City of Richmond

# Report to Committee

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|---|---|---|---|
| **To:** | Finance and Audit Committee | **Date:** | October 15, 2025 |
| **From:** | Jerry Chong, CPA, CA<br>General Manager, Finance and Corporate Services<br>Chief Financial Officer, Lulu Island Energy Company | **File:** | 01-0060-20-LIEC1/2025-Vol 01 |
| **Re:** | **2026 District Energy Utility Rates** | | |

## Staff Recommendations

1. That the Alexandra District Energy Utility Bylaw No. 8641, Amendment Bylaw No. 10705 be introduced and given first, second and third readings;

2. That the Oval Village District Energy Utility Bylaw No. 9134, Amendment Bylaw No. 10706 be introduced and given first, second and third readings; and

3. That the City Centre District Energy Utility Bylaw No. 9895, Amendment Bylaw No. 10707 be introduced and given first, second and third readings.

Jerry Chong, CPA, CA
General Manager, Finance and Corporate Services
Chief Financial Officer, Lulu Island Energy Company
(604-276-4064)

Att. 9

| REPORT CONCURRENCE | | |
|---|---|---|
| **ROUTED TO:** | **CONCURRENCE** | **CONCURRENCE OF DEPUTY CAO** |
| Finance Department<br>Law | ☑<br>☑ | |
| **REVIEWED BY SMT** | **INITIALS:** | **APPROVED BY CAO** |

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## Staff Report

### Origin

The purpose of this report is to recommend the 2026 Alexandra District Energy Utility (ADEU), Oval Village District Energy Utility (OVDEU), and City Centre District Energy Utility (CCDEU) district energy utility rates.

This report supports Council's Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

> *3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.*

This report supports Council's Strategic Plan 2022-2026 Focus Area #5 A Leader in Environmental Sustainability:

> *Leadership in environmental sustainability through innovative, sustainable and proactive solutions that mitigate climate change and other environmental impacts.*
>
> *5.1 Continue to demonstrate leadership in proactive climate action and environmental sustainability.*

Lulu Island Energy Company Ltd. (LIEC), a corporation wholly-owned by the City of Richmond, was established to provide district energy services on behalf of the City. Information regarding LIEC's district energy utility (DEU) operations can be found in Attachment 1. All capital and operating costs are recovered through revenues from user fees, ensuring that the business is financially sustainable. City Council is the regulator and sets customer rates.

### Analysis

LIEC staff have assessed the following factors when developing the 2026 rate recommendation:

- **Financially self-sustainable:** All LIEC service areas were established on the basis that all capital and operating costs would be recovered through revenues from user fees. Expenditures required to provide utility service include capital, operations, utilities, financing, and administration costs. These costs are susceptible to non-discretionary increases due to material and equipment cost increases, rises in electricity and natural gas rates and general inflation. Additionally, as endorsed by Council in 2022, LIEC executed a Project Agreement (PA) with City Centre Energy Limited Partnership (Corix) to design, construct, finance, operate and maintain the CCDEU. As part of the annual planning process, Corix submits a request to LIEC for a rate increase for next year in line with the financial model regularly updated by LIEC and Corix. Following the rate increases as per the long term financial model is critical to ensure the utility's positive financial performance and avoid increasing the capital repayment deferral account balance and/or under-recovering LIEC's operating expenses.

- **Competitive Rate:** Council's objective is to provide end users with annual energy costs that are competitive to conventional system energy costs, based on the same level of service. To date, LIEC's district energy rates have been compared to a Business as Usual (BAU) scenario based on the increase of conventional utilities (i.e. Fortis BC and BC Hydro). Staff recently updated the BAU model to ensure the proposed district energy rates continue to be competitive with conventional energy systems that provide the same level of service and environmental performance.

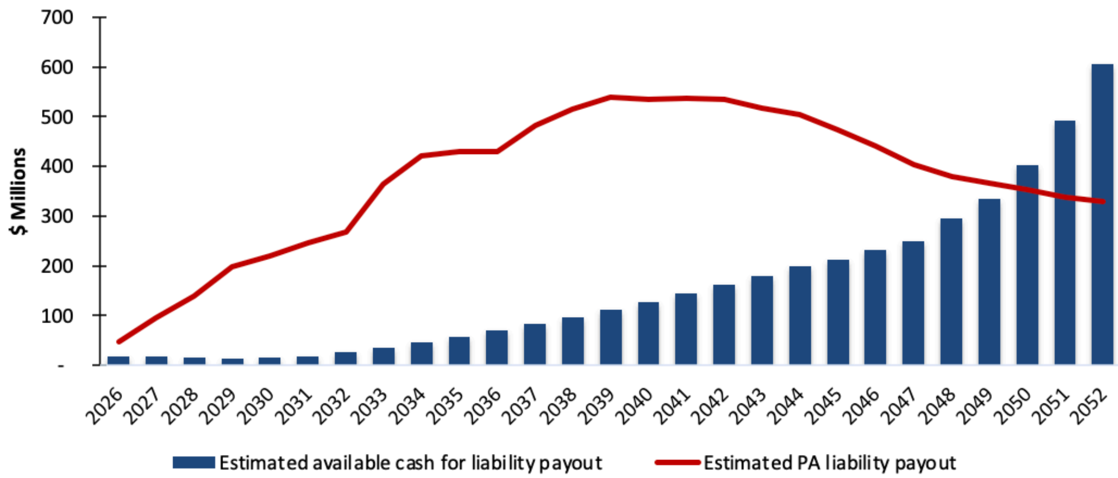
Recommended 2026 Customer Rates

LIEC's systems are still early in their operational life and still require significant capital investments in distribution infrastructure and low carbon energy sources to connect more customers and ensure low carbon objectives are achieved. The construction market experienced a 4% cost increase over the past year. Similarly, BC Hydro rates are expected to increase by 3.75% next year, while natural gas costs are also projected to increase by 2.1% next year due to commodity cost escalation and delivery rate increases. Based on the updated CCDEU financial model, Corix has requested a 5.25% capacity rate increase for next year.

LIEC actively and continually works to assess and evaluate Corix's performance and that of the consulting and contracting companies supporting infrastructure delivery to ensure best value is being achieved. A key example of this work in action is the decision to postpone the construction of the proposed Sewage Heat Recovery Plant to better time the project delivery with future residential development and take advantage of additional value engineering and engagement with the Major Capital Projects Oversight Committee.

In order to provide competitive and stable rates for LIEC customers, rates are levelized to gradually recover costs as the customer base is fully established. This approach ensures infrastructure costs are more equitably distributed between existing customers and those who connect in later years. Based on the most recent LIEC financial model (Attachment 2), customer rates are estimated to increase by 4.0% year-over-year in order to fully recover operating expenses and avoid increasing the capital repayment deferral account balance. This increase is consistent with the historical increase of conventional utilities, making LIEC rates competitive with conventional energy costs, as per City Council's objective. This increase also ensures LIEC will have enough reserve funds available at the end of the Project Agreement to meet future liability obligations. Graph 1 illustrates the relationship between the estimated available reserve funds for liability payouts and confirms that sufficient liquidity will be available to meet future obligations.

