



Integrated Infrastructure Services

Blatchford Redevelopment Office

Edmonton

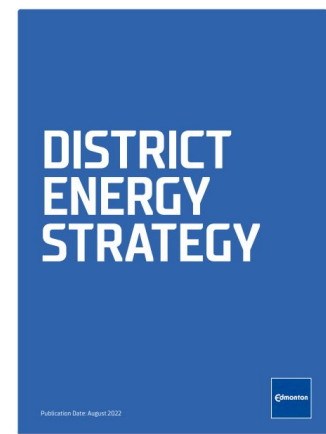
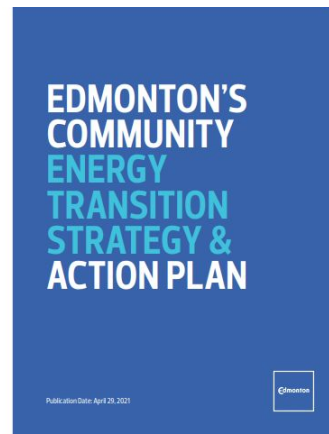
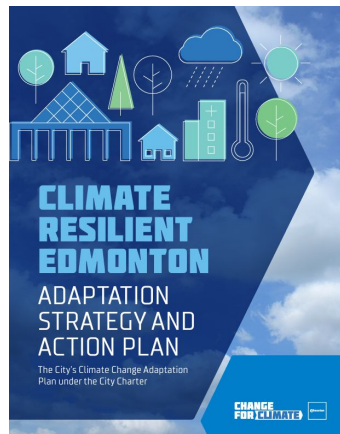
Downtown District Energy Initiative

Growth Plan, Bylaw, Fiscal Policy

Utility Committee / City Council
June 23, 2025 / July 2, 2025

IIS02765 - Downtown District Energy Initiative Growth Plan
IIS02583 - Bylaw 20914 Downtown District Energy Utility
FCS02853 - Downtown District Energy Fiscal Policy

Addressing Climate Emergency, Supporting Climate Goals



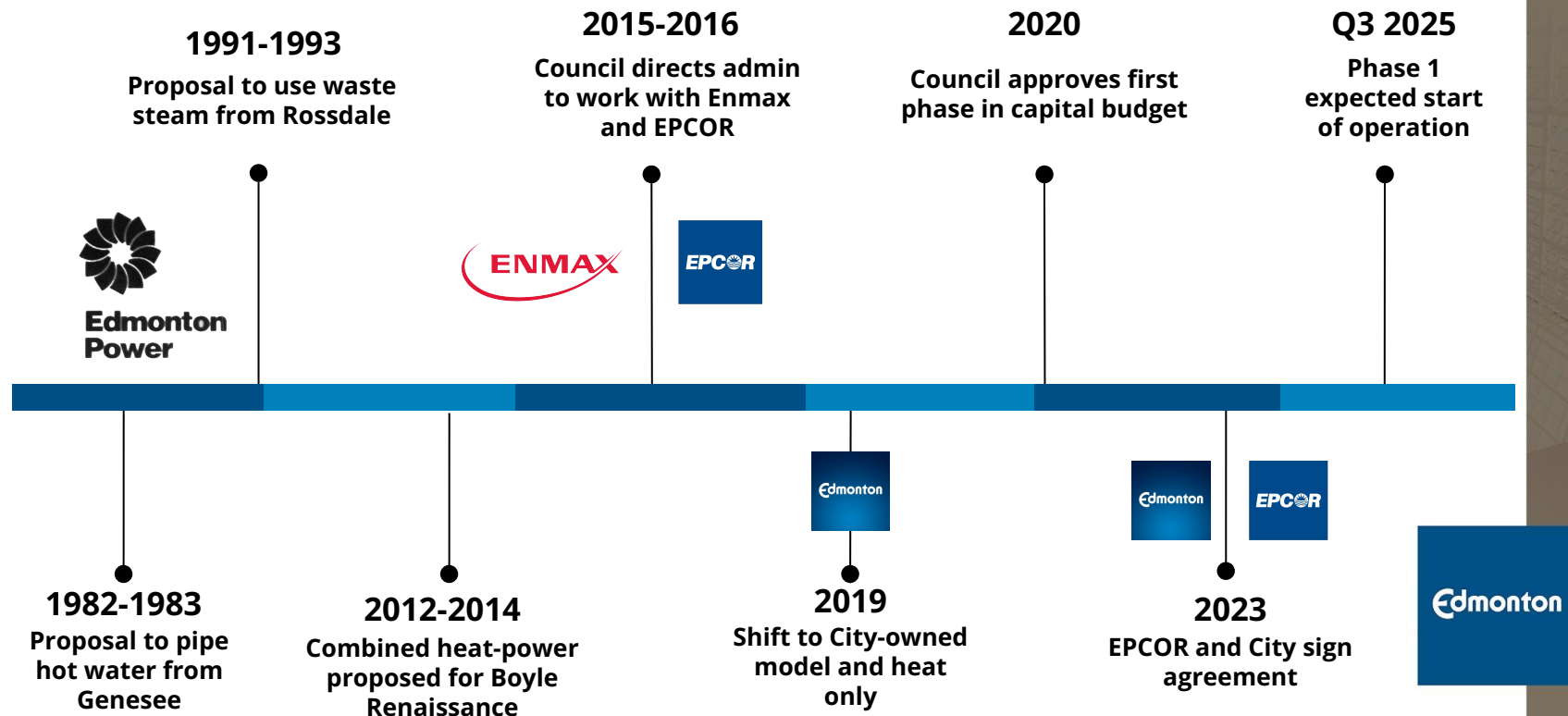
Downtown: A Prime Area for Decarbonization



