

Prepared for:
Halifax Regional
Municipality

Community Energy Plan

Task 2 - Stakeholder and Public Consultation

Final Report

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Table of Contents

1	Introduction	1
2	Consultation Program Background and Objectives	2
3	Consultation Activities	3
	3.1 Preparation	3
	3.2 Interviews.....	4
	3.3 Focus Groups	5
	3.4 Open House.....	6
	3.5 Stakeholders' Workshop	7
	3.6 Other Input.....	8
4	Main Messages from the CEP Consultations.....	9
5	Summary and Conclusions	21

Appendices

- A List of Stakeholders
- B Notes from HRM's Community Energy Planning Open House (March 28th, 2007)
- C Notes from HRM's Community Energy Planning Stakeholder Workshop (June 11th, 2007)
- D Notes From HRM's Community Energy Planning Interviews and Focus Groups

1 INTRODUCTION

In response to the requirements of the Regional Planning Strategy (2006) and its commitment to create a healthy, vibrant and sustainability community, HRM embarked on developing a Community Energy Plan (CEP) in 2007. Over a six month period - January to July 2007- members of the project consulting team conducted a series of consultation activities with diverse stakeholders throughout the municipality. The focuses of the consultation were:

- Confirm and update information bearing on current and future energy production and consumption in HRM related both to the direct activities of the stakeholders and within the municipality generally; and
- Gather stakeholder input and ideas regarding potential initiatives in fulfillment of the CEP's objectives.

The consultation with stakeholders was both a critical task in itself and a means of informing most other tasks encompassed by the project, including:

- Assessment of the Existing Energy Resource;
- Assessment of the Future Energy Supply and Demand;
- Creation of an Implementation Plan for the CEP; and
- Creation of a Monitoring Program for the CEP.

Stakeholder engagement and consultation is a priority HRM commitment generally and has been deemed a key underpinning, integral to the CEP development process, playing an important role to ensure stakeholder information sharing, knowledge, awareness and constructive participation. Inevitably, informed and involved community stakeholders throughout such a process will be a building block towards long-term alignment, support and participation in successful implementation. The CEP consultation program does not stand in isolation. In fact it deliberately builds upon considerable past and current HRM consultations with a broad audience on similar topics, most notably the extensive consultations on the Regional Plan, the Clean Air Strategy, the Wind Energy Master Plan, and the Community Visioning Processes. The emphasis of the CEP consultation program was on deeply engaging stakeholders with a strong vested interest in and/or knowledge of energy issues, since the broader community consultations on the direction of development in HRM were already well underway. This report describes the consultation task, its major outcomes and the way it which it connects with other tasks and deliverables of the project.

2 CONSULTATION PROGRAM BACKGROUND AND OBJECTIVES

The word “community” is central to the concept of Community Energy Planning. In deciding to create a CEP, the municipality acknowledged the need for a strategy on how HRM as a whole community will address energy issues. Since the production and consumption of energy is influenced by so many different actors in the community, the CEP cannot successfully be imposed by corporate HRM, regardless of its good sense and intentions. Instead, effective steps were taken to ensure that the key sectors, stakeholders, and citizens have the knowledge, means of involvement and motivation to engage or support the initiative and its implementation.

In this context, the consultation task was not a hurdle in meeting regulatory requirements or satisfying expectations. It was not seen as a burden, but rather as an opportunity to gain views and insights that not only influence but in fact shape the content of the CEP. Effective consultation was viewed as a collaborative opportunity within sectors, sub-communities and the public with the following objectives:

- share information and build awareness;
- draw on knowledge and stakeholder resources to validate and refine data;
- leverage diverse and broad experience and wisdom towards the most effective and realistic plans;
- test and refine ideas;
- continuously build confidence, buy-in and support of the initiative; and
- prepare the community for the successful implementation phase.

Consultation activities were initiated at the outset of this project in January 2007. The main activities of the consultation program are described below.

3 CONSULTATION ACTIVITIES

To reach the diversity of stakeholders with an interest or concern in energy matters, a variety of different consultation activities were undertaken. Given the busy schedules of most stakeholders involved in this consultation, most consultation activities were scheduled as focused face to face meetings, organized around an interview template designed to ensure consistent and comprehensive topic coverage. These meetings were complemented in most cases with advance briefing materials that offered the opportunity for stakeholders to learn about the project and invited them to submit written comments in addition to the compiled summary notes recorded by the consultation team at each meeting. The consultation activities and the stakeholders included through each activity are described below.

3.1 Preparation

The consultation task was initiated in early January 2007 with identification of stakeholders. This began with naming an HRM Core Team, comprised of representatives from Environmental Management Services, Regional Planning, Finance, Legal Services, Engineering, Transportation and Public Works, Planning and Development, and the Energy and Underground Services (EUGS) Committee of Council. HRM Core Team then helped to finalize a list of “direct” stakeholders – those who work directly in the energy sector as producers, distributors or regulators – and “indirect” stakeholders – those who have significant knowledge or interest in the way energy is produced, distributed, regulated or consumed. For each direct and indirect stakeholder organization, a key contact person was identified. The contact person was usually a senior staff member with direct responsibility or knowledge of energy issues for his or her organization. HRM citizens in general were also identified as key stakeholders. All direct and indirect stakeholder organizations were contacted early in the process to advise them of the project and solicit their participation.

In preparation for all other consultation activities, the Project Team in collaboration with HRM staff prepared a series of briefing notes. The purpose of the briefing notes was to provide the background information each stakeholder group needed to meaningfully engage in the consultation. It described the objectives of the CEP, the approach taken by the Project Team, the major tasks and deliverables of the CEP, the project’s commitment to consultation and the status of consultation and other activities. Given the broad range of interests among stakeholders, a few different versions of the briefing note with various levels of detail were produced. The briefing notes were also updated regularly throughout the project, especially prior to each consultation activity, to accurately reflect the status of the project at the time. Briefing notes were typically shared with stakeholders (who had generally been previously contacted and scheduled) about one week before the consultation activity they were involved in. In some cases, the briefing note was accompanied with a letter from the Mayor or other senior HRM officials to emphasize the importance of the CEP to HRM and encourage active participation from key stakeholders.

Preparatory activities also included the creation of a number of other communication materials based on the briefing note and other information. These included the project website (<http://www.halifax.ca/environment/energyplan/>), PowerPoint presentations and handouts distributed at meetings, and display boards for the Open House. Other activity-specific preparatory tasks included the

drafting of questionnaires for interviews, meeting templates, meeting agendas, invitations and advertisements for public meetings, and other logistical tasks.

3.2 Interviews

Between January and March of 2007, all direct stakeholders were invited to participate in one-on-one interviews with members of the Project Team. The invitation led to a total of 14 interviews with the following organizations:

- Nova Scotia Home Builders Association;
- Nova Scotia Power Inc.;
- Heritage Gas;
- NS Department of Energy;
- Natural Resources Canada;
- Halifax Chamber of Commerce Energy Security Committee;
- Union of Nova Scotia Municipalities Sustainability Office;
- Dalhousie Energy Research Group;
- HRM Regional Planning;
- HRM Finance;
- HRM Legal Services;
- HRM Engineering;
- HRM Transportation and Public Works; and
- EUGS committee.

Most interviews were conducted in person and involved key personnel from the stakeholder organization, as well as one or more members of the CEP Project Team with the most relevant area of expertise, and on occasion HRM staff. A few of the interviews took place by phone. While a number of generic questions were developed as the basis for each interview, each interview was approached flexibly and therefore had its own flavour and defined its own direction based on the interest of the stakeholders. Key questions explored during the interviews included:

- .1 **Vision** – If the CEP is successful, what do you envisage would be in place in HRM either in the short term or the long term?
- .2 **Priorities** – What priority issues or areas do you expect the CEP to consider? What are the priority actions that would make a significant difference to the energy production/use within HRM? What criteria should be used to evaluate potential actions and determine priority actions?
- .3 **Contributions** – What information / data / plans can you provide that would be useful to the CEP project team? What energy-related initiatives are currently ongoing in your organization? Are you able / willing to commit resources to improve your energy performance?

- .4 **Interactions** – What are the implications of your energy initiatives or other activities for the larger HRM community? What can other organizations do to help you achieve your energy goals or implement your plans? In particular, what could HRM do?

Notes from all meetings were recorded in a standard format and responses to the above questions identified where applicable. The Project Team then used these notes, as well as additional documentation or comments provided by stakeholders to inform various other tasks in this project ranging from baseline assessment to the creation and prioritization of a long list of actions according to priorities identified by stakeholders.

