently provided through onsite energy plants which incorporate low carbon, air-source heat pump technology, with high-efficiency natural gas boilers providing backup and peaking service at times of high heating demand. These plants are designed to interconnect to the CCDEU system currently under development.

OVDEU

Energy Station	Interim Energy Centre #1 – 6111 Bowling Green Road, Richmond, BC Interim Energy Centre #2 – 7011 River Parkway, Richmond, BC Interim Energy Centre #3 – 7015 River Parkway, Richmond, BC
Service	Residential: Space heating and domestic hot water heating
Technology	Energy for space heating and domestic hot water is provided to connected buildings through a hydronic (water) energy delivery system. Energy generated at three interim energy centres provides 15MW 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. The interim energy centres will be replaced by a permanent, sewer heat recovery energy centre that will extract heat from the Gilbert Trunk sanitary force main sewer; currently under development with expected completion by 2028.
Length of Distribution Network	1,800m (5,900 ft.) insulated steel piping

Connected Buildings

Building Name	Use	Area (ft ²)
CCDEU Service Area		
The Paramount	Residential/ Commercial/ Retail	633,057
Fiorella	Residential	159,866
OVDEU Service Area		
Carrera – 7368 Gollner Avenue	Residential	377,404
Riva Building 1 – 5399 Cedarbridge Way	Residential	155,942
Riva Building 2 – 5311 Cedarbridge Way	Residential	196,967
River Park Place 1 – 6888 River Road	Residential/ Commercial	191,662
Cadence – 7468 Lansdowne Road	Residential/ Commercial	276,826
Tempo – 7688 Alderbridge Way	Residential	214,266
Riva Building 3 – 7008 River Parkway	Residential	155,829
River Green – 6611 Pearson Way	Residential	323,111
River Park Place 2 – 6899 Pearson Way	Residential/ Commercial	373,171
River Green 2 – 6622 Pearson Way	Residential	385,854
Cascade City – 5766 & 5788 Gilbert Road	Residential/ Commercial	279,763
Hummingbird – 6899 Pearson Way	Commercial	8,148
Hollybridge – 6811, 6833 & 6855 Pearson Way	Residential/ Commercial	584,254

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 district energy 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 district energy 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 district energy rate costs with conventional utility, energy and maintenance costs. District energy 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.

CCDEU Customer Service

LIEC provides support 24 hours a day, 7 days a week to CCDEU customers.

Customers can contact customer service via a telephone hotline—1-844-852-5651

CCDEU Energy and Greenhouse Gas Emissions (GHGs)

The amount of Energy delivered by the end of 2022 was 108,969 MWh. The system has reduced greenhouse gas emissions annually by an estimated 3,715 tonnes of greenhouse gases (CO₂e), equal to removing 800 cars from City of Richmond roads for one year. At full build-out, the CCDEU system is anticipated to annually reduce GHG emissions by almost 9,000 tonnes of CO₂ as compared to business as usual.



Mechanical infrastructure located in the CCDEU's first connected building: The Paramount.

2022 CCDEU Financial Summary

In 2014, LIEC and Corix Utilities Inc. executed a Concession Agreement whereby LIEC would own the OVDEU infrastructure, and Corix would design, build, finance, operate and maintain OVDEU. In September 2022, the Concession Agreement has been terminated after LIEC entered into a new Project Agreement with City Centre Energy Limited Partnership (Corix), a wholly owned subsidiary of Corix Utilities Inc. to design, build, finance, operate and maintain CCDEU and OVDEU infrastructure providing heating and cooling services to new residential and mixed use commercial developments within the City Centre area. The existing OVDEU project has been transferred into the CCDEU project. Canada Infrastructure Bank will provide \$175 million in low cost financing to the project. LIEC would continue to own all CCDEU and OVDEU infrastructure.

The total net book value of CCDEU capital assets as at December 31, 2022 is \$22,754,750. Revenue from CCDEU customers has been increasing in pace with the occupancy of serviced buildings and new connected buildings. Revenue from operations for 2022 is \$3,769,258 (2021 – \$2,705,979). Revenue increased by \$1,063,279 compared to 2021. The increase was mainly due to additional heating days and additional energy use by new building connections as well as buildings that were not fully occupied in prior years (Aspac 12 and Cascade City).

The total estimated Project Agreement liability to finance the construction of the CCDEU project at full build out is estimated at \$383,000,000 and will be accrued over time as the infrastructure is constructed and services are rendered.



LIEC staff educating residents on the benefits of district energy use.

