Attachment 4

Downtown District Energy

Edmonton

2025 - 2026 Rate Filing Attachment 4 - IIS02765

edmonton.ca/DistrictEnergy

June 23, 2025 - Utility Committee | IIS02765

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1.0 Executive Summary

The Downtown District Energy Initiative (DDEI) supports Edmonton's Community Energy Transition Strategy by reducing greenhouse gas emissions and building energy resilience measures. The District Energy Strategy was developed in response to the City of Edmonton's Community Energy Transition Strategy, where the DDEI is identified as a key component. If all DDEI Phases are completed, the system will expand to connect approximately 50 buildings.

With the anticipated start of the Utility to be Q3 2025, this first rate filing incorporates two years of information for Phase 1 of the Initiative. The information presented in the Downtown District Energy 2025-2026 Rate Filing was compiled with 2025 as a partial year and 2026 being the first full year of operations.

The 2025-2026 utility rate filing summarizes the forecast operating and capital expenses required to establish and commence utility operations, to the end of 2026. The revenue requirement to support the establishment of regulated customer utility rates is also established in this rate filing. The financial information presented in this document was prepared through forecasts and methodology based on recommendations from two consulting firms that are experts in the district energy industry.

2025 Fees and Charges		2026 Fees and Charges				
Description of Fee or Charge Rate		Description of Fee or Charge	Rate			
Monthly Charge	\$7.92 per kW peak capacity per month	Monthly Charge	\$8.08 per kW peak capacity per month			
Variable Rate (Heat Energy Only)	\$0.0294 per kWh	Variable Rate (Heat Energy Only)	\$0.0300 per kWh			

Proposed initial regulated customer utility rates are as follows:

2.0 Introduction

The City of Edmonton, in partnership with EPCOR, is nearing completion of Phase 1 of the Downtown District Energy Initiative (DDEI). If all DDEI Phases are completed, the system will expand to connect approximately 50 buildings. The DDEI is a key action in the City's Community Energy Transition Strategy, and a priority opportunity in the District Energy Strategy.

Prior to the City leading the project, the DDEI was explored by various parties, including Edmonton Power in the 1990s and ENMAX starting in 2012. Throughout the initiative's iterations, City Council has provided direction at key decision points:

- **2012-2014:** District Energy project was initially contemplated for the Boyle Renaissance projects and other developments in the Quarters. A quadruple bottom-line assessment was completed.
- **2015-2016:** Council directed Administration to work with ENMAX and EPCOR on a downtown district energy system.
- **2017-2018:** Conceptual design was completed. ENMAX developed letters of intent with Winspear and EPCOR. City Council approved funding for detailed design.
- **October 2019**: Administration updated Council on the DDEI, which at the time was led by ENMAX, who informed the City it could no longer own the Downtown District Energy System following the Alberta Utilities Commission's decision to deny regulatory exemption. Council passed a motion to explore self-liquidating funding and public-private partnership options for a City-owned model.
- **April 2020**: Administration recommended a scaled-down approach under City ownership, with the central district energy located at Winspear Centre. City Council passed motions for Administration to bring forward an unfunded capital profile for the energy centre and to continue working with EPCOR or other potential private utility partners on future expansions.
- **May 2020**: City Council approved \$27.9 million for the first phase of the DDEI within the 2019-2022 Capital Budget. This was funded through capital profile 20-83-9001 (Downtown District Energy Initiative) primarily through tax supported debt and Pay-As-You-Go.
- **February 2021**: City Council approved the definitive agreements (design, build, operate, maintain and finance) between the City and EPCOR for the DDEI. They also directed Administration to develop a strategy to address any incremental operating funding shortfalls.
- **June 2022**: Administration and EPCOR jointly recommended moving forward with a heating-only system for Phase 1, and Executive Committee approved a contract amendment to accommodate the change from combined heating and power to heating only.
- **July 2023**: City Council approved a capital budget adjustment to capital profile 20-83-9001 (Downtown District Energy Initiative), for total funding of \$35.9 million, to accommodate the scope change. The additional funds were

transferred from capital profile CM-83-0001 (District Energy Network Strategy and District Energy Nodes) which is funded through tax supported debt. Administration indicated more detailed economic analysis was needed to further detail the opportunity and pathway to support growing the DDEI.

3.0 Current Situation

In 2022, EPCOR and the City completed a high-level feasibility study which included an assessment of a district energy system that could provide low-carbon thermal energy to buildings in downtown Edmonton to enable building decarbonization. The feasibility study identified approximately 50 buildings and two new developments (Station Lands and Village at ICE District) for phased connection to the district energy system.

Phase 1 is the foundation of the district energy utility and was designed to serve additional buildings, integrating low-carbon generating capacity. As noted in IIS01386 - DDEI Project Update, expansion of the downtown district energy system "is required to achieve the project objectives." This rate file is presented as an attachment to the business case, which the Administration is presenting along with a bylaw and fiscal policy to establish the DDE Utility.

As indicated in the June 2023 report to the Executive Committee (IIS01386), to achieve the original GHG reductions required to meet the City's current climate targets in a financially sustainable manner, expansion of the system beyond Phase 1 will be required. Careful consideration will need to be given to balance environmental and GHG reduction goals with costs of expansion. A phased approach to the development and implementation has been outlined for the DDEI in the business case to achieve maximum GHG reduction.

The approved capital profile 20-83-9001 Downtown District Energy Initiative includes construction of the energy centre structure, energy centre mechanical / electrical, distribution piping system and the energy transfer station for Phase 1. The capital profile was approved for \$35.9 million and is funded by a combination of tax supported debt and pay-as-you-go funding. Phase 1 construction is anticipated to be complete in Q3 of 2025, when it will start to provide heating services to the Winspear Centre, Century Place and Chancery Hall. The City and EPCOR, through a design, build, finance, operate and maintain agreement, are delivering Phase 1 of the DDEI.

Preliminary capital work on Phase 1A and conceptual design studies for Phase 2 are also proposed to commence towards the end of 2025 and through 2026. Phase 1A is currently proposed to include connections to City Hall, the Citadel Theatre, and Stanley Milner Library and provide three more buildings to establish DDEI's anchor load of utility customers.

4.0 Methodology & Key Assumptions

UTILITY FISCAL POLICY

The Downtown District Energy Proposed Fiscal Policy C631 is scheduled to be presented to Utility Committee on June 23, 2025 and City Council on July 2, 2025 in FCS02853 Downtown District Energy Fiscal Policy. The 2025-2026 Downtown District Energy Rate Filing is prepared to be in compliance with the proposed policy.

The proposed policy (Attachment 1 of report FCS02853), is being established to ensure:

- 1. The Utility is operated in a manner that reflects City Council's overall vision and philosophical objectives for the Utility.
- 2. There is a consistent approach year over year for the financial planning, budgeting and rate setting for the City managed Utility.
- 3. That the Utility is financially sustainable over the long term.

Similar to private utilities, the Utility will account for the cost of service under a full cost accounting approach. Regulated utility customer rates will be based on cost of service considering the impact of "Business As Usual" (BAU) costs. The BAU calculation is based on estimated avoided costs on energy utility bills, annual boiler equipment maintenance costs and capital renewal costs.

BUSINESS AS USUAL

The Business As Usual (BAU) method for calculating rates is based on an average building's estimated avoided costs for energy utility bills (heating), annual boiler equipment maintenance costs and capital renewal costs. This methodology is common with district energy systems where the connection to the energy system results in these costs being avoided by individual building owners. In general, if DDEI is financing all costs of providing utility service, BAU provides an upper limit for how much the Utility is able to charge utility customers compared to actual cost of providing the utility services.

