



2017 Community Excellence Awards

Application Form

Leadership & Innovation, Green Initiatives

Please complete and return the application form by **Friday, June 23, 2017**. If you have any questions, contact UBCM at awards@ubcm.ca or (250) 356-5193.

SECTION 1: Applicant Information

Local Government: Township of Langley

Complete Mailing Address: 20338 65 Ave,
Langley BC, V2Y 3J1

Contact Person: Tess Rouse

Position: Sustainability Programs Specialist

Phone: 604.533.6090 ext. 2252

E-mail: trouse@tol.ca

SECTION 2: Staff Contact

An invitation to attend the UBCM Community Excellence Awards Breakfast Reception will be sent out via e-mail in early September. Winners will not be named before the ceremony.

Please provide the contact information for the person in your office who should receive and reply to the invitation, on behalf of the elected officials/staff who will be in attendance at the UBCM Convention.

Staff Contact Person: Cindy Savoy

Position: Executive Assistant, Mayor & Council Support

Phone: 604.533.6065

E-mail: csavoy@tol.ca

SECTION 3: Project/Program Information

1. Name of the Project/Program:

Municipal Green Investment Fund

2. Project/Program Summary. Please provide a summary of your project/program in 150 words or less

In April 2017, Township of Langley Council adopted new Corporate Climate Action Program (CCAP) and Climate Action Reserve Fund (CARF) policies. Together, the policies establish

an innovative self-sustaining funding mechanism for energy efficiency projects in the Township; a unique municipal green initiative fund that uses utility savings as a reinvestment measure.

The program and established funding source enhances the Township's ability to invest in energy saving capital projects in Township facilities and finance energy and emission leadership projects in the community.

Projects, under the CCAP, will provide a return on investment in the form of annual utility savings. Instead of going to prior year's surplus, these savings along with annual carbon tax grants will be re-invested into the CARF. A share of the CARF will be used to finance both energy saving capital projects in Township facilities and projects that demonstrate the Township's commitment to sustainability leadership in the province.

SECTION 4: Project Details

Please answer each question in 250 words or less (our judges value directness and brevity). If you experience difficulty answering a particular question, consider the aspects of your program that may relate to the question and show us how they are linked. Remember to include measurable results whenever possible.

3. Environmental Stewardship. Please describe the mindful and future-focused project(s) and/or program(s) your local government is implementing to protect the environment and create a healthy, liveable community.

Facility energy consumption, in the Township, results in over 5,000 tonnes of GHG emissions annually. With a projected population growth of 18% over the next 5 years, the Township's building portfolio will continue to expand and energy consumption will increase to meet the demands of a growing population.

The Corporate Climate Action Program (CCAP) helps to address this growing demand by providing a funding mechanism to undertake a range of energy efficiency projects within Township facilities. The energy savings from identified facilities projects are estimated to avoid over 7,800 tonnes of GHG emissions compared to a BAU scenario over a ten year period.

This program exemplifies environmental stewardship as it removes the funding barrier to increasing energy efficiency within facilities while being fiscally responsible.

Utility surpluses from the CCAP program and annual carbon tax grants under the CARIP will be invested into the Climate Action Reserve Fund (CARF) allowing for the implementation of additional sustainability projects in the community, including:

- Updating corporate and community energy and GHG emissions inventories and plans
- Leveraging external energy-related funding through "matching fund" grant applications
- Financing local carbon reduction projects to reduce corporate carbon liability
- Purchasing local carbon offsets

- Serving as a funding source for energy management and GHG emission reduction related staff roles
- Investing in energy and emission leadership projects that are educational or innovative in nature and demonstrate the Township's commitment to sustainability leadership
- Financing strategies and actions that create more energy efficient communities

4. Results

A) Please provide a brief outline of the steps involved in the program/project and the status of each step.

The Township of Langley used a successive approach in the development of Corporate Climate Action Program (CCAP) and the Climate Action Reserve Fund (CARF).

In 2012, Council endorsed the creation of a Climate Action Reserve Fund (CARF). The annual carbon tax grant received by the Township under the CARIP is invested into this fund to support the Township in becoming a carbon neutral organization.

In 2016, with Council support, staff formalized specific guidelines for the use of the Township's CARF to ensure the fund would be maintained and accessed for the sole purpose of supporting corporate and community energy management and greenhouse gas (GHG) emission reduction efforts.

In 2016, Staff met with internal stakeholders to develop a framework for a Corporate Climate Action Program. The program utilizes a share of the CARF to complete projects that reduce electricity and natural gas usage in Township facilities that have a maximum 5-year payback. These projects will provide a return on investment in the form of annual utility savings. The CCAP will be managed and reviewed annually by the Facilities Department.