3.3 Focus Groups

While the main purpose of consultation activities was to inform the CEP Project Team of the activities and the priorities of different organizations, a secondary function was to create a space for different stakeholders in the same area of work to become informed of each others' initiatives. Four focus group meetings were organized to bring major categories of stakeholders together. The list of focus groups and participants are as follows:

- Economic Development
 - HRM Economic Development
 - Greater Halifax Partnership
 - Nova Scotia Economic Development
 - Atlantic Canada Opportunities Agency

- Non-Governmental Organizations
 - Clean Nova Scotia
 - Ecology Action Centre
 - Eco-Efficiency Centre
 - Sierra Club Atlantic Chapter

- Major Energy Consumers
 - Dalhousie University
 - Saint Mary's University
 - Capital District Health Authority
 - Burnside Business Association
 - Halifax Regional School Board

- Transportation
 - HRM Transportation and Public Works
 - Metro Transit
 - Halifax-Dartmouth Bridge Commission
 - Halifax Port Authority

The focus groups were typically started with a short presentation from the CEP Project Team followed by a discussion in the common areas of interest. They typically encompassed between 1.5 and 2 hours. Due to the range and variety of issues brought up by stakeholders, it was impractical to pose and expect stakeholders to confine discussion to specific or narrow questions. However, the following two leading questions were used to frame focus group discussions and the main information that the Project Team was interested in receiving:

- .1 **Actions** – What actions are you interested in seeing HRM take as a result of the CEP? What actions are your organizations taking that would benefit from being included in the CEP? Where do you see the biggest opportunities for green, clean or lean energy initiatives in HRM?
- .2 **Selection Criteria** – Given the range of potential actions that can be included in the CEP, what do you see as the key criteria in selecting priority actions? What underlying values should be used to prioritize action items in the CEP?

Notes from all focus group meetings were recorded in a standard format and responses to the above questions identified where applicable. The Project Team then used the data to inform various other tasks in this project, especially the creation of the long list of potential actions and the evaluation criteria for the creation of the short list. The feedback from focus group participants across all sectors was generally quite positive, evidencing a high degree of support for the CEP and its core objectives. Several participants commented that they ordinarily have little opportunity to exchange information and ideas in an informal setting with representatives from other organizations that work in their area and who may face similar issues and challenges.

3.4 Open House

The main event aimed at gathering face to face input from HRM citizens on the CEP was an Open House that took place on the evening of March 28th, 2007 at Cole Harbour Library. Due to project constraints, this was the only Open House the Project Team was able to organize. However, the project website invited comments and questions from the public both before and after the Open House, allowing additional opportunities for input from citizens.

The Open House was organized as an informal information exchange opportunity. There was no formal presentation during the open house but instead a self-running PowerPoint presentation, automatically cycled through slides presenting the background, approach and outcomes of the project to date. A number of display boards around the room presented some of the findings of the project to date (primarily based on Task 1, past and current energy and greenhouse gas assessment) which Open House participants were able to browse at their leisure. Members of the CEP Project Team were available to answer questions and engaged participants in discussion around energy, the CEP and other associated topics,

In addition, topic tables were set up each focused on different goals (land use planning, transportation, industry, infrastructure, buildings, alternative energy options, education and local government leadership) where some examples of potential actions being considered for the CEP were displayed. Participants were

encouraged to read these samples and provide their comments or additions at each table. This input was fed into Task 4 of the project and helped finalize the long list of potential actions and inform the selection of a short list.

3.5 Stakeholders' Workshop

The interviews, focus groups and the Open House provided a first opportunity to the CEP Project Team to consult with both direct and indirect stakeholders, concentrating on the specific interests and needs of each. The Stakeholders Workshop, an all-day event which took place on June 11th 2007 at St. Mary's Boat Club in Halifax, was a chance to bring diverse stakeholders together to receive the preliminary results of the earlier stages of the project, to validate what was learned in the preliminary round of consultations, to gather support, feedback or highlight potential problems and barriers for the proposed short list of actions, and to gain stakeholders' input before the creation of a detailed implementation plan.

The Stakeholder workshop was attended by approximately 40 stakeholders, almost all of whom had been previously consulted with. The day-long event began with presentations by the CEP Project Team on the tasks completed to date. The long list of potential actions, including ideas for actions gathered through the earlier stages of stakeholder consultations were shared with the participants. The Project Team then presented the selection criteria and described how it was applied to generate the short list of potential actions. Following the presentations, stakeholders broke into small facilitated discussion groups to comment on the items on the short list under various goals (land use planning, transportation, industry, infrastructure, buildings, alternative energy options, education and local government leadership) and identify any major missing items they felt were important to include on the short list. Overall, it appeared that stakeholders were generally satisfied with the selection process (with some contrary views expressed and recorded) and with the action items on the short list. A number of additional items or improvements to current action items were suggested.

Following a presentation that described the implementation planning process and highlighted examples of CEP implementation strategies and initiatives from other jurisdictions, the afternoon was spent in small group discussions where stakeholders generated recommendations toward the development of an implementation plan on the selected short list of actions. They suggested preliminary targets for various action areas, and they began to provide input on a number of specific action items around the following key implementation questions:

- .1 How will success be measured (indicators)?
- .2 Who should be involved in implementation (lead, staff, partners)?
- .3 What are the risks/ critical success factors?
- .4 What are the best tools?
- .5 What is the funding source for the program?
- .6 How will the program be phased in?
- .7 What ongoing resources and support are needed?

The CEP team utilized the input from the session to make revisions to the short list of recommended actions and to consider and integrate stakeholders' ideas in developing the implementation plan for the CEP.

3.6 Other Input

In addition to the input gathered through the formal processes outlined above, stakeholders and other interested individuals and groups were encouraged to interact with the CEP Project Team through the website and by email. A number of citizens and groups communicated with the CEP Project Team with general or specific questions or comments on the CEP. Their inquiries were addressed by the CEP Project Team or by HRM staff as appropriate using the same communication tools described in section 2.1. In addition, a number of stakeholders provided written submissions with specific comments and input into the CEP. Written submissions were received from the following groups:

- Royal Astronomical Society of Canada, Halifax chapter;
- Heritage Gas;
- Nova Scotia Power Inc.; and
- Nova Scotia Department of Energy.

4 MAIN MESSAGES FROM THE CEP CONSULTATIONS

The stakeholder consultation process gathered input from a diverse range of stakeholders who naturally brought a range of perspectives and ideas forward. While there was considerable variation in stakeholder input, several points were repeated by several stakeholders and therefore were considered key observations informing the planning process. These key points are summarized below and represent some of the primary messages brought forward to the consultation team and to HRM as part of this project.

- There are many energy initiatives happening across HRM. Most stakeholder groups and organizations engaged in the consultation process had energy and greenhouse gas issues high on their radar and among their priorities.
- The CEP needs to consider “energy security” in its broad sense as a goal. Energy security includes reliability of supply, affordability and long term contribution to quality of life.
- Stakeholders are looking for political leadership in this area from HRM. It is believed that the municipality can step up and champion efforts around energy, motivating other organizations to do the same, providing creative leadership and playing an important role in driving the provincial policy agenda. Stakeholders commend HRM for the leadership role it already plays as an advocate for these issues at the provincial and national level.
- The CEP is an important HRM document connected to the Regional Planning Strategy and overlaps with several of the other Functional Plans currently under development. While understanding these linkages, the CEP should focus especially on areas not covered by the other Functional Plans (alternative and renewable energies and community energy systems).
- Stakeholders believe the real opportunity for the CEP is to focus on those initiatives that HRM has a significant influence over (e.g. corporate initiatives, land use planning). They are interested in HRM’s short term commitments as well as longer term vision.
- Currently the level of HRM investment in energy initiatives is considered to be quite low. Many HRM departments are competing over a very limited budget allocated for energy initiatives. If this is a strategic focus for HRM, more money and human resources should be allocated.
- The future of energy in HRM is tied closely to the initiatives of other bodies, most importantly those of Nova Scotia Power and the Province (Department of Energy). HRM should continue to work closely with these bodies and should look for ways to influence the progressive advancement of their energy approaches.
- The GHG emission reduction targets and carbon market system contemplated by the Federal government is expected to significantly impact the energy sector including energy prices in HRM. Stakeholders would like to see HRM involved in creating and promoting a local carbon market.
- Currently, energy is still relatively inexpensive in HRM (especially price of gas), particularly when considered from the perspective of energy costs as a motivator for change. To see significant changes in behaviour, a significant change in energy prices is needed.
- A major barrier to enticing energy improvements within corporate HRM, is that incentives or savings are not realized by the same bodies/departments that carry the burden of change. There is a need for changes within organizations that allow departments to retain a portion of the financial benefits from energy efficiency projects.

- Capital funding for energy projects continues to be a large barrier. Organizations are bottom line driven and often do not have enough money to match grants provided by other levels of government. Innovative financing mechanisms are an important enabler of change in this area.
- While energy projects can be costly (at least in the short run) their positive economic impact cannot be ignored. HRM has the potential to grow a ‘Green Energy Economy’ here by demonstrating commitment to sustainability.
- The land use and transportation patterns that make sense from an energy perspective (active central downtown, served well by public transit) also make sense from a quality of life perspective and ultimately from an economic development perspective.
- Private sector stakeholders are interested in voluntary action and encouragement of innovative approaches. Any codes or guidelines that HRM introduces should be objective based, not prescriptive to allow room for innovation.
- Generally, demand side management initiatives (conservation and efficiency) should be prioritized over supply side initiatives (alternative and renewable energies) as they are much more cost effective (i.e. lower dollar value for each unit of greenhouse gas reduction)
- There is a need for broad based community education as well as communication with specific target audiences on energy and greenhouse gas emission issues. The progress report on the implementation of the CEP should be communicated regularly to stakeholders.
- All sectors, including all parts of the municipality and components of the resident/commercial populations, have a shared stake in our sustainable energy future. The planning process should continue to be broadly based, participatory but also not allow elements within the community to avoid their share of the responsibility for engagement and action.