Graph 1 – Projected Liability Coverage

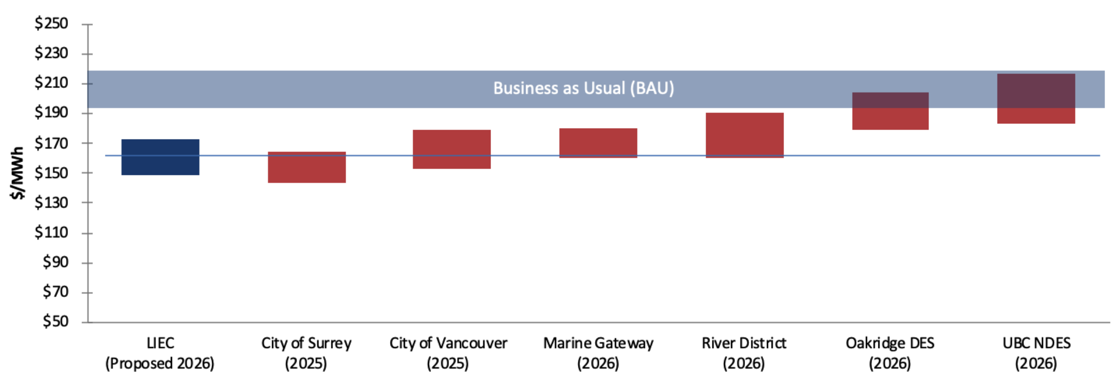



In consideration of these factors, a 4.0% rate increase is recommended for 2026 to ensure all capital and operating costs continue to be recovered in the long term. The recommended increase would also be sufficient to recover the non-discretionary increases due to electricity and natural gas rates and general inflation projected for 2026. The proposed 2026 service rates for the ADEU, OVDEU and CCDEU service areas are included in Attachments 7-9.

Rate Competitiveness

The recommended 4.0% rate increase also supports Council's objective to keep the annual energy costs for LIEC customers competitive with conventional energy costs, based on the same level of service. If the recommended rate increase is approved, LIEC's customers would still be paying 14% less than users using equivalent conventional energy systems in Richmond based on the same level of service. Staff also conducted a benchmarking analysis to confirm LIEC rates are competitive with other district energy utilities in Metro Vancouver (see Graph 2).

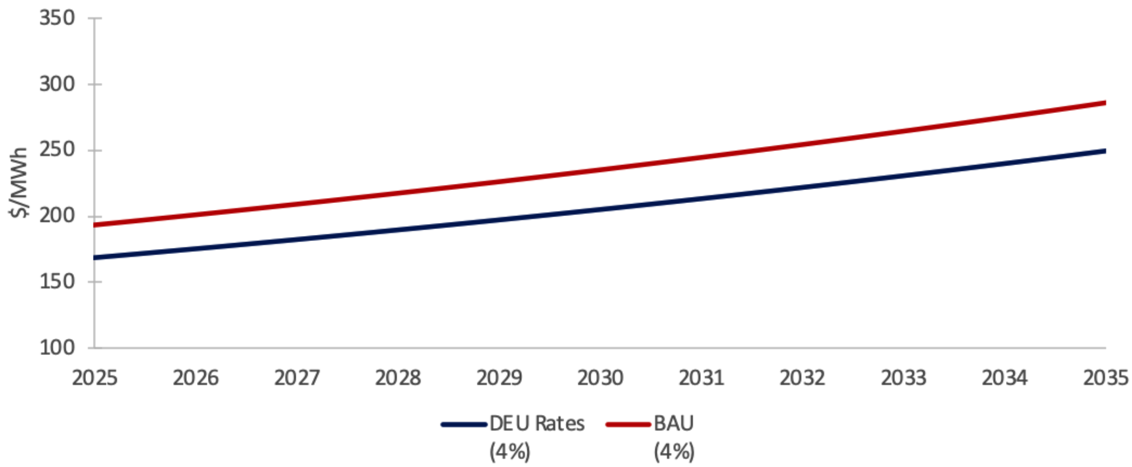
Graph 2 - Metro Vancouver DEU Rates Comparison[1]




The projected 4.0% year-over-year rate increase also ensures customer rates continue to grow at a similar rate to the historical increase of conventional utilities, making rates competitive in the long term (Graph 3).

[1] *Based on reported rates and assuming an EUI range of 70-90 kWh/m2 for heating and domestic hot water and 25 kWh/m2 for cooling*

Graph 3 – Projected DEU Rates vs BAU




The recommended 4.0% rate increase would result in approximately $4.10 per month increase in DEU fees in 2026 for the average LIEC residential customer.

### Financial Impact

None.

### Conclusion

The recommended 4.0% increase for ADEU, OVDEU and CCDEU 2026 service rates supports Council's objective to keep the annual energy costs for LIEC customers competitive with conventional energy costs, based on the same level of service. This rate increase also ensures sufficient revenues to offset the capital investment and operating costs. Staff will continuously monitor energy costs and review the rate to ensure fairness for consumers and cost recovery for LIEC.

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Helen Zhao, CPA
Controller, LIEC
(604-204-8699)

Att. 1: District Energy in Richmond
Att. 2: LIEC Financial Model (September 2025)
Att. 3: DEU Green House Gas (GHG) Emissions Reductions
Att. 4: Alexandra Neighbourhood and ADEU Service Area
Att. 5: Oval Village Neighbourhood and OVDEU Service Area
Att. 6: City Centre and CCDEU Service Area
Att. 7: ADEU Proposed 2026 Rates for Services
Att. 8: OVDEU Proposed 2026 Rates for Services
Att. 9: CCDEU Proposed 2026 Rates for Services

## Attachment 1 – District Energy in Richmond

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.
3. The DEU will provide a flexible platform for adopting low carbon energy technologies.

The City established three DEU service areas: ADEU, OVDEU, 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

| | **Buildings To-Date** | **Residential Units To-Date** | **Floor Area** | |
|---|---|---|---|---|
| | | | **To-Date** | **Build-out** |
| Alexandra DEU | 13 | 2,200 | 2.4M $ft^2$ | 4.4M $ft^2$ |
| Oval Village DEU | 14 | 3,174 | 3.7M $ft^2$ | 6.4M $ft^2$ |
| City Centre DEU | 6 | 2,164 | 2.2M $ft^2$ | 48.0M $ft^2$ |
| **Total** | **33** | **7,538** | **8.3M $ft^2$** | **58.8M $ft^2$** |

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

The OVDEU services 14 buildings, containing 3,174 residential units. Energy is currently supplied from the three interim energy centres with natural gas boilers which provide 16 MW of heating capacity. LIEC received a $6.2 million grant from the CleanBC Communities Fund for the design and construction of the sewer heat recovery technology and a permanent energy centre for the area. This project is in the design stage and is expected to be completed in 2030. Once completed, the system will be able to produce up to 80% of low-carbon energy from the Gilbert Trunk sanitary force main sewer.