■ APPENDIX A: AWARDS & RECOGNITION

Awarding Body	Award	Date	Comments
EuroHeat and Power	2021 Emerging Market Award	2021	The Emerging Market Award, which has recognized the ADEU, provides global recognition to organizations that excel in demonstrating the overall importance of district energy systems in providing sustainable energy solutions in countries without a fully established district energy market.
Community Energy Association	2021 Climate & Energy Action Award	2021	The Climate and Energy Action Award, in the Community Planning and Development category, acknowledges Richmond's successful District Energy Implementation Program. The City's leadership and implementation of the program shows best practices in technology, impact and economics.
International District Energy Association	IDEA Innovation Award	2020	IDEA presents this award to the company whose project displays technological, engineering and operational innovations within the district energy industry.
Energy Globe Foundation	Canadian Energy Globe National Award	2020	The National Energy Globe Award recognizes projects that conserve energy and use renewable or emission-free sources. The national award is presented annually to projects saving the environment through personal action, sustainable projects or campaigns for raising awareness in sustainability.
Association of Energy Engineers	Canada Region Energy Project of the Year Award	2019	The Association of Energy Engineers awards this to a project that takes a first-of-a-kind approach wherever it has been implemented.

Canadian Association of Municipal Administrators	CAMA Awards of Excellence – Environment Award	2019	This award recognizes the commitment of a municipality to environmentally sustainable governance, to protecting the environment and to combating climate change. Awards are granted to programs, projects or services that have made a significant and positive impact on the environment.
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.
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.

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: LULU ISLAND ENERGY COMPANY MILESTONE TIMELINE

	ADEU	OVDEU	CCDEU
2008		■ City enters MOU with ASPAC	
2009	■ Pre-feasibility study	■ Pre-feasibility study	
2010	■ Partnership with Oris ■ Feasibility and concept design ■ ADEU Bylaw adopted	■ Request for Expression of Interest	■ District energy-ready buildings (West of No 3 Rd)
2011		■ City enters MOU with Corix Utilities ■ Feasibility Study	■ Pre-feasibility study
2012	■ Ph 1 – First geo-exchange field and north loop of the DPS complete	■ Metro Vancouver Gilbert Trunk Study Completed	■ District energy ready (All City Centre buildings at rezoning)
2013 <i>Lulu Island Energy Company Incorporated</i>	■ Ph 2 – Distribution piping added to service connections	■ Due Diligence completed ■ KPMG Business Case reviewed	
2014		■ OVDEU Bylaw Adopted ■ Concession Agreement between LIEC and Corix executed	
2015	■ Ph 3 - 2nd geo-field added, completion of south loop DPS	■ Construction of 2 IECs	
2016	■ Ph 4 - ASHP added to service 284,000 ft ² of retail space ■ Award: IDEA 2016 System of the Year (See all award: here)		
2017	■ LIEC classified as Government Business Enterprise		
2018			■ CCDEU Bylaw adopted
2019		■ Increase capacity to 15 MW (IEC 3)	■ Canada Infrastructure Bank signs MOU with LIEC
2020	■ Distribution piping extended for two additional geo-fields	■ \$6.2M in CleanBC Grant funding towards permanent SHR energy centre	
2021			
2022		■ First LCEP serviced building: Keltic, The Paramount in Q1 ■ CCDEU Partnership Agreement executed	

■ APPENDIX C: MANAGEMENT'S DISCUSSION AND ANALYSIS

About the Company

Richmond's 2041 Official Community Plan (OCP) establishes a target to reduce greenhouse gas (GHG) emissions 50 percent below 2007 levels by 2030 and 100 percent by 2050. The City identified district energy utilities (DEUs) as a leading strategy to achieve the City's GHG reduction goals and incorporated Lulu Island Energy Company Ltd. (LIEC) in 2013 for the purposes of carrying out the City's district energy initiatives on the basis of the following guiding principles:

1. The DEU will provide end users with energy costs that are competitive with conventional energy costs, based on the same level of service; and
2. Council will retain the authority of setting customer rates, fees and charges for DEU services.

The City established three DEU service areas: ADEU, OVDEU, and CCDEU. Table 1 below provides a summary of the developments connected to the DEU service areas to-date.

Table 1: DEU Service Areas – Current and Projected Connected Space

	Buildings To-Date	Residential Units To-Date	Floor Area To-Date	Build-Out
Alexandra District Energy Utility	13	2,200	2.4M ft ²	4.4M ft ²
Oval Village District Energy Utility	13	3,007	3.5M ft ²	
City Centre District Energy Utility	2	728	0.8M ft ²	54.4Mft ²
Total	28	5,935	6.7M ft ²	58.8M ft ²

The ADEU provides heating and cooling services to ten residential buildings, the large commercial development at "Central at Garden City", the Richmond Jamatkhana temple, and Fire Hall No. 3, comprising over 2,200 residential units and over 2.4M ft² of floor area. While some electricity is consumed for pumping and equipment operations, most of this energy is currently produced locally from the geo-exchange fields in the greenway corridor and West Cambie Park, and highly efficient air source heat pumps.