Table 1 below summarizes more specific ideas that came out of stakeholder meetings. These form the basis of the “long list” of action further explored in the Task 4 Report of the CEP.

Table 1. Input from Stakeholders

	GOALS	IDEAS FOR CHANGE
BUILDINGS	Require energy efficient building design and practices for all new HRM Buildings	<p>Initiate new building design standards and targets to ensure all new corporate HRM buildings are constructed to LEED Gold standard for New Construction.</p> <p>Initiate new building design standards and targets for all buildings within the municipality (Energyguide for Housing rating of 80 for new residential buildings, LEED Silver standard for new commercial and institutional buildings.) Specific ideas:</p> <ul style="list-style-type: none"> • Encourage energy efficiency in development and rezoning processes through building permits and codes • Ensure public housing units are built to high energy efficiency standard • Support promotion of R-2000 homes by NS Home Builders Association • Promote CMHC 10% refund on its mortgage loan insurance premiums for homeowners who borrow money to build or buy an energy efficient home • Create a Green Building Incentive Program to supplement federal/provincial programs
	Retrofit existing HRM buildings to become more energy efficient	<p>Move toward meeting LEED for Existing Building standards at existing corporate HRM buildings. Start by conducting Building Energy Audits (Energy Performance Contracting) on all municipal buildings. Identify priorities, create retrofit plan and finance retrofits. Other ideas:</p> <ul style="list-style-type: none"> • Retrofit municipal buildings for energy efficiency improvements, with the recapitalization being paid from guaranteed energy savings. • Allow departments to retain a percentage of their energy savings while the remainder is used to replenish a capital reserve fund for energy efficiency projects. • Introduce a Buildings Rationalization Program: Identify and eliminate unnecessary or underused buildings and work toward “right sizing” the HRM building stock. • Recover condenser heat from ice plants in HRM owned arenas. <p>At the community level, promote building energy efficiency through incentives:</p> <ul style="list-style-type: none"> • Commercial: Work with partners (e.g. property owner association) to create incentives program for commercial building energy efficiency.

	GOALS	IDEAS FOR CHANGE
		<ul style="list-style-type: none"> • Residential: Evaluate opportunities for new household appliance incentive programs that can be offered through local delivery agents. • Reduce building permit fee for high efficiency home (Potential rebate of \$250-\$1000, based on range from 77 to R2000). • Evaluate possibility of setting up mortgage contributions based on home energy efficiency. • Evaluate the potential to provide property tax incentives for energy efficiency improvements. • Promote CMHC 10% refund on its mortgage loan insurance premiums for homeowners to renovate an existing building. • Require that all apartments be installed with energy meters – to ensure user pays.
BUILDINGS	Increase deployment of innovative technologies in building energy efficiency	<p>Design and build Demonstration Projects such as:</p> <ul style="list-style-type: none"> • Harbour cooling for new buildings near waterfront. • Green roofs program. • Solar power/heat demo projects. Also, promote solar water heating through the 10% rebate on domestic and commercial water systems (to a maximum \$5,000, of the installed cost. Valid until August 31, 2007) offered by the NS Department of Energy.
	Incorporate energy labelling into buildings	Use municipal code by-law changes as lever to require EnerGuide rating on all existing homes at time of sale- Work with realtors associations to accomplish this.

	GOALS	IDEAS FOR CHANGE
TRANSPORTATION	Increase transportation options and choice	<p>Examine HRM operations and community travel patterns to find opportunities for reducing trips in single occupancy vehicles.</p> <p>Initiate a Commuter Trip Reduction program for HRM and create corporate car pooling initiative for HRM employees.</p> <ul style="list-style-type: none"> • Encourage tele-commuting and compressed workweek within corporate HRM and businesses. • Promote ridesharing programs at the community level through high occupancy vehicle incentives and increase convenience (Carpool lots, shopper coupons or rebates, web-based carpool network system). • Implement Active Transportation Plan. <ul style="list-style-type: none"> - Work with trails group towards more active transport, emphasizing common user non-motorized trails. ‘Redbook’ standards on new developments. - Bike amenities: Bike lockers at transit terminals, bike racks at municipal facilities and all new buses, bike racks with new commercial development, require shower facilities, lockable inside storage. - Replace curbs, widen multi-user lanes, where possible. - Separate budget for bike routes – grade replacement, trail connectors. • Encourage the use of public transit through incentives and increase convenience (e.g. commercial establishments to give credits on merchandise for transit use, expanded bus rapid transit network to other suburban areas).
	Promote efficient transportation	<p>Design and implement program to reduce vehicle use through:</p> <ul style="list-style-type: none"> • Right size fleet, assign vehicle use appropriately and designate more vehicles for multi-use. • Improve efficiency of municipal fleet and eliminate waste (e.g. Streamline solid waste truck routes). • Create a driver training program for municipal fleet and employees (based on Natural Resource Canada’s Fleet SMART Program). • Expand the Anti-idling program. • Reduce bus and ferry idling. • Design and implement parking management program. • Improve efficiency at intersections.

	GOALS	IDEAS FOR CHANGE
TRANSPORTATION	Encourage the use of fuel efficient vehicles	<ul style="list-style-type: none"> • Incorporate fuel efficiency standards into the corporate fleet purchasing program. • Design and implement vehicle replacement program. • Replace light duty gasoline vehicles with light duty diesel vehicles to increase efficiency while reducing CO2 emissions. • Use preferential parking for employees that use alternative fuel/vehicles. • Use fleet management software program (e.g. Fleet Focus) to track vehicle age and optimize when to replace vehicles. • Investigate the opportunities for incentives for businesses that use smaller and more fuel efficient vehicles (e.g. provide preferential parking spots for selected vehicles based on fuel efficiency, size, or fuel type). • Encourage the Provincial Government to provide tax rebates for more energy efficient vehicle to HRM residents.
	Use alternative and renewable fuel for transportation	<p>Create a Green Fleet Procurement Policy working towards a 15% renewable content in municipal fleet:</p> <ul style="list-style-type: none"> • Implement Biodiesel Fuel Initiative - use biodiesel blend in diesel vehicles. • Use ethanol blend in gasoline vehicles. • When practical, purchase alternative fuels and vehicles as a demonstration project: Natural Gas, Propane, Electric, Hybrid and Hydrogen Fuel Cells. • Work with fuel providers to promote renewable and alternative fuels.
INDUSTRY	Reduce energy use by industry	<p>Encourage industrial consumers to set targets for energy conservation and adjust energy pricing to provide a driver for change.</p> <ul style="list-style-type: none"> • A joint effort between HRM and NS Energy to agree on a fuel/energy pricing structure for industry that helps change current consumption behaviour. • Initiate industrial process heat recovery in breweries for bottle washers, other industrial drains and refrigeration condenser heat recovery. • Initiate a condenser heat recovery system at the Tuft's Cove generating station. • Add combined cycle operation natural gas turbine plants at Tuft's Cove.
PLANN	Define Criteria for Evaluating the Energy Impact of Land Use Decisions	<p>Create a definition and attribute description of a successful community (e.g., an urban village, or a 'complete community') from an energy perspective – to support incorporation of energy efficiency into Land Use Planning. Use modeling tools to evaluate the energy impacts of developments (examples include CommunityViz, INDEX, or PLACE3S).</p>

	GOALS	IDEAS FOR CHANGE
	Incorporate Energy Efficiency into Planning Documents and Processes	<ul style="list-style-type: none"> • Incorporate energy efficiency principles into municipal planning documents through regular review cycles. • Support the principles of “Smart Growth” and the building of “Complete Communities”. • Develop policies that would allow planning departments to provide preferential or accelerated review for development permit process for projects that meet the energy efficient criteria for developments and/or other green criteria. • Require energy efficient or Green Development for large property developments where the municipalities (or other governments) have an interest.
PLANNING	Encourage Energy Efficient Land Use and neighbourhood site design	<ul style="list-style-type: none"> • Investigate whether property tax incentives, local improvement charges, or variable DCCs can be offered to desired energy efficient developments. • Develop Information and Education campaign around the benefits of energy efficiency and neighbourhood design for developers including concepts such as Solar Access Protection, house orientation, minimum house sizes, external fixtures (e.g. solar panels).
	Incorporate consideration of site options into planning new subdivisions and business/ retail parks	Create a checklist for developers to ensure they have considered energy efficiency in planning.
INFRASTRUCTURE	Reduce energy used for street and traffic lighting	<ul style="list-style-type: none"> • Reduce the number of streetlights in Halifax peninsula, and in new subdivisions. • Negotiate with NS Power and developers to acquire control of all street lighting in HRM. • Improve inventory of the number of streetlights using Geographic Information System tools. • Explore the possibility of installing a street light dimmer and timer project (e.g. to decrease hours of operation by 15 minutes per day). • Continue replacing HRM’s traffic signals with LED lights. • Investigate i-STOP Solar Powered Bus Stop Lighting. • Investigate i-SHELTER solar Powered Transit Shelter. • Investigate Solar LED lights. • Reducing light pollution and wasted energy through directional lighting, full cut-off lights, reducing the number of street lights, and motion censored security lights. • Standardize streetlighting service levels depending upon street traffic levels. • Work with NS Power and other municipalities to develop new streetlighting service rates that reflect new energy efficient technologies and operational techniques.

