



2024 | Annual Report





The award-winning Alexandra District Energy Utility.



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The CF Richmond Centre redevelopment. The Park Plaza – An outdoor hub for cultural and entertainment activities.



## ■ MESSAGE FROM THE BOARD CHAIR

In 2024, Lulu Island Energy Company achieved several significant milestones that underscore our commitment to advancing sustainable energy solutions for the Richmond community.

We completed preliminary design and finalized the concept of the Sewer Heat Recovery Central Energy Plant, marking a major step forward in harnessing renewable energy sources. Additionally, we continued expansion of the City Centre District Energy network, enhancing our capacity to provide efficient and reliable energy. Furthermore, we upgraded several interim energy centres and initiated the design for additional centres to meet growing energy demands, thereby strengthening our infrastructure and supporting our long-term plan for sustainable energy distribution.

Despite economic challenges from inflation and construction cost increases, district energy development progressed as planned in 2024. We look forward to continuing our effort to provide Richmond with clean energy solutions that foster a greener future for our community. I am pleased to share the outstanding progress detailed in the 2024 Annual Report with our shareholder, the City of Richmond.

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

I am delighted to share the remarkable progress Lulu Island Energy Company has made over the past year. In 2024, we achieved significant milestones on one of our most exciting projects: the future permanent energy center in Oval Village. This center will feature innovative sewer heat recovery technology and is set to serve customers by 2028. Additionally, we launched substantial infrastructure upgrades and expanded our service areas, working closely with stakeholders and developers to implement new connections and infrastructure.

The City Centre District Energy Utility (CCDEU) grows rapidly, with various residential, commercial, and mixed-use buildings planned for future connections. In the Alexandra District Energy Utility (ADEU) area, the design of the third cooling tower and upgrades to the system have been completed in order to boost the system's capacity to be ready to connect new customers. As Richmond's development accelerates, Lulu Island Energy Company is ensuring that our district energy utility infrastructure is ready to provide reliable energy services to our customers.

I am pleased to announce that Lulu Island Energy Company continues to be Richmond's trusted provider of "clean, efficient energy for now and the future." This report showcases the company's accomplishments and collaborations with partners and customers throughout 2024. We are very well positioned to manage emerging economic risks, and are constantly looking forward to ensure our capital program matches real customer growth.



**John Irving**  
CEO, Lulu Island Energy Company







The Alexandra District Energy Utility distribution infrastructure.



## ABOUT THE LULU ISLAND ENERGY COMPANY

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, 2024, LIEC had a net book value of capital assets totalling \$58,128,103, with annual revenues of \$9,760,452, and expenses of \$7,003,080.

In 2024, LIEC provided reliable energy services to more than 7.8M ft<sup>2</sup> of connected floor space with an uptime greater than 99.95%.



District Energy Infrastructure inside One Park.



# ■ SPOTLIGHT ON 2024: PROGRESS REPORT

## City Centre District Energy Utility Services Expansion

The expansion of the City Centre District Energy Utility (CCDEU) continues with the connection of another building: Phase 1B of the CF Richmond Centre development. This development utilizes an onsite low-carbon energy plant with over 6 MW of capacity to provide space heating, cooling, and domestic hot water heating services to customers. This energy plant incorporates three air-source heat pumps to meet the majority of the energy demand, along with two high-efficiency natural gas boilers for peaking and backup purposes. Upon completion of the upcoming Phase 1A of the CF Richmond Centre development, this energy plant will also recover waste heat from the Richmond Centre mall's cooling system to offset energy production for heating services, reducing overall emissions and increasing the use of low-carbon energy sources.

## Sewer Heat Recovery Permanent Energy Center Concept Design

A future permanent energy centre in the CCDEU service area is currently under design. Following on the success of the Alexandra district energy plant in Alexandra Neighbourhood Park, the Sewer Heat Recovery Permanent Energy Centre will be the first permanent energy plant servicing City Centre customers. It will deliver at least 70% of its energy primarily by recovering heat from the city's sewers via Metro Vancouver's Gilbert Trunk sewer, utilizing sewer heat extraction and heat pump technology. Preliminary design was completed in 2024, and the concept design has been approved by City Council. Sited near the northeastern edge of the future Lulu Island Park, the facility's concept was designed to integrate with both interim and future conditions of the area. It includes hybrid construction that utilizes concrete panels on the building's river side to allow for its partial burial (in coordination with future dike and park improvements), and a corrugated metal façade fronting River Parkway that reflects the industrial heritage of the location. The facility is planned for completion by 2028 and will interconnect with CCDEU customer buildings.

## Oval Village Interim Energy Centre #1 and #3 Upgrades

Located near the intersection of River Parkway and Gilbert Road, interim energy centres (IECs) #1 and #3 were upgraded in 2024 to add over 3 MW of additional boiler capacity to meet increased demand from upcoming developments in the Oval Village area. As part of this project, IEC #3 was extended by 2 meters to accommodate the new equipment. Additionally, a small office container was installed adjacent to IEC #1, including a workstation for operator use as needed. The total cost of this project was \$1.6 million.

## Alexandra District Energy Utility Energy Centre Upgrades

Upgrades to the plant's equipment and controls to enhance system serviceability and reliability were successfully completed in 2024. The installation of a manual transfer switch to allow the ADEU plant to run on emergency backup power in case of an extended power outage commenced in 2024. Additionally, the design of new distribution piping along Dubbert Street to service future developments and a third cooling tower to increase the system's cooling capacity were completed in 2024.



## LIEC System Operations

In 2024, LIEC delivered 53,719 MWh of space heating, cooling, and domestic hot water heating energy to customers. The low-carbon energy produced by ADEU's local geo-exchange fields and CCDEU's efficient air-source heat pumps resulted in over 5,213 tons of CO<sub>2</sub>e avoided, equivalent to removing 1,600 cars from City of Richmond roads for one year. Overall, LIEC's systems achieved an availability over 99.95%, providing reliable, uninterrupted low-carbon energy services to customers.

## LIEC Facilities Tours

In 2024, LIEC continued its tradition of providing educational tours of the LIEC facilities to a number of interested parties. These tours aimed to educate stakeholders on district energy initiatives, the operational aspects of LIEC in Richmond, and the numerous benefits district energy brings to the community. Among the groups that participated in these tours were British Columbia Utilities Commission, UBC Environmental Engineering, BCIT Environmental Engineering, UBC Urban Systems Engineering, Cascadia Networking Coalition, and the New York Building Decarbonisation Coalition. This initiative highlights LIEC's dedication to educating local, national, and international stakeholders about district energy and its efforts to reduce community GHG emissions.

## Barn Owl Box Update at the ADEU

LIEC is committed to preserving community wildlife and has constructed barn owl nesting boxes in the ADEU energy centre. Since 2021, a pair of barn owls has successfully reared 3–5 young each year. To monitor their activity, motion-activated cameras have been installed on the exterior of both nesting boxes. Footage from the 2025 breeding season will be available on the following website: [richmond.ca/wildlife](https://richmond.ca/wildlife).



At the Alexandra DEU, motion-activated cameras are installed at the Barn Owl nesting boxes to monitor their activities.

## Did you know?

Barn Owls are among the best controls for rodent populations. A breeding pair of Barn Owls can catch 4,000 rodents in a year.



Visitors can scan the QR code to learn more about Barn Owls.





Townline Luxe development on No. 3 Road.

## LOOKING FORWARD: 2025 WORK PLAN

### City Centre District Energy Utility Services Expansion

The next phase of the CF Richmond Centre development, Phase 1A, is anticipated to connect in 2025. It comprises over 620,000 ft<sup>2</sup> of residential floor space and marks the fifth connected CCDEU development. This development includes an onsite low-carbon energy plant with 8 MW of capacity, powered by three air-source heat pumps and two natural gas boilers that provide space heating, cooling, and domestic hot water heating services to customers. Similar to the Phase 1B energy plant, the Phase 1A energy plant will have the capability to receive waste heat from the Richmond Centre mall to offset energy production for heating services.

This functionality is made possible due to a Heat Rejection System comprising two water-to-water heat pumps with over 1.5 MW of capacity. This system is anticipated to be completed in 2025 in conjunction with the Phase 1A energy plant, and is designed to transfer otherwise wasted heat from the mall's thermal network to the low-carbon energy plants servicing the Phase 1A and Phase 1B developments. This innovative heat transfer system was developed in close collaboration between LIEC and the developer, demonstrating their commitment to energy savings and emissions reductions to the customers.

The Townline Luxe development at 5591 No. 3 Road is a high-density, mixed-use development with over 430,000 ft<sup>2</sup> of space across four towers, planned to connect to the CCDEU network in 2025. It will be served by an on-site low-carbon energy plant using air-source heat pumps to provide efficient heating, cooling, and domestic hot water heating. The development is also designed for future integration with the off-site centralized energy system. LIEC continues to collaborate closely with developers to deliver high-quality, utility-grade on-site energy plants that prioritize low-carbon energy sources for heating and cooling services to its occupants.

Building and Address	Use Type	Floor Area (ft <sup>2</sup> )	Occupancy
CF Richmond Centre (Phase 1A) – 6551 No. 3 Road	Residential	620,000	Q2 2025
Townline Luxe – 5593 No. 3 Road	Mixed	430,000	Q2 2025
Pathways – 5491 No. 2 Road	Residential	60,000	Q4 2025

### Alexandra District Energy Utility Services Expansion and Upgrades

Expansion and development in the West Cambie Neighbourhood continues. Camden Square, a new building that will connect to ADEU, is expected to start construction in 2025. This new development will increase the connected floor area by over 189,850 ft<sup>2</sup>, bringing the total serviced area to 2.5M ft<sup>2</sup> 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 public roadways.