In this rate filing, BAU utility rates have been proposed to balance the priorities of the DDEI system to ensure utility rates are reflective of an average utility customer's estimated costs. Connecting to the Utility is more attractive from a financial and environmental perspective, and BAU rates provide the Utility with a revenue stream that better supports short-term financial requirements and long-term financial sustainability (including future capital renewal).

5.0 Proposed Utility Rates

The prescribed fees and charges as identified in IIS02583 Bylaw 20914 - Downtown District Energy Utility (Schedule B) are proposed to be effective for 2025 upon completion of the third reading of the bylaw and the proposed 2026 rates will come into effect on January 1, 2026. There is only one rate class for the first three buildings to be connected, Winspear Centre, Century Place and Chancery Place. Additional rate classes will be considered based on future customer composition.

There are currently two fees and charges proposed for DDEI's customers. There will be a monthly charge per kW peak capacity per month and a variable rate for heat energy based on consumption per kWh. The capital assets for Phase 1 are funded by the City of Edmonton primarily through tax-supported debt and are considered to be contributed to the utility, which is not eligible to be part of the revenue requirement calculation.

2025 Fees and Charges		2026 Fees and Charges				
Description of Fee or Charge Rate		Description of Fee or Charge	Rate			
Monthly Charge	\$7.92 per kW peak capacity per month	Monthly Charge	\$8.08 per kW peak capacity per month			
Variable Rate (Heat Energy Only)	\$0.0294 per kWh	Variable Rate (Heat Energy Only)	\$0.0300 per kWh			

Table 1: 2025-2026 Downtown District Energy Proposed Fees and Charges

The DDEI is anticipated to begin operations of Phase 1 in Q3 of 2025, the proposed rates and charges for the partial year plus 2026 were combined for the 2025-2026 Rate Filing. This ensures customers have consistent rates for the short operating year in 2025 and the first full year of operations in 2026. In future, the fees and charges will be proposed to the City Council as part of the annual rate filing process starting with the 2027 rates in Q3 2026.

Administration engaged two consulting firms that are industry experts to jointly develop a rate structure based on a jurisdictional scan and comparison to other district energy systems to determine appropriate starting utility rates. From this work, the recommendation was to base monthly rates on an average building's estimated avoided annual maintenance costs and reserve cost to cover cost of replacing heating equipment in future, or Business As Usual (BAU), as this is a common practice for establishing monthly rates in the district energy industry. The variable rate was developed by gathering information on DDEI's forecast fuel costs which was converted to a rate per kWh. Phase 1's main source of fuel is natural gas which is a lower cost energy source and only results in a marginal GHG reduction as compared to other potential energy sources. These rates were adjusted for a 2 per

cent inflation estimate in 2026. The forecast revenue based on these rates aligns with the proposed operating budget (FCS02765 Downtown District Energy Initiative Attachment 1).

Administration will continually assess the rate structure and customer utility rates when bringing forward future utility rate filings to determine if they are still appropriate to support long-term financial sustainability and customer equity. As more types of customers express interest in connecting to DDEI, additional rate classes may be established in the future. Potential new utility customers in the future, after the anchor load has been established, will need to be supported by detailed engineering, financial, and economic review to determine the financial viability of connection based on their unique circumstances.

UTILITY RATES BASED ON BAU VS. COST OF SERVICE

As the City of Edmonton has provided tax-supported funding to support the DDEI through Phase 1 construction, utility rates based on cost of service would be lower than BAU. Administration has chosen to establish utility rates based on BAU to ensure long-term financial sustainability for the Utility and ensure that funding is available to support the renewal of capital in future years. Implementing utility rates based on cost of service would not achieve this as the Utility would be essentially only breaking even every year.

As well, the DDEI is a municipally owned Utility, with Phase 1 and 1A representing the anchor loads to establish and promote District Energy as a viable option for thermal energy utility services in Downtown Edmonton. While scenarios with higher forecasted GHG reductions are not currently forecasted as being economically viable without additional financial support (per IIS02765 Downtown District Energy Initiative), the recommended option for Phase 1 and 1A provides the foundation for a financially sustainable District Energy system. In the future, expansions may be possible where greater GHG reduction technologies would be implemented, if economically viable or financially supported by City Council, to support the City of Edmonton's long-term vision of net zero emissions for City buildings by 2040 and for the entire community by 2050.

6.0 Long-Term Financial Sustainability

Based on current forecasted costs and a no-decarbonization build (natural gas as an energy source), Phase 1 is forecasted to return a positive net present value (NPV) and be financially sustainable in the long term. More detailed analysis will be prepared as future expansion decisions are required.

Per Table 2 below, Phase 1 is anticipated to have an NPV of \$2.7 million over the 30-year financial model forecast.

Description	Capital Investment	Annual Operating Costs	Annual Rate Revenue	NPV
	Total	Average	Average	30 Year
Install electric boiler but only operate natural gas	35.9	1.1	1.4	2.7

Table 2: NPV Forecast Analysis - Phase 1 Only (in \$millions)

Annual operating costs do not include debt servicing costs as capital expenditures are funded primarily through tax-supported debt. The Utility is using funding from the City of Edmonton to pay for Phase 1 capital expenditures and the cost of debt servicing remains with the City of Edmonton. This allows for the anchor customer base to be established in a financially sustainable manner from a utility perspective. Further information on the financial sustainability of Phase 1 is included in the Net Income and Cash Position financial indicators sections below.

As the 2025-2026 rate filing includes preliminary capital expenditures for Phase 1A work along with Phase 2 conceptual design studies, Table 3 below highlights the financial impact of the inclusion of Phase 1A in its entirety for context. Phase 1A is also proposed to follow the path towards a no-decarbonization build with capital expenditures supported by tax-supported debt.

Description	Capital Investment	Annual Operating Costs	Annual Rate Revenue	NPV
	Total	Average	Average	30 Year
Install electric boiler but only operate natural gas	51.0	1.9	2.4	4.0

As shown in Table 3 above, the inclusion of Phase 1A is forecast to increase the NPV to \$4 million as the connection of additional utility customers further increases the positive return to the Utility as well as continues to support long-term financial sustainability. At critical decision points in the future, Administration will provide updated information, as available, to City Council along with updated business

cases, to support future capital expansion investment decisions.

FINANCIAL INDICATORS

The Downtown District Energy Utility Fiscal Policy C631 establishes Financial Indicators to be interpreted collectively to appropriately assess the Utility's long-term financial sustainability. Higher or lower results may be desired on a short-term basis to balance guiding principles and utility rate setting principles with long-term financial sustainability.

<u>Net Income</u>

The Net Income Financial Indicator has two principles to support the monitoring of performance in the fiscal policy:

- 1. The Utility is to generate sufficient revenue to cover annual operating costs, including debt repayment, generally resulting in a positive net income to ensure sufficient retained earnings to support capital growth and renewal.
- 2. Where net income is not sufficient to ensure long-term financial sustainability, external funding may need to be considered (i.e. tax levy support, grant funding, etc.).

Table 4 highlights forecasted net income over the next 30 years (Phase 1 only).

 Table 4: Net Income - Financial Indicator (Phase 1 Only)



Table 4 highlights that positive net income is achieved starting in 2026, the year after commencement of operations in Q3 2025, and continues to be positive into the future to the end of the 30-year financial model.