In April 2017, The CCAP was supported unanimously by Council and is now being used to fund energy saving capital projects within Township facilities.

B) Describe the results achieved and provide measurable results where possible.

The new funding mechanism created through the amalgamation of the Corporate Climate Action Program (CCAP) and the Climate Action Reserve Fund (CARF), saves the Township money over time with a better return than allowing the CARF to accumulate and sit unused.

By funding up to \$1.25 million in capital utility savings projects over the next 5 years through implementation of the CCAP, the CARF has a projected net present value of \$2.5 million. This is an improvement of over \$800 thousand compared to leaving the CARF to accumulate in a business as usual scenario.

The growth of the CARF not only allows the Township to complete corporate energy efficiency projects, but it also provides capital for the Township to pursue other sustainability initiatives that will benefit the larger community.

Other impacts will include upgrades to assets with no additional impact to taxpayers, promoting accountability for Township energy use, incentivizing management to take action on saving energy and reducing emissions, and reducing the environmental impact of

Township operations by 7,800 tonnes of GHG emissions over a 10-year period.

5. Challenges. What challenges did you face in implementing this program/project and how did you overcome them?

Staff initially tried to devise a program similar to a green revolving loan fund, but later realized that this financial model would not provide the same benefits to the corporation and community that the Corporate Climate Action Program (CCAP) would. The CCAP and Climate Action Reserve Fund (CARF) had a sound financial business case that did not put additional strain onto taxpayers.

Another challenge was balancing the uses of the CARF with the goals of the corporation and the Climate Action Charter. Originally, the CARF was set up to help the Township achieve carbon neutral operations. The revisions to the CARF formalized specific guidelines for its use that align with the original intent of the fund as well as the other goals of the Charter.

6. Leadership. How does the project reflect leadership and excellence in the advancement of environmental stewardship?

As a signatory of the BC Climate Action Charter (CAC), The Township has committed to becoming carbon neutral in corporate operations and reducing community wide emissions by creating more energy efficient communities. The Township has achieved carbon neutral status since 2014; however, with projected growth and increased corporate energy use this may not be achievable in future years operating under a business as usual scenario.

To address these growing pressures, the Township recently adopted a Strategic Energy Management Plan that sets targets to reduce corporate energy use and GHG emissions by 5% by the end of 2021, relative to 2014. The new Corporate Climate Action Program (CCAP) and Climate Action Reserve Fund (CARF) will be instrumental in the Township achieving these corporate targets and continuing its commitments to the CAC.

The Township is an action-orientated leader on energy and emissions by way of this program because it ensures a funding mechanism to support corporate and community energy management and greenhouse gas (GHG) emission reduction efforts.

In a growing community full of competing needs, energy efficiency and GHG emission projects can be set aside due to limited capital funding. With the new program and established fund, identified projects that assist the Township in becoming more energy efficient and save on utility costs will be possible. The growth of the fund under this mechanism will also support the Township in larger GHG emission reduction projects that spill over into the community.

7. Economic Impact.

A) How was the project a good use of budget and resources?

The Corporate Climate Action Program (CCAP) saves the Township money over time by promoting accountability for energy use in Township facilities; and providing access to previously unavailable capital for energy management projects that reduce corporate utility costs.

There are no tax increases to implement the energy efficiency projects associated with the program and no additional start-up funds are required.

In essence, the CCAP is a smart investment program that frees up capital to fund facility projects that reduce corporate utility consumption and improve facility assets. By funding up to \$1.25 million in capital utility savings projects over the next 5 years through implementation of the CCAP, the Climate Action Reserve Fund (CARF) has a projected net present value of \$2.5 million.

B) How does the project encourage economic sustainability? (e.g. life cycle analysis, internalizing costs and alternative financing, economic instruments)

Corporately, energy costs the Township about \$3.9 million per year. Over the next 5 years, by 2021, the Township's population is expected to grow by 18% and the Township's energy costs are projected to rise to \$5.4 million annually. This new program will reduce the energy demands of Township facilities, which will lead to cost savings for residents in the Township of Langley.

The Township's carbon tax grant is deposited into an account called the Climate Action Reserve Fund (CARF). Currently, the fund has a value of approximately \$400 thousand. Under a BAU scenario with a 2017 starting balance of \$400 thousand and an estimated yearly carbon tax grant of \$120 thousand, the CARF has a projected net present value of \$1.65 million if left unused for 10 years.