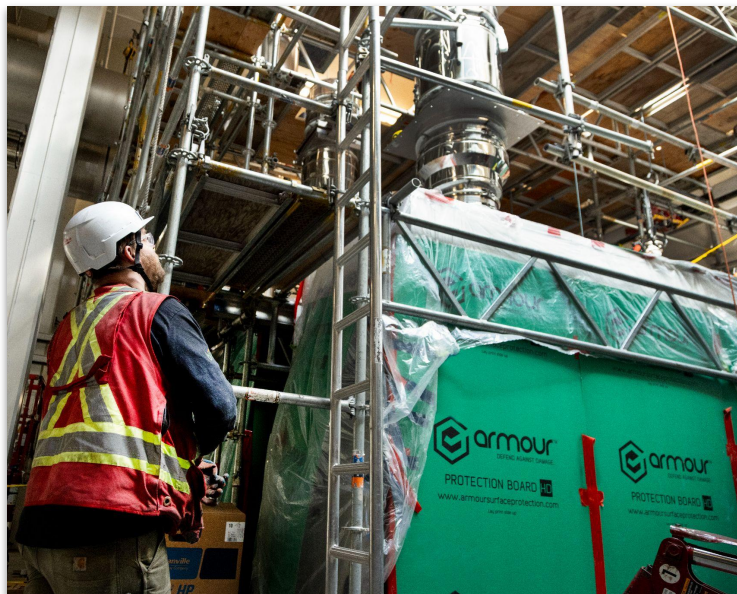
Legend

- Phase 1
- Phase 1A
- Phase 2
- Phase 3
- Phase 4
- Proposed Energy Centre

How Did We Get Here?



Phase 1 Progress to Date



- Capital funding approved
- Agreement with EPCOR signed
- Strong collaboration driving ongoing success
- Successful delivery of Phase 1 infrastructure
- Utility operational by third quarter 2025

What is Needed Now?

RECOMMENDATION TO COUNCIL	REPORT
Approve the Proposed Fiscal Policy C631	FCS02853
Give appropriate readings for Bylaw 20914 to establish utility rates and mandated connection for Phase 1	IIS02583
Approve 2025-2026 Utility Rate Filing	IIS02765
Approve 2025 & 2026 operating budget for Phase 1	
Approve capital budget transfer to provide funding to "Future Proof" growth of system into Phases 1A and 2	

Utility Fiscal Policy C631

- Purpose of the policy is to ensure:
 - ◆ Operated in a manner that reflects City Council overall vision and philosophical objectives
 - ◆ Consistent approach year over year for financial planning, budgeting, and rate setting
 - ◆ Financial sustainability over the long term
- Phased approach to long-term financial sustainability
 - ◆ Balance the opportunity of integrating renewable energy sources while ensuring long-term financial sustainability
 - ◆ External funding may be required (i.e. tax levy support, grants, etc.) if more advanced GHG reduction options desired

Business As Usual (BAU)

→ Regulated Utility Rates - Business As Usual (BAU)

- ◆ Equivalent on average to, what a utility customer would pay through traditional service providers, elsewhere in the City of Edmonton based on estimated avoided costs
 - Thermal energy utility bills
 - Annual equipment maintenance
 - Capital renewal costs.
- ◆ Benefits to building owners include:
 - Eliminates up front cost of renewing capital
 - Not responsible for regular maintenance
 - Potentially free up cash flow for other purposes

Utility Bylaw 20914

- Establish Service Area for Phase 1
- Service Connections, building mechanical systems and Utility infrastructure
- Fees, charges and other costs
- Enforcement
- City Manager authority



Energy Transfer Station

Long-Term Financial and Environmental Balance

- Crucial balance between Utility's emissions reduction goals and financial sustainability
- Regulatory Considerations
- Four high-level Long-Term Scenarios modelled for full build out

Table 1: NPV Forecast Analysis - Full Buildout (in \$millions)

Scenario	Description	Capital Investment	Annual Operating Costs	Annual Rate Revenue	NPV	GHG Reduction		Cost of GHG Reduced
		Total	Average	Average	30 Year	[%]	[tCO2] 30 Year	[\$/tCO2]
1	No Decarbonization	372	23	33	106	10	140,000	-757
2	4 MW Electric Boiler	374	30	33	16	35	400,000	-40
3	24 MW Electric Boiler	374	45	33	-161	75	900,000	179
4	Max Decarbonization	632	46	33	-172	96	1,200,000	143

Importance of System Growth

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Having only a short-term vision of the business case for district energy can be detrimental.