Building and Address	Use Type	Floor Area (ft²)	Occupancy
Camden Square – 9300/9320 Cambie Road	Residential	189,850	2026

Minor capital upgrades to the ADEU plant will be completed in 2025, including the installation of a manual transfer switch to enable the plant to operate on emergency backup power during extended power outages. The procurement and installation of a third cooling tower to increase the system's cooling capacity will also commence in 2025.

## Sewer Heat Recovery Central Energy Plant

LIEC is in the detailed design stage for the first permanent energy plant servicing City Centre customers. This plant will deliver at least 70% of its energy demand through heat recovery from Metro Vancouver's Gilbert Trunk sewer, utilizing sewage heat extraction and heat pump technology. It will replace the existing temporary energy infrastructure that uses natural gas, resulting in an annual reduction of approximately 9,750 tons of community greenhouse gas emissions at full build-out.

The energy plant will be sited near the northeastern edge of the future Lulu Island Park and will be designed as a contemporary, curvilinear building serving as a landmark and a catalyst for the transformation of the surrounding area. Key elements of the design include concrete panels on the building's river side for partial burial, a publicly accessible green roof (accessed via the future park) that brings ecological and environmental benefits and provides a riverfront landmark view, and publicly available washrooms that will eliminate the need for additional structures serving this purpose in the future park. The facility is scheduled to be completed by the end of 2028.

## Interim Energy Centre IEC #5 (Capstan)

To serve upcoming developments in the Capstan neighbourhood, LIEC is in the process of designing an interim energy centre (IEC #5) in the north end of the Capstan area. IEC #5 will service upcoming developments including Polygon Talistar Lots B and C (3420 and 3599 Ketcheson Court), Pinnacle Living Phase 4 (3200 No. 3 Road), and YuanHeng Viewstar II & III (3311 No. 3 Road and 3399 Corvette Way). The IEC #5 is designed with an initial capacity of 13 MW, consisting of high-efficiency natural gas boilers and distribution pumps, with the ability to expand to over 19 MW of capacity as needed to meet future demands. The energy centre is scheduled to be operational by 2026.

## Capstan Distribution Piping System

To distribute thermal energy across the Capstan neighbourhood, approximately 2.1 km of distribution piping system (DPS) will be installed over the course of two years, starting in 2025. The size of the piping will vary from 250 mm (NPS10) to 406 mm (NPS16) to meet hydraulic conditions and is expected to be completed by 2028, in line with upcoming development timelines. The carbon steel distribution piping comes equipped with pre-installed foam insulation, integral leak detection wiring for continuous monitoring, and an outer casing of high-density polyethylene.





CCDEU continues to expand their service area.

## Interim Energy Centre IEC #4 (Oval West)

In 2025, LIEC is scheduled to provide service to the upcoming Pathways affordable housing development near the intersection of No. 2 Road and Westminster Highway. To serve this building and upcoming developments in the west end of the Oval Village, LIEC is constructing interim energy centre IEC #4 adjacent to the south end of the No. 2 Road bridge. This energy centre will have an initial capacity of 2 MW, with the ability to expand to over 3 MW to connect to the ASPAC Lot 1 (6011 River Road) and Lot 7B (5900 River Road) developments by 2028. The IEC #4 will be equipped with high-efficiency condensing boiler technology that utilizes heat recovery from the boiler's exhaust. The initial phase is scheduled to be in service before the end of 2025. This section of the Oval Village neighbourhood will eventually be interconnected with the upcoming permanent sewer heat recovery facility by 2029. The operation of both IEC #4 and #5 will be monitored 24/7 and controlled remotely by LIEC's SCADA (Supervisory Control and Data Acquisition) network. Thermal energy will be delivered to customers and modulated based on demand via three variable-frequency drive (VFD) controlled pumps.

## Oval West Expansion Distribution Piping System

To deliver thermal energy from IEC #4 to the Oval West customers, LIEC is constructing approximately 300 m of distribution piping system (DPS) consisting of two 150 mm (NPS 6) supply and return carbon steel pipes. These pipes will include pre-installed foam insulation, integral leak detection wiring, and an outer casing of high-density polyethylene. The construction of the DPS will coincide with the installation of IEC #4 to meet the connection timeline for the Pathways affordable housing development in 2025.

## Interim Energy Centre # 2 Upgrade

In order to meet the increased thermal energy demands of upcoming Park Residence developments at 6333–6399 Mah Bing Street and other developments in the Brighthouse area, the existing Interim Energy Centre (IEC #2) located at 6111 Bowling Green Road will be upgraded to include an additional 1 MW of heating capacity through high-efficiency natural gas boilers. This upgrade is scheduled to be completed in 2025.

## Carrera & Mah Bing DPS Extension

To service the upcoming Park Residence developments at 6333–6399 Mah Bing Street, the distribution piping system (DPS) will be extended from IEC #2. The extension will consist of approximately 165 m of DPS piping, equipped with pre-installed foam insulation, integral leak detection wiring, and an outer casing of high-density polyethylene. The construction of the DPS will coincide with the upgrade of IEC #2.

## 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.



Alexandra District Energy Utility.



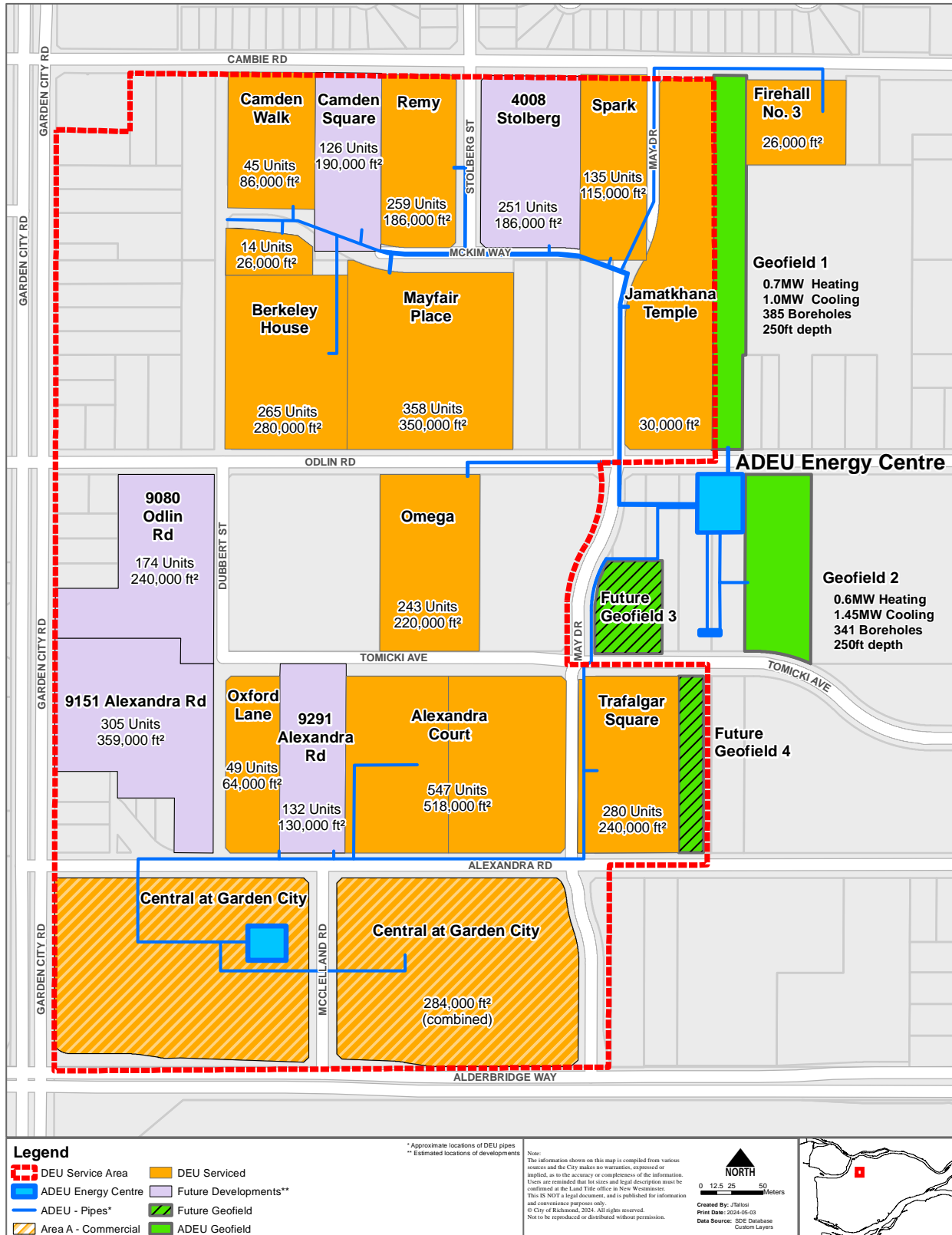


Alexandra District Energy Utility at Alexandra Neighbourhood Park.