The OVDEU services 13 buildings, containing over 3,000 residential units. Energy is currently supplied from the three interim energy centres with natural gas boilers which provide 16 MW of heating capacity. LIEC received a \$6.2 million grant from the CleanBC Communities Fund for the design and construction of the sewer heat recovery technology and a permanent energy centre for the area. Once completed, the system will be able to produce up to 80% of low-carbon energy from the Gilbert Trunk sanitary force main sewer.

In 2022, LIEC executed agreements (Project Agreement) with Corix Utilities Inc. (Corix) and the Canada Infrastructure Bank (CIB) to design, build, finance, operate, and maintain CCDEU infrastructure providing heating and cooling services to over 170 new residential and mixed-use commercial developments by 2050. The first two developments in the CCDEU service area comprising of over 790,000 square feet and over 720 residential units was connected in 2022. The CCDEU project is expected to reduce GHG emissions by one million tonnes by 2050.

LIEC owns and operates DEU infrastructure within the service areas. All capital and operating costs are recovered through revenues from user fees, ensuring that the business is financially sustainable. City Council is the regulator and thus sets customer rates as noted in the principles above.

Financial Summary

As a Government Business Enterprise (GBE), LIEC is a financially self-sustaining entity that does not rely on the assistance from the City and its financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS).

LIEC's overall financial position improved by \$7,164,592 in 2022 with total assets of \$63,501,473 (2021 – \$56,336,881). Total assets are comprised of current assets (cash, investments, and receivables) totaling \$17,756,420 (2021 – \$17,431,735) and non-current assets (plant and equipment) of \$45,745,053 (2021 – \$38,905,146). The current assets increased by \$324,685 mainly due to increased accounts receivable balance as a result of higher energy sales.

LIEC's liabilities consist of accounts payables, deferred contributions and Project Agreement liabilities. The deferred developers' contributions are recovering the cost of the service connection, including installation of the energy transfer station infrastructure. The Project Agreement liabilities are linked to the 30 year Project Agreement, which represent 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 the total liabilities and measures the company's financial health. In 2022, LIEC's shareholder equity was \$35,028,160 (2021–\$33,647,540).

The revenue consists of district energy services and metered billings which reflect the full year energy sales based on the actual customers' energy usage and consumption. The revenue increased by \$1,176,308 to \$7,608,009 (2021 – \$6,431,201), mainly due to new building connections. The 2022 revenue is in line with the Company's projections.

The cost of sales includes contract services, utilities (electricity and natural gas) and amortization expenses. The total cost of sales increased by \$1,504,135 to \$4,628,014 (2021 – \$3,123,879) due to more energy sales to customers. In comparison with the 2022 operating budget, the contract expense is below the budget by 18% mainly due to less unscheduled repairs and maintenance. The utility expenses are over budget by 20%, mainly due to the larger than expected (15%) increase in natural gas rate, unbudgeted carbon tax amount of \$240k, and higher than projected natural gas consumption.

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 administration expense includes a fee of \$282,498 (2021 – \$129,412), paid by LIEC to the City of Richmond for the support provided by the City. The increase is a result of the additional support that the City staff have provided to LIEC during the CCDEU negotiations. The increase of salaries and benefits to \$886,834 (2021 – \$841,736) is mainly due to staffing and adjustments to existing salaries and fringe benefits based on the City's annual increase. The insurance premium is higher due to a general insurance rate increase and the additional capital assets being insured. The professional fees is higher due to professional fees in relation to the CCDEU expansion project, BCUC inquiry in the municipally owned energy utilities, and higher audit fee.

Overall, LIEC's revenues exceeded expenses resulting in net income of \$1,380,620 (2021 – \$911,040). The net income as a percentage of revenue is 18% (2021 – 14%). Compared to 2021, net income increased by \$469,580 due to increased sales from new building connections.

LIEC's financial sustainability and future growth must be taken into consideration when reviewing its financial results. LIEC's success is dependent upon developing in-house expertise and securing funds for future capital replacements as existing infrastructure components reach their end of life, as well as to cover expenses of unexpected and rare events. Other important events include the planning of future projects, which consists of research and development, and exploratory reviews of future technology and opportunities. LIEC has retained earnings that will be utilized to build a reserve fund for future capital replacement and to ensure long-term rate stability for ratepayers.

■ APPENDIX D: FINANCIAL STATEMENTS OF LULU ISLAND ENERGY COMPANY LTD.

Period of incorporation on January 1, 2022 to December 31, 2022



KPMG LLP
PO Box 10426 777 Dunsmuir Street
Vancouver BC V7Y 1K3
Canada
Telephone (604) 691-3000
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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of the Lulu Island Energy Company:

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, 2022
- the statement of net income 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, 2022, 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 "**Auditor's Responsibilities for the Audit of the Financial Statements**" section of our auditor's 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.

