COUNCIL REPORT

Edmonton

DOWNTOWN DISTRICT ENERGY INITIATIVE

Project Update

RECOMMENDATION

That Executive Committee recommend to City Council:

- 1. That the agreements between the City of Edmonton and EPCOR Utilities Inc. (or an affiliate) for the design, build, financing, operation and maintenance of the Downtown District Energy System, as outlined in Attachment 2 of the June 23, 2023, Integrated infrastructure Services report IIS01386, be approved, and that the agreements be in form and content acceptable to the City Manager.
- 2. That the budget adjustments to capital profiles 20-83-9001 Downtown District Energy Initiative and CM-83-0001 District Energy Network Strategy and District Energy Nodes, as outlined in Attachment 4 of the June 23, 2023, Integrated Infrastructure Services report IIS01386, be approved.
- 3. That an amendment to the construction funding agreement between the City of Edmonton and the Francis Winspear Centre of Music, as outlined in the June 23, 2023, Integrated Infrastructure Services report IIS01386, be approved, and that the agreement be in form and content acceptable to the City Manager.

Requested Council Action		Decision required			
ConnectEdmonton's Guiding Principle		ConnectEdmonton Strategic Goals			
CONNECTED This unifies our work to achieve our strategic goals.		Climate Resilience			
City Plan Values	CREATE.				
City Plan Big City Move(s)	Greener as we grow	Relationship to Council's Strategic Priorities	Climate adaptation and energy transition		
Corporate Business Plan	Transforming for the future				
	Edmonton's Community Energy Transition Strategy				

or Project Relationships	District Energy Strategy
Related Council	 IIS01164, Downtown District Energy Initiative - Development Update,
Discussions	Executive Committee, June 29, 2022

Executive Summary

- The Downtown District Energy Initiative supports City Council's 10 year Climate Resilience objectives, The City Plan and is identified as a "big win action" in Edmonton's Community Energy Transition Strategy. The Growth Plan for the Downtown District Energy Initiative provides the blueprint for a thriving and climate resilient downtown core.
- Approximately 50 existing buildings and two future developments have been identified to
 potentially connect to the Downtown District Energy Initiative. Connecting all these buildings
 could result in 61,000 tonnes of carbon dioxide (CO₂) being reduced annually at full build out
 which is expected in the 2040 timeframe; however, they come with a significant capital
 investment.
- Work on the first phase of the initiative, connecting Winspear, Century Place and Chancery Hall from a central plant built at Winspear has advanced and the District Energy Building at Winspear is almost complete.
- Advanced design considerations, scope adjustments and construction inflationary pressures
 have led to an increase to the overall capital costs for the first phase of the initiative of \$7.7
 million and an adjusted operating shortfall.
- In order to continue to establish the foundation of this important climate and energy resilience
 initiative, Administration is recommending to fund the capital shortfall with funding from
 existing profiles within approved capital budgets. Any potential funding requests for operating
 impacts will be discussed with Council in future supplemental operating budget adjustment
 reports.
- Aligning with Edmonton's District Energy Strategy, Administration is implementing near term goals, which includes further technical and economic work in identified nodes including the downtown, the development of supporting policies and seeking out private investment.

REPORT

The Downtown District Energy Initiative supports City Council's 10-year Climate Resilience objectives, The City Plan and is identified as a "big win action" in Edmonton's Community Energy Transition Strategy.

The first phase of the initiative includes the construction of a Central District Energy Plant at the Winspear and includes connections to the Winspear, including the current completion project, and the City-owned Century Place and Chancery Hall. EPCOR will be responsible for the District Energy Infrastructure through a design, build, operate, maintain and finance agreement while Winspear will be responsible for the construction of the District Energy Building.

After a recent change to adjust the project scope from a combined heat and power system to a heating-only based system, utilizing boiler technology and Executive Committee approved amendment to the Early Works Contract between EPCOR and the City (June 29, 2022, Integrated Infrastructure Services report IIS01164, Downtown District Energy Initiative - Development Update), the project has progressed on several fronts.