Cash Position

The Cash Position Financial Indicator has several principles to support the monitoring of performance in the fiscal policy:

- 1. The minimum cash position required will need to be sufficient to cover:
 - a. Pay As You Go funding for forecasted capital expenditures as identified in the Capital Plan.
 - b. Working capital requirements with an allowance for operating risk.
- 2. The management of the Utility's cash position is the responsibility of Administration, taking into consideration many variables including borrowing rates, current and future cash requirements, and the planned capital financing structure (including Pay As You Go funding requirements).
- 3. Where the Utility's cash position is insufficient to meet cash flow requirements, the Utility may utilize bridge financing through the City of Edmonton's working capital, with the Utility paying interest at a rate that reflects the City of Edmonton's opportunity cost. External funding may also need to be considered (i.e. tax levy support, grant funding, etc.), depending on the magnitude and term of cash flow requirements required.

Table 5 highlights the forecasted cash position over the next 30 years (Phase 1 only).



Table 5: Cash Position - Financial Indicator (Phase 1 Only)

Table 5 highlights that a positive cash balance is achieved in 2026, the year after commencement of operations in Q3 2025. As the Utility is forecasted to generate

positive net income starting in 2025 (per Table 4) and into the future, cash position continues to improve into the future.

Debt Service Coverage Ratio

The Debt Service Coverage Ratio has two principles to support the monitoring of performance in the fiscal policy:

- 1. The Debt Service Coverage Ratio measures the ability of the Utility to meet its debt servicing obligations using annual revenues and is calculated as outlined in the fiscal policy.
- 2. The minimum baseline target is recommended to be 1.5. Meeting the baseline will ensure that the Utility is earning enough revenue to cover annual debt servicing costs.

As capital expenditures related to Phase 1 are supported by the City of Edmonton through tax-supported debt, DDEI is not responsible for any debt servicing costs during this phase. As a result, DDEI's debt service coverage ratio is not relevant for Phase 1.

Debt to Net Assets Ratio

The Debt to Net Assets Ratio has two principles to support the monitoring of performance in the fiscal policy:

- 1. The Debt to Net Assets ratio is a measure of the extent that capital investment is financed through debt and is calculated as outlined in the fiscal policy.
- 2. The Utility will aim to maintain a Debt to Net Assets Ratio between 50 per cent and 70 per cent by balancing long-term financial sustainability with intergenerational equity.

As all capital expenditures relating to Phase 1 are supported by the City of Edmonton through tax-supported debt, DDEI will not be carrying any long-term debt. As a result, DDEI's debt to net assets ratio is not relevant for Phase 1.

7.0 Operating Budget & Forecast

The following tables provide Forecast Operating Costs by major expense category with a detailed discussion of each applicable cost category. All of these costs are forecast based on extensive work with two consulting firms that are industry experts. Once DDEI operations have commenced and actual results are available, these will be incorporated in all future Rate Filings, starting with the 2027 Rate Filing in for Q3 2026.

Phase 1 is expected to begin in Q3 2025 and the first full year of operations will be 2026. As a result, the proposed 2025 budget is for a partial year and 2026 budget is for a full 12 months. Operating costs are conservatively forecast and presented in Table 6 below.

Table 6: Operating by Major Expense Category (\$000s)

Line		- 2	2025	- 1	2026
No.	Description	в	udget	в	udget
1	Operating				
2	Utilities	\$	100.0	\$	207.0
3	Operations and Maintenance	\$	289.0	\$	577.0
4					
5	Total Operating	\$	389.0	\$	784.0

Summary of Operating Costs (000s)

UTILITIES

For Phase 1, the main energy source is natural gas and minimal electricity to operate the Winspear Energy Centre (natural gas boilers). The level of consumption and the costs, as shown in Table 7 below, were both forecast by the industry experts based on jurisdictional scans and other comparable energy centres.

Table 7: Utility Costs (\$000s)

Utilities & Other Costs (000s)

Line			2025		2026	
No.	Description	E	Budget	Budget		
1	Utilities	\$	100.0	\$	207.0	
2						
3	Total Utilities	\$	100.0	\$	207.0	

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OPERATIONS & MAINTENANCE

The operation of DDE Phase 1 will be managed by EPCOR Inc. with some City oversight. The forecast Operations & Maintenance costs for 2025 and 2026 by major cost categories are in Table 8 below.

Table 8: Operations & Maintenance by Major Expense Category (\$000s)

Operations and Maintenance Costs (000s)

Line		2025		2026	
No.		В	udget	Budget	
1	Operations and Maintenance				
2	Personnel	\$	16.0	\$	31.0
3	Technical Consultants	\$	240.0	\$	480.0
4	General Services	\$	33.0	\$	66.0
5					
6	Total Operations and Maintenance	\$	289.0	\$	577.0

<u>Personnel</u>

A management partnership with EPCOR Inc. was established through a term agreement, which stipulates EPCOR is responsible for managing the operational activities of the DDE systems. Currently DDEI is only requesting 0.2 FTE for a Program Manager position, to provide oversight of EPCOR's execution of the term agreement in operating and maintaining the energy system. Total forecast cost of DDEI personnel was determined by applying the full time equivalent factor to a comparable position base salary plus benefits. The level of resources related to this function will be monitored over the 2025-2026 period and will be further evaluated as part of the 2027 rate filing process in Fall 2026.

Technical Consultants

Operational support is provided through a term agreement with EPCOR Inc. which was signed December 6, 2023. The relationship with EPCOR is a Design, Build, Finance, Operate and Maintain partnership and EPCOR's rate to operate was set out in the term agreement. The proposed budget was based on this rate, at a monthly fee of \$38,833.33. The agreement includes an option to rebase after the first year of operations to be reflective of EPCOR's actual cost of services. This represents the bulk of the operating and maintenance budget costs.

General Services

These represent the budget for other indirect costs required to keep the entire initiative working smoothly and effectively, including costs such as facility maintenance, insurance and minor material costs.

8.0 Capital Budget & Forecast

City Council has approved a capital budget of \$35.9 million (capital profile 20-83-9001) for the first phase of the DDEI. This includes the construction of the Energy Centre structure, Energy Centre mechanical and electrical (boilers), distribution piping and the energy transfer station. This capital profile is funded through tax levy support primarily with tax-supported debt and is classified as contributed assets.

The forecast for DDEI capital is referenced below in Table 9 as contributed capital and includes additional proposed capital in 2025 and 2026 for preliminary Phase 1A work and Phase 2 conceptual design studies. The additional capital additions are also being proposed to be supported by tax levy funding.