	GOALS	IDEAS FOR CHANGE
	Increase efficiency of infrastructure corridors	Establish policies to permit the environmental enhancement of traditional municipal infrastructure such as multi-use trenches for municipal services, especially in new developments.
	Reduce energy use by water and sewage infrastructure	<p>Start by auditing equipment to determine whether to retrofit, optimize or upgrade. Some ideas for upgrades:</p> <ul style="list-style-type: none"> • Ensure pipe maintenance, rehabilitation and source separation. • Install Variable Frequency Drives to increase energy efficiency. • Ensure pump control balancing and adjustment. • Install heat recovery units. • Install power factor controllers and corrections. • Procurement of energy efficient equipment. • Cogeneration at the Eastern Passage Wastewater Treatment Plant. • Install booster pumps (to decrease run time and operating costs). • Initiate pumping station energy SMART Program. • Establish alternative energy generation at plants. • Price municipally supplied water in blocks with lower prices for first blocks and higher prices for subsequent blocks. Use different block thresholds for different customer classes.
ALTERNATIVE ENERGY	Higher proportion of green/renewable energy used in buildings	<p>Create policy for all new corporate buildings to explore use of renewables and continue with the Green Power Purchasing Program towards a 30% renewable energy in corporate HRM buildings.</p> <ul style="list-style-type: none"> • Investigate biofuels in buildings (B20 –B100). • Investigate the potential for waste oil recovery from vehicle fleet and reuse as heating fuel for HRM owned buildings. • Small wind turbines for HRM buildings. • Solar water heating panels on HRM Buildings. • Use ground source heat pumps (GSHP) for Alderney 5 complex and new HRM buildings. <p>At the community level:</p> <ul style="list-style-type: none"> • Ensure regulations and codes allow implementation of renewable energy projects. • Develop an information and education program for BOMA and developers.

	GOALS	IDEAS FOR CHANGE
	Increase use of cleaner energy technologies in buildings	<ul style="list-style-type: none"> • Collect and use restaurant grease to produce biofuels for generating heat and power for wastewater plants. • Reconsider producing energy (electricity, steam, and heat) from municipal solid waste (MSW) using the residual refuse derived fuels (RDF) and solid derived fuels (SDF) after organics separation and recyclables removal. • Use heat pumps to recover heat from wet wells in sewage treatment plants and use to heat and cool the conditioned parts of the buildings. • Convert a block of municipal buildings in Dartmouth to NG. • Encourage developers of residential and commercial developments to incorporate renewable energy technologies.
	Increase renewable and alternative electricity generation within the region	<p>Develop a long term alternative strategy for the region:</p> <ul style="list-style-type: none"> • Work with partners to identify opportunities for renewable energy pilot projects (e.g. those identified in the Community Energy Plan). • Evaluate the potential for generating hydro electricity. • Create a network of individual energy contributors within HRM: e.g. using biomass, biogas, small wind turbines. • Develop pilot projects within HRM either as a municipality or in partnership with other sectors (e.g. wind). • Explore energy from waste options from Harbour Solutions Project. • Develop systems to use biomass (wood pellets) for district heating multiple houses in new rural developments. <p>Create Community Energy Projects in partnership with private sector. Some possibilities include:</p> <ul style="list-style-type: none"> • Biomass: <ul style="list-style-type: none"> - Biomass cogeneration plants at sawmills (6 so far looking attractive). - Beetle infested wood for biomass cogeneration and/or district energy. - MSW residuals for cogeneration or district energy potential. - Anaerobic digester (AD) plant for processing of organic ICI and septage waste. - C and D waste combustion for cogeneration or district energy potential.

	GOALS	IDEAS FOR CHANGE
		<ul style="list-style-type: none"> • Wind: <ul style="list-style-type: none"> - Utility size wind turbines independently or in cluster approach. • Natural Gas <ul style="list-style-type: none"> - NG fired cogeneration on the peninsula Halifax (One large Plant). - Smaller distributed NG fired cogeneration plants on the peninsula. - NG conversion of industrial boiler plants. - Make a request to NSPI to change net metering regulations in terms of capacity limitation (e.g. increase this limit from 100 kW to say, 500 – 800 kW) • Solar <ul style="list-style-type: none"> - Install solar panels to heat process water in industrial processes such as breweries and dairies. - Install solar air heating systems for industrial, institutional and municipal buildings (examples: Burnside park, community recreational centres). <p>In August 2005, Dalhousie, SMU and Capital District Health Authority agreed to move forward with the next phase of a Community Energy Project: The construction of natural gas-fired combined heat and electrical power plant on peninsula Halifax (will provide 15MW of heat and hot water).</p> <ul style="list-style-type: none"> • GSHP, WSHP and Harbour Water <ul style="list-style-type: none"> - Use GSHPs for private and institutional buildings - Harbour water cooling project for downtown core. - Harbour water cooling for Nova Scotia and Dartmouth Hospitals. - Water source heat pumps (WSHP) for heating and cooling loads in downtown. - Water source heat pumps for heating and cooling at the NS and Dartmouth Hospitals • Hydro <ul style="list-style-type: none"> - Mini (run-of-the-river) hydroelectric plants on Musquodoboit River at Crawford Falls, Middle and Upper Musquodoboit. - Mini hydro on Sheet Harbour River at Malay Falls, Half Way Brook and Little West River

	GOALS	IDEAS FOR CHANGE
	Set up a municipal utility	Consider setting up a municipally owned energy utility which has authority over power generation and rents the distribution system.
EDUCATION	Promote Energy Efficiency and Green Practices to Identified Target Markets	<p>Implement a public outreach campaign around energy issues:</p> <ul style="list-style-type: none"> • Conduct a well-planned and timed Community Energy Plan (CEP) launch campaign within HRM and NS. • Implement an energy or climate change recognition program and maintain the brand presence in all other energy incentive programs. • Encourage the local NGO community to provide input and opportunities to assist with outreach. • Promote and offer support to existing education presentations delivered by Clean Nova Scotia. • Partner with a local NGO to organise school events such as energy efficiency challenges at the school and classroom level. • Work with local industrial consumers to expand their commitment to the community to reduce energy. • Work with the development and construction sectors to identify target markets and new avenues to reach program participants. • Create a car pool culture with large ad campaign. • Organize a day long coalition building session organized by Mayor and involving CEOs and top managers of energy users to build a movement to get projects off the ground. • Conduct a focussed neighbourhood canvassing program to promote Energiguide. • On civic water bills show the amount of “carbon” required for the electrical power to move treated water to the user (including waste water treatment) with the purpose to build the link between water consumption/energy used/carbon produced and encourage “water” conservation.

	GOALS	IDEAS FOR CHANGE
LOCAL LEADERSHIP	Be a catalyst for Demonstration and Innovation Projects	<p>Allow access to municipal property or in-kind resources for demonstration projects and lead the piloting of promising new approaches where identified.</p> <ul style="list-style-type: none"> • Examples of demo projects: geo-exchange, solar hot water heating, green roofs, biofuel programs, etc • Example of pilot projects: Reserved parking spaces for car-sharing • Develop a policy that encourages user energy efficient practices within corporate properties and buildings. <ul style="list-style-type: none"> - Energy initiatives for lighting, energy save mode on equipment, water conservation. - Paper: reduce paper consumption. - Transport: see section on vehicle fleet. - Disposal: recycle all suitable paper, containers and minimize non-recyclable waste. - Procurement: purchase energy efficient equipment and consumables; maintain equipment to optimize performance.
	Build Partnerships for Long term Program Delivery	<ul style="list-style-type: none"> • Develop joint proposal submissions with other municipalities and stakeholders for federal funding programs. • Work with NS Power and Clean Nova Scotia to deliver consistent commercial building audit and education programs. • Work with the province to provide legislation and related regulations in the near future relative to opening up more of the electricity market to Independent Power Producers. These regulations should include the introduction of Standard Offer Contracts (SOCs) as the norm for power purchase agreements (PPA), and the carbon credits from renewable and alternative energy projects should remain the property of the owners of these projects.

5 SUMMARY AND CONCLUSIONS

The consultation program was a significant and integral component of the CEP creation and a major source of information for other tasks. By design, the consultation program directly involved most members of the CEP Project Team, making it particularly easy to integrate the input from stakeholders into all the other tasks for which members of the Project Team were responsible or participating. Stakeholder input formed an essential building block of the project team's knowledge base and understanding of local perspectives. Consultation and communication will continue to hold an essential role in further development and implementation of the CEP – facilitating cooperation, support, refinement and enhancements of the CEP towards fulfilling the community's shared objectives.

Those stakeholders that were engaged in the consultation process offered much valuable input and should be continually engaged in the ongoing implementation phases of the CEP. Some other stakeholders were invited into the consultation but were either uninterested or unable to participate either due to timing and other commitments, or because they did not see the applicability of the CEP to their work or mandates. The recommendations section of the CEP provides some suggestions for further engagement with specific groups of stakeholders. The CEP implementation plan identifies those stakeholders who have potential roles or need to be further consulted during the early or ongoing phases of implementation planning or action. In some cases there are opportunities for potential partnerships or shared responsibility for specific action items.