Phase 1 - Project Update

<u>District Energy Infrastructure</u>

EPCOR has advanced the design of the District Energy Infrastructure for Phase 1 of the initiative, based upon a heating only system. This included the development of a new design basis memorandum and advancing the design in certain focus areas. During this period, meetings, site visits and workshops were held both with the City and the Winspear project teams to review needs and to gain greater clarity on the project and costs. With the removal of the combined heat and power units, the electrical design for the system underwent a complete redesign. With an updated scope and more advanced design work, the capital costs for the District Energy Infrastructure are currently about \$6.4 million over the approved capital costs (see Table 1 and Table 2 in the Budget/Financial Implications section). The removal of the combined heat and power units and microgrid provided savings; however, design advancements and more scope adjustments did offset a significant portion of the gained savings. The updated price also continues to show continuous escalation in material prices and construction indexes.

District Energy Building Construction

With adjustment to the project scope leading to some delays and increased costs as a result of ongoing construction escalation issues, the construction of the District Energy Building at the Winspear has been advancing. It is currently anticipated to be completed by the end of 2023. The District Energy Building is built on the second floor above Winspear's loading dock and will provide a 460 square meter space to house the District Energy Infrastructure for Phase 1 with the opportunity to increase generation capacity for future phases.

In order to complete construction of the District Energy Building, the construction funding agreement between the City of Edmonton and the Francis Winspear Centre for Music approved by City Council on August 31, 2020 (CR 8386, Downtown District Energy Initiative Winspear Agreement), requires an amendment to increase by \$1.3 million from \$7.1 million to \$8.4 million (see Table 1 and Table 2 in the Budget/Financial Implications section). This increase is required to address cost escalations as well as experienced delays and changes to the design required for the Energy Centre that have been identified as the construction has progressed.

With the adjusted original capital budget, consisting of District Energy Infrastructure and Building of \$28.2 million, the updated total capital costs are now \$35.9 million (see Table 1 and Table 2 in the Budget/Financial Implications section), which represents an overall increase of 27 per cent, within the range of accuracy for checkpoint 3 of -20 to +30 per cent.

Operating Requirements

Once construction of the District Energy Building and Infrastructure are complete, the assets will be put in service and the Utility will begin to provide heating. As such, the Utility will begin to collect revenues and incur operating and maintenance costs. An update to the financial model for

Phase 1 was completed and the ongoing operating requirement was adjusted to the new project scope of heating only. As a result, the operating funding shortfall in the first year of the project is currently estimated to be \$1.1 million (see Table 3 in the Budget/Financial Implications section for the impact over the 2023-2026 period).

The increases are mainly a result of the switch to the boiler only scenario and updated commodity forecasts for natural gas, which represents the most constant variable for the operating phase of the initiative. Attachment 1 summarizes the changes in project capital and operating funding shortfall in the first year of the initiative.

Updated Term Sheet

During development and negotiation of acceptable definitive agreements for the project, Administration and EPCOR have determined that in order to complete the agreements certain revisions are required to the term sheet which was approved by City Council on February 8, 2021 (CR 8257, Downtown District Energy Initiative - Expansion Opportunities). The revisions are reflected in Attachment 2 - Downtown District Energy Project - Adjusted Term Sheet. A summary of the revisions are:

- 1. Change to the anticipated capital cost of Phase 1 of the project which is to be reflected in the City's capital repayment amounts.
- 2. In order to more accurately reflect operating costs, the calculation of operating payments to EPCOR has changed from an annual percentage increase to an approach that would see the costs revisited on a regular (every five year) basis.
- 3. EPCOR will provide customer care service for the utility instead of entering commercial energy agreements with the customers given that there are only two customers for this phase (the City and the Winspear).
- 4. Electricity generation and distribution has been removed with the project now focusing on thermal energy.