Table 9: Capital Additions and Construction Work In Progress (\$000s)

Line		2025		2026	
No.			Budget		Budget
1	Contributed Previous Year Balance	\$	-	\$	1,800.0
2					
3	Contributed Capital Expenditures				
4	Energy Centre Structure & Civil Works	\$	8,400.0	\$	-
5	Energy Centre Mechanical & Electrical	\$	22,443.0	\$	-
6	Distribution Piping System	\$	4,046.0	\$	-
7	Energy Transfer Stations	\$	1,011.0	\$	-
8	Preliminary Phase 1A/2 Design	\$	1,800.0	\$	2,700.0
9	Total Contributed Capital Expenditures	\$	37,700.0	\$	2,700.0
10					
11	Less: Capital Additions:				
12	Energy Centre Structure & Civil Works	\$	(8,400.0)	\$	-
13	Energy Centre Mechanical & Electrical	\$	(22,443.0)	\$	-
14	Distribution Piping System	\$	(4,046.0)	\$	-
15	Energy Transfer Stations	\$	(1,011.0)	\$	-
16	Preliminary Phase 1A/2 Design	\$	-	\$	-
17	Total Capital Additions	\$	(35,900.0)	\$	-
18					
19	Contributed Current Year Balance	\$	1,800.0	\$	4,500.0
20					
21	Non-Contributed Previous Year Balance	\$	-	\$	-
22					
23	Non-Contributed Capital Expenditures	\$	-	\$	-
24					
25	Less: Non-Contributed Capital Additions	\$	-	\$	-
26	Non-Contributed Current Year Balance	\$	-	\$	-

Construction Work in Progress (000s)

ENERGY CENTRE - STRUCTURE & CIVIL WORKS

This capital expenditure is for the building that houses the mechanical and electrical assets of the energy centre, and provides the structural support the energy centre needs to be able to function. This is a key component of the energy centre infrastructure itself, along with the mechanical and electrical section below.

ENERGY CENTRE - MECHANICAL & ELECTRICAL

The mechanical and electrical assets include five natural gas boilers used to generate the heating required by the three Phase 1 utility customers, which are expected to be commissioned in Q3 2025.

For Phase 1A, which includes connections to Citadel Theatre, Stanley Milner Library and City Hall, the proposed recommendation from IIS02765 Downtown District Energy Initiative is to advance development with supporting electrical boilers to "future proof" the system to allow for a more efficient transition to renewable electricity use in the future. If approved, conceptual designs for Phase 1A and Phase 2 are expected to begin in the second half of 2025.

An estimated \$18.3 million costs will be incurred for the planning, design and construction to complete Phase 1A infrastructure, and to advance conceptual design of Phase 2. The expansion of the system is expected to begin incurring costs late in 2025 through 2028 and will connect the next phase of utility customers beginning in 2028. Total capital costs of \$4.5 million are included in 2025 (\$1.8 million) and 2026 (\$2.7 million) to support this work.

Administration is recommending the use of approved capital budget within capital profile CM-83-0001 - District Energy Network Strategy and District Energy Nodes to fund Phase 1A and Phase 2 work outlined above. As this capital budget will be supported by tax levy funding, the capital additions are considered contributed assets.

DISTRIBUTION PIPING SYSTEM

The distribution piping delivers energy from the Winspear Energy Centre to the Energy Transfer Station and then to the three Phase 1 customers. In the future this piping will be extended to the three Phase 1A customers.

ENERGY TRANSFER STATION

The Energy Transfer Stations connect the main utility mechanical and electrical infrastructure to distribute energy to the energy transfer station which then distributes heat to the three Phase 1 customers. In the future the three Phase 1A customers will be incorporated into this process.

PHASE 1A DESIGN AND CONSTRUCTION

If approved, preliminary Phase 1A work and Phase 2 conceptual design studies will commence late in 2025 and continue in 2026.

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Appendix 1 - Capital Profiles includes the approved capital profiles for 20-83-9001 Downtown District Energy Initiative, and CM-83-0001 District Energy Network Strategy and District Energy Nodes. These capital profiles highlight details such as the profile descriptions, backgrounds, and the annual budget amounts currently available.

9.0 Revenue Requirement

The forecast revenue requirement for 2025 is \$0.4 million with forecast revenues of \$0.3 million and the forecast revenue requirement for 2026 is \$0.8 million with \$1.0 million in forecast revenue. This results in a revenue shortfall of \$0.1 million in 2025 and a revenue surplus of \$0.2 million in 2026. For Phase 1, on-going shortfalls are not anticipated. Table 10 provides a summary of the revenue requirements for the two years of this rate filing.

Table 10: Total Revenue Requirement (\$000s)

Line			2025	2026		
No.	Description	B	udget	Budget		
1	Revenue Requirement					
2	Operations & Maintenance	\$	389.0	\$	784.0	
3	Depreciation	\$	-	\$	-	
4	Debt Interest	\$	-	\$	-	
5	Return on Rate Base	\$	-	\$	-	
3	Total System Revenue Requirement	\$	389.0	\$	784.0	
4						
5	Revenue					
6	Revenue on Proposed Rates	\$	336.0	\$	1,031.0	
7	Total Revenue	\$	336.0	\$	1,031.0	
8						
9	Revenue Surplus (Shortfall)	\$	(53.0)	\$	247.0	

Summary of Total System Revenue Requirement (000s)

The partial first year of operations for DDEI is 2025. The data used to develop the proposed rate revenue is based on BAU determined by information and recommendations provided by two industry experts..

DEFERRAL ACCOUNT AND INTEREST ON FINANCING

In the case of any shortfalls, DDEI will utilize a deferral account to accumulate any shortfall occurring until utility revenues equal or exceed the revenue requirement. Interest will be applied on any outstanding deferral account balance. Future utility rate setting will also consider the deferral account balance.

The 2025 shortfall is forecast to be fully offset in 2026. The provided interest rate is 3.5 per cent for 2025 and 3.0 per cent for 2026.

Table 11 below provides a summary of the forecast deferral account balances during the rate filing period:

 Table 11: Deferral Account Balance (\$000)

Annual Revenue Shortall and Interest Expense	
(000s)	

Line			2025	2026		
No.	Description	E	Budget	Budget		
1	Total Revenue	\$	336.0	\$	1,031.0	
2	Total Revenue Requirement	\$	389.0	\$	784.0	
3	Annual Revenue Surplus (Shortfall)	\$	(53.0)	\$	247.0	
4						
5	Deferral Account Opening Balance	\$	-	\$	(53.9)	
6	Annual Revenue Surplus (Shortfall)	\$	(53.0)	\$	247.0	
7	Deferral Account Closing Balance	\$	(53.0)	\$	193.1	
8						
9	Annual Interest	\$	(0.9)	\$	-	
10						
11	Deferral Account Closing Balance	\$	(53.9)	\$	193.1	

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RATE BASE

As all capital expenditures related to Phase 1 are considered contributed assets, there is no current rate base balance and no applicable return on rate base. Table 12 provides a summary of the mid-year net property, contributions and rate base.

Table 12: Mid-Year Net Property, Contributions and Rate Base (\$000s)

Line		2025	2026		
No.	Description	Budget		Budget	
1	Prior Year Property, Plant and Equipment	\$ -	\$	35,900.0	
2	Prior Year Accumulated Depreciation	\$ -	\$	(501.0)	
3	Prior Year Net Property	\$ -	\$	35,399.0	
4					
5	Current Year Property, Plant and Equipment	\$ 35,900.0	\$	-	
6	Current Year Accumulated Depreciation	\$ (501.0)	\$	(1,003.0)	
7	Current Year Net Property	\$ 35,399.0	\$	(1,003.0)	
8					
9	Mid-Year Net Property	\$ 17,699.5	\$	17,198.0	
10					
11	Gross Mid-Year Rate Base	\$ 17,699.5	\$	17,198.0	
12					
13	Mid-Year Net Contributions	\$ (17,699.5)	\$	(17,198.0)	
14					
15	Net Mid-Year Rate Base	\$ -	\$	-	

Rate Base (000s)

10.0 Next Steps

As the DDEI continues to evolve, the Utility's financial performance will be diligently monitored. Once Phase 1 is operational and actual results are available, future financial analysis will start incorporating actual costs and actual revenues to forecast future performance. Short and long term next steps include:

- DDEI will proceed with utility operations and commence preliminary Phase 1A work and Phase 2 conceptual design studies, if approved.
- Administration will return to Utility Committee in the fall of 2026 with the 2027 DDEI Rate Filing including proposed rates for 2027.
- Administration will incorporate additional years of data, actual and forecast, in the future once the DDE is operational and when performance data is available as opposed to this rate filing which is based mainly on consultant's forecast data.
- Utility rate setting methodology will be continually evaluated to ensure it best represents DDE requirements while factoring in BAU parameters.
- Administration will return to Utility Committee with updates as required to support future rate filings and potential future system expansions, as more experience is gained in the operation of the Utility and further studies are performed to determine more detailed operating and capital cost requirements for DDEI.