The CCDEU currently services six buildings, comprised of 2,164 residential units and approximately 2.2M ft2 of floor area. While offsite energy centres progress through development, CCDEU utilizes on-site low carbon energy plants as a source of energy production. At full build-out, 176 developments, 28,000 residential units and approximately 48M ft2 of floor space will be serviced by 5 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 tonnes of GHG emissions compared to conventional service.

# Attachment 2: LIEC Financial Model (September 2025)

**LIEC Financial Model Summary**

| | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2037 | 2042 | 2047 | 2052 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CCDEU Customer Rate Increase | 5.30% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% |
| ADEU Commercial Rate Increase | 5.30% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% |
| ADEU Residential Rate Increase | 5.30% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% |
| LIEC Payment to SPV | 4.75% | 5.20% | 5.20% | 5.20% | 5.20% | 5.20% | 5.20% | 5.20% | 5.20% | 5.20% | 5.20% | 5.20% |
| **LIEC Overall (ADEU + CCDEU)** | | | | | | | | | | | | |
| Metered Billings | 10,490,537 | 12,435,195 | 14,335,359 | 17,947,978 | 23,524,272 | 29,895,648 | 40,648,557 | 52,751,423 | 78,482,170 | 107,921,731 | 147,641,977 | 183,543,227 |
| Total Revenue | 11,472,023 | 13,416,681 | 15,316,845 | 18,929,464 | 24,505,758 | 30,877,134 | 41,630,043 | 53,732,908 | 79,463,656 | 108,903,217 | 148,623,463 | 184,524,713 |
| Gross Margin | 3,097,789 | 4,117,951 | 5,262,888 | 6,722,212 | 8,633,321 | 8,623,665 | 12,442,771 | 18,076,435 | 29,501,009 | 49,137,337 | 79,700,405 | 118,411,930 |
| Net Income | 214,741 | 1,457,275 | 929,493 | 416,920 | 1,072,095 | 66,913 | 4,228,440 | 9,898,231 | 7,156,570 | 20,604,041 | 47,191,454 | 106,059,578 |
| EBITA | 3,269,167 | 6,561,097 | 7,973,798 | 11,091,034 | 15,829,978 | 20,920,998 | 29,003,082 | 38,053,283 | 56,091,796 | 79,066,532 | 103,789,020 | 147,733,065 |
| Gross Margin % | 27% | 31% | 34% | 36% | 35% | 28% | 30% | 34% | 37% | 45% | 54% | 64% |
| Net Income % | 2% | 11% | 6% | 2% | 4% | 0% | 10% | 18% | 9% | 19% | 32% | 57% |
| Overall EBITA % | 28% | 49% | 52% | 59% | 65% | 68% | 70% | 71% | 71% | 73% | 70% | 80% |

**Estimated Development Timing for Future Connections**

| Square Footage | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2037 | 2042 | 2047 | 2052 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New connections | 5 | 5 | 2 | 7 | 10 | 14 | 24 | 13 | 7 | 3 | 4 | 0 |
| Incremental ADEU (ft2) | - | 58,203 | 179,235 | 304,764 | 316,529 | 125,000 | 125,243 | 125,243 | - | - | - | - |
| Incremental CCDEU (ft2) | 1,251,972 | 323,674 | 804,280 | 1,857,753 | 2,750,715 | 3,075,741 | 5,317,609 | 5,659,076 | 1,512,108 | 332,380 | 1,002,515 | - |
| Total (ft2) | 1,251,972 | 381,877 | 983,516 | 2,162,518 | 3,067,244 | 3,200,741 | 5,442,853 | 5,784,319 | 1,512,108 | 332,380 | 1,002,515 | - |
| Cumulative (ft2) | 8,598,458 | 8,980,335 | 9,963,851 | 12,126,368 | 15,193,612 | 18,394,353 | 23,837,206 | 29,621,525 | 36,399,969 | 41,430,580 | 46,716,775 | 47,709,058 |

**Projected Capital Expenditures for LIEC**

| CCDEU CAPEX | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2037 | 2042 | 2047 | 2052 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual CAPEX | 7,045,747 | 20,767,383 | 45,933,010 | 40,574,898 | 56,136,650 | 19,782,929 | 27,868,350 | 28,322,791 | 54,981,486 | 11,427,223 | 441,449 | 1,251,655 |
| Annual ETS Contribution | 3,004,800 | 2,472,200 | 2,173,784 | 8,010,501 | 5,674,549 | 5,539,029 | 21,580,416 | 14,528,580 | 7,539,827 | 4,145,241 | 6,223,143 | 124,822 |
| Annual LCEP Contribution | 8,442,304 | 8,570,083 | - | - | 14,482,909 | 16,291,876 | 15,163,434 | - | - | - | - | - |
| Annual DCP Contribution | - | - | - | 5,605,128 | 6,595,197 | 9,333,749 | 13,039,521 | 29,624,794 | - | 1,644,904 | 5,851,955 | - |
| CCDEU LIEC In-house | 2,156,000 | 1,227,048 | 1,239,589 | 1,450,256 | 1,692,268 | 2,182,497 | 4,367,695 | 4,329,844 | 1,379,656 | 1,814,557 | 2,053,644 | 1,649,314 |
| | 20,648,851 | 33,036,714 | 49,346,384 | 55,640,783 | 84,581,573 | 53,130,079 | 82,019,417 | 76,806,009 | 63,900,969 | 19,031,924 | 14,570,191 | 3,025,791 |
| | - | - | - | - | - | - | - | - | - | - | - | - |
| Cumulative CCDEU Capital Assets | 61,306,183 | 94,342,897 | 143,689,281 | 199,330,064 | 283,911,637 | 337,041,716 | 419,061,133 | 495,867,143 | 760,978,273 | 902,410,372 | 992,749,242 | 1,062,616,477 |
| Annual ADEU ETS Contribution | - | 650,000 | 750,000 | 1,500,000 | 750,000 | - | 750,000 | - | - | - | - | - |
| ADEU LIEC in-house | 1,100,000 | 1,757,913 | 561,071 | 914,293 | 5,067,579 | 4,670,930 | 174,349 | 177,836 | 196,345 | 216,781 | 239,343 | 264,254 |
| | 1,100,000 | 2,407,913 | 1,311,071 | 2,414,293 | 5,817,579 | 4,670,930 | 924,349 | 177,836 | 196,345 | 216,781 | 239,343 | 264,254 |
| Cumulative ADEU Capital Assets | 29,268,854 | 31,676,767 | 32,987,838 | 35,402,131 | 41,219,709 | 45,890,639 | 46,814,988 | 46,992,824 | 49,436,797 | 50,479,020 | 51,629,718 | 52,900,182 |
| Cumulative LIEC Capital Assets | 90,575,036 | 126,019,664 | 176,677,119 | 234,732,194 | 325,131,346 | 382,932,356 | 465,876,121 | 542,859,966 | 810,415,070 | 952,889,391 | 1,044,378,960 | 1,115,516,659 |

| | | | |
|---|---|---|---|
| The total estimated Project Liability at the end of the contract (YR 2052) | $ | 329 | million |
| The total estimated Capex financed through CCDEU Project Agreement | $ | 606 | million |