Appendix A
List of Stakeholders

Appendix A - List of Stakeholders

Category	Organization	Contact	Interview	Workshop	Comments	
Municipal	HRM Environmental Management Services	Stephen King	x	x	Main client contact	
	HRM Regional Planning Division	Kelly Denty	x		Interviewed in Feb and July 2007, involved in Core HRM Team meetings	
	HRM Finance	Cathie O'Toole	x		Interviewed in Feb 2007, involved in Core HRM Team meetings	
	HRM Planning and Development	Shayne Vipond	x		Involved in Core HRM Team meetings	
	HRM Capital Projects	Julian Boyle	x		Interviewed in Jan 2007, involved in Core HRM Team meetings	
	HRM Legal Services	Mary Ellen Donovan	x	x	Interviewed in Fed 2007, involved in Core HRM Team meetings and stakeholder workshop	
	HRM Transportation and Public Works	Ken Reashor	x	x	Interviewed in Fed 2007, involved in Core HRM Team meetings and stakeholder workshop	
	HRM Manager of Utilities Coordination	Angus Doyle		x	Attended stakeholder workshop	
	HRM Transportation and Public Works	David McCusker	x		Transportation focus group, May 2007	
	HRM Transportation and Public Works	Roxanne MacInnis	x	x	Transportation focus group, May 2007, attended stakeholder workshop	
	HRM Transportation and Public Works	Alan Taylor	x		Transportation focus group, May 2007	
	HRM Economic Development	Jim Donovan	x		Economic Development focus group, March 2007	
	Energy and Underground Services Committee	Councillor Andrew Younger			x	Presentation Feb 2007, attended stakeholder workshop
		Councillor Sheila Fougere			x	Presentation Feb 2007, attended stakeholder workshop
		Councillor Jim Smith			x	Contacted by email and phone in April 2007 for an interview but did not respond, attended stakeholder workshop
Councillor Steve Adams, Councillor Debbie Hum, Councillor Linda Mosher, Deputy Mayor Sue Utek, Mayor Peter Kelly					Presentation Feb 2007	
Buildings	BOMA Atlantic	Terry Doran			Information phone calls in Feb and April 2007, invited to stakeholder workshop but did not attend	
	Construction Association of NS	Carol MacCulloch			Information phone calls in Feb and April 2007, input recorded	
	Nova Scotia Home Builders Association	Paul Pettipas	x		Interviewed in Feb 2007	
	UDI	Kevin Riles		x	Information phone calls in Feb and April 2007, input recorded, attended stakeholder workshop	
	Waterfront Development Corp.	Bill Campbell			Information phone calls in Feb and April 2007, invited to stakeholder workshop but did not attend	

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Category	Organization	Contact	Interview	Workshop	Comments
Large Consumers	Capital District Health Authority	Chris Power			Information phone calls in Feb and April, was invited to focus group and stakeholder workshop but did not respond
	Dalhousie University	Jeff Lamb / Darrell Boutilier	x	x	Large Consumers focus group, April 2007, attended stakeholder workshop
	Greater Burnside Business Association	Kelvin Sams / Debbie Stuart	x		Large Consumers focus group, April 2007
	Hospitals - IWK, Infirmary, General	Greg McGragh	x		Large Consumers focus group, April 2007
	Mt. St. Vincent University	Paul Reyno			Information phone calls in Feb and April 2007, was invited to focus group and stakeholder workshop but was unable to attend either.
	Halifax Regional School Board	Ron Heiman /Earl McMullin	x		Large Consumers focus group, April 2007
	St. Mary's University	Gary Schmeisser	x	x	Large Consumers focus group, April 2007, attended stakeholder workshop
Energy Sector	Canadian Oil Heat Association	Dave Graham / Steve Wilson		x	Information phone calls Feb and April 2007, attended stakeholder workshop
	Canadian Wind Energy Association	Robert Hornung			Contact in Feb 2007, not interested in the project
	ECNG Energy LP	David Shaw / Bill Snee		x	Attended stakeholder workshop
	High Performance Energy Systems	David Stewart		x	Attended stakeholder workshop
	Imperial Oil	Willy Gelevan / Janice Kennedy		x	Information phone calls Feb and April 2007, attended the Open House March 2007
	Nova Scotia Power / Emera	Dana Atwell / Bill Hattie / Chris Huskilson / Margaret Murphy	x	x	Interviewed Feb 2007, attended stakeholder workshop, written submission received June 2007
	Heritage Gas	Ray Ritcey / Michel Sarrouy / Harvey Fedyk	x	x	Interviewed Feb 2007, attended stakeholder workshop, written submission received June 2007
	Conserve Nova Scotia	Heather Foley Melvin / Allan Crandlemire	x		Interviewed Feb 2007, attended stakeholder workshop
	Barrington Wind Energy	Erik Twohig			Invited to stakeholder workshop but did not respond
	ExxonMobil Canada Ltd.	Ron Moore			Invited to stakeholder workshop but did not respond
Solar Nova Scotia (NGO)	Don Rosco / Daniel MacKay		x	Information phone call in Feb 2007, requested a presentation at their AGM but was not possible due to budget restrictions, attended stakeholder workshop	

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Category	Organization	Contact	Interview	Workshop	Comments
Federal	Natural Resources Canada	Ken Church	x	x	Interviewed by phone in Feb 2007, attended stakeholder workshop
	Department of National Defence	Meena Forsythe / Mike Comeau		x	Information phone calls in Feb and April 2007, attended stakeholder workshop
	Environment Canada	Chris Feetham / Michael Hingston		x	Phone call in Feb 2007, attended Open House March 2007 and stakeholder workshop
	Industry Canada	Ann Thompson			Contacted in Feb 2007 and invited to stakeholder workshop but chose not to participate
	ACOA	Chris Giddens / Matthew Johnson	x	x	Economic Development focus group, March 2007, attended stakeholder workshop
	Public Works and Government Services Canada	Ian McKay / Bob Colbourne		x	Phone call in Feb 2007, attended stakeholder workshop
Provincial Government	Nova Scotia Department of Economic Development	Tony Lamport / Judy White	x	x	Economic Development focus group March 2007
	Nova Scotia Department of Energy	Scott McCoombs / Allison Scott / George Foote / Jason Hollet	x	x	Interviewed Feb 2007, attended stakeholder workshop, written submission received June 2007
NGO	Clean Nova Scotia	Heather Takerer / Judy McMullen	x	x	NGO focus group March 2007, attended stakeholder workshop
	Dalhousie Energy Research Group	Dr. Larry Hughes	x	x	Interviewed Feb 2007, attended stakeholder workshop
	Dalhousie Eco-Efficiency Centre	Ray Cote	x		NGO focus group March 2007, Written submission received March 2007
	Sierra Club of Canada - Atlantic Chapter	Emily McMillan	x		NGO focus group March 2007
	Ecology Action Centre	Gerry Ternan, Brendan Haley, Wayne Groszko	x		NGO focus group March 2007, RSVPed for stakeholder workshop but did not attend
	Federation of Canadian Municipalities	Amy Seabrooke	x		Phone conversation in Feb 2007, interested in following the progress of CEP
	Royal Astronomical Society of Canada - Halifax Chapter	John Walker			Written submission received March 2007
	Nova Scotia Environmental Industries Association	Rick Joseph			Phone conversation in Feb 2007, invited to NGO focus group and stakeholder workshop but did not attend
	GPI Atlantic	Clare Levin			Phone conversation in Feb 2007, not interested in direct involvement with the CEP but pointed our relevant GPI reports
	Union of NS Municipalities	Peggy Crawford	x	x	Meeting in March 2007, attended stakeholder workshop

Appendix A - List of Stakeholders

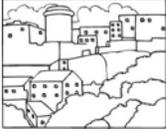
Category	Organization	Contact	Interview	Workshop	Comments
Transportation	Bridge Commission	Steve Snider / Jon Eppell	x	x	Transportation focus group May 2007, attended stakeholder workshop
	Metro Transit	Paul McDaniel / Kenny Silver / Dave Reggie	x	x	Transportation focus group May 2007, attended stakeholder workshop
	NS Department of Transportation and Public Works	Keith Boddy		x	Attended stakeholder workshop
	Transportation Association of Canada	David McCusker / Roxanne MacInnes (HRM)	x	x	Transportation focus group May 2007, attended stakeholder workshop
	Halifax International Airport Authority	Peter Clarke			Was contacted in April 2007 and May 2007 and invited to focus group and stakeholder workshop but never responded to invitations
	Halifax Port Authority	Dean Bouchard	x		Transportation focus group May 2007
	Atlantic Provinces Trucking Association	Jenn Gillespie			Was contacted in April 2007 and May 2007 and invited to focus group and stakeholder workshop but never responded to invitations
	Halifax Gateway Council	James Frost			Was contacted in April 2007 and May 2007 and invited to focus group and stakeholder workshop but never responded to invitations
	Transportation Club of Halifax Dartmouth	Amy Cogan			Was contacted in April 2007 and May 2007 and invited to focus group and stakeholder workshop but never responded to invitations
	Armour Trucking	R Leblanc			Was contacted in May 2007 and invited to stakeholder workshop but never responded to invitations
Economic Development	Greater Halifax Partnership	Fred Morley / Mislal Balogun / Stephen Dempsey	x		Economic Development focus group March 2007
	Halifax Chamber of Commerce Energy Security Working Group	Alex Pavlovski / Wendy Harrington / Wayne Adams / Steve Foran / Shelley Wilcox / Marlene Moore / Mark Vande Wiel / Margaret MacDonald / Larry Hughes / John Crace / Donald C Dodge / Anne Rodger	x		Presentation Feb 2007