KPMG LLP, an Ontario limited liability partnership and member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. KPMG Canada provides services to KPMG LLP.



Lulu Island Energy Company Ltd.
Page 2

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 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.

Auditor's 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 auditor's 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.



Lulu Island Energy Company Ltd.
Page 3

- 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 auditor's 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 auditor's 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.

A handwritten signature in black ink that reads "KPMG LLP". The signature is written in a cursive, stylized font and is underlined with a single horizontal stroke.

Chartered Professional Accountants

Vancouver, Canada
April 11, 2023

LULU ISLAND ENERGY COMPANY LTD.

Statement of Financial Position

December 31, 2022, with comparative information for 2021

	2022	2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 3,191,380	\$ 11,707,794
Accounts receivable (note 4)	2,240,807	1,676,423
Investments (note 5)	12,324,233	4,047,518
	17,756,420	17,431,735
Non-current assets:		
Plant and equipment (note 6)	45,745,053	38,905,146
	\$ 63,501,473	\$ 56,336,881
Liabilities and Shareholder's Equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 3,852,889	\$ 2,671,416
Current portion of deferred developer contributions (note 7(a))	471,964	337,732
Current portion of Project Agreement liability (note 8)	1,518,053	-
Current portion of Concession Agreement liability (note 8)	-	3,312,613
	5,842,906	6,321,761
Non-current liabilities:		
Government grants (note 7(b))	241,051	-
Deferred developer contributions (note 7(a))	12,545,851	7,415,806
Project Agreement liability (note 8)	9,843,505	-
Concession Agreement liability (note 8)	-	8,951,774
	22,630,407	16,367,580
Shareholder's equity:		
Share capital and contributed surplus (note 9)	27,397,115	27,397,115
Retained earnings	7,631,045	6,250,425
	35,028,160	33,647,540
Commitments and contingencies (note 12)		
	\$ 63,501,473	\$ 56,336,881

The accompanying notes are an integral part of these financial statements.

Approved on behalf of the Board:

	Director		Director
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LULU ISLAND ENERGY COMPANY LTD.

Statement of Net Income and Other Comprehensive Income

Year ended December 31, 2022, with comparative information for 2021

	2022	2021
Revenue (note 13)	\$ 7,608,009	\$ 6,431,201
Cost of sales:		
Operating expenses	3,087,915	1,788,480
Depreciation	1,540,099	1,335,399
	4,628,014	3,123,879
Gross profit	2,979,995	3,307,322
General and administrative expenses (note 10)	1,379,713	1,043,129
Income before undernoted items	1,600,282	2,264,193
Developer contributions, other income (expenses) and net finance cost:		
Developer contributions (note 7(a))	397,695	237,347
Other income (note 13)	120,394	49,521
Other expenses (note 6)	(426,141)	(1,084,975)
Net finance cost (note 11)	(311,610)	(555,046)
	(219,662)	(1,353,153)
Net income and other comprehensive income	\$ 1,380,620	\$ 911,040

The accompanying notes are an integral part of these financial statements.

LULU ISLAND ENERGY COMPANY LTD.

Statement of Changes in Equity

Year ended December 31, 2022, with comparative information for 2021

	Share capital (note 9)	Contributed surplus (note 9)	Retained earnings	Shareholder's equity
Balance, January 1, 2021	\$ 5	\$ 27,397,110	\$ 5,339,385	\$ 32,736,500
Net income and other comprehensive income	-	-	911,040	911,040
Balance, December 31, 2021	5	27,397,110	6,250,425	33,647,540
Net income and other comprehensive income	-	-	1,380,620	1,380,620
Balance, December 31, 2022	\$ 5	\$ 27,397,110	\$ 7,631,045	\$ 35,028,160

The accompanying notes are an integral part of these financial statements.

LULU ISLAND ENERGY COMPANY LTD.