**Disclaimer:**

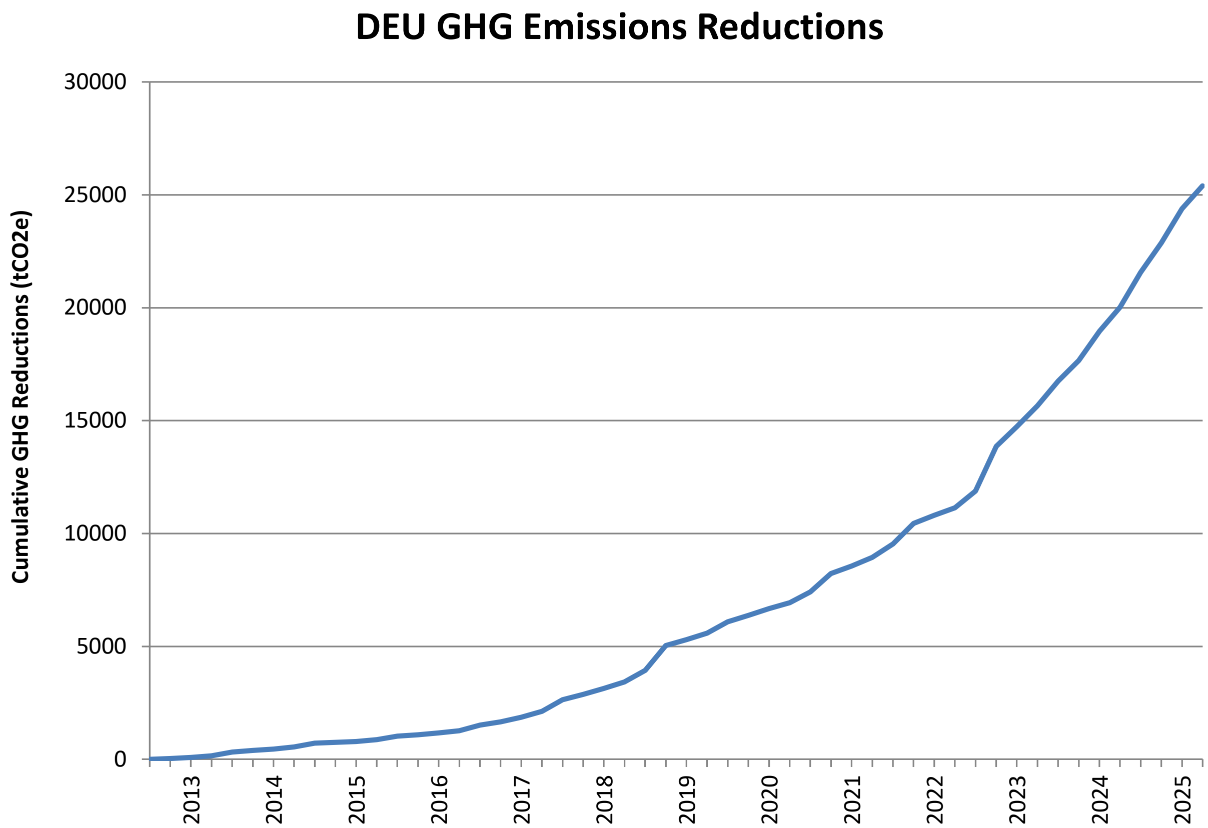
The financial model is based on information, projections, and assumptions available at the time of preparation. It reflects current market conditions, business strategies, and anticipated developments. The model is subject to change as circumstances evolve. Staff will review and update the financial model regularly to ensure its continued relevance and accuracy.