Alternatively, The Corporate Climate Action Program (CCAP) provides a mechanism for the Township to invest a share of the CARF in fiscally responsible capital projects that provide a return on investment in the form of annual utility savings which will grow the CARF exponentially. The CCAP will fund \$250 thousand per year over the next 5 years in capital utility saving projects in an identified 5 year or less simple payback; This program results in the CARF having a net present value of \$2.5 million, an improvement of over \$800 thousand compared to leaving the CARF to accumulate in a business as usual scenario.

This alternative framework creates a self-sustaining funding mechanism whereby further investments in capital projects that reduce utility costs result in an increased capacity to undertake energy saving projects.

8. Engagement. How does the project encourage engagement? (e.g. stakeholder engagement, public participation, equity and diversity, knowledge sharing, capacity building, community identity and marketing)

With an established fund available for energy efficiency upgrades in facilities, facility operators and other department managers now have access to capital for energy efficiency projects that they did not have before. This incentive encourages them to find projects that have an impact on energy consumption and GHG emissions within their buildings. As energy efficiency projects no longer have to compete with other facility needs in their operating budgets, we have seen an increase in support and identification of such projects.

9. Innovation. What makes this program/project innovative and creative?

The Township of Langley's Corporate Climate Action Program (CCAP) is one of the first, if not the first, municipal green initiative fund that uses utility savings as a reinvestment measure.

The unique formation and unification of the CCAP and CARF provides an opportunity to undertake energy efficient capital projects that the Township would otherwise not have had

the capital to fund.

The additional capital that is injected into the Climate Action Reserve Fund (CARF) allows the Township to not only enhance its building performance and cut emissions, but also equips the Township with funding to implement larger GHG reduction and sustainability projects in the community.

A non-exhaustive list of projects completed, underway, and in planning due to the formation of this program are listed below:

- Energy audits at Township park locations to determine potential energy efficiency measures/projects.
- Pilot higher biodiesel content fuel in the corporate fleet
- Undertaking a study to look at city-owned electric vehicle supply equipment (EVSE) expansion.
- Continued implementation of \$1.0 million in capital utility savings projects at various corporate facilities as identified by energy audits conducted in 2015.
- Feasibility study on a district energy system utilizing sewage heat recovery

As a corporation that is forecasted to increase energy costs by almost 40% under a BAU scenario, the Township has devised an innovative program that allows it to minimize the impacts and environmental consequences of population and service growth all while continuing to provide the community with the amenities it requires.

10. Transferability. How is this program/project transferable to other local governments?

The majority of local governments in British Columbia are signatories of the British Columbia Climate Action Charter (CAC). Signatories have committed to make progress toward achieving carbon neutrality in corporate operations and creating complete, compact, energy-efficient communities. In return for being a CAC signatory, local governments receive an annual grant equal to one hundred percent of the annual carbon tax paid by the municipality. Therefore, all CAC signatories have access to the initial funding sources needed to establish a similar program. If local governments can identify energy projects that have a 5-year or less payback, it would be possible for them to set up a similar surplus investment mechanism as is demonstrated in the Township model. Re-investment of annual utility savings back into a fund is a crucial component for this type of program.

Key foundational elements of the program including the Township's Climate Action Reserve Fund guidelines and policy, energy management policy, Strategic Energy Management Plan, and business case development plan are available to other local governments upon request.

11. Knowledge Sharing. What helpful advice would you share with other communities looking to embark on a similar project?

To obtain Mayor and Council support for an initiative like this, the business case has to be defensible and sound. A lot of time must be devoted to engaging with an organization's Finance department to ensure that the project and net present value calculations are favorable to the municipality while being fiscally responsible to taxpayers.

Tying this program back to previous commitments made by the organization is also key to gaining support. In the Township's case, staff were able to show how the program and funding mechanism would help align the Township with the goals, targets, and objectives outlined in the Community Action Charter, Official Community Plan, and Strategic Energy Management Plan, leading to a unanimous adoption by Mayor and Council.

12. Additional Information. Please share any other information you think may help support your submission.

The Township of Langley would like to thank the judges for their time in reviewing and considering its submission for a 2017 UBCM Community Excellence Award.

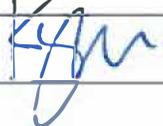
SECTION 5: Signature

Applications are required to be signed by an authorized representative of the applicant.

Name: Ryan Schmidt

Title: Manager of Energy and Solid Waste

Signature:



Date: June 23, 2017

Applications should be submitted as Word or PDF files. If you choose to submit your application by e-mail, hard copies do not need to follow.

Submit applications to Local Government Program Services, Union of BC Municipalities

E-mail: awards@ubcm.ca or mail: 525 Government Street, Victoria, BC, V8V 0A8

The following graph illustrates the structure of the Corporate Climate Action Program (CCAP) and its integration with the Township's Climate Action Reserve Fund (CARF):