Statement of Cash Flows

Year ended December 31, 2022, with comparative information for 2021

	2022	2021
Cash provided by (used in):		
Cash flows provided by (used in) operating activities:		
Net income and other comprehensive income	\$ 1,380,620	\$ 911,040
Adjustments for:		
Depreciation	1,540,099	1,335,399
Recognition of deferred contributions	(397,695)	(237,347)
Other income	-	(12,978)
Finance expense on Project Agreement liability	128,179	-
Finance expense on Concession Agreement liability	568,174	672,135
Write off of assets	81,179	-
Changes in non-cash operating working capital:		
Accounts receivable	(564,384)	1,358,087
Accounts payable and accrued liabilities	1,181,473	880,497
Net cash provided by operating activities	3,917,645	4,906,833
Cash flows provided by (used in) investing activities:		
Additions to plant and equipment	(1,305,119)	(1,460,215)
Deferred developer contributions	662,882	638,525
Cash receipts from sale of investments	4,047,518	4,014,336
Cash payments to acquire investments	(12,324,233)	(4,047,518)
Net cash used in investing activities	(8,918,952)	(854,872)
Cash flows provided by (used in) financing activities:		
Cash received from government grants	241,051	-
Project Agreement liability	(1,482,165)	-
Concession Agreement liability	(586,371)	(948,671)
Repayment of the non-capital portion of the Concession Agreement liability	(1,687,622)	-
Net cash used in financing activities	(3,515,107)	(948,671)
(Decrease) increase in cash and cash equivalents	(8,516,414)	3,103,290
Cash and cash equivalents, beginning of year	11,707,794	8,604,504
Cash and cash equivalents, end of year	\$ 3,191,380	\$ 11,707,794
Non-cash transactions:		
Additions to plant and equipment	\$ (7,156,066)	\$ (1,370,459)
Project Agreement liability	407,902	-
Concession Agreement liability	1,637,906	1,370,459
Developer contributions	4,999,090	-
Finance cost capitalized to plant and equipment	111,168	-

The accompanying notes are an integral part of these financial statements.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2022

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:

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

These financial statements were approved and authorized for issue by the Board of Directors on April 11, 2023.

(b) Basis of measurement:

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

(c) Functional and presentation currency:

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

(d) 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.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

2. Basis of presentation (continued):

(d) Use of estimates and judgments (continued):

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 note:

Note 7 - recognition of deferred developer contributions.

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

Note 6 - accrued liabilities for distribution pipe leak; and

Note 3(a) - useful lives of plant and equipment.

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:

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, after deducting trade discounts and rebates. The cost of self-constructed assets includes 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.

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.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

3. Significant accounting policies (continued):

(a) Plant and equipment (continued):

(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	25-30

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

(b) Revenue recognition:

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.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

3. Significant accounting policies (continued):

(c) Concession projects:

Concession projects are delivered by partners selected to design, build, finance, and maintain the assets which are owned by the Company. 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. An obligation for the cost of capital and financing received to date, net of repayments, is recorded under Project Agreement liability (2021 – Concession Agreement liability) (note 8).

(d) Government grants:

Government grants related to assets are initially recognised as deferred income at fair value if there is reasonable assurance that they will be received and the Company will comply with the conditions associated with the grant. Grants related to the acquisition of assets are recognised in profit or loss as other income on a systematic basis over the useful life of the asset.

(e) Developer contributions:

Developer contributions are amounts received from developers toward the cost of equipment and/or assets received from developers, required for the supply of district energy to the developer site. Developer contributions are recognized into income over the expected useful life of the related assets from when the assets are available for use. Non-cash developer contributions are initially recorded at fair value.

(f) 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.

(g) Cash and cash equivalents:

Cash and cash equivalents comprise cash balances and call deposits with original maturities of three months or less.

(h) 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 the Project Agreement liability/Concession Agreement liability (2021 – Concession Agreement liability). Finance 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.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

3. Significant accounting policies (continued):

(i) Financial instruments:

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

Under IFRS 9, *Financial Instruments* ("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.

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 cost 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.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

3. Significant accounting policies (continued):

(i) Financial instruments (continued):

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

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

- Financial assets at FVTPL: these assets are subsequently 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(i)(i)). 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.

Financial liabilities are initially recognized at amortized cost. Subsequent to initial recognition financial liabilities are measured at amortized cost using the effective interest method.

The following table shows the measurement categories for each class of the Company's financial assets and financial liabilities:

Financial assets:

Cash and cash equivalents	Amortized cost
Accounts receivable	Amortized cost
Investments	Amortized cost

Financial liabilities:

Accounts payable and accrued liabilities	Amortized cost
Government grants	Amortized cost
Project Agreement liability	Amortized cost
Concession Agreement liability	Amortized cost

(ii) Measurement categories:

The following table shows the carrying values of assets and liabilities for each of these categories at December 31, 2022 and 2021. 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.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

3. Significant accounting policies (continued):

(i) Financial instruments (continued):

(ii) Measurement categories (continued):

	2022	2021
Financial assets:		
Financial assets at amortized cost:		
Cash and cash equivalents	\$ 3,191,380	\$ 11,707,794
Accounts receivable	2,240,807	1,676,423
Investments	12,324,233	4,047,518
	\$ 17,756,420	\$ 17,431,735
Financial liabilities:		
Financial liabilities at amortized cost:		
Accounts payable and accrued liabilities	\$ 3,852,889	\$ 2,671,416
Project Agreement liability	11,361,558	-
Concession Agreement liability	-	12,264,387
	\$ 15,214,447	\$ 14,935,803

(j) Impairment:

(i) Financial assets:

The 'expected credit loss' ("ECL") impairment model applies to financial assets measured at amortized cost, contract assets and debt investments at FVOCI, but not to investments in equity instruments.

