

# TERMS OF REFERENCE

## Community Energy Planning Committee

### INTRODUCTION

1. Communities today are increasingly faced with competing challenges such as raising funds for new infrastructure and services, managing residential growth, ensuring economic development, managing traffic congestion, and maintaining green space and good air and water quality.
2. The way in which a community uses and delivers energy services affects all of these issues. In turn, the way a community is designed and operated directly impacts on its energy requirements. Good energy planning, integrated into larger community planning processes, can help communities address many of today's challenges.
3. To improve its energy situation, the City of Yellowknife is proposing to develop a Community Energy Plan ("CEP").

### BACKGROUND

4. The total cost of the energy and utility services consumed each year in Yellowknife is estimated to be \$78 million.<sup>1</sup> Per capita energy usage and greenhouse gas emissions are considerably higher than in southern Canada, largely due to the sub-Arctic climate, long, dark winters, and dependence on expensive imported fuel supplies.
5. Most of the energy use in Yellowknife occurs in the areas of electricity, space heating, water consumption and transportation activities. Yellowknife's annual energy requirements are provided by local hydro-electricity and the importation and combustion of millions of liters of fossil fuels. These fossil fuels (gasoline, diesel, propane) must be transported from outside Yellowknife at great cost, resulting in the export of large amounts of money from the Yellowknife economy each year. Environmentally, this dependence on fossil fuels also results in the release of high per capita emissions of the greenhouse gases that contribute to global climate change.<sup>2</sup>
6. In 1997, the City of Yellowknife joined the Federation of Canadian Municipalities' (FCM) Partners for Climate Protection (PCP) program (formerly known as the "20% Club"). The PCP program is a five-step framework that helps communities reduce their greenhouse gas emissions and achieve sustainable community development:

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1 \$78 million estimated as follows: Electricity - \$22 million, Water - \$6 million, Fuel - \$50 million. The cost of service for the electric and water systems were obtained from the service providers. The annual expenditure for fuel is an estimate that needs to be confirmed during the course of the project.

2 Per capita greenhouse gas emissions in the NWT average about 27 Tonnes per year (see the NWT Greenhouse Gas Emissions Forecast). This compares to a Canadian average of about 20 Tonnes per person per year. Scandinavian countries have average per capita emissions between 4 Tonnes (Sweden) to 15 Tonnes (Denmark) per person per year.

**Partners for Climate Protection Milestones**

Milestone One: Complete a greenhouse gas inventory and forecast.

Milestone Two: Set a greenhouse gas reduction target.

Milestone Three: Develop a Local Action Plan.

Milestone Four: Implement the Plan.

Milestone Five: Measure Progress.

7. To realize the benefits of better managing its energy supply and use, and meet the commitments made when it joined the PCP program, the City of Yellowknife has decided, in cooperation with many local partners, to develop a Yellowknife Community Energy Plan.

**VISION**

8. As part of Council's Goals & Objectives for the 2004-2006 term, the City adopted Action Item 2.4: "Through a community energy planning approach, work closely with community groups to reduce greenhouse gas emissions and energy use within the City; and meet the City's obligation as a member of the FCM's Partners for Climate Protection Program."
9. The City government is a major player in the community energy planning process. Local governments control much of the infrastructure in a community, including roads, transit systems, public housing, water supply, sewage treatment and solid waste management facilities, and heavy equipment and machinery. These functions of government consume large amounts of energy and can contribute to environmental problems.
10. Local government does not have the ability to directly control energy supply and usage decisions made in the residential, commercial and transportation sectors. The City can, however, influence these sectors through appropriate use of instruments such as planning, by-laws, incentive programs, and working with energy suppliers to ensure future energy supplies meet the community's needs and contribute to the goals of the plan.

