

Energy Management Revolving Fund

In 1995 the City of Edmonton created a revolving fund aimed at energy retrofits of City facilities. This fund initially started at \$1 million dollars and was increased in 1999 to \$5 million. In 2002, City Council approved an increase in the fund limit of up to \$30 million, to be financed from the Alberta Municipal Finance Corporation (AMFC).

The \$30 million fund is set aside for energy efficiency projects such as upgrades to lighting, heating, cooling and ventilation systems and envelope upgrades. The amount borrowed against the fund for these projects is repaid over a period of up to eight years (up to 10 years by exception) out of the utility savings making this money available for other energy projects.

Why a Revolving Fund

While there isn't only one right way to fund energy efficiency in municipal organizations, here are some reasons why the City went the revolving fund route:

- The repayment stream is already in place, in the form of utility budgets
- Because the City is using short term borrowing, there is little impact on the tax levy part of the budget
- The energy projects are not competing for limited capital funds
- By using AMFC financing the City can get money at very competitive rates
- One of the key outcomes of the fund is that it will reduce operating costs
- There are also many environmental benefits such as reduction of greenhouse gases and other air pollutants by improving energy efficiency
- The City has proven that this approach works and because the fund is internal, there is flexibility to address changing conditions.

How it Works

- Projects are brought forward by the operating areas, with the incentive of reducing their utility expenses and rolling this into program delivery
- The City's Facility Energy Management Revolving Fund Review Committee provides feedback from a technical perspective
- Projects are then recommended to the Environmental Policy Coordinating Committee, a Branch Manager level committee
- Applications include a number of the key things you would expect in a project proposal, including cost and benefit
- It also includes the greenhouse gas emission reductions expected based on reduction in electrical, natural gas and water use
- The 'standard' payback that is undertaken is eight years or less with the operating area repaying the fund over a fixed five year period
- Longer term paybacks will be considered when supported by other co-benefits such as improved indoor air quality, etc.

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\$30 Million Fund - Status

The increase of the fund to up to \$30 million dollars and an expansion of the payback period to eight years has necessitated an update on how the fund operates.

A more strategic approach for identifying projects or groups of projects and process to provide a more rigorous review of the changes being recommended needs to be undertaken.

Currently, one project to retrofit Edmonton traffic signals to LED (light emitting diode) technology is underway with \$2.5 million of a total project cost of \$5 million currently being accessed from the AMFC.

How it All Fits

The Energy Management Revolving Fund is part of the City's Energy Management Program. Other parts include initiatives in fleets, wastewater treatment and streetlights.

An example is the recent launch of our Fuel Sense Program, a driver training initiatives that is projected to significantly reduce fuel use from our Municipal fleet.

The Energy Management Program is part of the Municipal Operations Climate Change Strategy, a high priority environmental topic identified in the City's Environmental Strategic Plan. The Environmental Strategic Plan is identified in Plan Edmonton, Edmonton's overall Strategic Plan.

Other Energy Efficiency Initiatives

While the revolving fund is the focus of most of the energy efficiency work in the City facilities, other energy related work does occur:

- Operating funds are used for a number of smaller efficiency upgrades, usually in conjunction with other work
- Capital funding, again to a limited extent, is used to improve energy efficiency in combination with other capital improvements
- All new City facilities are built to 'Energy Code' standards

More recently, the City has projects prioritized in the Federal Infrastructure Program for retrofits of a number of our recreation and civic use facilities. While the primary purpose is an overall revamp of these facilities, there will be a strong focus on energy efficiency. The total investment through this program may be as high as \$10 million.