Appendix

- 1. 2025-2026 Minimum Filing Requirements
- 2. Capital Profile Reports

Appendix 1 - 2025-2026 Minimum Filing Requirements

Integrated Infrastructure Services, Renewable Energy Systems | Downtown District Energy 2025-2026 Rate Filing | IIS02765

Downtown District Energy 2025 - 2026 Rate Filing Index of MFR Schedules

Schedule Name	Schedule No
Part A - Total System Revenue Requirement	
Summary of Total System Revenue Requirement	<u>3-1</u>
Summary of Operating Costs	<u>5-1</u>
Utilities & Other Costs	<u>6-1</u>
Operations and Maintenance Costs	<u>7-1</u>
Rate Base	<u>15-1</u>
Property, Plant & Equipment	<u>15-2</u>
Construction Work in Progress	<u>15-4</u>
Contributions in Aid of Construction	<u>15-6</u>
Part B - Customers, Revenue and Proposed Rates and Fees	
Customers and Consumption	<u>19-1</u>
Revenue on Proposed Rates	<u>19-2</u>
Proposed Customer Rates and Fees	<u>20-1</u>

Part C - Utility Deferral Account

Interest on Financing

Schedule No.

<u>21-1</u>

Schedule 3-1

Downtown District Energy 2025 - 2026 Rate Filing Summary of Total System Revenue Requirement (000s)

.....

Line		Cross	2025	2026	Cross
No.	Description	Reference	Budget	Budget	Reference
1	Revenue Requirement				
2	Operations & Maintenance	5-1	\$ 389.0	\$ 784.0	
3	Depreciation		\$ -	\$ -	
4	Debt Interest		\$ -	\$ -	
5	Return on Rate Base		\$ -	\$ -	
3	Total System Revenue Requirement		\$ 389.0	\$ 784.0	
4					
5	Revenue				
6	Revenue on Proposed Rates	19-2	\$ 336.0	\$ 1,031.0]
7	Total Revenue		\$ 336.0	\$ 1,031.0	
8]
9	Revenue Surplus (Shortfall)		\$ (53.0)	\$ 247.0]

Schedule 5 - 1

Downtown District Energy 2025 - 2026 Rate Filing Summary of Operating Costs (000s)

Line		Cross	1	2025		2026	Cross
No.	Description	Reference	в	Budget Budget		udget	Reference
1	Operating						
2	Utilities	<u>S.6-1</u>	\$	100.0	\$	207.0	
3	Operations and Maintenance	<u>S. 7-1</u>	\$	289.0	\$	577.0	
4							
5	Total Operating		\$	389.0	\$	784.0	

Integrated Infrastructure Services, Renewable Energy Systems | Downtown District Energy 2025-2026 Rate Filing | IIS02765

Schedule 6 - 1

2025 - 2026 Rate Filing Utilities & Other Costs (000s)

Line		Cross	1	2025		2026	Cross
No.	Description	Reference	B	udget	Budget		Reference
1	Utilities		\$	100.0	\$	207.0	
2							
3	Total Utilities		\$	100.0	\$	207.0	<u>S. 5-1</u>

Schedule 7 - 1

2025 - 2026 Rate Filing Operations and Maintenance Costs (000s)

Line		Cross	2025		2026	Cross
No.		Reference	E	Budget	Budget	Reference
1	Operations and Maintenance					
2	Personnel		\$	16.0	\$ 31.0	
3	Technical Consultants		\$	240.0	\$ 480.0	
4	General Services		\$	33.0	\$ 66.0	
5						
6	Total Operations and Maintenance		\$	289.0	\$ 577.0	<u>S. 5-1</u>

Schedule 15 - 1

Downtown District Energy 2025 - 2026 Rate Filing Rate Base (000s)

Line		Cross	2025			2026	Cross
No.	Description	Reference		Budget		Budget	Reference
1	Prior Year Property, Plant and Equipment	<u>S. 15-2</u>	\$	-	\$	35,900.0	
2	Prior Year Accumulated Depreciation		\$	-	\$	(501.0)	
3	Prior Year Net Property		\$	-	\$	35,399.0	
4							
5	Current Year Property, Plant and Equipment	<u>S. 15-2</u>	\$	35,900.0	\$	-	
6	Current Year Accumulated Depreciation		\$	(501.0)	\$	(1,003.0)	
7	Current Year Net Property		\$	35,399.0	\$	(1,003.0)	
8							
9	Mid-Year Net Property		\$	17,699.5	\$	17,198.0	
10							
11	Gross Mid-Year Rate Base		\$	17,699.5	\$	17,198.0	
12							
13	Mid-Year Net Contributions	<u>S. 15-6</u>	\$	(17, 699.5)	\$	(17,198.0)	
14							
15	Net Mid-Year Rate Base		\$	-	\$	-	

Schedule 15 - 2

Downtown District Energy 2025 - 2026 Rate Filing Property, Plant & Equipment (000s)

Line		Cross	2025			2026	Cross
No.		Reference	Budget		udget Budget		Reference
1	Previous year balance						
2	City Contributions - Capitalized Assets		\$	-	\$	35,900.0	<u>S. 15-1</u>
3	City Contributions - Construction Work-In-Progress		\$	-	\$	1,800.0	
4	Total Previous Year Balance		\$	-	\$	37,700.0	
5							
6	Contributed Additions to Property, Plant & Equipment						
7	City Contributions - Capitalized Assets	<u>S. 15-4</u>	\$	35,900.0	\$	-	
8	City Contributions - Construction Work-In-Progress	<u>S. 15-4</u>	\$	1,800.0	\$	2,700.0	
9	Developer Contributions		\$	-	\$	-	
10	Total Contributed Additions to Property, Plant & Equipment		\$	37,700.0	\$	2,700.0	
11							
12	Non-Contributed Additions to Property, Plant & Equipment		\$	-	\$	-	
13							
14	Total Additions to Property, Plant & Equipment		\$	37,700.0	\$	2,700.0	
15							
16	Retirements and Adjustments		\$	-	\$	-	
17							
18	Current year balance		\$	37,700.0	\$	40,400.0	

Schedule 15 - 4

Downtown District Energy 2025 - 2026 Rate Filing Construction Work in Progress (000s)