## Infrastructure Overview

<b>Energy Station</b>	9600 Odlin Road, Richmond, BC V6X 1C9 Satellite Energy Plant (Area A) – 4751 McClelland Road, Upper Parkade, Richmond, BC V6X 0M5
<b>Service</b>	Residential: Space heating, cooling and domestic hot water Commercial: Space heating and cooling
<b>Technology</b>	<p>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.</p> <p>In heating mode, ground source heat pump technology extracts heat (geothermal energy) from the ground via a network of vertical pipe loops. Built-in natural gas-fired boilers provide 100% back up in case the ground source heat pumps shut down or require maintenance.</p> <p>This system also cools buildings. During the summer months, the energy flow reverses, extracting heat from buildings and pumping it into the ground. This process “recharges” the energy that was extracted from the ground, allowing heat to be available for the next cold season.</p> <p>The satellite energy plant located at the <i>Central at Garden City</i> (Smart Centres) commercial development utilizes efficient air-source heat pump technology to provide space heating and cooling for large commercial customers. This new energy plant is also interconnected with the current ADEU energy plant, allowing energy sharing with the main ADEU distribution system.</p> <p>Individual buildings connected to the ADEU require smaller-sized boilers only to increase the temperature of domestic hot water, reducing the overall building maintenance costs. The system’s performance is continuously monitored, ensuring the highest level of reliability to customers.</p>
<b>Length of Distribution Network</b>	3,660 m (12,000 ft.) of high-density polyethylene piping 726 vertical closed-loop boreholes, each 250 ft. deep

## Alexandra District Energy Utility Service Area Map



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LIEC staff conducting a tour of the Alexandra energy centre.

## Customers and Energy Rates

Energy rates are established in the City of Richmond Service Area Bylaws, which are approved by City Council. This approach ensures transparency and accountability for all LIEC district energy projects in the City. The rate and bylaw provisions are reviewed and approved by Council on an annual basis.

The energy rates are determined based on City Council's objective to provide customers with energy costs that are equal to or less than conventional low-carbon 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 uses a combination of natural gas and electricity, resulting in operational and maintenance expenses. This is the basis for comparing DE rate costs with conventional systems, 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.

### 2025 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: Monthly charge based on the gross floor area of the building (\$0.1017 per ft<sup>2</sup>)
- Volumetric Charge: Charge based on the energy consumed by the buildings (\$25.727 per MWh)

### 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.

## Connected Buildings

Building Name and Address	Use	Area (ft <sup>2</sup> )
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
Spark – 4033 May Drive	Residential	115,600

Building Name and Address	Use	Area (ft <sup>2</sup> )
Berkeley House – 9233 Odlin Road	Residential	282,500
Camden Walk – 9200 & 9211 McKim Way	Residential	112,000
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	26,000

## 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 2024 was 77,439 MWh. Greenhouse gas performance by the end of 2024 was 13,334 tons of CO<sub>2</sub>e avoided, equal to removing over 4,080 cars from City of Richmond roads for one year.<sup>1</sup>

## 2024 Financial Summary

The total net book value of ADEU's capital asset at December 31, 2024 is \$21,884,475. Revenue from operations for 2024 remained consistent with prior year, totaling \$2,852,861 (2023 – \$2,876,481).

Corix Utilities remains engaged as the system operator under contract to perform functional verification ensuring continuous operation and fine tuning of the system. Total cost of sales (utilities, contract services, depreciation expenses) are \$1,540,457 (2023 – \$1,592,180). The slight decrease of \$51,723 is in line with the change in revenue and is attributed to milder weather conditions.

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



Community garden surrounding the energy centre at Alexandra Park.

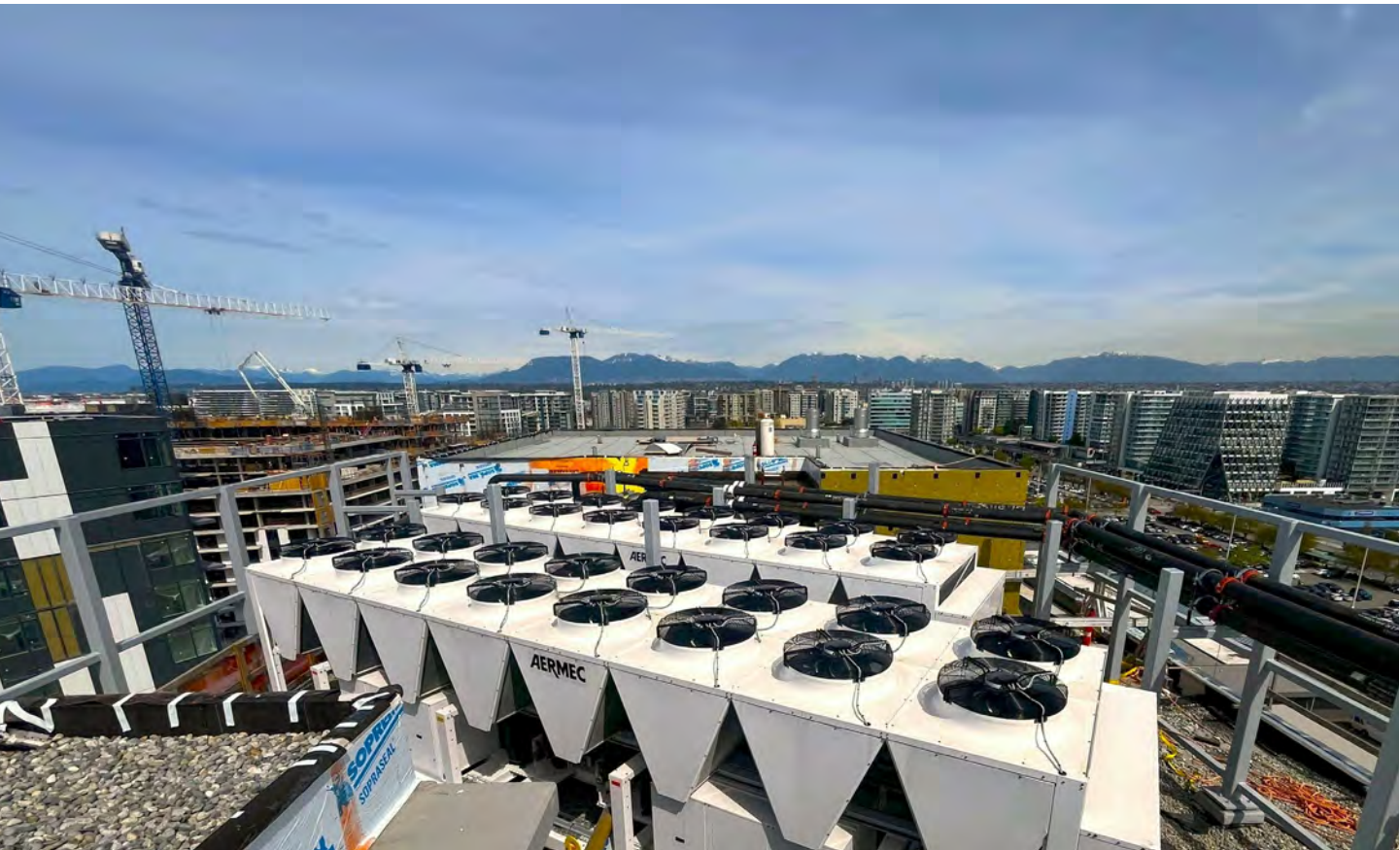
<sup>1</sup> [oee.nrcan.gc.ca/corporate/statistics/neud/dpa/calculator/ghg-calculator.cfm](https://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/calculator/ghg-calculator.cfm)