**LIEC - Overall Financial Pro-Formas**

| Project Year | Budget | YR 4 | YR 5 | YR 6 | YR 7 | YR 8 | YR 9 | YR 10 | YR 15 | YR 20 | YR 25 | YR 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2037 | 2042 | 2047 | 2052 |
| **INCOME STATEMENT** | | | | | | | | | | | | |
| Revenue | | | | | | | | | | | | |
| Metered billings - ADEU | 3,011,353 | 3,213,239 | 3,599,713 | 4,199,843 | 4,860,536 | 5,257,311 | 5,678,461 | 6,124,892 | 8,517,004 | 10,362,238 | 12,607,247 | 15,338,643 |
| Metered billings - CCDEU | 7,479,184 | 9,221,956 | 10,735,646 | 13,748,135 | 18,663,736 | 24,638,337 | 34,970,096 | 46,626,530 | 69,965,166 | 97,559,493 | 135,034,730 | 168,204,584 |
| Service fee | 981,486 | 981,486 | 981,486 | 981,486 | 981,486 | 981,486 | 981,486 | 981,486 | 981,486 | 981,486 | 981,486 | 981,486 |
| Total Revenue | 11,472,023 | 13,416,681 | 15,316,845 | 18,929,464 | 24,505,758 | 30,877,134 | 41,630,043 | 53,732,908 | 79,463,656 | 108,903,217 | 148,623,463 | 184,524,713 |
| Expenses | | | | | | | | | | | | |
| Utility expenses - ADEU | 280,000 | 298,804 | 333,473 | 386,982 | 445,852 | 481,506 | 519,336 | 559,422 | 774,425 | 942,207 | 1,146,340 | 1,394,699 |
| Contract expense - ADEU | 726,270 | 755,321 | 785,534 | 816,955 | 849,633 | 883,619 | 1,177,974 | 1,184,224 | 1,256,724 | 1,294,224 | 1,331,724 | 1,369,224 |
| Utility expenses - CCDEU | 2,801,202 | 2,443,932 | 2,566,146 | 3,158,326 | 4,156,840 | 5,289,389 | 6,971,918 | 8,685,489 | 11,805,773 | 14,979,838 | 18,451,438 | 15,572,343 |
| Contract expense - CCDEU | 2,312,975 | 2,588,413 | 2,893,102 | 3,099,477 | 3,719,537 | 4,647,242 | 5,624,870 | 6,468,329 | 9,697,917 | 12,051,339 | 14,217,107 | 12,224,515 |
| Utility expense - DCP | - | - | - | - | 56,015 | 177,334 | 423,426 | 904,715 | 1,110,760 | 1,310,052 | 1,631,999 | 706,915 |
| Contract expense - DCP | - | - | - | - | 104,452 | 330,677 | 993,878 | 2,202,142 | 2,989,239 | 3,659,890 | 5,150,800 | 8,178,085 |
| Depreciation expense | 2,253,787 | 3,212,260 | 3,475,702 | 4,745,512 | 6,540,109 | 10,443,703 | 13,475,869 | 15,652,154 | 22,327,810 | 25,528,330 | 26,993,651 | 26,667,001 |
| General and administration expense | 2,596,029 | 2,752,999 | 2,558,112 | 2,644,568 | 2,764,273 | 2,833,823 | 3,430,610 | 3,613,161 | 4,753,322 | 5,700,892 | 13,486,582 | 6,090,019 |
| Other income | (667,000) | (614,000) | (270,000) | (153,000) | (173,000) | (151,000) | (129,000) | (137,000) | (143,000) | (135,000) | (125,000) | (125,000) |
| Financing Expense | 1,899,000 | 2,141,563 | 3,818,603 | 6,053,602 | 8,342,774 | 10,535,382 | 11,423,773 | 12,627,899 | 26,732,416 | 33,059,161 | 29,728,915 | 15,131,486 |
| Developers contributions | (944,981) | (1,619,886) | (1,773,320) | (2,239,878) | (3,372,821) | (4,661,452) | (6,511,052) | (7,925,856) | (8,998,299) | (10,091,757) | (10,581,547) | (8,744,152) |
| | 11,257,282 | 11,959,406 | 14,387,352 | 18,512,543 | 23,433,662 | 30,810,221 | 37,401,603 | 43,834,678 | 72,307,085 | 88,299,176 | 101,432,009 | 78,465,135 |
| Net Income | 214,741 | 1,457,275 | 929,493 | 416,920 | 1,072,095 | 66,913 | 4,228,440 | 9,898,231 | 7,156,570 | 20,604,041 | 47,191,454 | 106,059,578 |
| Cumulative net income | 12,672,897 | 14,130,171 | 15,059,665 | 15,476,585 | 16,548,680 | 16,615,594 | 20,844,034 | 30,742,265 | 54,982,547 | 119,601,075 | 308,689,558 | 688,431,617 |
| **EBITA** | | | | | | | | | | | | |
| Net income per above | 214,741 | 1,457,275 | 929,493 | 416,920 | 1,072,095 | 66,913 | 4,228,440 | 9,898,231 | 7,156,570 | 20,604,041 | 47,191,454 | 106,059,578 |
| Depreciation expense | 2,253,787 | 3,212,260 | 3,475,702 | 4,745,512 | 6,540,109 | 10,443,703 | 13,475,869 | 15,652,154 | 22,327,810 | 25,528,330 | 26,993,651 | 26,667,001 |
| Financing Expense | 800,639 | 1,891,563 | 3,568,603 | 5,928,602 | 8,217,774 | 10,410,382 | 11,298,773 | 12,502,899 | 26,607,416 | 32,934,161 | 29,603,915 | 15,006,486 |
| EBITA | 3,269,167 | 6,561,097 | 7,973,798 | 11,091,034 | 15,829,978 | 20,920,998 | 29,003,082 | 38,053,283 | 56,091,796 | 79,066,532 | 103,789,020 | 147,733,065 |
| **CASH FLOW STATEMENT** | | | | | | | | | | | | |
| Cash inflow from revenue | 11,472,023 | 13,416,681 | 15,316,845 | 18,929,464 | 24,505,758 | 30,877,134 | 41,630,043 | 53,732,908 | 79,463,656 | 108,903,217 | 148,623,463 | 184,524,713 |
| Less: ADEU utility | (280,000) | (298,804) | (333,473) | (386,982) | (445,852) | (481,506) | (519,336) | (559,422) | (774,425) | (942,207) | (1,146,340) | (1,394,699) |
| Less: ADEU contract | (726,270) | (755,321) | (785,534) | (816,955) | (849,633) | (883,619) | (1,177,974) | (1,184,224) | (1,256,724) | (1,294,224) | (1,331,724) | (1,369,224) |
| Less: Payment to SPV | (6,794,330) | (7,367,133) | (8,270,180) | (10,694,072) | (14,535,360) | (19,071,555) | (26,714,958) | (35,445,040) | (54,446,485) | (78,078,630) | (111,078,998) | (56,874,877) |
| Less: LIEC Management and Overhead | (1,004,414) | (1,170,202) | (1,545,322) | (1,702,848) | (1,748,338) | (1,775,469) | (1,836,801) | (1,867,896) | (2,076,888) | (2,282,209) | (2,543,146) | (2,820,154) |
| Less: Utility - DCP | - | - | - | - | (56,015) | (177,334) | (423,426) | (904,715) | (1,110,760) | (1,310,052) | (1,631,999) | (706,915) |
| Less: Contract expense - DCP | - | - | - | - | (104,452) | (330,677) | (993,878) | (2,202,142) | (2,989,239) | (3,659,890) | (5,150,800) | (8,178,085) |
| | (8,805,015) | (9,591,460) | (10,934,508) | (13,600,856) | (17,739,649) | (22,720,160) | (31,666,374) | (42,163,439) | (62,654,520) | (87,567,211) | (122,883,006) | (71,343,954) |
| **Net cash flow from operations** | 2,667,008 | 3,825,220 | 4,382,337 | 5,328,607 | 6,766,108 | 8,156,974 | 9,963,669 | 11,569,470 | 16,809,136 | 21,336,005 | 25,740,456 | 113,180,759 |
| Less: LIEC Financed Capital Projects | (3,256,000) | (2,984,961) | (1,800,661) | (2,364,549) | (6,759,847) | (6,853,427) | (4,542,044) | (4,507,680) | (1,576,001) | (2,031,338) | (2,292,987) | (1,913,569) |
| Less: Contributions | (3,004,800) | (3,122,200) | (2,923,784) | (9,510,501) | (6,424,549) | (5,539,029) | (22,330,416) | (14,528,580) | (7,539,827) | (4,145,241) | (6,223,143) | (124,822) |
| Add: Developers contributions | 3,004,800 | 3,122,200 | 2,923,784 | 9,510,501 | 6,424,549 | 5,539,029 | 22,330,416 | 14,528,580 | 7,539,827 | 4,145,241 | 6,223,143 | 124,822 |
| Annual Cash Flow | (588,992) | 840,259 | 2,581,676 | 2,964,059 | 6,261 | 1,303,547 | 5,421,625 | 7,061,790 | 15,233,135 | 19,304,667 | 23,447,469 | 111,267,190 |
| Cumulative cash flow | 23,724,102 | 24,564,361 | 27,146,037 | 30,110,096 | 30,116,358 | 31,419,905 | 36,841,530 | 43,903,320 | 108,408,032 | 196,329,863 | 299,611,732 | 637,764,967 |
| Cumulative cash flow | 23,724,102 | 24,564,361 | 27,146,037 | 30,110,096 | 30,116,358 | 31,419,905 | 36,841,530 | 43,903,320 | 108,408,032 | 196,329,863 | 299,611,732 | 637,764,967 |
| Revenue lag | (3,441,607) | (2,683,336) | (3,063,369) | (3,785,893) | (4,901,152) | (2,470,171) | (3,330,403) | (4,298,633) | (6,357,092) | (8,712,257) | (11,889,877) | (14,761,977) |
| Estimated year-end cash balance | 20,282,495 | 21,881,025 | 24,082,668 | 26,324,203 | 25,215,206 | 28,949,734 | 33,511,126 | 39,604,687 | 102,050,939 | 187,617,606 | 287,721,855 | 623,002,990 |
| Working capital | (2,397,865) | (2,733,627) | (3,400,214) | (4,434,912) | (5,680,040) | (7,916,593) | (10,540,860) | (11,437,037) | (16,565,391) | (23,754,772) | (27,805,233) | (17,835,988) |
| Capital projects | (2,984,961) | (1,800,661) | (2,364,549) | (6,759,847) | (6,853,427) | (4,542,044) | (4,507,680) | (1,501,674) | (1,595,521) | (2,561,644) | (11,325,436) | (1,913,569) |
| Estimated available cash for liability payout | 14,899,669 | 17,346,737 | 18,317,906 | 15,129,444 | 12,681,739 | 16,491,096 | 18,462,587 | 26,665,975 | 83,890,027 | 161,301,190 | 248,591,186 | 603,253,433 |
| Estimated PA liability payout | 26,590,663 | 48,133,618 | 95,817,089 | 138,798,041 | 197,461,416 | 219,552,155 | 246,190,918 | 268,458,650 | 481,834,246 | 534,010,083 | 403,455,123 | 328,572,137 |