**PURPOSE**

11. A CEP is a document that outlines how a community can better manage its use and production of energy. The City of Yellowknife CEP will outline ways that the community can reduce its dependence on imported fossil fuels, reduce the environmental impacts of its energy use (with a focus on Greenhouse Gas reductions) and keep more of the money that is currently spent on imported energy in the community.
12. A CEP is a document, but producing this document is only one of the goals of the Community Energy Planning process. The success of the CEP process will be judged by the actions and projects it generates that result in measurable progress towards meeting the City's energy management goals.

13. The purpose of the Community Energy Planning Committee is to assist the City of Yellowknife in an advisory capacity in the development of a Yellowknife Community Energy Plan by making recommendations to Council through the Municipal Services Committee. Committee members will be expected to seek consensus solutions that will provide the greatest benefit to the community.

### **SCOPE**

14. Results typically achieved through good community energy planning include:
- Improved energy efficiency:
    - Better site (or land-use) planning and building design,
    - Increased use of energy efficient equipment and technologies, and
    - Changes in operating practices to reduce energy consumption;
  - Increased use of local and sustainable energy sources:
    - Increased use of renewable energy technologies,
    - District heating and co-generation projects,
    - Examining opportunities to use alternate fuels, and
    - Encouraging alternative transportation; and
  - Better environmental and economic performance:
    - Lower energy consumption,
    - Reductions in greenhouse gas emissions and other pollutants,
    - Lower energy expenditures, and
    - Reduced infrastructure costs.

### **APPROACH**

15. A draft work plan has been completed that outlines the following 6 steps:

#### **Step #1: Getting Started**

The following tasks are suggested to ensure the project starts on the right track:

- Council approval of Community Energy Planning Committee Terms of Reference;
- Assemble Community Energy Planning Committee;
- Develop CEP Vision and Key Goals:
  - Review broader community goals and objectives,
  - Review how CEP has been done in other communities, and
  - Identify key challenges and opportunities; and
- Further develop and finalize the work plan and project budget.

**Step #2: Collecting Baseline Information**

The purpose of this step is to provide information on what the current energy situation is for Yellowknife. This is necessary to identify priority and opportunity areas, and guide the subsequent steps of the CEP. Consultants will be required to complete the baseline energy and greenhouse gas emissions studies.

- Conduct baseline energy supply and use study:
  - Energy supply systems,
  - Energy use patterns,
  - Greenhouse gas emissions profile and forecast, and
  - Breakdown of community energy expenditures;
- Review the baseline work with the Committee; and
- Develop a communications strategy for the project and the baseline work. This information will then be released to the public.

**Step #3: Identify Opportunities for Improvements**

Following the communications of the baseline work, it is suggested that a public workshop be held to identify opportunities for actions. This workshop would include a review of the CEP process and the baseline work completed. It would also serve to identify information gaps for each of the opportunities and provide some guidance on community priorities for the selection and implementation of actions. Typical opportunities for discussion include:

- Public education & outreach:
  - Adult - awareness campaigns, seminars, workshops, etc., and
  - Youth – school-based programs;
- Energy efficiency:
  - Integrated planning,
  - Siting and design, and
  - By-law changes;
- Local sustainable energy sources:
  - Renewable energy systems (i.e. solar, wind, hydro, biomass), and
  - Co-generation, district heating etc; and
- Other ideas:
  - Incentive programs, and
  - Joint initiatives with community groups.

**Step #4: Evaluate and Rank Opportunities**

The purpose of this step is to develop a list of “high potential” opportunities for improving the City’s use of energy and its energy supply systems and then undertake evaluations of the feasibility of each opportunity. Some of this work will be assigned to consultants, and will involve:

- Further develop evaluation criteria; and
- Evaluate opportunities considered to have high potential.

**Step #5: Assemble Community Energy Plan**

The purpose of this step is to assemble a Yellowknife Community Energy Plan that satisfies the Vision and Key Goals identified earlier.