## ■ CITY CENTRE DISTRICT ENERGY UTILITY

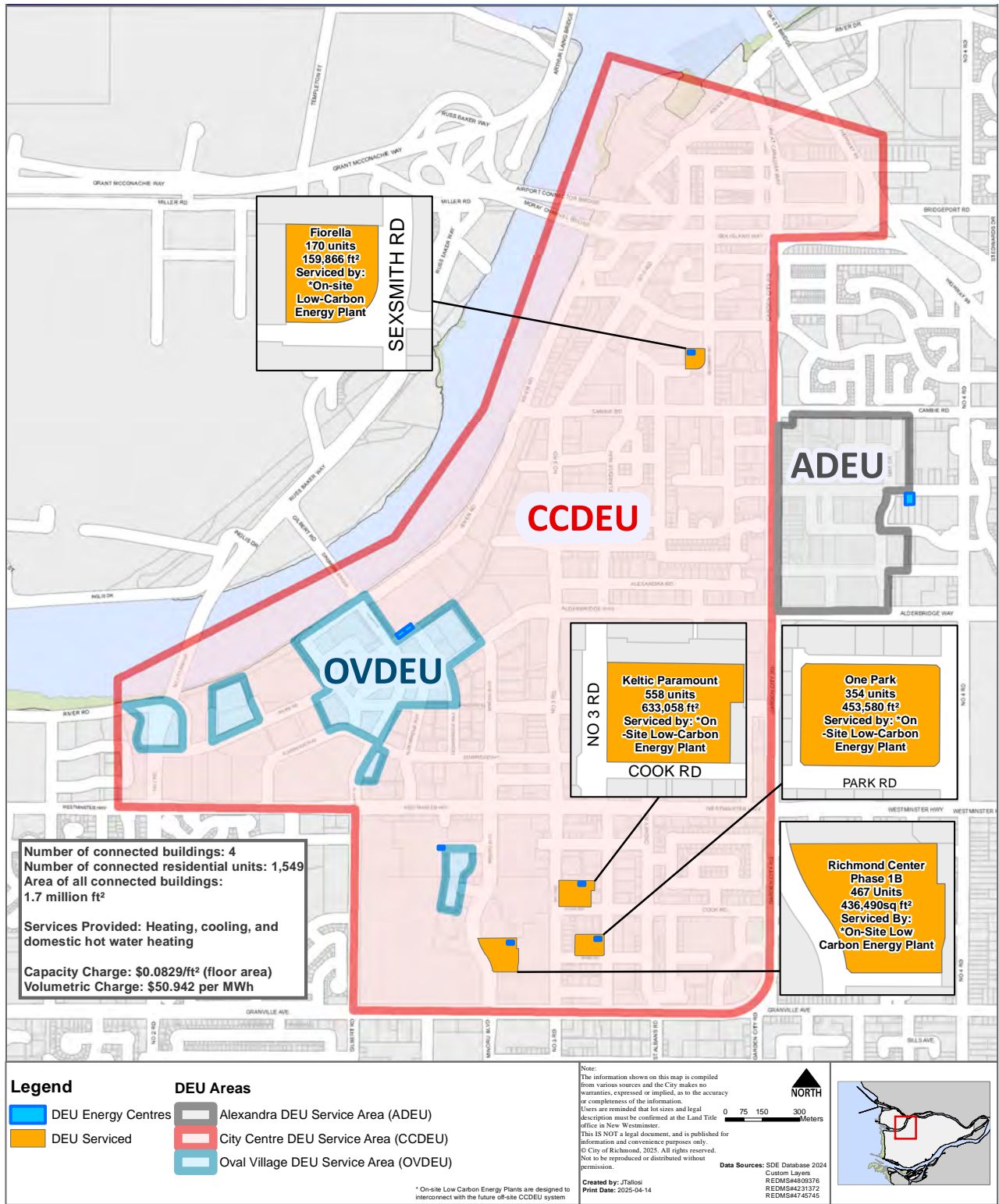
### **CCDEU Service Area**

Delivered in partnership between Lulu Island Energy Company, City Centre Energy Limited Partnership (Corix Utilities), and the Canada Infrastructure Bank, the CCDEU system under development is projected to service over 170 development sites and almost 50 M ft<sup>2</sup> of floor space at full buildout. Delivery strategy of the system includes the build out of both offsite and on-site infrastructure. Offsite infrastructure includes distribution piping, interim energy centres and permanent energy centres. Onsite infrastructure includes low carbon energy plants that will be eventually connected to the offsite infrastructure network. The first four CCDEU developments under this strategy, The Paramount, Fiorella, One Park, and Richmond Centre Phase 1B are now connected and being serviced by onsite energy plants utilizing low-carbon high-efficiency air source heat pumps. These sites comprise approximately 1.7 million ft<sup>2</sup> of floor space and 1,500 residential units. LIEC continues to collaborate closely with developers to deliver high-quality, utility-grade onsite energy plants that prioritize low-carbon energy sources for heating and cooling services to its occupants.



The CF Richmond Centre redevelopment is well underway and on track, continuing the revitalization of both the shopping centre and the community.

## City Centre District Energy Utility Service Area Map



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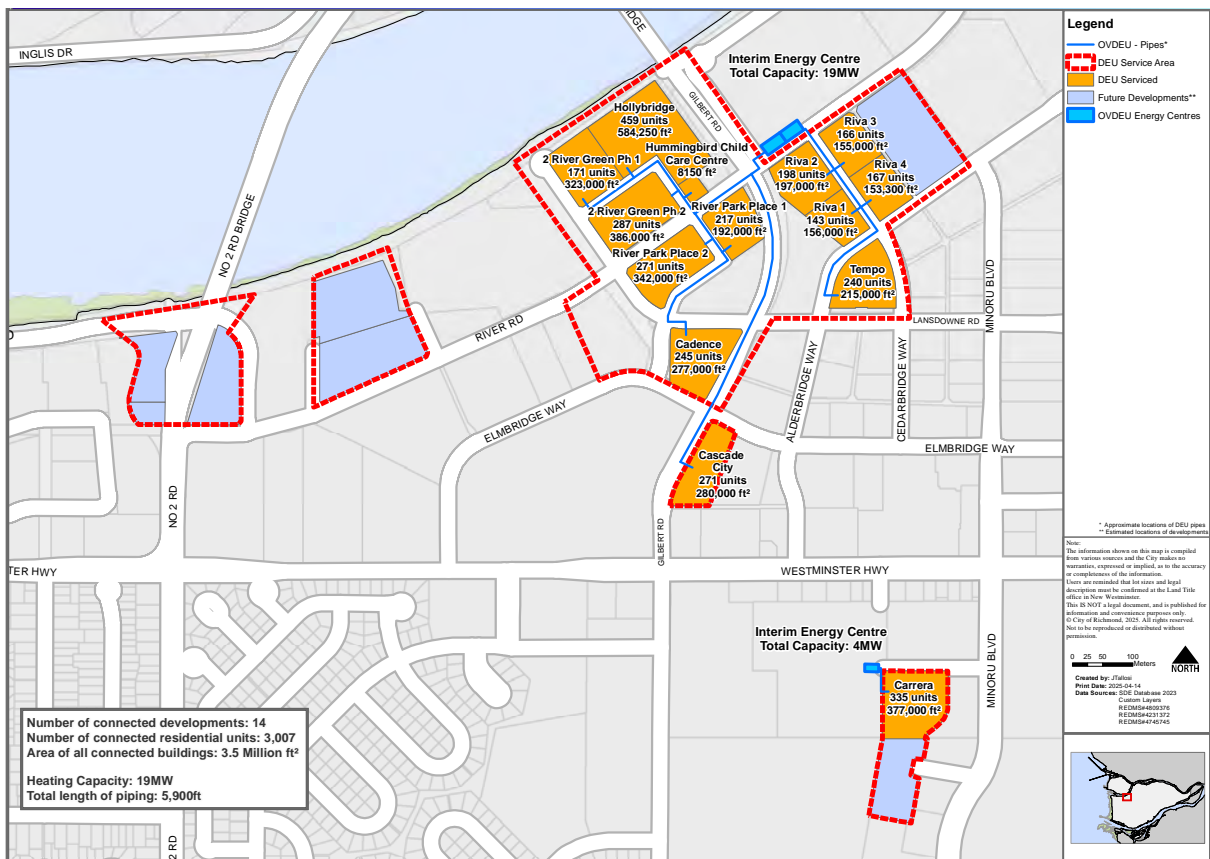
OVDEU Infrastructure.

## OVDEU Service Area

The OVDEU has been operating since 2015 under a Concession Agreement with Corix Utilities Inc. who designed, constructed, financed, operated and maintained the system. In 2022, the OVDEU infrastructure has been transferred under the CCDEU Project Agreement in which CIB will provide \$175 million in financing and City Centre Energy Limited Partnership, a wholly owned subsidiary of Corix District Energy Holdings GP, will design, build, finance, operate and maintain the infrastructure.

Today, over 3,000 residential units (14 buildings) are receiving energy from the OVDEU. At full build-out the OVDEU will service up to 5,500 residential units and 6.4 M ft<sup>2</sup> of floor space. Space heating and domestic hot water heating energy is currently supplied from three interim energy centres (IECs), with a fourth IEC planned for completion in 2025. 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. Together with 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 all connected buildings with renewable low carbon energy.

## Oval Village District Energy Utility Service Area Map



## Infrastructure Overview

### CCDEU

<b>Energy Station</b>	The Paramount Onsite Energy Plant – 6340 No. 3 Road Fiorella Onsite Energy Plant – 3699 Sexsmith Road One Park Onsite Energy Plant – 8119 Park Road Richmond Centre Phase 1B Onsite Energy Plant – 6551 No. 3 Road
<b>Service</b>	Space heating, space cooling, and domestic hot water heating
<b>Technology</b>	Energy for space heating, cooling, and domestic hot water is currently provided through onsite energy plants which incorporate 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 construction.

### OVDEU

<b>Energy Station</b>	Interim Energy Centre #1– 6111 Bowling Green Road Interim Energy Centre #2 – 7011 River Parkway Interim Energy Centre #3 – 7015 River Parkway
<b>Service</b>	Space heating and domestic hot water heating
<b>Technology</b>	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 19 MW of heating capacity to service these buildings. These interim energy centres use high efficiency natural gas boilers to produce energy. The performance of the system is monitored continuously to ensure a high level of reliability is provided to customers. The interim energy centres will be replaced by the 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.
<b>Length of Distribution Network</b>	2,010 m (6,695 ft.) insulated steel piping



CCDEU Infrastructure





## 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.

### 2025 Rate Structure

#### CCDEU Service Area

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

- Capacity charge: Monthly charge based on the gross square floor area of the building (\$0.0829 per ft<sup>2</sup>)
- Volumetric Charge: Charge based on the energy consumed by the building (\$50.942 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: Monthly charge based on the gross square floor area of the building (\$0.0711 per ft<sup>2</sup>)
- Volumetric Charge: Charge based on the energy consumed by the building (\$43.765 per MWh)

#### 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.

## Connected Buildings

Building Name and Address	Use	Area (ft <sup>2</sup> )
<b>CCDEU Service Area</b>		
The Paramount – 6320 No. 3 Road	Residential/ Commercial	633,057
Fiorella – 3699 Sexsmith Road	Residential	159,866
One Park – 8119 Park Road	Residential/ Commercial	455,433
Richmond Centre Building 1B	Residential	436,486
<b>OVDEU Service Area</b>		
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
Riva 4 – 7771 Alderbridge Way	Residential	153,257



Richmond Centre Phase 1.



## Energy and Greenhouse Gas Emissions (GHGs)

The amount of Energy delivered by the end of 2024 was 191,356 MWh. Up to date, the system has reduced greenhouse gas emissions by an estimated 9,540 tons of greenhouse gases (CO<sub>2</sub>e), equal to removing 2,920 cars from City of Richmond roads for one year.<sup>2</sup> At full build-out, the CCDEU system is anticipated to reduce approximately 9,000 tons of CO<sub>2</sub> GHG emissions annually as compared to business as usual.