The financial assets at amortized cost consist of cash and cash equivalents, accounts receivable and 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 ECLs: 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 trade receivables, including amounts due from the City, 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).

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

3. Significant accounting policies (continued):

(j) Impairment (continued):

(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").

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.

(k) 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.

(l) Standards issued but not yet effective:

A number of new standards are effective for annual periods beginning after January 1, 2023 and earlier application is permitted; however, the Company has not early adopted the new or amended standards in preparing these financial statements.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

3. Significant accounting policies (continued):

(I) Standards issued but not yet effective (continued):

The following amended standards and interpretations are not expected to have a significant impact on the financial statements;

- IFRS 17, Insurance contracts and its amendments are effective for annual periods beginning on or after January 1, 2023;
- Amendments to IAS 1, Presentation of financial statements: Classification of Liabilities as Current or Non-Current are effective for annual periods beginning on or after January 1, 2023;
- Amendments to IAS 1, Presentation of financial statements: Disclosure of accounting policies are effective for annual periods beginning on or after January 1, 2023; and
- Amendments to IAS 8, Accounting policies, changes in accounting estimates and errors: Definition of accounting estimates are effective for annual periods beginning on or after January 1, 2023.

4. Accounts receivable:

	2022	2021
Trade receivables	\$ 194,213	\$ 33,455
Due from City of Richmond	152,937	151,454
Unbilled trade receivables	1,874,018	1,491,514
GST receivable	19,639	-
	\$ 2,240,807	\$ 1,676,423

5. Investments:

Investments represent term deposits as follows:

Purchase date	Maturity date	Interest rate	2022	2021
July 19, 2022	July 19, 2023	5.05%	\$ 4,123,378	\$ -
November 7, 2022	November 7, 2023	5.95%	3,193,869	-
December 21, 2022	December 21, 2023	5.10%	5,006,986	-
July 15, 2021	July 15, 2022	1.50%	-	2,033,628
October 28, 2021	October 28, 2022	1.50%	-	2,013,890
			\$ 12,324,233	\$ 4,047,518

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

6. Plant and equipment:

	Energy plant center	General equipment	Distribution piping	Total
Cost:				
Balance as at December 31, 2020	\$ 5,031,915	\$ 24,685,820	\$ 12,217,654	\$ 41,935,389
Additions	-	1,955,387	925,313	2,880,700
Balance as at December 31, 2021	5,031,915	26,641,207	13,142,967	44,816,089
Additions	-	6,954,522	1,506,663	8,461,185
Disposals	-	-	(88,238)	(88,238)
Balance as at December 31, 2022	\$ 5,031,915	\$ 33,595,729	\$ 14,561,392	\$ 53,189,036
Accumulated depreciation:				
Balance as at December 31, 2020	\$ 268,368	\$ 3,637,984	\$ 669,192	\$ 4,575,544
Depreciation	67,092	1,045,148	223,159	1,335,399
Balance as at December 31, 2021	335,460	4,683,132	892,351	5,910,943
Depreciation	67,092	1,207,563	265,444	1,540,099
Disposals	-	-	(7,059)	(7,059)
Balance as at December 31, 2022	\$ 402,552	\$ 5,890,695	\$ 1,150,736	\$ 7,443,983
Net book value:				
At January 1, 2020	\$ 4,763,547	\$ 21,047,836	\$ 11,548,462	\$ 37,359,845
At December 31, 2021	4,696,455	21,958,075	12,250,616	38,905,146
At December 31, 2022	4,629,363	27,705,034	13,410,656	45,745,053

Included in plant and equipment is \$3,642,359 (2021 - \$1,951,975) of assets under construction being \$1,340,818 (2021 - \$1,070,537) general equipment and \$2,301,541 (2021 - \$881,438) distribution piping. For the year ended December 31, 2022, capitalized borrowing costs related to the construction of the general equipment and distribution system in the year amounted to \$111,168 (2021 - \$37,048).

In 2020, the Company identified a distribution pipe leakage of heat transfer fluid at one of the Company's service areas. During the year ended December 31, 2022, the Company continued to repair, remediate and monitor the service area and recognized expenses of \$344,962 (2021 - \$1,084,975) in other expenses. As of December 31, 2022, \$716,403 (2021 - \$596,585) is included in accounts payable and accrued liabilities pertaining to the accrued costs for the leak. Management believes the Company has adequately provided for the remediation costs and intends to seek compensation for such costs from the third parties involved.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

7. Deferred developer contributions and Government grants:

(a) Deferred developer contributions:

The following table summarizes deferred developer contribution amounts recognized:

	2022	2021
Deferred developer contributions, beginning of year	\$ 7,753,538	\$ 7,352,360
Developer contributions received (net of refunds)	662,882	638,525
Developer contributions received (non-cash)	4,999,090	-
Recognized revenue from developer contributions	(397,695)	(237,347)
	13,017,815	7,753,538
Less: current portion of deferred developer contributions	471,964	337,732
Non-current deferred developer contributions	\$ 12,545,851	\$ 7,415,806

(b) Government grants:

In 2021, the Company was awarded a grant (the "Sewer Heat Recovery grant") from CleanBC Communities Fund. In 2022, the Company recognized \$241,051 (2021 - nil) under the grant. The relevant assets were under construction at December 31, 2022 and therefore the grant received is recognized in deferred income.

