

CAPITAL PROFILE REPORT

Profile Page 1

PROFILE NAME:	BLATCHFORD DISTRICT ENERGY SHARING SYSTEM - ENERGY TRANSFER ST	UNFUNDED
PROFILE NUMBER:	22-83-8384	PROFILE STAGE: Entry - Create Profile
DEPARTMENT:	Integrated Infrastructure Services	PROFILE TYPE: Standalone
LEAD BRANCH:	Infrastructure Delivery	LEAD MANAGER: Brian Latte
PROGRAM NAME:		PARTNER MANAGER: Christian Felske
PARTNER:	Blatchford Renewable Energy Utility	ESTIMATED START:
BUDGET CYCLE:	2019-2022	ESTIMATED COMPLETION:

Service Category:	Utilities	Major Initiative:	Blatchford - City Centre Airport Lands
GROWTH	RENEWAL	PREVIOUSLY APPROVED:	-
100		BUDGET REQUEST:	5,000
		TOTAL PROFILE BUDGET:	5,000

PROFILE DESCRIPTION

This new Capital Profile is needed to manage the design and construction costs of the Energy Transfer Stations of apartment buildings in the Blatchford development which are connected to the District Energy Sharing System operated by the Blatchford Renewable Energy Utility.

PROFILE BACKGROUND

Energy Transfer Stations within apartment buildings will distribute the energy from the District Energy Sharing System into the building units. The Utility will design and install the Energy Transfer Stations and will own, operate and maintain them. The operating and business model for the new Blatchford Renewable Energy Utility envisions the builder reimbursing the full costs for the Energy Transfer Stations to the Utility.

PROFILE JUSTIFICATION

By designing and constructing the Energy Transfer Stations, the Utility ensures in the initial stages that proper mechanical systems are in place leading to highest operational and financial efficiencies for the operation and maintenance of the District Energy Sharing System. The costs are a basic flow through for the utility, with the funding recovered from the building industry in Blatchford.

STRATEGIC ALIGNMENT

The initiative aligns to Council's strategic goals 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. Council's vision for Blatchford is a carbon neutral community, entirely powered by renewable energy.

ALTERNATIVES CONSIDERED

The alternative of having the builders design and install the Energy Transfer Stations was considered. However technical and operational advice was received to utilize the proposed and described process in the initial stages of the development of the District Energy Sharing System to ensure that operational efficiencies are achieved and that reputational challenges, as experienced in other projects, should be avoided. As more experience with these types of systems with local builders are gained in Blatchford, it is possible to revert to an alternative model in the future.

COST BENEFITS

The cost benefits achieved are based on the better control of the Energy Transfer Station design and operation with the District Energy Sharing System infrastructure. These cost benefits are achieved through lower operation and maintenance costs for the Utility, compared to the considered alternative and by considering a more efficient operation.

KEY RISKS & MITIGATING STRATEGY

The key risks avoided with the chosen strategy is that the Blatchford Renewable Energy Utility will control the design and construction of the Energy Transfer Stations, hence ensuring that the overall systems are working effectively and efficiently and reduce the operational risks in comparison to the considered alternative.

CONCLUSIONS AND RECOMMENDATIONS

It is needed to manage the design & construction of the Energy Transfer Stations of apartment buildings in the Blatchford development which are connected to the District Energy Sharing System operated by the Blatchford Renewable Energy Utility. It is recommended for the Utility to design & install the Energy Transfer Stations, to own, operate & maintain them. The reasons are higher efficiency of the Utility infrastructure, lower costs, & reduced risks in overall system operation. The costs are a basic flow through for the Utility, with the funding recovered from the Blatchford building industry. The alternative considered would also see the builder pay & manage its resources to complete the work, but would likely result in lower efficiency, higher costs for the Utility & enhanced risks of operation.

CAPITAL PROFILE REPORT

Profile Page 2

PROFILE NAME: **Blatchford District Energy Sharing System - Energy Transfer St**

UNFUNDED

PROFILE NUMBER: **22-83-8384**

PROFILE TYPE: **Standalone**

BRANCH: **Infrastructure Delivery**

CAPITAL BUDGET AND FUNDING SOURCES (000's)

APPROVED BUDGET		Prior Years	2020	2021	2022	2023	2024	2025	2026	2027	2028	Beyond 2028	Total
	Approved Budget												
	Original Budget Approved	-	-	-	-	-	-	-	-	-	-	-	-
	Current Approved Budget	-	-	-	-	-	-	-	-	-	-	-	-

BUDGET REQUEST	Budget Request	-	-	-	1,500	1,500	2,000	-	-	-	-	-	5,000
	Revised Funding Sources (if approved)												
	Partnership Funding	-	-	-	1,500	1,500	2,000	-	-	-	-	-	5,000
	Requested Funding Source	-	-	-	1,500	1,500	2,000	-	-	-	-	-	5,000

REVISED BUDGET (IF APPROVED)	Revised Budget (if Approved)	-	-	-	1,500	1,500	2,000	-	-	-	-	-	5,000
	Requested Funding Source												
	Partnership Funding	-	-	-	1,500	1,500	2,000	-	-	-	-	-	5,000
	Requested Funding Source	-	-	-	1,500	1,500	2,000	-	-	-	-	-	5,000

CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2020	2021	2022	2023	2024	2025	2026	2027	2028	Beyond 2028	Total
	Construction	-	-	-	1,500	1,500	2,000	-	-	-	-	-	5,000
	Total	-	-	-	1,500	1,500	2,000	-	-	-	-	-	5,000

OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
Total Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-