Line		Cross	202	5	2026	Cross
No.		Reference	Budg	get	Budget	Reference
1	Contributed Previous Year Balance		\$	-	\$ 1,800.0	
2						
3	Contributed Capital Expenditures					
4	Energy Centre Structure & Civil Works		\$ 8,4	00.0	\$ -	<u>S. 15-2</u>
5	Energy Centre Mechanical & Electrical		\$ 22,4	43.0	\$ -	<u>S. 15-2</u>
6	Distribution Piping System		\$ 4,0	46.0	\$ -	<u>S. 15-2</u>
7	Energy Transfer Stations		\$ 1,0)11.0	\$ -	<u>S. 15-2</u>
8	Preliminary Phase 1A/2 Design		\$ 1,8	0.00	\$ 2,700.0	<u>S. 15-2</u>
9	Total Contributed Capital Expenditures		\$ 37,7	'00.0	\$ 2,700.0	
10						
11	Less: Capital Additions:					
12	Energy Centre Structure & Civil Works		\$ (8,4	00.0)	\$ -	
13	Energy Centre Mechanical & Electrical		\$ (22,4	43.0)	\$ -	
14	Distribution Piping System		\$ (4,0	(46.0	\$ -	
15	Energy Transfer Stations		\$ (1,0)11.0)	\$ -	
16	Preliminary Phase 1A/2 Design		\$	-	\$ -	
17	Total Capital Additions		\$ (35,9	00.0)	\$ -	
18	•					
19	Contributed Current Year Balance		\$ 1,8	0.00	\$ 4,500.0	
20						
21	Non-Contributed Previous Year Balance		\$	-	\$ -	
22						
23	Non-Contributed Capital Expenditures		\$	-	\$ -	
24	· ·					
25	Less: Non-Contributed Capital Additions		\$	-	\$ -	
26	Non-Contributed Current Year Balance		\$	-	\$ -	

Schedule 15 - 6

Downtown District Energy 2025 - 2026 Rate Filing Contributions in Aid of Construction (000s)

Line		Cross	2025	2026	Cross
No.	Description	Reference	Budget	Budget	Reference
1	Prior Year Gross Contributions		\$ -	\$ (35,900.0)	
2					
3	City Contributions		\$ (35,900.0)		
4	Developer Contributions		\$ -	\$ -	
5	Retirements, Transfers & Disposals		\$ -	\$ -	
6					
7	Current Year Gross Contributions		\$ (35,900.0)	\$ -	
8					
9	Interest Expense on Contributed Capital		\$ -	\$ -	
10					
11	Prior Year Accumulated Amortization		\$ -	\$ 501.0	
12	Gross Amortization on Contributed Assets		\$ 501.0	\$ 1,003.0	
13	Retirements, Transfers & Disposals		\$ -	\$ -	
14	Current Year Accumulated Amortization on Contributed Assets		\$ 501.0	\$ 1,504.0	
15					
16	Mid Year Net Contributions		\$ (17,699.5)	\$ (17,198.0)	<u>S. 15-1</u>
17					
18	Prior Year Gross Non-Contributed Expenditures		\$ -	\$ -	
19	Utility Funded Capital		\$ -	\$ -	
20	Current Year Gross Non- Contributed Expenditures		\$ -	\$ -	
21					
22	Interest Expense on Non-Contributed Capital		\$ -	\$ -	
23	· · ·				
24	Prior Year Accumulated Amortization on Non-Contributed Assets		\$ -	\$ -	
25	Gross Amortization on Non-Contributed Assets		\$ -	\$ -	
26	Retirements, Transfers & Disposals		\$ -	\$ -	1
27	Current Year Accumulated Amortization on Non-Contributed Assets		\$ -	\$ -	

Schedule 19 - 1

2025 - 2026 Rate Filing Customers and Consumption (000s)

Line		Cross	2025	2026	Cross
No.	Description	Reference	Budget	Budget	Reference
1	New Customer Connections		3	0	
2	Total DESS Connections		3	0	
3	Total DESS Connections Accumulated		3	3	
4					
5	Energy Consumption (MWh)		2,300.0	6,900.0	
6	Total Energy Consumption		2,300.0	6,900.0	

Schedule 19 - 2

Downtown District Energy 2025 - 2026 Rate Filing Revenue on Proposed Rates (000s)

Line		Cross	2025	2026	Cross
No.	Description	Reference	Budget	Budget	Reference
1	Revenue on Proposed Rates				
2	Rate Revenue		\$ 336.0	\$ 1,031.0	
3	Total Revenue on Proposed Rates		\$ 336.0	\$ 1,031.0	
4					
5	Other Revenue				
6	Grants		\$ -	\$ -	
7	Total Other Revenue		\$ -	\$ -	
8					
9	Total Revenue		\$ 336.0	\$ 1,031.0	

Schedule 20 - 1

Downtown District Energy 2025 - 2026 Rate Filing Proposed Customer Rates and Fees (000s)

Line		Cross	2025	2026	Cross
No.	Description	Reference	Budget	Budget	Reference
1	Monthly Charge per kW peak capacity per month		\$7.92	\$8.08	
2	Variable Rate (Heating Only) per kWh		\$0.0294	\$0.0300	

Note:

* Approval is being requested for 2025 and 2026 Customer Rates and Fees

** As per Attachment 1 in Bylaw 20914 Downtown District Energy Utility Bylaw

Schedule 21 - 1

Downtown District Energy 2025 & 2026 Rate Filing Annual Revenue Shortall and Interest Expense (000s)

Line		Cross		2025	2026	Cross
No.	Description	Reference	E	Budget	Budget	Reference
1	Total Revenue	S. 19-2	\$	336.0	\$ 1,031.0	
2	Total Revenue Requirement	S. 5-1	\$	389.0	\$ 784.0	
3	Annual Revenue Surplus (Shortfall)		\$	(53.0)	\$ 247.0	<u>S. 3-1</u>
4						
5	Deferral Account Opening Balance		\$	-	\$ (53.9)	
6	Annual Revenue Surplus (Shortfall)		\$	(53.0)	\$ 247.0	
7	Deferral Account Closing Balance		\$	(53.0)	\$ 193.1	
8						
9	Annual Interest		\$	(0.9)	\$ -	
10						
11	Deferral Account Closing Balance		\$	(53.9)	\$ 193.1	

Interest rate on Financing (Per CoE Treasury May 23, 2025) Interest are not applied to revenue surpluses (for 2026) 3.00%

3.50%

Appendix 2 - Capital Profile Reports

- 1. CM-83-0001 DISTRICT ENERGY NETWORK STRATEGY AND DISTRICT ENERGY NODES
- 2. 20-83-9001 DOWNTOWN DISTRICT ENERGY INITIATIVE

CM-83-0001 DISTRICT ENERGY NETWORK STRATEGY AND DISTRICT ENERGY NODES

CAPITAL PROFILE REPORT

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PROFILE NAME:	DISTRICT ENERGY NETWORK STRATEGY AND	DISTRICT ENERGY NODES	FUNDED
PROFILE NUMBER:	CM-83-0001	PROFILE STAGE:	Approved
DEPARTMENT:	Integrated Infrastructure Services	PROFILE TYPE:	Composite
LEAD BRANCH:	Blatchford Redevelopment Office	LEAD MANAGER:	Tom Lumsden
PARTNER:		PARTNER MANAGER:	
BUDGET CYCLE:	2023-2026	ESTIMATED START:	January, 2023
		ESTIMATED COMPLETION:	December, 2026
Service Category:	Blatchford Redevelopment	Major Initiative:	

GROWTH	RENEWAL	PREVIOUSLY APPROVED:	26,833
100		BUDGET REQUEST:	-
		TOTAL PROFILE BUDGET:	26,833

PROFILE DESCRIPTION

This profile would provide the funding to plan and design upgrades to Checkpoint 3 for District Energy Network Strategy and District Energy Nodes with funding from Tax Supported Debt. Edmonton's Community Energy Transition Strategy promotes the pathway of "renewable and resilient energy transition in Edmonton". This includes to "plan for and enable the development of community renewable energy projects and the expansion of a renewable district energy network". This profile lays out the immediate near-term opportunities for development of District Energy networks, aligned with the City's District Energy Strategy, District Energy nodes identifies for this profile are the Downtown, River Crossing, Exhibition Lands, Heritage Valley and the Bonnie Doon development. Investment need and strategy is foreseeing the City funding and facilitating the initial development of District Energy nodes and then over time divesting them as assets to private companies/ utilities to only invest in new nodes in accordance with the Strategy.