Appendix B

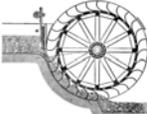
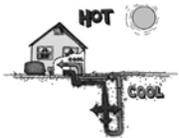
Notes from HRM's Community Energy Planning Open House (March 28th, 2007)

Energy Efficiency of Buildings		
	Ideas for Potential Initiatives	Community Comments
	Reduce building permit fees for high efficiency homes.	<ul style="list-style-type: none"> ▪ Would this mean increasing fees for lower efficiency homes?
	Introduce HRM procurement policy changes, using life-cycle energy costs and efficiency related to new buildings.	<ul style="list-style-type: none"> ▪ Efficient sports field lighting or with new lights at South Field. ▪ Motion detector security lights save energy.
	Promote passive solar orientation for siting of new buildings.	<ul style="list-style-type: none"> ▪ Very good idea.
	Support EnerGuide for Houses program and explore the idea of requiring an EnerGuide rating before building permits are issued.	<ul style="list-style-type: none"> ▪ Exposed on EnerGuide Program, need higher money incentives.
	Allow HRM departments to retain a percentage of their energy savings while the remainder used to replenish a capital reserve fund for energy efficiency projects.	<ul style="list-style-type: none"> ▪ Especially for those in financial need of help with retrofitting.
	Work with partners (e.g., property owners’ association) to create incentives program for commercial building energy efficiency	

<h1 style="text-align: center; background-color: black; color: white; padding: 5px;">Transportation Choice and Efficiency</h1>		
	Ideas for Potential Initiatives	Community Comments
	Implement HRM's Active Transportation Plan.	<ul style="list-style-type: none"> • Bike Corridors needed • Finish Dartmouth Trail System • Need pedestrian and bike access to cross #111 highway at Burnside Drive overpass – currently dangerous and discourages non-vehicle use
	Improve regional public transit services.	<ul style="list-style-type: none"> ▪ Bus service for Prospect Road
<p>Citizen's Suggestion</p>	Would like to see a Provincial/Municipal initiated car pool agency. Government funding to help with start up costs, member fee maintained. Money incentives for paying members.	
	Increase efficiency at intersections.	<ul style="list-style-type: none"> ▪ More traffic sensor lights (Micmac mall/Glen Manor are bad examples)
	Introduce programs to reduce bus and ferry idling.	<ul style="list-style-type: none"> ▪ Good idea
	Provide preferential parking spots for selected vehicles based on fuel efficiency, size, or fuel type.	<ul style="list-style-type: none"> ▪ Good idea
	Purchase fuels with renewable component for all municipal fleet vehicles and transit vehicles.	<ul style="list-style-type: none"> ▪ Not ethanol - too expensive

Energy Efficient Land Use Planning		
	Ideas for Potential Initiatives	Community Comments
	Support the principles of “Smart Growth” and the building of “Complete Communities.”	<ul style="list-style-type: none"> ▪ Very important. Do we need more box store type shopping areas?
	Use modeling tools to evaluate the energy impacts of proposed developments.	<ul style="list-style-type: none"> ▪ e.g., ecological footprint
	Allow planning departments to provide preferential or accelerated review for development permit process for projects that meet the energy efficient criteria for developments and/or other green criteria.	<ul style="list-style-type: none"> ▪ Must take into account esthetics of build up construction
Citizen’s Suggestion	Use porous concrete in certain areas to re-charge rainfall to the subsurface to reduce stormwater run off.	
	Incorporate energy efficiency principles into municipal planning documents through regular review cycles.	
	Offer property tax incentives or local improvement charges to desired energy efficient developments.	

<h1 style="text-align: center;">Efficiency of Infrastructure and Service Delivery</h1>		
	Ideas for Potential Initiatives	Community Comments
	<p>Use directional lighting and employ dimmer and timer on street lights.</p>	<ul style="list-style-type: none"> ▪ Yes ▪ Reduce light pollution- lets see the stars again ▪ Full cut off lighting ▪ Less lights especially parking lots ▪ Full cut off street lights example – airport road lights saves energy reduce glare light trespass
	<p>Switch over to LED traffic lights.</p>	<ul style="list-style-type: none"> ▪ Makes sense
	<p>Meter water use to encourage water conservation. Goal: Reduce energy used for delivering municipal services.</p>	<ul style="list-style-type: none"> ▪ Incentives/disincentives for conversation below a threshold. ▪ Already metered. Perhaps consumption under set amount – give money rebate
<p>Citizen's Suggestion</p>	<ul style="list-style-type: none"> ▪ Coordination between NSPI, HRM, Department Energy. All parties involved must understand the idea behind technological changes that can reduce energy use (Specifically through retrofit of lighting) 	

Diversification of the Energy Supply		
	Ideas for Potential Initiatives	Community Comments
	Support Natural Gas Distribution in HRM.	<ul style="list-style-type: none"> As long as supply can be guaranteed of LNG plant?
	Investigate opportunities to provide incentives to developers or builders that will construct buildings with "solar ready" plumbing systems.	<ul style="list-style-type: none"> Change the building codes and siting approvals
	Support landfill gas capture systems:	<ul style="list-style-type: none"> Use anaerobic digestors for green cart material then re-compost the sludge Use sludge from tertiary waste water system to make compost
	Evaluate the potential for regenerating hydro electricity on HRM rivers.	
	Pilot an earth energy project within HRM.	<ul style="list-style-type: none"> Heating and cooling storage seems to work in NS (Mahone Bay example) We are on Bedrock.
	Compile an inventory of the resource potential for alternative energy within the region.	<ul style="list-style-type: none"> E.g. Northwest Arm Tidal Power station

Local Government Leadership

	<p>Develop outreach materials to highlight energy efficiency opportunities in the community.</p>	<ul style="list-style-type: none"> ▪ Need a process to reach communities ▪ Efficient outdoor shielded lighting fixtures ▪ Motion detector security lights
	<p>Partner with local non-for-profits to organize school events such as energy efficiency challenges at the school and classroom level.</p>	<ul style="list-style-type: none"> ▪ Schools. Elementary and high, need improved educational programs to educate kids on the issues and solutions so they “buy in” young ▪ See stars and have safe lighting classroom workshops (Partner with Light Pollution Abatement Committee) ▪ Encourage student/parent projects at school and at home
	<p>Initiate pilot projects for new approaches where identified (e.g., reserved parking spaces for car-sharing)</p>	<ul style="list-style-type: none"> ▪ Plus lane/toll change for multi-passenger car rides (bridge)
<p>Citizen’s Suggestion</p>	<p>Competitions between communities/neighborhoods on energy efficiency</p>	
	<p>Allow access to municipal property or in-kind resources for demonstration projects (e.g., geo-exchange, solar hot water heating, wind turbines green roofs, biofuel programs, etc).</p>	

Appendix C

**Notes from HRM's Community Energy Planning
Stakeholder Workshop (June 11th, 2007)**

First Breakout Session Question: Comment on the short list of actions – are these the appropriate items for the CEP team to take into the next stage of analysis?

Breakout session themes:

- Transportation and Infrastructure
- Land Use Planning
- Energy Security and Diversification
- Buildings and Industry

Transportation and Infrastructure

Short list of actions is generally on the right track. Additional thoughts:

Additions to Legislative Priorities

- Roundabouts policies by province (already in discussion with HRM)
- Prioritize provincial roadway standards to encourage active transportation in 2 areas:
 - o Secondary networks
 - o Roads around schools

Additions to Actions

- Anti-idling
- Insuring that sustainable transportation options speak to both urban and rural areas:
 - o Options for urban areas – transit etc.
 - o Options for rural areas – carpooling, commuter vans
- Taxis – look at barriers to energy efficient vehicles in addition to the zoning issue
- Streetlighting – many stakeholders have noticed increased public interest. Technological and design opportunities to be investigated
- LED lights – important to show cost-benefit analysis, seen as a major priority and requiring tight timelines

Land Use Planning

- Retail-food missing from actions – GHG's from food production and transport
 - o Encourage local production in and small scale local retail
- Subdivision layout
 - o Site planning services and landscape and design included in lot purchase price
 - o Review how lots are established
 - o Encourage developers to incorporate and adapt to natural features
 - o Ensure communication between landowner and builders and developer
 - o Encourage developers to create design guidelines to suit the site – land, slope...in terms of energy and resource needs of the sites (e.g. solar orientation, waste treatment) stormwater drainage
 - o Bylaw/Policy requiring developers to account for energy/environment implications – choice of design, fit with Regional Plan, what services will be required

- Required mixed use subdivisions
 - o Ask developers to do this
 - o Need to look forward at future demographics etc. to determine who will be moving in and what services they will need.
- Support for collaborative approach to planning
- Research/understand what did and did not work in subdivisions
- Implement penalties for non-compliance

Energy Security and Diversification

District Energy – fuels

Waste to energy

Definition of Energy security

- o Reliable supply
- o Affordable

Three components

- o Review sources and users
- o Reduce consumption
- o Replace

Long term sustainability

Don't just look at supply also look at use- Look from a sourcing perspective

Barriers: Capital

Legislative opportunities

Wind Energy:

Timing

Coordination with province

Buildings and Industry

Buildings

1. Extend policy to all Building stock
2. Include Queuing in permit process
3. Harder/more active role for HRM – beyond 'support'
4. Targets
5. Education – eco-footprint
6. From energy efficiency to measurable eco-footprint
7. Existing stock – requirements/standards e.g. furnaces and appliances

Industrial

1. Carbon credits – within HRM actively identify/work with marketers and developers
2. From inventory of waste heat to evaluate the applications of waste energy
3. Smart design for commercial/industrial facilities – footprint criteria for development approvals – Provincial level statutes
4. Recognition program
5. Broaden initiative from breweries to other industries

Second Breakout Session Question: Suggest targets for each action on the short list. Take one action through the list of Implementation Considerations.