**Disclaimer:**
The financial model is based on information, projections, and assumptions available at the time of preparation. It reflects current market conditions, business strategies, and anticipated developments. The model is subject to change as circumstances evolve. Staff will review and update the financial model regularly to ensure its continued relevance and accuracy.

**Attachment 3 – DEU Green House Gas (GHG) Emissions Reductions**

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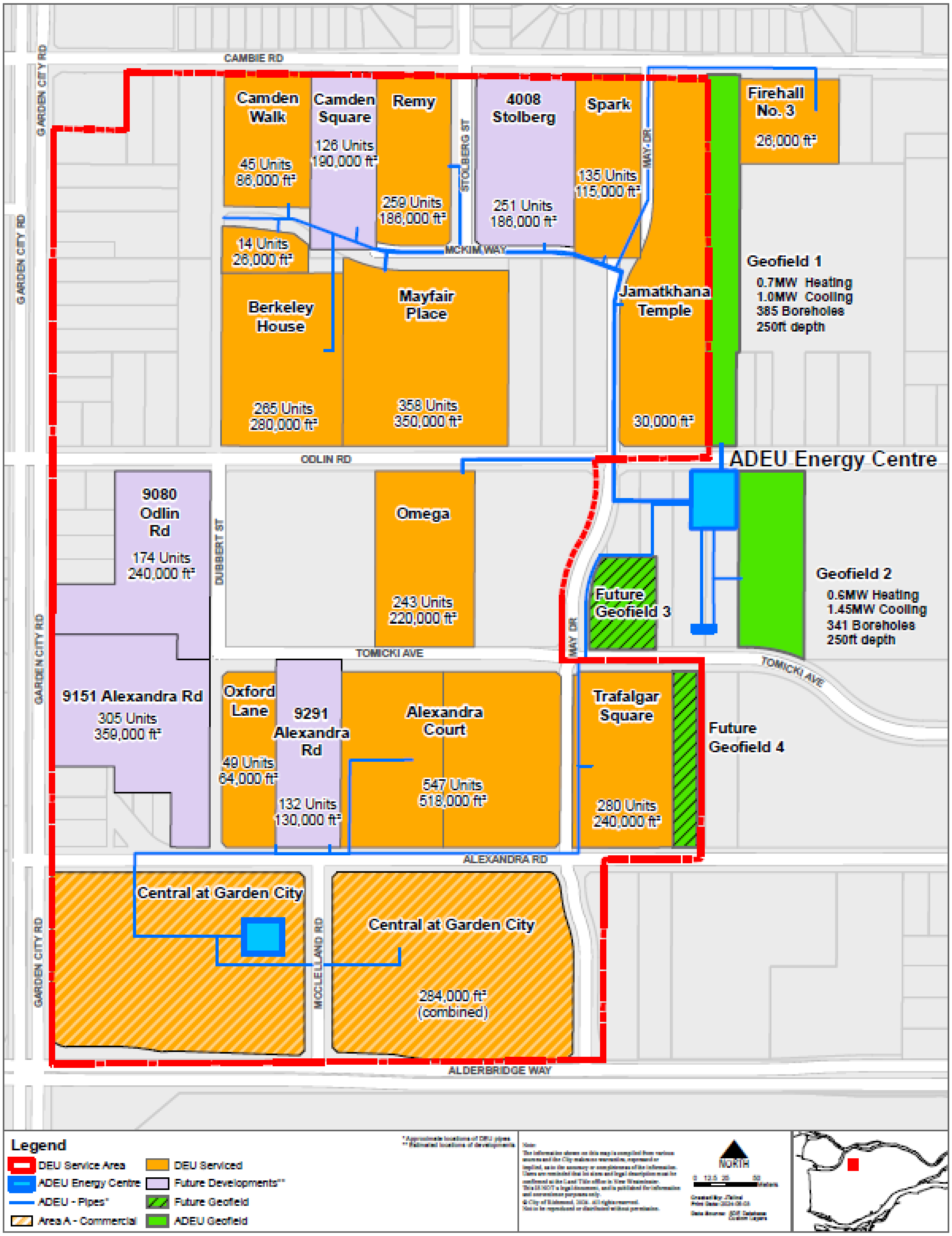
## Attachment 4 – Alexandra Neighbourhood and ADEU Service Area