Growth of Downtown District Energy

The further development of the Downtown District Energy Initiative is one key objective outlined in the City's Community Energy Transition Strategy. Typical with District Energy projects, the feasibility and economics improve with its connected growth. As the situation is slightly different from a regulated utility and service area for connection, as seen in Blatchford, the connections in the downtown core will have to be negotiated through agreed upon terms and conditions between the building owner/operator and the utility.

In the last few months EPCOR and Administration have worked on feasibility studies with interested parties in the downtown, such as the Station Lands developments and the Village at ICE District Lands. The available information was integrated in the development of a growth plan identifying this opportunity. This growth plan showcases the technical, financial and environmental challenges and opportunities for the long term plan for development.

The growth plan identified 50 existing buildings and two future developments (Station Lands and ICE District) to potentially connect to the Downtown District Energy Initiative. These buildings represent over 2.2 million square meters of floor area and 103 megawatts (MW) of peak heating

and 90 MW of peak cooling demand. These buildings range from hotels, office buildings, commercial and residential buildings. Aggregating these buildings into a District Energy network translates to a significant reduction in installed equipment capacity compared to the individual building level, and is one of key advantages to implementing District Energy.

The growth plan identifies the second phase, consisting of City Hall, Stanley A. Milner Library and the Citadel Theater, as an immediate and relatively short-term opportunity, presumably between 2028 and 2030. These buildings together represent a doubling of the peak heating demand and serviced floor area and can be serviced through the installation of more generation capacity at the District Energy Plant at the Winspear. The phased development approach would continue to build clusters to the north of the downtown area and would eventually require the construction of a second Energy Centre, as the generation capacity and space requirement of the first one would be exceeded. The last two development phases would comprise building clusters to the west and south of the downtown. This phased approach, and connected buildings, together with a proposed location for the second Energy Centre can be found in Attachment 3 of this report.

The growth plan also highlights that while Phase 1 depends on natural gas fired boilers, lower or zero carbon energy sources need to and will become more prevalent in future phases of the buildout to fully achieve the climate and energy resilience objectives. Greenhouse gas emission impact could be reduced by 96 per cent for about 61,000 tonnes of annual $\rm CO_2$ compared to the business-as-usual development scenario utilizing traditional heat and cooling energy sources. This reduction could be achieved through a combination of approaches as the Downtown District Energy Initiative is phased in and built out: electric boilers and chilled water plants (powered with renewable electricity), a planned geo-exchange field at the Station Lands development and primarily waste heat recovery from EPCOR's Gold Bar Wastewater Treatment Plant. The integration of these renewable and low carbon energy sources would happen over time and at distinct project phases where projected energy sales would justify these larger investments. The initially installed natural gas boilers would remain in place and part of a larger system as peaking and back up infrastructure only.

A significant opportunity identified for effluent heat recovery above is EPCOR's Gold Bar Wastewater Treatment Plant. The opportunity to recover heat from the treated effluent before discharging to the North Saskatchewan River and pipe it through a transmission line into the downtown for utilization represents a key win for the Downtown District Energy Initiative, but also needs to be analyzed further in terms of technical feasibility, project risks and financial impacts to the business case.

More work is needed to identify the capital and operating investment including associated revenues over all project phases between today and 2050. This includes the capital and operating costs for Energy Centres and equipment, distribution piping systems, Energy Transfer Stations, geo-exchange field costs, and initial estimates about the potential to recover waste heat from the Gold Bar Wastewater Treatment Plant, offset by sale revenue of thermal energy (heating and cooling) to determine the levelized costs of greenhouse gas reductions for the full Downtown District Energy Initiative.

The value proposition for building owners and developers in the downtown would be comparable utility costs, a combination of reduced infrastructure investment and space savings in their buildings, the opportunity to receive renewable energy and support their sustainability goals and ambitions and the reduced operating and maintenance costs resulting from the utility connection. As mentioned above, more detailed and economic analysis is needed to further detail the opportunity and pathway to a growing Downtown District Energy System. This work is planned as part of the overall District Energy Strategy implementation, which is described further below.