PROFILE BACKGROUND

The profile identifies capital investments and operational impact for the build out requirements for the key district energy nodes beside Blatchford (Downtown, River Crossing, Exhibition Lands and Heritage Valley). It also identifies necessary design and operational support to implement the district energy strategy and the initial years of the operation of the Downtown District Energy Initiative until more buildings become connected. With the growth of the overall district energy portfolio in the City there will also be a need to increase staff contingence. Over the next budget cycle the goal is to introduce two or three new FTEs to the projects.

PROFILE JUSTIFICATION

The development of a city-wide low carbon district energy network is identified as a big win in Edmonton's Community Energy Strategy. Starting the development of these low carbon and renewable energy systems in the Blatchford development the City manifested the opportunity and importance of district energy as one of the key actions for climate adaptation and resilience, Design and construction on the Downtown District Energy Initiative is ongoing and further feasibility studies have started in the River Crossing Development and for the Bonnie Doon project. The District Energy Strategy has been developed outlining the pathway for the City to develop the city-wide network over the next decades. Overall expected GHG reduction goals for the full implemented district energy is 240,000 tCO2 per year.

STRATEGIC ALIGNMENT

This profile is aligned with the goals of the City Plan and Edmonton's Community Energy Transition Strategy, Edmonton's Community Energy Transition Strategy promotes the pathway of "renewable and resilient energy transition in Edmonton". This includes to "plan for and enable the development of community renewable energy projects and the expansion of a renewable district energy network".

ALTERNATIVES CONSIDERED

The alternatives for these low or net zero carbon district energy system is business as usual: thermal and energy utility systems. The majority of current energy systems are leaving behind a significant larger carbon footprint and increasing costs. District energy system have various advantages due to the lower carbon footprint, longer term decoupling of fossil fuel costs, better climate adaptation criteria and increased customer comfort. However the challenges are that they are mostly compared to current fossil fuel utility systems which are more cost effective in the short run.

COST BENEFITS

Eventually these district energy systems are providing cost benefits by decoupling from fossil fuel costs and provide longer lasting resilient infrastructure.

KEY RISKS & MITIGATING STRATEGY

The recently completed city-wide district energy strategy provides opportunities and processes for the City to initially facilitate, invest, and later divest these district energy network utility assets. A roadmap was developed looking at feasibility studies, policy and planning instruments, and developing external funding opportunities to partner with private industry to bear the investment costs and risk ahead. The City is also actively identifying funding opportunities from other levels of government,

RESOURCES

Resourcing is included in accordance with the Project Development and Delivery Model (PDDM) utilized within the Integrated Infrastructure Services Department.

City of Edmonton

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CAPITAL PROFILE REPORT

Profile Page 2

CONCLUSIONS AND RECOMMENDATIONS

Following the goals and objectives of the Edmonton's Community Energy Transition Strategy, this project is recommended for approval until Checkpoint 3 in accordance with the Project Development and Delivery Model (PDDM) utilized within the Integrated Infrastructure Services Department.

CHANGES TO APPROVED PROFILE

2023 Council One Off Budget Adjustment 23-08: The Downtown District Energy Initiative project requires an additional \$7,666,908 in funding due to advanced design considerations, scope adjustments, and inflationary pressures, as outlined in the June 23, 2023 Integrated infrastructure Services Report IIS01386. The funding source for this adjustment will be a transfer of tax-supported debt from existing capital profile "CM-83-0001 - District Energy Network Strategy and District Energy Nodes". The impact of removing \$7,666,908 from this profile will need to be further evaluated to determine scope reductions of this previously approved work.

CAPITAL PROFILE REPORT

Profile Page 3

PROFILE NAME:	District Energy Network Strategy and District Energy Nodes		FUNDED
PROFILE NUMBER:	CM-83-0001	PROFILE TYPE:	Composite

BRANCH: Blatchford Redevelopment Office

CAPITAL BUDGET AND FUNDING SOURCES (000's)

		Prior Years	2025	2026	2027	2028	2029	2030	2031	2032	2033	Beyond 2033	Total
	Approved Budget												
	Original Budget Approved												-
0	2022 Cap Budget Request for Next Cycle	10,350	10,350	13,800								-	34,500
SVEI SET	2023 Cap Capital Budget Adj (one-off)	-3,833	-3,833									-	-7,667
8 dia	2023 Cap Carry Forward												-
B	2024 Cap Carry Forward	-5,526	5,526	-	-		-	-	-			-	
	Current Approved Budget	991	12,042	13,800	-	•	•	-	•	-	-	-	26,833
	Approved Funding Sources												
	Tax-Supported Debt	991	12,042	13,800			-		-			-	26,833
	Current Approved Funding Sources	991	12,042	13,800						-	-	-	26,833

t ta	Budget Request	-	-	-	-	-	-	-	-
U U U									
50									

a, <u>â</u>	Revised Budget (if Approved)	991	12,042	13,800	-	-	-	-	•	-	-	-	26,833
E B B	Requested Funding Source												
ZG-X	Tax-Supported Debt	991	12,042	13,800								-	26,833
R B 4	Requested Funding Source	991	12,042	13,800	-		•	-	•	-	-	-	26,833

CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF PPROVED)	Activity Type	Prior Years	2025	2026	2027	2028	2029	2030	2031	2032	2033	Beyond 2033	Total
	Construction	-2,722	9,567	11,738	-		-						18,583
	Design	3,713	2,475	2,063	-		-					-	8,250
<	Total	991	12,042	13,800	-	•	-	-	•	-	•	-	26,833

OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:	Rev	Exp	Net	FTE												
Total Operating Impact														•		

20-83-9001 DOWNTOWN DISTRICT ENERGY INITIATIVE

CAPITAL PROFILE REPORT

Profile Page 1

PROFILE NAME:	DOWNTOWN DISTRICT ENERGY INITIATIVE		FUNDED
PROFILE NUMBER:	20-83-9001	PROFILE STAGE:	Approved
DEPARTMENT:	Integrated Infrastructure Services	PROFILE TYPE:	Standalone
LEAD BRANCH:	Blatchford Redevelopment Project	LEAD MANAGER:	Tom Lumsden
PARTNER:	Infrastructure Delivery	PARTNER MANAGER:	Jesse Banford
BUDGET CYCLE:	2019-2022	EST MATED START:	June, 2020
		ESTIMATED COMPLETION:	June, 2025

Service Categ	gory: Utilit	es Major Initiative: Downtown Arena District	
GROWTH	RENEWAL	PREVIOUSLY APPROVED:	35,896
90	10	BUDGET REQUEST:	_
		TOTAL PROFILE BUDGET:	35,896

PROFILE DESCRIPTION

This capital profile is to initiate the overall Downtown District Energy initiative in a scaled-down approach, in a partnership with EPCOR, with the Central District Energy Plant located at the Winspear. The scaled-down approach provides the most benefits, as it allows for electrical and thermal energy generation for all three buildings, provides the best greenhouse gas impact and costs, and also keeps the location of the Central District Energy Plant at the Winspear.