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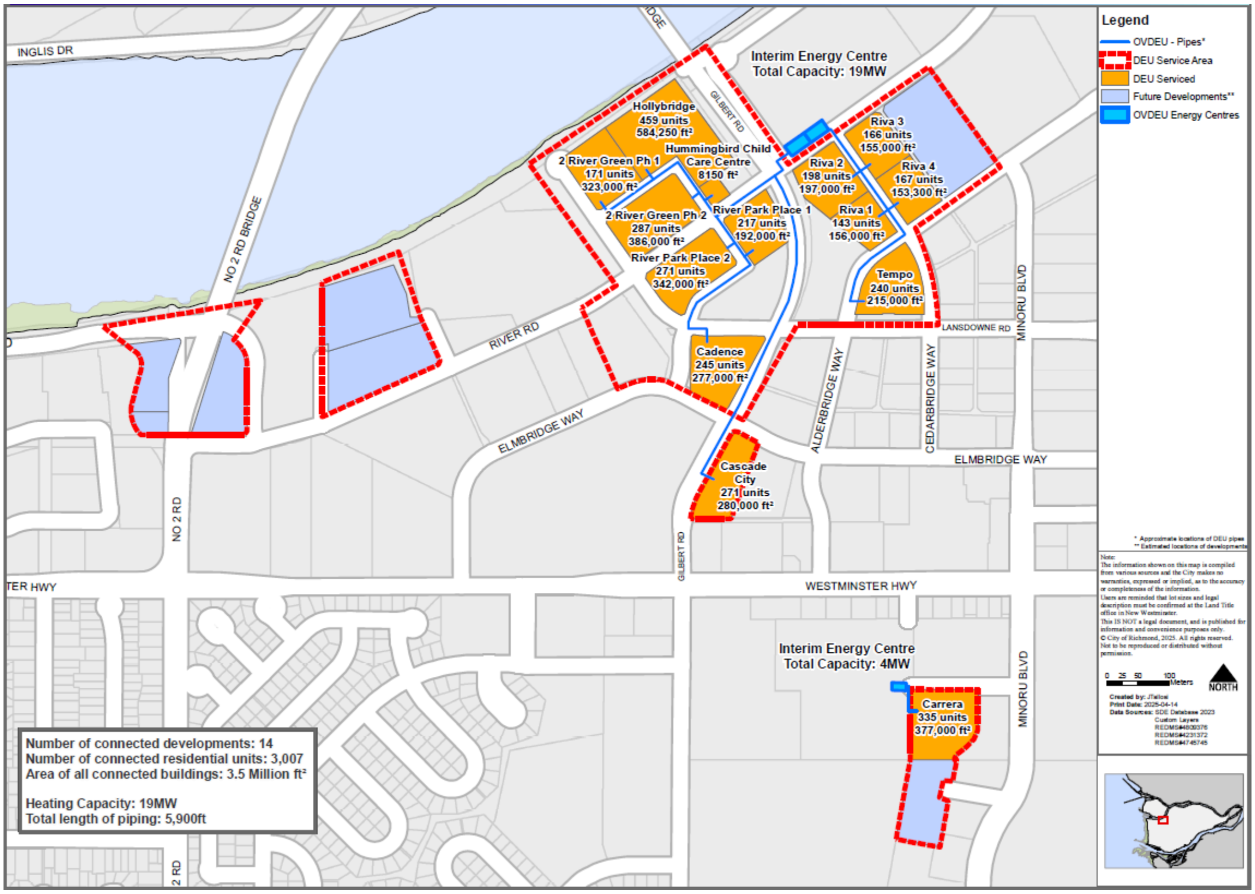
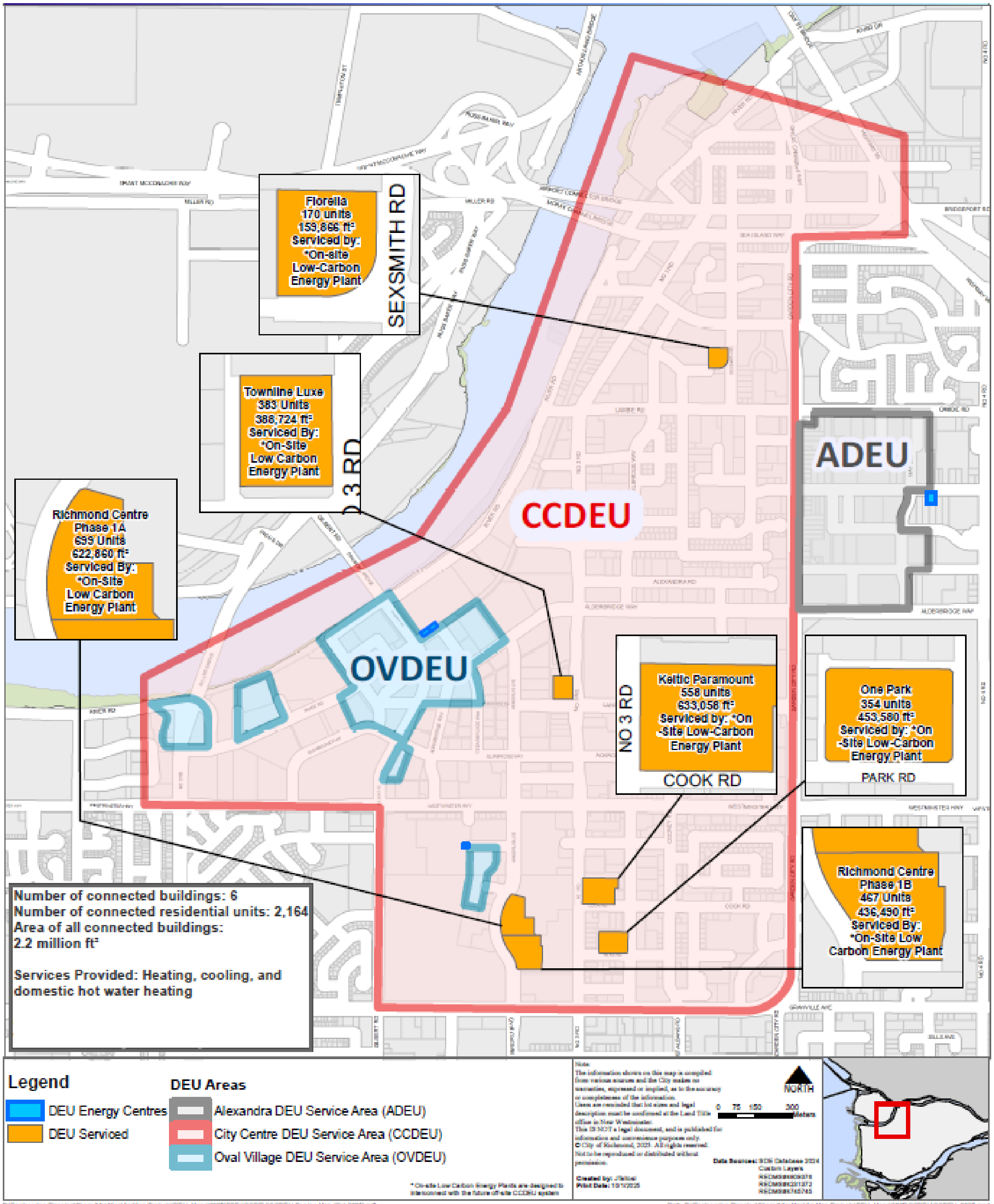
## Attachment 5 – Oval Village Neighbourhood and OVDEU Service Area



## Attachment 6 – City Centre and CCDEU Service Area

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**Attachment 7 – ADEU Proposed 2026 Rates for Services**

**Table 1: Proposed Rates for Services, excluding commercial area (Area A)**

| | ADEU | |
|---|---|---|
| | **2025** | **2026** |
| **Capacity Charge One:** Monthly charge per square foot of the building gross floor area | $0.1017 | $0.1058 |
| **Volumetric Charge:** Charge per megawatt hour of energy consumed by the building | $25.727 | $26.756 |
| **Excess Demand Fee -** for each watt per square foot of each of the estimated peak heat energy demand and the estimated peak cooling demand that exceeds 6 W/ft2 | $0.2067 | $0.2150 |