- Prepare draft Plan;
- Present to Community Energy Planning Committee and revise based on feedback;
- Conduct public consultations;
- Revise and finalize Plan; and
- Obtain approval from Municipal Services Committee and Council.

**Step #6: Propose Implementation of a Community Energy Plan**

- Work with community partners to develop Implementation Plan;
- Propose projects and activities;
- Conduct monitoring (progress measured against baseline data); and
- Report on progress and revise Community Energy Plan as required.

It is important to note that the Community Energy Plan will lead to future projects that will come forward during upcoming budget discussions with a view to lessen the greenhouse gas emissions in a cost-effective manner. The City will continue to pursue funding from Governments and Organizations that support these initiatives.

**TIMELINE AND BUDGET**

16. Following is a tentative schedule and budget summary. The details are subject to change as the work plan is modified and funding opportunities are pursued.

**Project Schedule**

<u>Step</u>	<u>Tentative Schedule</u>
1. Getting started	Winter 2004/5
2. Collecting baseline information	Winter 2005
3. Identifying opportunities	Spring 2005
4. Evaluating and ranking opportunities	Summer 2005
5. Assemble Community Energy Plan	Fall 2005
6. Propose Implementation of a CEP	Fall 2005 & Beyond

**Project Budget**

City of Yellowknife – Community Energy Plan	\$ 50,000 (carried over from 2004)
City of Yellowknife – Greenhouse Gas Emissions	\$ 10,000 (carried over from 2004)
ANCAP (INAC) – Community Energy Plan	\$ 50,000 (expires in March, 2005)

17. The City will make applications for additional funding to the Federation of Canadian Municipalities Green Fund.

**COMPOSITION**

18. The City is intent on involving interested groups in the development and implementation of the community energy plan to ensure that the community energy plan addresses the main economic and/or energy-consuming sectors of the local economy (including the residential, commercial, transportation, and City operations sectors).

19. The suggested roles and responsibilities of the main participants are as follows:

*City Council* – City Councilors may wish to participate at the committee level to provide input to the project and track its progress.

*City Administration* – Several members of Administration will be involved at the committee level. As significant issues arise that require formal input from Council, it will be the responsibility of Administration to flag such issues for the committee and manage the process for reporting to and obtaining decisions from Council.

*Interested Groups* – The proposed process is intended to maximize input and involvement from local organizations. While this is viewed as crucial to determining appropriate solutions to key energy issues, participants on the committee must remember that there are usually a wide range of views and perspectives on what is important and how problems ought to be addressed.

*General Public* – it is anticipated that public input into the Yellowknife Community Energy Plan will be obtained in two ways: through inclusion of members of the public on the Community Energy Planning Committee and through public meetings on specific issues.

*Consultants* – at the City’s discretion, it is anticipated that some of the detailed research and analytical work will be assigned to local consultants.

*Project Manager* – to ensure overall coordination of the project, the City will work with the Arctic Energy Alliance who will act as project manager.

20. The Community Energy Planning Committee shall consist of Members appointed by Council and shall preferably include the following:
- (a) One (1) member of the Municipal Services Committee;
  - (b) Citizen, organization and agency representatives, preferably as follows:
    - (i) One (1) representative from Environmental Protection Service, GNWT,
    - (ii) One (1) representative from Public Works and Services, GNWT,
    - (iii) One (1) representative from the NWT Power Corporation,
    - (iv) One (1) representative from a Yellowknife School District,
    - (v) One (1) representative from Northland Utilities Limited (NUL),
    - (vi) One (1) representative from Ecology North,
    - (vii) One (1) representative from a Property Management Corporation,
    - (viii) One (1) representative from the Yellowknife Chamber of Commerce,
    - (ix) One (1) representative from the Yellowknives Dene First Nation,
    - (x) Two (2) members of the public at large,
- Technical Representatives will be:
- (xi) The Director of Public Works and Engineering, and
  - (xii) Technical Staff from the Department of Public Works and Engineering.
21. The Mayor shall sit as an ex-officio voting member of the Committee.
22. Members shall be appointed for the duration of the Committee.
23. If any Member misses three (3) meetings consecutively, the Member shall be struck from the Committee membership.