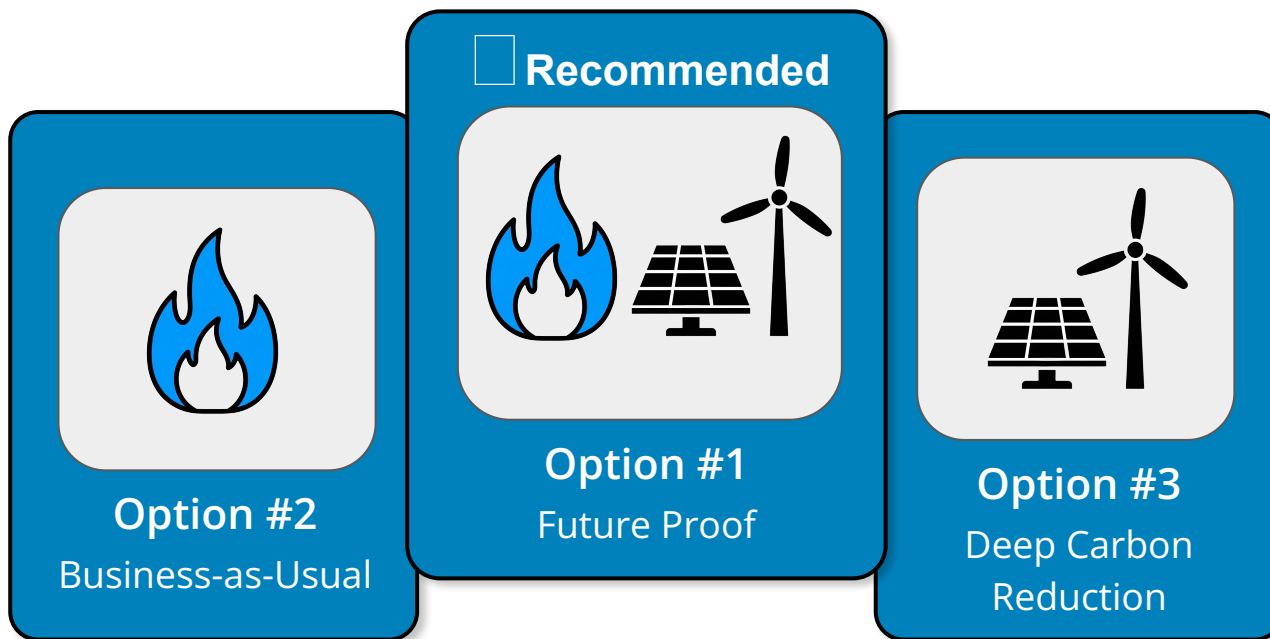
United Nations Environment
Programme
District Energy in Cities report

Advance
Phase 2
design
work



Edmonton

Immediate Expansion - Phases 1A and 2



→ Funding: \$18.3M from Capital Profile CM-83-0001
(District Energy Network Strategy & Nodes)

Immediate Expansion - Phases 1A and 2

Table 2: Cumulative Cash Flows by Phase - Phase 1 and 1A Only (in \$ millions)

Options	Description	2025-2027	2028-2030	2031-2035	2036-2040	2041-2045	2046-2054
1	Install electric boiler but mainly operate natural gas	1.1	2.6	4.4	6.5	8.8	13.9
2	Install and operate only natural gas - No Decarbonization	1.1	2.6	4.4	6.5	8.8	13.9
3	Install and Operate electric boiler - Max Decarbonization	1.1	-4.5	-18.9	-34.8	-52.3	-88.1

→ Option #1 (recommendation) forecasts positive cash flows realized by 2027 supporting long-term financial sustainability

- ◆ Ending balance of \$13.9 million for future capital renewals
- ◆ Financial sustainability greatly supported by tax levy support
- ◆ Table highlights that greater GHG reduction options are cost intensive and would require further external funding

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Summary and Next Steps

- Operation of Phase 1 of the Downtown District Energy Utility in the third Quarter of 2025.
- Begin design work for Phase 1A and 2 and engage EPCOR under the existing agreement.
- Implement a Communications and Outreach Plan to generate awareness and buy-in.
- Administration will return to Council with scheduled updates on the Utility.

Thank you.

Questions?

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edmonton.ca/DistrictEnergy

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