Impact on the Energy Transition and District Energy Strategy

In 2021, Edmonton City Council adopted the updated Community Energy Transition Strategy, designed to ensure the City's climate targets are aligned with meeting the Paris Agreement commitment of limiting global temperature rise to 1.5 °C. The Strategy is targeting a 35 per cent reduction in greenhouse gas (GHG) emissions (relative to 2005 levels) by 2025, a 50 per cent reduction by 2030, and net-zero emissions by 2050.

Reducing emissions from heating and cooling buildings will be a key part of achieving Edmonton's climate targets. Commercial, residential and institutional buildings together account for 38 per cent of the City's GHG emissions (from space heating, cooling and electricity use). The City is targeting a 19 per cent reduction in building emissions through deep energy retrofits of existing buildings and a further 36 per cent reduction in City-wide emissions through "Energy Systems Transformation", which includes both low-carbon electricity supply and low-carbon district energy systems for thermal energy supply.

The "Energy Systems Transformation" pathway identified in the Community Energy Transition Strategy includes a "City-wide decarbonized district energy network" to provide emissions-free thermal energy to connected buildings. The development and growth of the Downtown District Energy Initiative was identified as one key action in the Strategy. The development growth plan for the Downtown District Energy Initiative will help in facilitating this opportunity over the next years and decades.

Edmonton's first District Energy Strategy¹, which supports the Community Energy Transition Strategy, was released in 2022. The Strategy outlines the City's role in facilitating more systems implementation to decarbonize Edmonton's heating and cooling energy systems from buildings and businesses. The strategy lays out a full vision of a growing network of District Energy nodes, which eventually over time have the potential to grow to a more denser and efficient District Energy network, focusing on improving energy resilience and reducing greenhouse gas emissions.

Administration is working on the implementation of the near term goals of the District Energy Strategy, which includes establishing the technical and economic feasibility for District Energy in specific nodes (Downtown, River Crossing, Exhibition Lands, Bonnie Doon), developing supporting policies, regulation and bylaws, and in addition seeking out a private partner(s) investment to develop systems in priority District Energy nodes, which includes the the growth of the

¹ https://www.edmonton.ca/sites/default/files/public-files/District-Energy-Strategy.pdf?cb=1666469467

Downtown District Energy Initiative, which is grounded in the operation of the first phase of the initiative presented in this report.

Budget/Financial Implications

To address the current capital funding shortfall, Administration is recommending two adjustments to the approved capital budget:

- 1. a transfer from profile CM-83-0001 District Energy Network Strategy and District Energy Nodes to 20-83-9001 Downtown District Energy Initiative, and
- 2. a funding source adjustment to convert previously approved self-liquidating debt to tax-supported.

Once construction is completed, operations will commence and the Utility will begin to collect revenues, and incur operating and maintenance costs. The full operational impact will be addressed through a future operating budget adjustment when a more detailed estimate is possible. If the recommendations are approved, they would have no immediate net impact to the City's capital budget, however other considerations are outlined below.

Overview

At this time, the Utility has not been formally set up and is in the early stages of development. Utilities generally require a customer base that reaches a critical mass to ensure financial sustainability. Without an established customer base of critical mass or the ability of the current customer base to cover the operating and capital requirements, some form of cash infusion for initial capital investment would likely be required. Administration is currently working on the implementation of the near term goals of the District Energy Strategy and the build out of potential District Energy Systems nodes identified.

The current financial model, provided by EPCOR, is based on rate revenue charged at a "Business as Usual" level. The financial model reflects the current phase 1 development stage (Chancery Hall, Century Place, and Winspear) and does not include financial impacts of potential future expansions outlined in Attachment 3. As such, additional financial model enhancements (i.e. impacts of expansion, related City of Edmonton debt financing impacts, etc.) and fiscal policy work will be needed to understand what is required to ensure financial sustainability and when that would occur. This will also provide further clarity on the amount of cash infusion that is required to fund the initial capital investments and to ensure the financial sustainability of the district energy system.