Breakout session themes:

- Infrastructure and Leadership
- Land Use Planning and Transportation
- Buildings
- Energy Security/Supply and Industry

Infrastructure and Leadership

Infrastructure

Street lighting actions:

UNSM + HRM + NSPI

Currently have a project around standards of street lighting, Late 2007 completion date

Target: having lighting services meet lighting purposes

Indicators:

- night time accidents
- Perception of comfort safety
- Luminaires/KW
- Finding a suitable standard for all new streets (e.g. Illuminating Engineering Society of North America).

LEDs

Target: 100% conversion of traffic lights

Timeline: immediate, within the year

Pumping Stations

Target: combine energy audit with next round of maintenance schedule (2-3 years) -> lead to specific energy improvement targets for each pumping stations

Water Pricing

Target: Revenue Neutral System

Immediate target: information sharing on what water costs to both residences and individuals

Indicator: results of public survey on level of knowledge

Leadership

Walk the talk according to CEP

State of Environment Report

Reporting on actions coming out of CEP.

Target: First report by end of 2008, then every 2-3 years

Include: what we know and don't know

Lobbying powers

ongoing

NS Energy Strategy

short term – immediate

Detailed implementation ideas for street lighting strategy

Success	strategy in place looking at effectiveness for intended purpose Indicator: perception of comfort, safety, visibility, access
Partners	City and NSPI, NS Dept. Energy and Public Works
Risks	negative public perception difficulty in measuring political risks – lost of council support in the face of public demand for light
Tools	education for councilors, parents, teachers, women's groups
Funding	business case for owning all street lights, better management Need upfront funding to create strategy – consortium? Funding partners
Phasing	partnerships Strategy Implementation Prioritizing 1) public areas (e.g. municipal properties, schools, squares) 2) Residential secondary 3) Parks and other sensitive places
Ongoing support/resources	technical basis, other municipalities, input from survey

Land Use Planning and Transportation

Transportation

GHG Emissions

- 25-30% from '02
- 30-35% per capita

Single Occupancy Vehicles

- From 70+% - 50% 60% by 2012

Volume – gas/diesel sold

- 25-30% - 2012

Ridership – Public Transit

- 25% 2012
- Level of service + 10%
- Number of people access (walk 500m) + 100%
- 1 km outside city + 50%
- Travel time – 20%
- Distance per unity of GHL
- Emissions + 20%

Parking

- From 4 to 3 per/1000 sqft.

Land Use

Impervious Surfaces
Roads kms (future) %?

Density
+ people/hectare
Urban #s?
Suburban #s?
Rural #s?

Trucks per day downtown
300/day by 2012
(inland terminal)

Number mixed use communities
90% of new suburban/rural homes by 2015

Protected Solar access on lots + 50%
(within 4J of 5)

GHG Emissions
25-30% from '02
30-35% per capita

Detailed implementation ideas for Mass/Public Transit

Who	Metro Transit - taxis, commuter vans, prov. TPW Bridge Commission - taxis, commuter vans, prov. TPW Community Developers – commercial/res Product – Technology COS, CN, marine AR Employers HRM Interdisciplinary Working Group– steering comm.
Risks	\$ Capital without Goal Fuel costs don't rise Operational costs too high Success exceeds capacity
Success Factors	High gas \$ More white collar industry Congestion – travel decay Queue jumping lanes for transit (transit priority) Political Acceptability Prov. Federal targets
Tools	Transit MGT Plan CEP Reg. plan TDM strategy

FED emissions targets
Infrastructure – transit improvements
Links to other transit
Integrated system
Measurement tools

Resources Federal and provincial dollar programs
Fee adjustments
Parking
Tolls
Transit
User pay

Buildings

Pre-existing Corporate Targets
20% reduction from BAU by 2012
Up target over 20 years 30-35%

LEED Gold – all new buildings are designed to LEED Gold
Corporate standards demos: have to be able to see them e.g. sewage plants/green roofs/
partnering with universities

Show business case for solar

Solar hot water – up deployment

Awareness – demo projects business case

- o Increased property taxes with solar installed – barrier
- o Proportion of furnace/hot water/roof replacement
- o 5% a year
- o Model efficient home new plus older retrofits demo
- o New homes – requirement for Energuide 80/R2000 by 2011 (Provincial regulations)
- o Target for HRM within 1 year, diverge 1-2 years
- o Occupancy permits – linked to energy efficiency
- o Permit costs linked to cost of building up capital costs = up permit fees – disincentive

Targets for all new houses: no consensus

Support for education and for mandatory with house sale by 2010
MURBS new down 30% MNECB – need incentives programs because low income –
primarily retrofits

Mobile homes

Priorities

1. LEED gold new buildings
2. Property tax down with energy efficiency
3. Building permits down with energy efficiency
4. Corporate retrofits by 2012
5. Subdivision design orienting buildings for max solar gain

Energy Security/Supply and Industry

- Add questions to annual property assessment forms for businesses related to energy consumption , energy audits , and waste products
- Industry does not want mandatory targets for energy efficiency , business case will determine projects
- HRM should focus an efficiency awareness campaign on the largest industrial loads first
- HRM should take its annual GHP funding and use it to fund an energy advisor position to help homeowners and small businesses and non profits to qualify for energy efficiency assistance funding
- NSPI will consider increasing the net metering limit once an impact study on ratepayers is completed
- NSPI is interested in developing or purchasing power from some or all of the small hydro projects on the short list
- Municipal wind energy plan will require an equivalent provincial plan before it can proceed
- HRM should consider purchasing 30 – 40% of its energy requirements from renewable sources , not just electricity.

Wrap Up Questions and Comments

Q. How sensitive are energy forecasts to price in energy?

How would this affect implementation Plan?

Revisit the plan every few years

Would not emphasize future prices in the report

Pricing – too uncertain and too much fluctuation

Caution – make sure we are clear about how the actions link back to the goals and objectives we established

Intensity factors if or NS vs. looking at utilities

Wants to revisit definition of energy security

Focus on back-casting: how we get to the end use

Transportation will be tough – it's primarily lifestyle change

Important to maintain link between land use planning and transport

Need to examine definition of “mixed use” – not just residential with a little bit of commercial

Critical to have comfort in baseline and methodology to create baseline

Importance of best practices in other jurisdictions

HRM must be able to learn from others best practices

Tendency to develop implementation plans – don't want to start from scratch. Need to leverage off pre-existing programs/partnership and resources.

Yearly competition - or research 1 set of goals and targets

Identify those measures totally within the municipality's hands when writing the implementation plans

Q. how to engage community? e.g. developers and builders – public awareness

Need to celebrate success, e.g. housing, ferry system

Appendix D

Notes from HRM's Community Energy Planning Interviews and Focus Groups

CEP STAKEHOLDER MEETING/CONVERSATION

ORGANIZATION: HRM

DATE: Feb 7th, 2007

DEPARTMENT: Regional Planning

CONTACT PERSON:

Name: Kelly Denty, Acting Director

Tel: 490-6011

E-mail: dentyk@halifax.ca

MEETING PARTICIPANTS: Kelly Denty, Aftab Erfan

Discussion Points

Vision of the CEP:

Smaller ecological footprint

Cleaner, greener, more responsible production and use of energy

Energy objectives addressed through multiple programs

What priority issues or areas do you expect the CEP to consider?

Refer to Regional Plan Policy SU-30 on CEP, which identifies 5 goals:

- Use of cleaner energy (eg. Co-gen and district energy and natural gas)
- Energy efficiency in HRM buildings, utilities and fleet
- Viability of using renewable energy sources
- Education program for citizens to encourage energy efficiency in design of buildings, site plans, subdivisions and communities
- Appropriate measures including public consultation for siting of wind turbines

Others: landfill energy generation, incentives for green buildings, solar orientation, transit

The biggest change HRM can make right now: Corporate changes

Characteristics of the CEP actions desired:

Easy to explain and easy to understand

Straight forward – meaning no changes to provincial regulations / admin structures in place

Supported by senior government and council

Measurable

The economic incentives most useful will likely be Tax incentives

Finance functional plan- focus on service delivery, is currently in progress to restructure the entire tax structure for HRM

Other Initiatives of Interest

Functional Plans – CEP will be ahead of most other functional plans and will be pushing them along. Where an area is already covered by other functional plans CEP will not go into as many details.