## 2024 Financial Summary

In September 2022, LIEC entered into a Project Agreement with City Centre Energy Limited Partnership (Corix), a wholly owned subsidiary of Corix District Energy Holdings GP to design, build, finance, operate and maintain CCDEU and OVDEU infrastructure providing heating and cooling energy to new residential and commercial developments within the City Centre area. 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, 2024 is \$36,243,628. Revenue from CCDEU customers has been increasing in pace with the occupancy of serviced buildings and new connected buildings. Revenue from operations for 2024 is \$5,926,105 (2023 – \$4,712,496). The increase was mainly due to additional energy use by buildings that were not fully occupied in prior years.

The total estimated Project Agreement liability to finance the construction of the CCDEU project at full build out is estimated at \$618,657,000 and will be accrued over time as the infrastructure is constructed and services are rendered.



Onsite energy plant at One Park.

<sup>2</sup> [see.nrcan.gc.ca/corporate/statistics/neud/dpa/calculator/ghg-calculator.cfm](https://www.see.nrcan.gc.ca/corporate/statistics/neud/dpa/calculator/ghg-calculator.cfm)

## APPENDIX A: AWARDS & RECOGNITION

### 2023 Awards

#### Canadian Energy Globe National Award by Energy Globe Foundation

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.

### 2021 Awards

#### Emerging Market Award by EuroHeat and Power

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.

#### Climate & Energy Action Award by Community Energy Association

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.



City of Richmond Mayor Malcolm Brodie accepted the 2023 National Energy Globe Award for the expansion of the City Centre utility.



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## 2020 Awards

### **IDEA Innovation Award** by International District Energy Association

IDEA presents this award to the company whose project displays technological, engineering and operational innovations within the district energy industry.

### **Canadian Energy Globe National Award** by Energy Globe Foundation

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.

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## 2019 Awards

### **Canada Region Energy Project of the Year Award** by Association of Energy Engineers

The Association of Energy Engineers awards this to a project that takes a first-of-a-kind approach wherever it has been implemented.

### **CAMA Awards of Excellence – Environment Award** by Canadian Association of Municipal Administrators

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.

---

## 2018 Awards

### **Public Sector District Energy Leadership Award** by International District Energy Association

This award recognized the commitment and vision shown by the City of Richmond's Council for its ongoing support for district energy in Richmond.

### **Canada Region Innovative Energy Project of the Year Award** by Association of Energy Engineers

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.

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## 2017 Awards

### **Canadian Consulting Engineering Award of Excellence** by Association of Consulting Engineering Companies

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.

**Canada Region Institutional Energy Management Award** by Association of Energy Engineers

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.

**UBCM Community Recognition Award** by Canadian Wood Council

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.

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## 2016 Awards

**System of the Year** by International District Energy Association

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.

**Community Excellence Award** by Union of British Columbia Municipalities

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.

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## 2014 Awards

**Excellence Award** by Canadian Geo-Exchange Coalition

The Canadian Geo-exchange Coalition Excellence Award recognized the Alexandra District Energy Utility geothermal/geo-exchange system for its quality of installation and design.

**Sustainability Award** by Association of Professional Engineers and Geoscientists of British Columbia (APEGBC)

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.

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## 2013 Awards

**Award of Excellence (Natural Resources, Mining, Industry and Energy Category)** by Canadian Consulting Engineer Magazine & the Association of Consulting Engineering Companies – Canada

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.



**Project of the Year** by Public Works Association of British Columbia

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

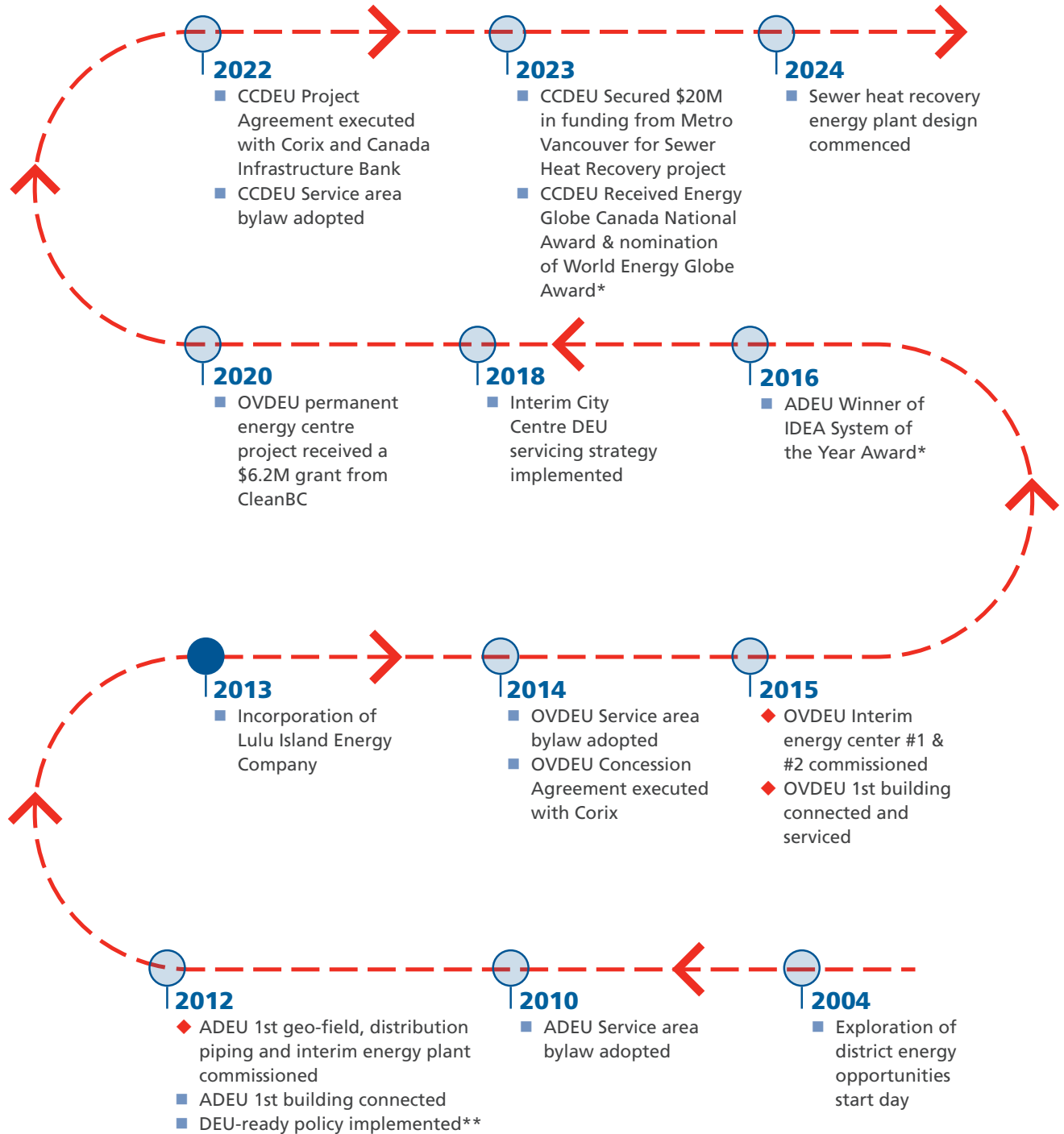
**Certificate of Recognition – Innovation Awards** by International District Energy Association

This program highlighted the Alexandra District Energy System as an example of engineering, technology and operational innovation within the district energy industry.

**Canadian Energy Globe National Award** by ENERGY GLOBE Foundation

This program highlighted the Alexandra District Energy System as an example of engineering, technology and operational innovation within the district energy industry.

## APPENDIX B: LULU ISLAND ENERGY COMPANY MILESTONE TIMELINE



\* See Appendix A: Awards & Recognition

\*\* New developments in the DEU service area must have the mechanical capability to connect to and receive 100% of annual space heating, domestic water heating, and space cooling from the DEU and connect to the network once informed by LIEC



## ■ APPENDIX C: MANAGEMENT'S DISCUSSION AND ANALYSIS

### About the Company

The City of Richmond's 2041 Official Community Plan (OCP) establishes a target to reduce greenhouse gas (GHG) emissions 50 per cent below 2007 levels by 2030 and 100 per cent 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;
2. Council will retain the authority of setting customer rates, fees and charges for DEU services; and
3. The DEU will provide a flexible platform for adopting low carbon energy technologies.

There are two established DEU service areas within the City; ADEU and CCDEU. Table 1 below provides a summary of the developments connected under the DEU service areas to-date.

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

	<b>Buildings To-Date</b>	<b>Residential Units To-Date</b>	<b>Floor Area To-Date</b>	<b>Floor Area Build-Out</b>
Alexandra DEU	13	2,200	2.4M ft <sup>2</sup>	4.4M ft <sup>2</sup>
City Centre DEU	18	4,723	5.4M ft <sup>2</sup>	48.0M ft <sup>2</sup>
<b>Total</b>	<b>31</b>	<b>6,923</b>	<b>7.8M ft<sup>2</sup></b>	<b>52.4M ft<sup>2</sup></b>

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 of 2,200 residential units and over 2.4M ft<sup>2</sup> 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 CCDEU currently services 18 buildings, comprised of 4,723 residential units and approximately 5.3M ft<sup>2</sup> of floor area. Energy is currently supplied from the three interim energy centres with natural gas boilers which provide 19 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. This project is in the detailed design stage with off-site construction starting this year and is expected to be completed in 2028.