In the interim, risks of not proceeding with phase 1 of the initiative at this time would very likely result in further capital and operating costs increases. In addition, any construction delays will push out the date of project completion, which may impact the timing of meeting certain client and partner commitments, especially the Winspear's completion project but also partner commitments where current feasibility studies are ongoing.

Capital Funding Shortfall

Capital costs incurred to-date are approximately \$6.4 million. The remainder of capital costs expected to be incurred by the end of 2023 is \$2.3 million for a total of \$8.7 million (expenditures for the District Energy Building being built at the Winspear Centre and development support).

Design and construction of the District Energy Infrastructure by EPCOR is expected to begin later this year with work finishing in the second quarter of 2025. At that time, the District Energy assets will be turned over to the City of Edmonton. As the infrastructure will also be partially financed by EPCOR, the commencement of a 30 year loan from EPCOR to pay back the costs of construction will also begin at that time. The current estimate of the loan at this time is \$13.8 million. This is the amount that is being financed through EPCOR and will be finalized by EPCOR closer to completion of construction as costs are confirmed.

An updated breakdown of costs by initiative/timeline is shown in Table 1 below:

Table 1 - Project Spend (\$millions):

	2023 (LTD) Actuals	2023 Forecast	2024-2025 Forecast	Total
District Energy Building (COE)				
Previously Approved	6.3	0.8	0.0	7.1
New Requested Funding	0.0	1.3	0.0	1.3
Subtotal - District Energy Building	6.3	2.1	0.0	8.4
District Energy Infrastructure (EPCOR)				
Previously Approved	0.0	0.0	20.8	20.8
New Requested Funding	0.0	0.0	6.4	6.4
Subtotal - District Energy Infrastructure	0.0	0.0	27.2	27.2
Development Support (COE)				
Previously Approved	0.1	0.2	0.0	0.3
Subtotal - Development Support	0.1	0.2	0.0	0.3
Total	6.4	2.3	27.2	35.9
Budget Approval Status				
Previously Approved	6.4	1.0	20.8	28.2
New Requested Funding	0.0	1.3	6.4	7.7
Total	6.4	2.3	27.2	35.9

The increase in required capital funding from \$28.2 million to \$35.9 million, resulting in a requested funding increase of \$7.7 million, is related to \$1.3 million for the District Energy

Building and \$6.4 million for the District Energy Infrastructure for increased construction cost estimates. For further information on progress updates to date, please see Attachment 1.

The breakdown of funding sources for the previously approved budget (Capital Profile 20-83-9001 Downtown District Energy Initiative) and the new funding request by project component is shown in Table 2 below:

Table 2 - Project Funding Summary (\$millions):

	PAYG	FSR	SLD	Budget Approved	Budget Request	Total
District Energy Building (COE)	7.1	0.0	0.0	7.1	1.3	8.4
District Energy Infrastructure (EPCOR)	7.0	0.0	13.8	20.8	6.4	27.2
Development Support (COE)	0.0	0.3	0.0	0.3	0.0	0.3
Total	14.1	0.3	13.8	28.2	7.7	35.9

The original approved budget of \$28.2 million included a "cash infusion" from the City of Edmonton of approximately \$14.4 million (PAYG - \$14.1 million; Financial Stabilization Reserve (FSR) - \$0.3 million). This included \$7.1 million to build the District Energy Building, \$7.0 million of funding to EPCOR for the City of Edmonton's portion of the District Energy Infrastructure, and \$0.3 million for development support. In addition, \$13.8 million was approved and funded through self liquidating debt (SLD) for the remainder of the District Energy Infrastructure being designed, built, and financed by EPCOR.

Administration has considered pay-as-you-go to fund the capital shortfall of \$7.7 million. As presented to Council at the June 13, 2023, City Council meeting through the Spring 2023 Supplemental Capital Budget Adjustment (report FCS01658) pay-as-you-go is in a deficit balance of \$10.1 million, therefore is not available for this purpose.