## **MEETINGS**

24. The Committee shall select a chairperson from amongst its Members.

25. Regular meetings of the Committee shall be held during the year with the time and place to be determined by the Chairperson. It is anticipated that the meetings will be held on a monthly basis.
26. A quorum of Committee shall consist of a majority of its Members.
27. The Chairperson may cancel any scheduled meeting of the Committee if it is felt that a quorum will not be achieved or if there are no items for the agenda.
28. The rules of procedure for the Committee shall be governed by City of Yellowknife Council Procedures By-law No. 4250 insofar as it may be applicable.
29. All decisions of the Committee shall be in the form of resolutions duly passed by a majority of its Members present. The Committee shall strive to reach consensus on issues, and shall include minority recommendations within its communications to Council.

#### **REMUNERATION**

30. The members of the Committee shall serve in a volunteer capacity only with no remuneration.

#### **REPORTING RELATIONSHIPS**

31. The following reporting relationships will ensure effective communication and implementation of initiatives developed by the Committee:

Community Energy Planning Committee

The Committee Chair will provide recommendations, resolutions, updates and advice as required to the Municipal Services Committee.

Municipal Services Committee:

Will review and report recommendations of the Community Energy Planning Committee to Council.

#### **DUTIES**

32. The Committee shall assist in developing a Yellowknife Community Energy Plan by:
  - (a) Reviewing and providing feedback on the Community Energy Plan development process as outlined in the CEP work plan.
  - (b) Guiding the Community Energy Planning process by participating in each step identified in the CEP work plan as required and providing advice and feedback.

- (c) Ensuring that any recommended actions include the following:
    - (i) A general outline of the resources required (financial - Class D cost estimates, human resources, physical), and rough scheduling of each suggestion including identifying if it is a one time initiative, cyclic or ongoing;
    - (ii) An outline of known and possible resources (City, volunteer, local organizations, contributions, etc.);
    - (iii) Measurable goals and objectives;
  - (d) Presenting the draft Community Energy Plan at a public meeting, permitting public commentary, and considering such feedback in the finalization of the report; and
  - (e) Submitting the written Community Energy Plan to the Municipal Services Committee;
  - (f) Recommending an appropriate mechanism to ensure that the implementation of the Community Energy Plan is monitored and that progress towards meeting the plan's goals and objectives is reported on.
33. Copies of Committee minutes shall be forwarded to Council through the Municipal Services Committee. All recommendations to Council shall be made through the Municipal Services Committee.

**FINANCE, ADMINISTRATION AND TECHNICAL SUPPORT**

- 34. The Director of Public Works and Engineering shall designate a City staff member as Secretary to the Community Energy Planning Committee.
- 35. The Secretary shall prepare minutes of all meetings of the Community Energy Planning Committee, including recommendations and submissions to the Municipal Services Committee, and forward these to the City Clerk for inclusion on the Municipal Services Committee Agenda.
- 36. The Secretary shall, in cooperation with the Chair, prepare all meeting agendas and distribute them to Committee Members at least forty-eight (48) hours in advance of the meeting or as soon thereafter as is possible.

37. The Director of Public Works and Engineering shall be responsible for supervising the preparation of the draft and final written report of the plan developed by the Community Energy Planning Committee.

**GENERAL MATTERS**

38. This Committee or any Member thereof is not authorized to commit the City to any financial obligations.

**TERMINATION**

39. The Community Energy Planning Committee shall be considered dissolved upon submission of the Community Energy Plan for consideration by the Municipal Services Committee, or shall be otherwise dissolved by resolution of Council.
40. Notwithstanding the above, Council may, by resolution, dissolve the Community Energy Planning Committee at any time, or amend these Terms of Reference.

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