**Table 2: Proposed Rates for Services, commercial area (Area A)**

| | Area A | |
|---|---|---|
| | **2025** | **2026** |
| **Volumetric Charge:** Charge per megawatt hour of energy consumed | $99.861 | $103.855 |

**Attachment 8 – OVDEU Proposed 2026 Rates for Services**

**OVDEU**

| | **2025** | **2026** |
|---|---|---|
| **Capacity Charge One:** Monthly charge per square foot of the building gross floor area | $0.0711 | $0.0739 |
| **Volumetric Charge:** Charge per megawatt hour of energy consumed by the building | $43.765 | $45.516 |
| **Excess Demand Fee -** for each watt per square foot of the aggregate of the estimated peak heat energy demand that exceeds 6 W/ft2 | $0.2067 | $0.2150 |

**Attachment 9 – CCDEU Proposed 2026 Rates for Services**

**CCDEU**

| | **2025** | **2026** |
|---|---|---|
| **Capacity Charge One:** Monthly charge per square foot of the building gross floor area | $0.0829 | $0.0862 |
| **Volumetric Charge:** Charge per megawatt hour of energy consumed by the building | $50.942 | $52.980 |
| **Excess Demand Fee -** for each watt per square foot of each of the estimated peak heat energy demand and the estimated peak cooling demand that exceeds 6 W/ft2 | $0.2067 | $0.2150 |

# Alexandra District Energy Utility Bylaw No. 8641 Amendment Bylaw No. 10705

The Council of the City of Richmond enacts as follows:

1. The Alexandra District Energy Utility Bylaw No. 8641, as amended, is further amended by deleting Schedule C (Rates and Charges) in its entirety and replacing it with a new Schedule C attached as Schedule A to this Bylaw.

2. This Bylaw is cited as **"Alexandra District Energy Utility Bylaw No. 8641, Amendment Bylaw No. 10705"**

FIRST READING ____________________

SECOND READING ____________________

THIRD READING ____________________

ADOPTED ____________________

| CITY OF RICHMOND |
|---|
| APPROVED for content by originating dept. CR |
| APPROVED for legality by Solicitor BRB |

____________________ MAYOR

____________________ CORPORATE OFFICER

**Schedule A to Bylaw No. 10705**

***SCHEDULE C to BYLAW NO. 8641***

***Rates and Charges***

***PART 1 - RATES FOR SERVICES***

*The following charges, as amended from time to time, will constitute the Rates for Services for the Service Area excluding shaded Area A as shown in Schedule A to this Bylaw:*

*(a) Capacity charge – a monthly charge of $0.1058 per square foot of Gross Floor Area; and*
*(b) Volumetric charge – a charge of $26.756 per megawatt hour of Energy returned from the Energy Transfer Station at the Designated Property.*

**PART 2 - EXCESS DEMAND FEE**

Excess demand fee of $0.2150 for each watt per square foot of each of the estimated peak heat energy demand and estimated cooling demand referred to in section 21.1(e)(i), 21.1(e)(ii), and 21.1(e)(iii) that exceeds 6 watts per square foot.

***PART 3 - RATES FOR SERVICES APPLICABLE TO AREA A***

*The following charges will constitute the Rates for Services applicable only to the Designated Properties identified within the shaded area (Area A) shown in Schedule A to this bylaw:*

*(a) Volumetric charge – a charge of $103.855 per megawatt hour of Energy returned from the Energy Transfer Station at the Designated Property calculated on each of (i) an energy use of 2644 MWh per annum (“Basic Supply Amount”), and (ii) any energy use in excess of the Basic Supply Amount.*

City of Richmond

**Bylaw 10706**

## Oval Village District Energy Utility Bylaw No. 9134 Amendment Bylaw No. 10706

The Council of the City of Richmond enacts as follows:

1. The Oval Village District Energy Utility Bylaw No. 9134, as amended, is further amended by deleting Schedule D (Rates and Charges) of the Bylaw in its entirety and replacing it with a new Schedule D as attached as Schedule A to this Bylaw.

2. This Bylaw is cited as **"Oval Village District Energy Utility Bylaw No. 9134, Amendment Bylaw No. 10706".**

| | | |
|---|---|---|
| FIRST READING | ______________________ | CITY OF RICHMOND |
| SECOND READING | ______________________ | APPROVED for content by originating dept. CR |
| THIRD READING | ______________________ | |
| ADOPTED | ______________________ | APPROVED for legality by Solicitor BRB |

______________________ MAYOR

______________________ CORPORATE OFFICER

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**Schedule A to Bylaw No. 10706**

## SCHEDULE D

### Rates and Charges

**PART 1 - RATES FOR SERVICES**

The following charges, as amended from time to time, will constitute the Rates for Services:

(a) capacity charge - a monthly charge of $0.0739 per square foot of gross floor area; and

(b) volumetric charge – a monthly charge of $45.516 per megawatt hour of Energy returned from the Energy Transfer Station at the Designated Property.

**PART 2 - EXCESS DEMAND FEE**

Excess demand fee of $0.2150 for each watt per square foot of the aggregate of the estimated peak heat energy demand referred to in section 19.1(e) (i), (ii), and (iii) that exceeds 6 watts per square foot.

# City Centre District Energy Utility Bylaw No. 9895 Amendment Bylaw No. 10707

The Council of the City of Richmond enacts as follows:

1. City Centre District Energy Utility Bylaw No. 9895, as amended, is further amended by deleting Schedule D (Rates and Charges) in its entirety and replacing it with a new Schedule D as attached as Schedule A to this Bylaw.

2. This Bylaw is cited as **"City Centre District Energy Utility Bylaw No. 9895, Amendment Bylaw No. 10707".**

FIRST READING ____________________

SECOND READING ____________________

THIRD READING ____________________

ADOPTED ____________________

| CITY OF RICHMOND |
| --- |
| APPROVED for content by originating dept. CR |
| APPROVED for legality by Solicitor BRB |

____________________ MAYOR

____________________ CORPORATE OFFICER

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**Schedule A to Bylaw No. 10707**

**SCHEDULE D**

**Rates and Charges**

**PART 1 - RATES FOR SERVICES**

The following charges, as amended from time to time, will constitute the Rates for Services:

(a) capacity charge - a monthly charge of $0.0862 per square foot of gross floor area; and
(b) volumetric charge – a monthly charge of $52.980 per megawatt hour of Energy returned from the Energy Transfer Station at the Designated Property.

**PART 2 - EXCESS DEMAND FEE**

Excess demand fee of $0.2150 for each watt per square foot of each of the estimated peak heat energy demand and estimated cooling demand referred to in section 19.1(f) (i), 19.1(f) (ii) and 19.1(f) (iii) that exceeds 6 watts per square foot.