Administration's recommendation is to continue to finance the expansion of the district energy system through use of debt financing. A fully developed and sustainable utility, with sufficient and sustainable rate revenues (i.e. established customer base) would use self-liquidating debt (repaid through future rate revenues) to finance utility capital. As mentioned above, Administration does not currently have a thorough understanding of the financial sustainability of the Downtown District Energy after full expansion and is not certain sufficient revenues would be generated through the district energy system to fund the debt servicing payments. Additionally it is not unreasonable for a utility to require cash infusions or tax-levy support in its early stages. Accordingly, the recommendation is to fund the \$7.7 million capital budget shortfall, through tax-supported debt.

Administration is currently updating its Q2 2023 debt reporting, which includes an assessment of the City's debt servicing compared to its debt servicing limits in accordance with Council Policy C203D - Debt Management Fiscal Policy. After the 2023-2026 capital budget deliberations the City did not have any tax-supported debt servicing room available. Administration is currently updating debt servicing forecasts and debt servicing limits based on adjustments approved by

Council through the Spring 2023 Supplemental Capital Budget Adjustment on June 13, 2023 (report FCS01658) that impact debt, and other updates required for debt limit forecasts.

In order to limit the amount of new tax-supported debt, Administration recommends repurposing \$7.7 million of previously approved tax-supported debt intended to be used for planning and design of future district energy nodes, including Downtown, River Crossing, Exhibition Lands, Heritage Valley, and the Bonnie Doon redevelopment. During the 2023-2026 capital budget deliberations, City Council approved capital profile CM-83-0001 - District Energy Network Strategy and District Energy Nodes, for \$34.5 million of tax-supported debt financing to fund planning and design work for future district energy nodes.

The full impact of transferring approved capital funding and tax supported debt from this profile will need to be further evaluated to determine impacts and likely scope reductions of this previously approved work. The recommended capital budget adjustments are provided in Attachment 4.

Funding Source Adjustment to Self-Liquidating Debentures

As noted previously, the original capital budget for profile 20-83-9001 - Downtown District Energy Initiative included \$13.8 million in funding from self-liquidating debentures, which at the time of approval were expected to be repaid using utility rate revenue. Based on the changes to the project scope outlined in this report 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), Administration is recommending a funding source adjustment to convert these self-liquidating debentures to tax-supported debt (recommendation 2 in Attachment 4). If future expansion is approved, and rates are sufficient to cover previously approved capital and new capital discussed in this report, a future funding source adjustment will be brought forward to convert a portion 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.

Operating Impacts of Capital and Operating Shortfall

Based on the current phase of development, the annual operating and maintenance shortfall is currently projected to be approximately \$1.1 million in the first year of operation increasing to a shortfall of \$1.9 million in 2026. The operating shortfall includes business as usual revenues generated through the district energy utility and expenses required to operate the district energy system. The expenditures comprise:

- Capital repayments (loan payments) to EPCOR related to the \$13.8 million of the District Energy Infrastructure financed through EPCOR.
- Operating service payments to EPCOR to maintain and operate the District Energy Infrastructure.
- Natural gas purchases.
- Debt servicing costs related to the \$7.7 million in tax-supported debt servicing proposed to fund the additional costs discussed in this report.

The first year of operation will not commence until after construction of the District Energy Infrastructure is completed by EPCOR. First year of operation is currently estimated to begin as of the second quarter of 2025.

For a breakdown of net operating results for the 2023-2026 period, please see Table 3 below. Please note that 2025 is a partial year as operations are estimated to begin as of the second quarter of the year.