8. City Centre District Energy Utility Project Agreement:

On October 30, 2014, the Company and Corix Utilities Inc. ("Corix") entered into a 30-year concession project (the "Concession Agreement"), where Corix will design, construct, finance, operate and maintain the infrastructure for the district energy utility at the Oval Village community (the "OVDEU project"). On September 22, 2022, the Company terminated the Concession Agreement after the Company entered into a new concession project (the "Project Agreement") with City Centre Energy Limited Partnership ("Project Contractor"), a wholly owned subsidiary of Corix to design, build, finance, operate and maintain City Centre District Energy Utility infrastructure providing heating and cooling services to new residential and mixed use commercial developments within the City Centre area (the "CCDEU project"). The existing OVDEU project has been transferred into the CCDEU project, and the OVDEU plant and equipment, financing and operations are now executed by the Project Contractor under the Project Agreement. Part of the transfer of the existing OVDEU project into the CCDEU project was the termination of the existing Concession Agreement liability, including repayment of the non-capital portion of the Concession Agreement liability in the amount of \$1,687,622.

The total estimated Project Agreement liability to finance the construction of the CCDEU project at full build out is estimated at \$383,000,000 (2021 - OVDEU project \$41,414,000) and will be accrued over time as the infrastructure is constructed and services are rendered.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

8. City Centre District Energy Utility Project Agreement (continued):

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

The following tables summarize the changes in the Project Agreement liability and the Concession Agreement liability due to financing cash flows and liability related charges:

(a) Project Agreement liability:

	2022	2021
Opening balance September 22, 2022	\$ -	\$ -
Transfer balance from Concession Agreement liability	10,966,470	-
Additions	1,637,906	-
Finance expense (note 11)	239,347	-
Net repayment	(1,482,165)	-
Ending balance	\$ 11,361,558	\$ -

	2022	2021
Project Agreement liability	\$ 11,361,558	\$ -
Less: Current portion of Project Agreement liability	(1,518,053)	-
Non-current portion of Project Agreement liability	\$ 9,843,505	\$ -

(b) Concession Agreement liability:

	2022	2021
Opening balance Concession Agreement liability	\$ 12,264,387	\$ 11,133,416
Additions	407,902	1,370,459
Finance expense (note 11)	568,174	709,183
Repayment of the non-capital portion of the Concession Agreement liability	(1,687,622)	-
Net repayment	(586,371)	(948,671)
Transfer balance to Project Agreement liability	(10,966,470)	-
Ending balance Concession Agreement liability	\$ -	\$ 12,264,387

	2022	2021
Concession Agreement liability	\$ -	\$ 12,264,387
Less: Current portion of Concession Agreement liability	-	(3,312,613)
Non-current portion of Concession Agreement liability	\$ -	\$ 8,951,774

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

8. City Centre District Energy Utility Project Agreement (continued):

The finance cost on the OVDEU projects financed under the Concession Agreement up to September 22, 2022 is 6.12% (2021 – Concession Agreement 5.24%). The finance cost on the OVDEU projects transferred to the Project Agreement for the period from September 22, 2022 to December 31, 2022 is 6.23%. The finance cost on the new CCDEU project financed under the Project Agreement from September 22, 2022 to December 31, 2022 is 4.40%.

The Project Agreement liability is repayable as follows:

2023	\$	1,518,053
2024		1,548,414
2025		1,579,383
2026		1,610,970
2027 and thereafter		5,104,738
Total	\$	11,361,558

The Project Agreement liability and the termination payment obligation under the Project Agreement is secured by the CCDEU project infrastructure assets and energy services agreements with customers.

9. Share capital:

At December 31, 2022, the authorized share capital comprised 10,000 (2021 - 10,000) common shares without par value.

As at December 31, 2022, the Company has issued 450 common shares (2021 - 450) at \$0.01 per share totaling \$4.50 (2021 - \$4.50) and contributed surplus of \$27,397,110 (2021 - \$27,397,110).