While offsite infrastructure is being built, CCDEU utilizes interim energy centers and on-site low carbon energy plants as a source of energy production. At full build-out, 176 developments, 28,000 residential units and almost 50M ft<sup>2</sup> of floor

space will be serviced by five permanent energy centres with over 130 MW of heating and 115 MW of cooling capacity. The built-out system is estimated to reduce over one million tons of GHG emissions compared to conventional service.

## Review of Financial Performance

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).

### Statement of Financial Position

#### Cash and Cash Equivalents and Investments

The year-end cash balance of \$7,575,940 (2023 – \$2,511,976) supports operational activities and committed capital projects. The increase in cash was due to net income and advanced payments from developers for future building connections. LIEC maintained a higher cash balance at year-end in order to bridge the finance of the Sewer Heat Recovery project. LIEC's investments of \$13,727,812 (2023 – \$12,014,953) remain in secured term deposits with a continued strategy to capitalize on higher interest rates.

#### Accounts Receivable

Accounts receivable totaled \$4,385,448 (2023 – \$4,792,892), primarily reflecting accruals for the last quarter's meter billings. The decrease from the prior year is due to the collection of outstanding developers' contributions, which were recorded as receivables at the end of 2023 and received in 2024.

#### Plant and Equipment

Plant and equipment are reported at net book value, representing capital cost net of accumulated depreciation. In 2024, the net book value increased to \$58,128,103 (2023 – \$53,740,785) due to additional capital expenditures.

#### Accounts Payable and Government Grants

Accounts payable totaled \$1,377,195 (2023 – 1,848,902), representing outstanding vendor invoices. The decrease compared to prior year was due to the timing of year-end invoices. The government grant liability increased to \$514,462 (2023 – \$403,026), reflecting the accumulated CleanBC grant received for the Sewer Heat Recovery project. In accordance with IFRS reporting, the grant is recognized as revenue annually over the useful life of the plant once the asset is in service.

#### Deferred Developer Contributions and Project Agreement Liabilities

Utility company balance sheets are predominantly dominated by capital assets and debt due to the requirements to build out the infrastructure network. The developers' contributions and Project Agreement liabilities are the primary sources of funding for the construction of new assets, which make up the majority of the liabilities. Developer contributions, which recover the construction costs for in-building equipment installation, are recognized as deferred liabilities. In accordance with IFRS reporting, revenue from these contributions is recognized annually over the useful life of the equipment once the asset is in service. At the 2024 year-end, deferred developer contribution totaled \$22,788,278 (2023 – \$19,235,460).



The Project Agreement liability is associated with the 30-year agreements between LIEC, Corix, and the Canada Infrastructure Bank (CIB). Under the Project Agreement, Corix designs, constructs, finances, and maintains the CCDEU infrastructure, while CIB provides low-cost financing for a portion of the infrastructure. The Project Agreement liability represents anticipated future cash outflow for capital and operating costs under the agreement. At the 2024 year-end, the Project Agreement liability was \$19,283,096 (2023 – \$14,475,318)

### **Shareholder's Equity**

Shareholder's equity reflects the net worth of the company, calculated as total assets minus the total liabilities. In 2024, LIEC's shareholder equity was \$39,855,272 (2023 – \$37,097,900), representing a 7% increase from the previous year.

### **Statement of Profit or Loss and Total Comprehensive Income**

#### **Revenues**

Metered billings reflect energy sales based on the actual customers' energy usage and consumption. It comprises of energy sales from ADEU and CCDEU service areas. Metered billings revenue was \$5,926,105 (2023 – \$4,712,496) from the CCDEU and \$2,852,861 (2023 – \$2,876,481) from the ADEU. Overall, metered billings increased by \$1,189,989 to \$8,778,966 (2023 – \$7,588,977). The increase was due to additional energy use by buildings that were not fully occupied in prior years, as well as the approved 2024 rate increase.

There was no change to the service fee of \$981,486 (2023 – \$981,486) for LIEC's facilitation of advancing district energy opportunities in the City, which results in numerous benefits to the City and community of Richmond. The service fee covers staff and specialized consultants working on low carbon district energy initiatives. With or without LIEC, 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. The City identified district energy utilities as a leading strategy to achieve the City's GHG reduction goals. To date, it is estimated that LIEC's district energy systems has resulted in the reduction of over 22,870 tons of GHG emissions.

#### **Cost of Sales**

The cost of sales consists of total expenses attributable to energy sales, which includes contract services, utilities (electricity and natural gas), and depreciation. Contract expenses increased by \$287,774 to \$2,093,165 (2023 – \$1,805,391) due to additional operations and maintenance work. Contract expenses increased by 16%, consistent with the increase in metered revenue.

Utility expenses increased by \$110,220 to \$1,926,163 (2023 – \$1,815,943) driven by increased energy usage from new buildings connected in 2023 that operated for the first time for a full year in 2024.

Depreciation expense increased due to additional assets being put into service. The gross margin in 2024 was 40%, which was slightly lower than the 41% in 2023. This was mainly due to the additional maintenance and higher utility costs of the newly connected on-site Low Carbon Energy Plants (LCEPs).

## General and Administration Expenses

The general and administration expenses are expenditures that LIEC incurs to engage in business development activities and includes salaries and benefits, administration expenses, insurance and professional fees. The general and administration expenses increased by \$134,244 to \$2,109,745 (2023 – \$1,975,501) driven by the following key factors:

- **Administration expenses:** The increase of \$26,861 to \$365,929 (2023 – \$339,068) was mainly due to the increase in the CCDEU Project Agreement related administration expenses, which include: project administration, overhead costs for managing Corix's special purpose entity, and CIB financial administration requirements. This increase was expected as the implementation of the CCDEU project ramped up. Administration expenses also include the overhead allocation of \$69,680 (2023 – \$70,723) paid to the City of Richmond for the day-to-day support that LIEC received from City staff during the year.
- **Insurance:** The premium increased by \$36,578 or 12% due to a general insurance rate increase, and the inclusion of additional capital assets under coverage.
- **Professional fees:** The increase of \$52,877 to \$323,760 (2023 – \$270,883) was due to costs associated with professional studies. Additionally, higher audit fees contributed to this increase, as additional work was required to support the company's operational growth.

Overall, general and administration expenses as a percentage of revenues was 22% in 2024, slightly lower than in 2023 (23%).

## Contributions and Financing Expenses

The contributions and financing expense section represents other sources of revenue and expenses for the Company. Developer contributions increased compared to 2023 due to two new connections that occurred in 2023 and operated for a full year for the first time in 2024. Other income was higher than 2023 due to LIEC receiving a recovery payment for its internal administrative and personnel costs related to Corix reorganization consent request. Interest income was higher than 2023 due to higher cash and investment balances. Finance expense was higher than 2023 due to increase in new infrastructure being financed and constructed.

LIEC's earnings before interest, tax, depreciation and amortization (EBITDA), used as a proxy to measure the company's operational efficiency, increased to 44% as a percentage of revenue compared to 40% in 2023. This was due to the increase in revenue outpacing the increase in operating costs.

Overall, LIEC's revenues exceeded expenses, resulting in a net income of \$2,757,372 (2023 – \$2,069,740).

LIEC's financial sustainability and future growth must be taken into consideration when reviewing its EBITDA and net income. 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 factors include the planning of future projects, which consists of research and development, and exploratory reviews of future technology and opportunities.



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

Period of incorporation on January 1, 2024 to December 31, 2024



**KPMG LLP**  
PO Box 10426 777 Dunsmuir Street  
Vancouver BC V7Y 1K3  
Canada  
Telephone (604) 691-3000  
Fax (604) 691-3031

### 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, 2024
- the statement of profit or loss and total 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 material 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, 2024, and its financial performance and its cash flows for the year then ended in accordance with IFRS Accounting Standards as issued by the International Accounting Standards Board.

#### **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 Accounting Standards as issued by the International Accounting Standards Board, 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' with a horizontal line underneath.

Chartered Professional Accountants

Vancouver, Canada

April 11, 2025



# LULU ISLAND ENERGY COMPANY LTD.

## Statement of Financial Position

December 31, 2024, with comparative information for 2023

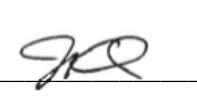
	2024	2023
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 7,576,940	\$ 2,511,976
Accounts receivable (note 4)	4,385,448	4,792,892
Investments (note 5)	9,120,685	12,014,953
	21,083,073	19,319,821
Non-current assets:		
Investments (note 5)	4,607,127	-
Plant and equipment (note 6)	58,128,103	53,740,785
<b>Total assets</b>	<b>\$ 83,818,303</b>	<b>\$ 73,060,606</b>
<b>Liabilities and Shareholder's Equity</b>		
Current liabilities:		
Accounts payable and accrued liabilities (note 7)	\$ 1,377,195	\$ 1,848,902
Current portion of deferred developer contributions (note 8(a))	668,133	668,131
Current portion of Project Agreement liability (note 9)	7,158,752	6,125,191
	9,204,080	8,642,224
Non-current liabilities:		
Government grants (note 8(b))	514,462	403,026
Deferred developer contributions (note 8(a))	22,120,145	18,567,329
Project Agreement liability (note 9)	12,124,344	8,350,127
	34,758,951	27,320,482
<b>Total liabilities</b>	<b>43,963,031</b>	<b>35,962,706</b>
Shareholder's equity:		
Share capital and contributed surplus (note 10)	27,397,115	27,397,115
Retained earnings	12,458,157	9,700,785
	39,855,272	37,097,900
<b>Commitments and contingencies (note 13)</b>		
<b>Total equity and liabilities</b>	<b>\$ 83,818,303</b>	<b>\$ 73,060,606</b>

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

Approved on behalf of the Board:



Director



Director

# LULU ISLAND ENERGY COMPANY LTD.

## Statement of Profit or Loss and Total Comprehensive Income

Year ended December 31, 2024, with comparative information for 2023

	2024	2023
Revenue (note 14, 15(a))	\$ 9,760,452	\$ 8,570,463
Cost of sales:		
Operating expenses	4,019,328	3,419,169
Depreciation (note 6)	1,798,972	1,455,216
	5,818,300	4,874,385
Gross profit	3,942,152	3,696,078
General and administrative expenses (note 11, 15(b))	2,109,745	2,177,666
Profit before undernoted items	1,832,407	1,518,412
Developer contributions, other income and net finance cost:		
Developer contributions (note 8(a))	668,131	475,410
Other income (note 15(a))	32,868	20,511
Net finance income (note 12)	223,966	55,407
	924,965	551,328
Profit and total comprehensive income for the year	\$ 2,757,372	\$ 2,069,740

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, 2024, with comparative information for 2023

	Share capital (note 10)	Contributed surplus (note 10)	Retained earnings	Shareholder's equity
Balance, January 1, 2023	\$ 5	\$ 27,397,110	\$ 7,631,045	\$ 35,028,160
Profit and total comprehensive income	-	-	2,069,740	2,069,740
Balance, December 31, 2023	5	27,397,110	9,700,785	37,097,900
Profit and total comprehensive income	-	-	2,757,372	2,757,372
Balance, December 31, 2024	\$ 5	\$ 27,397,110	\$ 12,458,157	\$ 39,855,272

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



# LULU ISLAND ENERGY COMPANY LTD.

## Statement of Cash Flows

Year ended December 31, 2024, with comparative information for 2023

	2024	2023
Cash provided by (used in):		
Cash flows provided by (used in) operating activities:		
Profit and total comprehensive income	\$ 2,757,372	\$ 2,069,740
Adjustments for:		
Depreciation	1,798,972	1,455,216
Recognition of deferred developer contributions	(668,131)	(475,410)
Finance expense	735,020	729,783
Changes in non-cash operating working capital:		
Accounts receivable	407,444	(406,393)
Accounts payable and accrued liabilities	(471,708)	(2,003,987)
Net cash provided by operating activities	4,558,969	1,368,949
Cash flows provided by (used in) investing activities:		
Additions to plant and equipment	(1,118,889)	(2,050,178)
Deferred developer contributions	4,220,949	438,780
Cash receipts from sale of investments	12,014,953	12,324,233
Cash payments to acquire investments	(13,727,812)	(12,014,953)
Net cash provided by (used in) investing activities	1,389,201	(1,302,118)
Cash flows provided by (used in) financing activities:		
Cash received from government grants	111,438	161,975
Project Agreement liability, net	(994,644)	(908,210)
Net cash used in financing activities	(883,206)	(746,235)
Increase (decrease) in cash and cash equivalents	5,064,964	(679,404)
Cash and cash equivalents, beginning of year	2,511,976	3,191,380
Cash and cash equivalents, end of year	\$ 7,576,940	\$ 2,511,976
Non-cash transactions:		
Additions to plant and equipment	\$ (5,067,401)	\$ (7,400,770)
Project Agreement liability	4,855,397	3,247,234
Developer contributions	-	6,254,275
Finance cost capitalized to plant and equipment	212,005	44,953
Accounts receivable	-	(2,145,692)

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

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements

Year ended December 31, 2024

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## 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 IFRS Accounting Standards 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 10, 2025.

### (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, 2024

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## 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 8(a) - Deferred developer contributions and Government grants.

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 note:

- Note 3(a)(iii) and Note 6 - useful lives of plant and equipment.

## 3. Material accounting policies:

The material 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, 2024

## 3. Material 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	20-40

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, 2024

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## 3. Material 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 (note 9).

### (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/receivable 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 these 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. 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, 2024

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## 3. Material accounting policies (continued):

### (i) Financial instruments:

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, 2024

## 3. Material accounting policies (continued):

### (i) Financial instruments (continued):

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(j)(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
Project Agreement liability	Amortized cost



# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

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## 3. Material accounting policies (continued):

### (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).

#### (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.

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

## 3. Material accounting policies (continued):

### (j) Impairment (continued):

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

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, 2024 and earlier application is permitted; however, the Company has not early adopted the new or amended standards in preparing these financial statements.

#### *IFRS 18 Presentation and Disclosure in Financial Statements:*

IFRS 18 will replace IAS 1 *Presentation of Financial Statements* and applies for annual reporting periods beginning on or after 1 January 2027. The new standard introduces the following key new requirements:

- Entities are required to classify all income and expenses into five categories in the statement of profit or loss, namely the operating, investing, financing, discontinued operations and income tax categories. Entities are also required to present a newly-defined operating profit subtotal. Entities' net profit will not change.
- Management-defined performance measures (MPMs) are disclosed in a single note in the financial statements.
- Enhanced guidance is provided on how to group information in the financial statements.

In addition, all entities are required to use the operating profit subtotal as the starting point for the statement of cash flows when presenting operating cash flows under the indirect method.

The Company is still in the process of assessing the impact of the new standard, particularly with respect to the structure of the Company's statement of profit or loss, the statement of cash flows and the additional disclosures required for MPMs. The Company is also assessing the impact of how information is grouped in the financial statements, including for items currently labelled as 'other'.

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

## 3. Material accounting policies (continued):

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

The following amended standards and interpretations are effective for annual periods beginning after January 1, 2024 and are not expected to have a material impact on the financial statements.

- Lack of exchangeability (Amendments to IAS 21);
- Classification and Measurement of Financial Instruments (Amendments to IFRS 9 and IFRS 7).

## 4. Accounts receivable:

	2024	2023
Trade receivables	\$ 1,251,399	\$ 2,371,845
Due from City of Richmond (note 15(a))	166,301	165,059
Unbilled trade receivables	2,833,834	2,157,192
GST receivable	133,914	98,796
	<b>\$ 4,385,448</b>	<b>\$ 4,792,892</b>

## 5. Investments:

Investments represent term deposits as follows:

Purchase date	Maturity date	Interest rate	2024	2023
June 20, 2024	June 20, 2025	5.20%	\$ 2,980,151	\$ -
June 20, 2024	June 22, 2026	5.01%	1,026,628	-
June 20, 2024	June 22, 2027	5.00%	1,026,575	-
July 23, 2024	July 23, 2025	5.22%	3,069,076	-
July 23, 2024	July 23, 2025	5.40%	3,071,458	-
July 23, 2024	July 23, 2026	4.89%	2,553,924	-
June 15, 2024	June 17, 2024	6.21%	-	3,707,485
June 15, 2024	June 17, 2024	5.65%	-	1,056,153
July 19, 2024	July 19, 2024	6.40%	-	4,357,453
November 8, 2024	November 8, 2024	6.21%	-	2,893,862
			<b>13,727,812</b>	<b>12,014,953</b>
Less: current portion of investments			<b>9,120,685</b>	<b>12,014,953</b>
Non-current investments			<b>\$ 4,607,127</b>	<b>\$ -</b>

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

## 6. Plant and equipment:

	Energy plant center	General equipment	Distribution piping	Total
<b>Cost:</b>				
Balance as at December 31, 2022	\$ 5,031,915	\$ 33,595,729	\$ 14,561,392	\$ 53,189,036
Transfer	-	667,176	(667,176)	-
Additions	-	6,337,288	3,113,661	9,450,949
Balance as at December 31, 2023	5,031,915	40,600,193	17,007,877	62,639,985
Additions	-	2,802,641	3,383,649	6,186,290
Balance as at December 31, 2024	\$ 5,031,915	\$ 43,402,834	\$ 20,391,526	\$ 68,826,275
<b>Accumulated depreciation:</b>				
Balance as at December 31, 2022	\$ 402,552	\$ 5,890,695	\$ 1,150,737	\$ 7,443,984
Transfer	-	(6,723)	6,723	-
Depreciation	67,092	1,178,511	209,613	1,455,216
Balance as at December 31, 2023	469,644	7,062,483	1,367,073	8,899,200
Depreciation	67,092	1,431,183	300,697	1,798,972
Balance as at December 31, 2024	\$ 536,736	\$ 8,493,666	\$ 1,667,770	\$ 10,698,172
<b>Net book value:</b>				
At December 31, 2022	\$ 4,629,363	\$ 27,705,034	\$ 13,410,655	\$ 45,745,052
At December 31, 2023	4,562,271	33,537,710	15,640,804	53,740,785
At December 31, 2024	4,495,179	34,909,168	18,723,756	58,128,103

Included in plant and equipment is \$10,706,471 (2023 - \$5,173,479) of assets under construction being \$5,212,386 (2023 - \$2,982,685) general equipment and \$5,494,085 (2023 - \$2,190,794) distribution piping. For the year ended December 31, 2024, capitalized borrowing costs related to the construction of the general equipment and distribution system in the year amounted to \$212,005 (2023 - \$44,953), calculated using a capitalization rate of 4.76% (2023 - 4.40%).

## 7. Accounts payable and accrued liabilities:

In 2020, the Company identified a distribution pipe leakage of heat transfer fluid at one of the Company's service areas. Following repair and remediation of the service area in earlier years, during the year ended December 31, 2024, the Company continued to monitor the service area and incur legal costs associated with the leak, and recognized expenses of nil (2023 - nil) in other expenses. As of December 31, 2024, \$259,293 (2023 - \$440,560) is included in accounts payable and accrued liabilities pertaining to the accrued costs associated with the leak. Management believes the Company has adequately provided for the costs associated with leak and intends to seek compensation for costs incurred and accrued from the third parties involved.