Table 3 - Net Operating Shortfall Summary (\$millions):

	2023	2024	2025	2026	Total
REVENUES					
Total Revenues (BAU)	0.0	0.0	0.3	0.7	1.0
EXPENSES					
Payments to EPCOR					
Loan Payments - EPCOR Financing	0.0	0.0	0.4	0.8	1.2
Operating Service Payments	0.0	0.0	0.3	0.6	0.9
Subtotal - Payments to EPCOR	0.0	0.0	0.7	1.4	2.1
Natural Gas Purchases	0.0	0.0	0.3	0.6	0.9
Debt Servicing - City Financing	0.0	0.0	0.4	0.6	1.0
Total - Expenses	0.0	0.0	1.4	2.6	4.0
Net Operating Shortfall	0.0	0.0	(1.1)	(1.9)	(3.0)

Financial sustainability of the utility is contingent on future system expansions and bringing on more customers as identified in the Downtown District Energy development growth plan described above. As previously noted, future expansions are currently being investigated and will be factored into future financial modeling as information becomes available. Additional financial modeling will also be required to better determine future operating needs and resulting revenue impacts due to future expansions. If no future expansions are pursued, the annual operating shortfall will progressively increase to approximately \$3.6 million in Year 30. If the operating shortfall is funded through the tax-levy, the estimated tax increase in each of 2025 and 2026 is estimated to be 0.05 per cent and 0.04 per cent respectively.

The current estimates for the operating shortfalls are preliminary and will be updated based on the most current information at the time before bringing forward any operating budget adjustments. Administration will bring forward the necessary adjustments to the operating budget to fund the projected shortfall at the Fall 2023 Supplemental Operating Budget Adjustment.

Legal Implications

Public utilities owned or operated by municipalities providing service within that municipality are generally regulated by their municipal councils, as they are exempt from Alberta Utilities

Commission regulation pursuant to s. 78(2) of the *Public Utilities Act*, RSA 2000, c P-45. Public utilities that are not owned or operated by municipalities that supply water, heat, light or power are regulated by the Alberta Utilities Commission. Municipally controlled corporations are exempt from regulation by the Alberta Utilities Commission with respect to utilities that provide water or steam within a municipality pursuant to s. 75.4 of the *Municipal Government Act*.

Since the initial customers for the Downtown District Energy System are limited to the City and Winspear, and are further limited to only three buildings in total, it would be appropriate for the service and rates for the service to be determined by the City through contract.

COMMUNITY INSIGHT

Regular project updates have been provided and presented to the Energy Transition Climate Resilience Advisory Committee (ETCRAC) and have informed engagement for the Community Energy Transition Strategy. Administration has also been in ongoing communications with Winspear about the integration of the Downtown District Energy Initiative into their completion project, which aligns the development of both projects and ensures thermal energy can be provided when it is required. As part of the future project development, EPCOR and Administration are planning public consultation activities for the surrounding community to achieve awareness of the project and the overall initiative.

GBA+

The Downtown District Energy Initiative supports City Council's 10-year Climate Resilience objectives, the City Plan, and was identified as a "big win" in Edmonton's Community Energy Transition Strategy. The initiative is not directly public facing, and while there would be no changes in economical impact as a result of the project, the reduction of greenhouse gas emissions and the gain in energy resilience will be net positive impacts on a community level. In addition the direct liability towards Edmontonians is limited. The project does not foresee any medium or long term impact to residents or visitors in the downtown area as a result of construction activities.

RISK ASSESSMENT

Risk Element	Risk Description	Likelihood	Impact	Risk Score (with current mitigations)	Current Mitigations	Potential Future Mitigations		
If recommendat	If recommendation is approved							
No high risks, with score above 12 identified								
If recommendation is not approved								
Environmental	Project would not advance - Opportunity for Downtown District Energy would be significantly halted or lost	5 - Almost Certain	3 - Major	15 - High	Project approach would need to be evaluated but key aspects (District Energy Plant) at Winspear would be lost			

Financial/ Reputational Winspear Expansion Project and overall	5 - Almost Certain	3 - Major	15 - High	Winspear would have lost space and revenue opportunities for District Energy Building. Winspear would need to develop its own heating plant for the expansion project.	
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ATTACHMENTS

- 1. Capital and Operating Costs Development Project Budget Downtown District Energy Initiative
- 2. Downtown District Energy Project Adjusted Term Sheet
- 3. Development Growth Plan for the Downtown District Energy Initiative
- 4. Capital Budget Adjustments