10. Personnel expenses:

The following expenses are included in general and administrative expenses:

	2022	2021
Wages and salaries	\$ 886,834	\$ 834,736
Other payroll expenses	-	7,000
	\$ 886,834	\$ 841,736

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

11. Net finance cost:

	2022	2021
Finance income:		
Investment interest	\$ 169,433	\$ 51,182
Bank interest	186,562	63,729
Other	28,748	2,178
	384,743	117,089
Finance cost:		
Finance expense on Project Agreement liability (note 8)	(239,347)	-
Finance expense on Concession Agreement liability (note 8)	(568,174)	(709,183)
Less: Finance cost capitalized to plant and equipment (note 6)	111,168	37,048
	(696,353)	(672,135)
Net finance cost	\$ (311,610)	\$ (555,046)

12. Commitments and contingencies:

(a) Project Agreement commitments:

Under the Project Agreement, the Company needs to make monthly payments to the Project Contractor based on the aggregate of the capital obligations, the operating costs, the asset management fee on contributed assets, Project Contractor income tax and commodity costs amounts calculated as of the end of the each contract year. The capital obligations are comprised of capital expenditures, financing costs and the Project Contractor's return on equity. The commodity costs include costs of fuel, electricity, water, waste water, chemicals, etc. which are consumed or produced in the performance of the infrastructure and the operating services. All these costs will be repaid over time by revenue generated through the customer rates. As construction progresses the asset values are recorded as plant and equipment and the corresponding liabilities are recorded as Project Agreement liability as disclosed in note 8.

As at December 31, 2022, under the Project Agreement, on an early termination for convenience by the Company, or termination on an event of default by the Company, the Company is obligated to pay \$748,661 to Project Contractor.

(b) Distribution pipe leakage:

An accrual has been maintained in accounts payable and accrued liabilities for the damages that resulted from a distribution pipe leakage at one of the Company's service areas (note 6). Management believes the Company has adequately provided for the remediation costs and intends to seek compensation for such costs from the third parties involved. It is not permissible at this time to accrue the estimated financial effect of any recovery of expenses from the other parties involved or the Company's insurer.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

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) Due from City of Richmond:

During 2022, the Company received and recognized in revenues \$981,500 (2021 - \$981,000) 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 2022 is \$30,830 (2021 - \$34,920) for district energy utility services rendered by the Company to the City.

The Company also received and recognized energy model review fees into other income of \$120,394 (2021 - \$36,543) relating to district energy permit fees collected by the City for in-building district energy related equipment reviews performed by the Company.

The total amount due from the City as at December 31, 2022 is \$152,937 (2021 - \$151,454) and is included within 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. The amount is non-interest bearing and repayable on demand.

(b) Key management personnel:

A fee of \$282,498 (2021 - \$129,412), included in general and administrative expenses, was paid to the City for the day-to-day support that the Company received from City staff during the year. These costs have been charged to the Company on a cost recovery basis.

14. 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).

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

14. Fair values (continued):

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 entirety 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, investments and 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 Project Agreement liability is accounted for at amortized cost using the effective interest method. The carrying amount of the Project Agreement liability approximates its fair value due to the nature of liabilities accrued and benchmark market rate of interest rate applied (Level 3 inputs).

15. 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; and
- 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.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

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

(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.

The sale of energy utilities is made to end-user customers in the City's geographic region. On the basis of the Company's collective experience, management considers the credit risk associated with trade receivables to be low.

(ii) Due from the City:

The credit risk on amounts due from the City is considered to be low as the City is a Crown entity incorporated under the Local Government Act of British Columbia.

(iii) Cash and investments:

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

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

15. 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 Project Agreement liability are disclosed in note 12.

The information presented below shows the undiscounted contractual maturities of the Project Agreement liability (2021 – Concession Agreement liability), including estimated interest payments.

	Carrying amount	Contractual cash flow	Less than 1 year	1 - 2 years	2 - 5 years
December 31, 2022	\$ 11,361,558	\$ 12,437,215	\$ 2,882,097	\$ 4,301,253	\$ 5,253,865
December 31, 2021	12,264,387	13,821,248	3,397,805	1,952,570	8,470,873

(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.

The Company has mitigated the interest rate fluctuation risk associated with the Project Agreement liability (note 8) by securing the debt funding for the project at fixed interest rates until 2032.

LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2022

16. 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 Project Agreement 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.

17. Pension plan:

The Company and its employees contribute to the Municipal Pension Plan (a jointly trustee 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, 2022 and 2021, the plan has about 227,000 active members and approximately 118,000 retired members. Active members include approximately 42,000 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 actuarial valuation for the Municipal Pension Plan as at December 31, 2021, indicated a \$3,761 million funding surplus for basic pension benefits on a going concern basis. The next valuation will be at December 31, 2024, with results available in 2025.

The Company paid \$72,275 (2021 - \$86,323) for employer contributions to the Plan in 2022.

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). This is because the plan records accrued liabilities and accrued assets for the plan in aggregate, resulting in no consistent and reliable basis for allocating the obligation, assets and cost to individual employers participating in the plan.

Lulu Island Energy Company

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Cover photo: City Centre connected
building: The Paramount at Keltic Place