Accounts payable and accrued liabilities also include post-employment benefits of \$86,000 (2023 - \$72,800).



# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

## 8. Deferred developer contributions and Government grants:

### (a) Deferred developer contributions:

The following table summarizes deferred developer contribution amounts recognized:

	2024	2023
Deferred developer contributions, beginning of year	\$ 19,235,460	\$ 13,017,815
Developer contributions receivable	-	2,145,692
Developer contributions received (net of refunds)	4,220,949	366,780
Developer contributions received (non-cash)	-	4,180,583
Recognized revenue from developer contributions	(668,131)	(475,410)
	22,788,278	19,235,460
Less: current portion of deferred developer contributions	668,133	668,131
Non-current deferred developer contributions	\$ 22,120,145	\$ 18,567,329

### (b) Government grants:

In 2022, the Company was awarded a grant (the "Sewer Heat Recovery grant") from CleanBC Communities Fund. In 2024, the Company recognized on the statement of financial position \$514,464 (2023 - \$403,026) under the Sewer Heat Recovery grant. As the relevant assets were under construction at December 31, 2024, the grants received have been deferred under non-current liabilities.

## 9. City Centre District Energy Utility Project Agreement:

On September 22, 2022, the Company entered into a new concession project agreement (the "Project Agreement") with City Centre Energy Limited Partnership ("Project Contractor") 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 Project Contractor was a wholly owned subsidiary of Corix Utilities Inc. ("Corix"). During 2024, following a re-organization within Corix, the Project Contractor become a wholly owned subsidiary of Corix District Energy Holdings GP Inc.

The total estimated Project Agreement liability to finance the construction of the CCDEU project at full build out is estimated at \$618,657,000 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, 2024

## 9. 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 13.

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

(a) Project Agreement liability:

	2024	2023
Project Agreement liability – capital	\$ 18,343,191	\$ 13,968,958
Project Agreement liability – non-capital	939,905	506,360
	19,283,096	14,475,318
Less: Current portion of Project Agreement liability	(7,158,752)	(6,125,191)
Non-current portion of Project Agreement liability	\$ 12,124,344	\$ 8,350,127

The average finance cost on the project liability is 5.17% for the year ended December 31, 2024 (2023 - 5.35%).

The Project Agreement liability is repayable as follows:

2025	\$ 7,158,752
2026	1,429,696
2027	1,497,607
2028	1,568,743
2029 and thereafter	7,628,298
Total	\$ 19,283,096

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.

	2024	2023
Opening balance	\$ 14,475,318	\$ 11,361,558
Additions	4,855,397	3,247,234
Finance expense (note 12)	947,025	774,736
Net repayment	(994,644)	(908,210)
Ending balance	\$ 19,283,096	\$ 14,475,318

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

## 10. Share capital and contributed surplus:

At December 31, 2024, the authorized share capital comprised 10,000 (2023 - 10,000) common shares without par value.

As at December 31, 2024, the Company has issued 450 common shares (2023 - 450) at \$0.01 per share totaling \$4.50 (2023 - \$4.50) and held a contributed surplus of \$27,397,110 (2023 - \$27,397,110).

## 11. Personnel expenses:

The following expenses are included in general and administrative expenses:

	2024	2023
Wages and salaries	\$ 1,074,838	\$ 1,056,910

## 12. Net finance income:

	2024	2023
Finance income:		
Investment interest	\$ 761,880	\$ 706,881
Bank interest	182,576	52,097
Other	14,530	26,212
	958,986	785,190
Finance cost:		
Finance expense on Project Agreement liability (note 9)	(947,025)	(774,736)
Less: Finance cost capitalized to plant and equipment (note 6)	212,005	44,953
	(735,020)	(729,783)
Net finance income	\$ 223,966	\$ 55,407

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

## 13. 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 each contract year. The capital obligations are comprised of capital expenditures and financing costs. The commodity costs include costs of fuel, electricity, 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 provision of energy services. The information presented below shows the expected committed cash outflow for the next year under the Project Agreement for the capital and operating costs. As construction progresses the asset values are recorded as plant and equipment and the corresponding liabilities are recorded as project agreement liabilities as disclosed in note 9.

	Capital Commitment	Operating Commitment	Total Commitment
2025	\$ 996,104	\$ 6,162,648	\$ 7,158,752

As at December 31, 2024, 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 \$20,442,835 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 7). 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 practicable at this time to measure the financial effect of any recovery of expenses from the other parties involved or the Company's insurer.

## 14. Revenue:

	2024	2023
Metered billings	\$ 8,778,966	\$ 7,588,977
Other revenue	981,486	981,486
	\$ 9,760,452	\$ 8,570,463



# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

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## 15. 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 2024, the Company received and recognized in other revenue \$981,486 (2023 - \$981,486) 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 metered billings revenue for 2024 is \$34,274 (2023 - \$44,848) 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 \$32,868 (2023 - \$20,511) relating to district energy permit fees collected by the City for in-building district energy related equipment reviews performed by the Company.

Additionally, a fee of \$69,680 (2023 - \$70,723), 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.

The total amount due from the City as at December 31, 2024 is \$166,301 (2023 - \$165,059) 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.

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

## 15. Related party transactions (continued):

### (a) Key management personnel:

Key management personnel compensation comprised the following:

	2024	2023
Short-term employee benefits	\$ 215,610	\$ 101,417
Post-employment benefits	2,781	-
	<u>\$ 218,391</u>	<u>\$ 101,417</u>

The Board of Directors do not receive any remuneration. Key management personnel include the Board of Directors, Chief Executive Officer, Chief Financial Officer and Chief Operating Officer. In 2024, the Company undertook an operational review in conjunction with its growth plan, which resulted in the creation of a full-time Chief Operating Officer role that was reclassified from an existing position and the elimination of the Corporate Secretary role. The Chief Operating Officer role is the only officer position held by a full-time employee of the Company, hence the variance in key management personnel compensation between 2024 and 2023. The growth plan and staff positions were approved by the Board. Short-term employee benefits include salaries and taxable benefits.

## 16. Fair values and financial instruments:

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

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

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

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

## 16. Fair values and financial instruments (continued):

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 and/or market rates of interest.

Subsequent to initial recognition, the Project Agreement liability is accounted for at amortized cost using the effective interest method. The Project Agreement liability includes a component relating to a financing arrangement the Project Contractor holds with the Canada Infrastructure Bank. To determine the fair value of the Project Agreement liability for disclosures purposes, this component has been discounted using a market-based rate for a similar instrument. The other components of the Project Agreement liability approximate their fair values due to the market rates of interest.

The following table shows the carrying amounts and fair values of the financial assets and financial liabilities according to their fair value hierarchy.

	December 31, 2024		December 31, 2023	
	Carrying amount	Fair value	Carrying amount	Fair value
Cash and cash equivalents	\$ 7,576,940	\$ 7,576,940	\$ 2,511,976	\$ 2,511,976
Accounts receivable	4,385,448	4,385,448	4,792,892	4,792,892
Investments	13,727,812	13,727,812	12,014,953	12,014,953
Accounts payable and accrued liabilities	1,377,195	1,377,195	1,848,902	1,848,902
Project Agreement liability	19,283,096	17,558,506	14,475,318	13,699,825

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

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## 17. Financial risk management:

### (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.

### (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.



# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

## 17. Financial risk management (continued):

### (c) Credit risk (continued):

#### (i) Trade and unbilled trade receivables (continued):

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.

The following table provides information about the exposure to credit risk for trade receivables by aging:

December 31, 2024				
Aging	Gross book balance	Bad debt provision	Proportion of provision	Credit-impaired
Current (not past due)	\$ 3,000,135	\$ -	\$ -	No
1 to 30 days past due	-	-	-	-
31 to 60 days past due	216,010	-	-	No
61 to 90 days past due	-	-	-	-
91 days to 1 year past due	1,035,389	-	-	No
	<b>\$ 4,251,534</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>

December 31, 2023				
Aging	Gross book balance	Bad debt provision	Proportion of provision	Credit-impaired
Current (not past due)	\$ 2,322,251	\$ -	\$ -	No
1 to 30 days past due	2,145,691	-	-	No
31 to 60 days past due	61,847	-	-	No
61 to 90 days past due	-	-	-	-
91 days to 1 year past due	164,306	-	-	No
	<b>\$ 4,694,095</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>

#### (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 cash equivalents, and investments:

Credit risk arising from other financial assets of the Company comprises cash and cash equivalents, 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 risk.

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

## 17. Financial risk management (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 13.

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

	Carrying amount	Contractual cash flow	Less than 1 year	1 - 2 years	2 - 5 years
December 31, 2024	\$ 19,283,096	\$ 22,219,519	\$ 7,353,383	\$ 1,549,506	\$13,316,630
December 31, 2023	14,475,318	16,697,726	6,310,433	1,307,153	9,080,140

### (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 9) by securing some of the debt funding at fixed interest rates until 2032.

# LULU ISLAND ENERGY COMPANY LTD.

Notes to Financial Statements (continued)

Year ended December 31, 2024

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## 18. 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. 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.

## 19. Pension plan:

Lulu Island Energy Company Ltd. 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, 2024, the plan has about 256,000 active members and approximately 129,000 retired members. Active members include approximately 45,000 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 Company paid \$114,138 (2023 - \$105,804) for employer contributions while employees contributed \$105,556 (2023 - \$97,849) to the plan in fiscal 2024.

The next valuation will be as at December 31, 2024.

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: Sewer Heat Recovery  
Central Energy Plan Rendering