PROFILE BACKGROUND

The Downtown District Energy Initiative aims to develop a district energy system in support of Climate Resilience.

PROFILE JUSTIFICATION

The scaled-down District Energy approach provides the most benefits, as it allows the electrical and thermal energy generation for all three buildings, provides the best greenhouse gas impact and costs, and also keeps the location of the Central District Energy Plant at the Winspear,

STRATEGIC ALIGNMENT

This profile supports the Strategic Goal of Climate Resilience - Edmonton is a city transitioning to a low-carbon future, has clean air and water and is adapting to a changing climate.

ALTERNATIVES CONSIDERED

Three alternatives were considered, two of them were alternative District Energy development scenarios, the other one was the business as usual scenario, This Profile represents the recommended alternative as presented to Council in report CR_7754 Downtown District Energy Initiative – Public/Private Partnership Options, and reflects Option 1 as discussed in report CR_8009 Spring 2020 Supplemental Capital Budget Adjustment.

COST BENEFITS

A Council report coupled with a financial model was developed which concluded that the chosen scaled-down approach provides the most benefits, as it allows the electricity generation for all three buildings, provides the best greenhouse gas impact and costs, and also keeps the location of the Central District Energy Plant at the Winspear.

KEY RISKS & MITIGATING STRATEGY

Key risks were evaluated in a risk assessment. The risks are financial, regulatory and legal nature and mitigation strategies have been developed.

RESOURCES

At this time existing staff resources are in place to further develop this initiative, We are working with EPCOR on a future governance and operational model. A resourcing plan will be developed in the future.

CONCLUSIONS AND RECOMMENDATIONS

Recommendation from Council to go forward in the Spring 2020 SCBA

City of Edmonton

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Profile Page 2

CAPITAL PROFILE REPORT

CHANGES TO APPROVED PROFILE

2020 Fall SCBA (#20-31, CFO 1D-7): To transfer \$329,000 from operating (Cost Centre: 996140) to 20-83-9001: Downtown District Energy Initiative profile, The \$329,000 was previously earmarked and approved by Council for Winspear to complete design activities,

2020 Year End (20-39):

To reverse entry SCBA-C-2020-00151, The initial entry was to transfer \$329,000 from operating (Cost Centre: 996140) to 20-83-9001: Downtown District Energy Initiative profile (PAYG). This entry should have used FSR as the funding source.

To transfer \$329,000 of FSR from operating (Cost Centre: 996140) to 20-83-9001: Downtown District Energy Initiative profile. The \$329,000 was previously earmarked and approved by Council for Winspear to complete design activities, Related to change requests SCBA-C-2020-00151 and SCBA-A-2020-00140,

2023 Council One Off Budget Adjustment 23-08: The Downtown District Energy Initiative project requires an additional \$7,666,908 in funding due to advanced design considerations, scope adjustments, and inflationary pressures, as outlined in the June 23, 2023 Integrated infrastructure Services Report IIS01386. The funding source for this adjustment will be a transfer of tax-supported debt from existing capital profile "CM-83-0001 - District Energy Network Strategy and District Energy Nodes". The impact of removing \$7,666,908 from this profile will need to be further evaluated to determine scope reductions of this previously approved work.

2023 Council One Off Budget Adjustment 23-08: This funding source adjustment is required to convert \$13,771,441 of self-liquidating debentures into \$13,771,441 of tax-supported debt. This adjustment is recommended based on the changes to the project scope outlined in the June 23, 2023 Integrated infrastructure Services Report IIS01386 and the uncertainty related to the future expansion of the district energy systems and related financial sustainability (i.e. future expansion is required to generate the necessary revenues to pay for the capital). If future expansion is approved, and rates are sufficient to cover previously approved capital, a future funding source adjustment will be brought forward to convert a protion of this debt back to self-liquidating. Until such time, the debt servicing payments required on approved capital spending should be funded with tax levy.

2023 Fall SCBA (#23-30, 6,2-20): To update the in-service date of "20-83-9001 Downtown District Energy Initiative" profile to June 30, 2025 as per the Integrated Infrastructure Services report IIS01386 - approved by Council July 4, 2023 (item 7,9),

CAPITAL PROFILE REPORT

PROFILE NUMBER: 20-83-9001

Profile Page 3

PROFILE NAME: Downtown District Energy Initiative

FUNDED PROFILE TYPE: Standalone

BRANCH: Blatchford Redevelopment Project

CAPITAL BUDGET AND FUNDING SOURCES (000's)

		Prior Years	2025	2026	2027	2028	2029	2030	2031	2032	2033	Beyond 2033	Total
	Approved Budget												
	Original Budget Approved	-	-	-	-	-	-	-	-	-	-	-	-
	2020 Cap Administrative	329	-	-	-	-	-	-	-	-	-	-	329
	2020 Cap Council	27,900			-					-	-	_	27,900
	2020 Cap Carry Forward											-	
	2021 Cap Carry Forward	-	-	-	-	-	-	-	-	-	-	-	-
_	2022 Cap Carry Forward	-	-	-	-		-	-		-	-	-	-
티트	2023 Cap Council			-		-	- I			· -	-	_	-
0200	2023 Cap Capital Budget Adj (one-off)	5,750	1,917									-	7,667
BL	2023 Cap Carry Forward	-					· .				-	-	-
	2024 Cap Carry Forward	-8,424	8,424				· -			· -	-	-	-
	Current Approved Budget	25,555	10,341	-	-	-	-	-	-	-	-	-	35,896
	Approved Funding Sources												
	Financial Stabilization Resrv.	329		-		-	-	-		-	-	-	329
	Pay-As-You-Go	7,145	6,983	-	-	-	-	-	-	-	-	-	14,129
	Self-Liquidating Debentures	-	-	-	-	-	-	-	-	-	-	-	-
	Tax-Supported Debt	18,081	3,357	-	-	-	-	-	-	-	-	-	21,438
	Current Approved Funding Sources	25,555	10,341	-	-	-	-	-	-	-	-	-	35,896
ST	Budget Request	-	-	-	-	-	-	-	-	-	-	-	-
10 Big													
BU													
	Revised Budget (if Approved)	25,555	10,341	-	-	-	-	-	-	-	-	-	35,896
EI (Requested Funding Source												
9.4	Financial Stabilization Resrv.	329	-	-	-	-	-	-	-	-	-	-	329
립분않	Pay-As-You-Go	7,145	6,983	-	-	-	-	-	-	-	-	-	14,129
APP APP	Self-Liquidating Debentures	-	-	-			-	-		-	-	-	-
, REV	Tax-Supported Debt	18,081	3,357	-	-	-	-	-	-	-	-	-	21,438
	Requested Funding Source	25,555	10,341	-	-	-	-	-	-	-	-	-	35,896

CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2025	2026	2027	2028	2029	2030	2031	2032	2033	Beyond 2033	Total
	Construction	19,020	10,341	-	-	-	-	-		-	-	-	29,361
	Contingency	2,969	-	-	-	-	-	-	-	-	-	-	2,969
	Design	3,566	-	-	-	-	-	-	-	-	-	-	3,566
	Other Costs	-	-	-	-	-	-	-	-	-	-	-	-
	Total	25,555	10,341	-	-	-	-	-	-	-	-	-	35,896