

### Funding Approach

Transformational change poses many challenges and opportunities. Edmonton's vision is aspirational but is achievable with significant levels of public and private investment in transformational initiatives that will reshape our city and our place in the world. Investment is required from the private sector, Federal and Provincial levels of government, and the City of Edmonton. The overall funding approach must be one of partnership.

An investment analysis at the strategy level (ie. of the broad community wide transition), identified public and private investments totalling \$41.7 billion over the next 30 years, averaging \$1.4 billion annually. However, because of the urgency to act to mitigate the effects of climate change, some of the investments have a higher front-end investment required for accelerated climate actions, to reach economies of scale and support local market transformation. Looking specifically over the next ten years, approximately \$24 billion is required to finance the transition, an average of \$2.4 billion per year. To put this in context, the GDP of the Edmonton Census Metropolitan Area (CMA) is about \$90 billion per year.<sup>1</sup>

### Private Investment

To catalyze the investment in private assets and energy transition actions throughout the region, a range of barriers will need to be overcome. Investors using business discount rates not only consider the weighted average cost of capital, but also include a premium based on the perceived risk of the investment. Higher risk premiums are applied to investments in the demonstration or early commercialization phase. Industry and household discount rates can be as high as 15% which means that to catalyze around 85% of private investment, government investment could be upwards of 15% of the total investment required. This 15% of investment would need to be supported by all orders of government to “de-risk” the necessary private investment. Administration will monitor future potential Federal carbon tax changes which may impact this assessment.

### Public Investment

Of the annual investment requirement of \$2.4 billion, the level of public investment required to catalyze private investment and for local infrastructure is

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<sup>1</sup> <https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=3610046801>

estimated to be approximately \$300 million. This level of investment is significantly higher than the City of Edmonton can realistically manage alone. A targeted City funding share is one-third or \$100 million annually, shared with Provincial and Federal governments. The City share can be further aggregated into two categories:

- \$75 million annually for capital infrastructure investment
- \$25 million annually for catalyst investment

The City-owned capital infrastructure investment relates primarily to the full electrification of the bus fleet, deep facility retrofits, district energy systems and expansion of the active transportation network. These investments will enable future ongoing operational savings, and build infrastructure fundamental towards transition. The remaining operating portion focuses on new or increased rebates and incentives to local homeowners and businesses for energy transition actions, such as to increase the uptake towards solar installations and building retrofits.

These are 'net new' incremental investments, over and above what is included in current capital plans and budgets - very few of these actions are currently funded.

### Funding the Action Plan

Within the energy transition actions, there may need to be further prioritization as there may not be sufficient funding or capacity to immediately advance them all. A listing of potential funding tools available to the City is provided in the following tables, categorized from 'conventional' to 'emerging'.

Conventional funding tools are readily available to the City and can be actioned in a relatively short period of time. Emerging funding tools will require further investigation and analysis in order to assess feasibility. A combination of these tools will likely be required to effectively advance these investments.

Next steps include continued engagement with private and public partners and further exploration of non-conventional funding strategies. These climate actions will roll into upcoming capital and operating long term plans. Budget prioritization tools will be reviewed and/or updated to ensure energy transition is properly represented.

### Conventional Funding Tools

<b>FUNDING TOOL</b>	<b>DESCRIPTION / OBSERVATIONS</b>
Debt financing	Bridge financing tool available to manage the timing between investments and future funding sources. Trade-offs against competing initiatives will be required.
New 'Green' Levy	Similar in approach to previous levies (e.g. Neighbourhood / Alley Renewal, LRT, etc.)
Re-prioritize Approved Capital / Operating Budgets	Priority Based Budgeting can assist with budget reprioritization. Trade-offs against competing initiatives will be required.
Public / Private Partnerships (e.g. Canadian Infrastructure Bank, Climate Innovation Fund)	Examples include Canadian Infrastructure Bank and Climate Innovation Fund. Many emerging arrangements are similar to loan arrangements. Continuous scanning of emerging programs that may assist with the generation of investment capital and the sharing of project and financial risks.
Grants	An overview of the federal and provincial grant funding landscape is addressed in Attachment 6.

### Emerging Funding Tools

<b>FUNDING TOOL</b>	<b>DESCRIPTION / OBSERVATIONS</b>
Property tax uplift deferral incentives	There are financial risks associated with locking in assessment growth to specific areas / initiatives. Trade-offs against competing initiatives will be required.
Carbon adjusted utility franchise fee	Develop a new franchise fee that reflects the carbon intensity of the energy provided by the utility.
Creation of a 'Municipal Energy Corporation'	An arms-length entity with the ability to operate and raise capital independent of the City of Edmonton.