Energy areas not covered by other Functional plans: Renewable energies and energy systems (eg. District heating)

Areas where CEP team's ideas will be welcome: Settlement patterns – secondary planning process can use CEP ideas for community design (the Urban design guidelines are also to help with this)

Other Suggested Stakeholders/Contacts

Relationship with the province (eventually need change in legislation)

Stakeholders eg. Developers and NSPI

CEP STAKEHOLDER MEETING/CONVERSATION

ORGANIZATION: HRM

DATE: February 6, 2007

DEPARTMENT: Legal Services

CONTACT PERSON:

Name: Mary Ellen Donovan

Tel: 490- 4226

E-mail: donovad@halifax.ca

MEETING PARTICIPANTS: Mary Ellen Donovan, David Lea, Marty Janowitz

Discussion Points

- Building Code Bylaws- have ability to use to implement more significant restrictions (like have done with smoke detectors, sprinklers, fencing around swimming pools) – perhaps minimum energy standard of 70 or 80
- Procurement policy changes- consider lifecycle energy cost/efficiency; policy matrix; smart cars or hybrids preferred; low flow toilets vs. energy cost of transfer and treatment
- Conversion of buildings to natural gas, Transit Garage done , looking at Northbrook School , Eric Spicer building.
- Could explore municipal policy to standardize building standards re- energy efficiency
- Funds tied up in strategic investment fund – not enough money (energy just one aspect) – need to separate funds for strategic energy initiatives
- Adopt European type system for motion detectors in buildings – HRM has 365 buildings- lights and thermostats could be on such system- some spaces would turn off automatically (kitchen and meeting rooms, storage, washrooms, utility, infrequently occupied spaces) – cleaning staff procedures
- Landfill – lost 2 years of methane production because of NSPIU process (ask Julian Boyle) – 2 MW and under standard offer in place; negotiate carbon credits; need changes to small IPPs → more entrepreneurial
- NSPI- Monopoly crown corp. vs. monopoly private sector – need government to redress balance of power problem
- LEDs- Department of Energy (50% cover capital costs)- excellent; but needs HRM to be more nimble in installation of lights- must complete installation prior to new money- Feb. 20 deadline of application- needs strategic dollars

Appendix D Notes From HRM's Community Energy Planning Interviews And Focus Groups

- Street lighting issue- 39,000 in HRM but HRM owns only 13,000 on peninsula. NSPI owns and maintains rest; but maintenance time and quality seriously deficient; HRM paying for service its not getting- paying for bulbs that are out- would like to acquire rest of lights- would bring efficiencies, flexibility, innovation (e.g. cut off light , dust proof covers, enhanced photocells); developers might be required to invest and turn over to HRM- NSPI resistant because it is profitable at current level of maintenance
- Wind- recent changes to Electricity Act; allows municipal utilities to buy directly from IPPs. Deadline of March 30 for introduction of legislation to allow financial bilateral contracts for renewable energy producers. HRM has approved 2 contracts but not yet allowed to conclude- financial bilateral contracts- HRM concern: carbon credits from contracts surrendered to NSPI (not yet imposed in legislation) – HRM contracts don't provide for this
- Water Commission – behind the fence wind turbine- still opportunity- Lake Major plant
- Buses- working on problems with biofuel , will reinstate program once problems fixed
- Simple opportunistic changes to internal processes – electronic blinds close at night; cleaners procedures to close blinds , turn off lights
- Biomass – Councillor Streach (because of longhorn beetle quarantine in his region) – biofuel opportunities; but problem is that can't take material out of quarantine zone without processing – but theoretically could be used in district heating (e.g Barrett Lumber is preparing a fuel product); looking at wood waste in HRM but finances not yet practical (\$15/tonne cost of product; but \$12 is breakeven); C&D waste is high %; fuel crops on marginal land (fast growing crops best- alder etc.)
- Municipal solid waste to energy – not likely
- Reserve fund to allow innovative energy saving initiatives in new corporate buildings.

Other Initiatives of Interest

- Alderney Five Project- no regulatory issues, SDTC financing applied for but no action (feds)
- 1st natural gas transit centre
- Victoria Road new police station
- Policy re: new building energy standards are possible (LEED or?); Energuide 80
- Anti idling campaign for all HRM staff
- District Energy System, staff favour heating only instead of cogeneration. Provincial money still committed.

Other Suggested Stakeholders/Contacts

HRM-

- David McKusker – long term development and policy
- Phil Francis – Right of Ways, encroachments

CEP STAKEHOLDER MEETING/CONVERSATION

ORGANIZATION: HRM

DATE: February 12, 2007

DEPARTMENT: Finance

CONTACT PERSON:

Name: Cathie O'Toole, Acting Director of Finance

Tel: 409-4226 476-0392 (cell)

E-mail: otoolec@halifax.ca

MEETING PARTICIPANTS: Cathie O'Toole, David Lea, Marty Janowitz

Discussion Points

- Reduce HRM Corporate's own consumption
- Prospect of creating a municipal utility – probably not realistic in short to medium term
- A number of opportunities-
 - Street lights and traffic lights
 - Changing the way HRM delivers some services- may need to change some service standards. Challenge departments to come up with innovative ways to reduce energy consumption. Some examples:
 - Waste Management- sending trucks long distance to pick up 1/3 full compost bins
 - Transit scheduling and operations- idle buses and buses idling; ferries keep engines running in order to stay steady to dock (couldn't there be some sort of holding clamp?)
- Need to incentivize- so departments have benefit to conserve energy and money; Today departments lose budget monies (or concerned that they would) that are saved through efficiencies. Perhaps allow departments to retain a percentage of the savings while the remainder is used to replenish a capital reserve fund for energy efficiency projects.
- Self financing mechanisms to fund the Energy and Underground Services Reserve Fund – was set up 3 years ago but only approximately \$300,000 in funding is currently available but there is no sustainable funding source. If .5% or .25% of \$691 million municipal budget went into reserve, plus a % of departmental savings, it would have major impact.
- HRM has mid/low relative tax burden compared with other Canadian cities

Appendix D Notes From HRM's Community Energy Planning Interviews And Focus Groups

- Service improvement reserve fund has been used in the past to fund some energy efficient projects but it is currently poorly funded.
- Most federal financing programs are 1/3- 1/3- 1/3 between Feds, province, municipality, but today province generally can't afford its' third; plus administrative complexity of federal programs (e.g. Green Municipal Fund or Gas Tax) is a disincentive to applying to these programs.
- Need standards for new municipal buildings – most common new buildings are recreation centres and fire stations (3-4/year). There are currently no energy standards within TPW on capital works
- National Energy Code guideline , suggested that Corporate buildings could exceed by 25% , this is similar target to defunct CBIP program
- Need policy on common streetlighting standard across HRM
- Markham Ontario example – 11 categories within Green Development Plan – need to demo to municipality how it could work; need for Master Plan area (linkages between various components of Regional Plan not clear)
- Economic impact needs to be reflected in CEP (include reference to commodity shortages, opportunities for benefits by use of innovative technology, commodity energy strategies). HRM should be encouraging companies involved with green technologies to locate here. Demonstrating a commitment to sustainability in the community is likely to attract like minded companies to locate here.
- Provincial government employs few incentives – payroll rebates exist- others needed (for R&D, tidal power – much happening in Europe)
- Common currency (requested in RFP) – net utility measure- could be ecological footprint, CO2 emissions; Prefer performance measures- quantitative; possibly reference participation rates – probably going to be difficult to come up with a useful approach

Other Initiatives of Interest

- Clause in Municipal Government Act creates a difficulty – prohibits energy performance contracts (would have to record the liability plus Minister of Service NS has to sign contracts on operational leases of over \$100,000 which is an unreasonably small amount for a municipality of HRM's size and profile., and these need Council approval on each. Have asked for it to be raised but no response- could be based on a % of municipality's annual budget.
- Green procurement standards coming this year

Other Suggested Stakeholders/Contacts

HRM-

- Phil Townsend, Capital Projects Group
- Peter Duncan - Engineering
- Austin French – Community development

CEP MEETING/CONVERSATION

ORGANIZATION: HRM

DATE: February 29, 2007

DEPARTMENT: Transportation and Public Works

CONTACT PERSON:

Name: Julian Boyle

Tel: 902-490-7115

E-mail: boylej@halifax.ca

MEETING PARTICIPANTS: Julian Boyle, Dave Lea, Jim Simmons, Anthony Hlahatsi

Discussion Points

- .A brief presentation by Julian on Energy Use and HRM energy projects:
 - The importance of Energy and its interaction with Environment, Security, Supply and Demand.
 - General level of HRM investment in energy considerably low. Approximately \$15 million per year budgeted for Corporate HRM energy needs (includes energy bills and projects).
 - Example of how HRM finances energy-efficiency initiatives was given based on the Energy Performance Contract (EPC) for the Metro Transit garage for \$1 million. This example served to show how difficult it is for HRM to set aside funding for energy-improvements and management across the Corporate as well as community sectors.
 - There are many HRM buildings which are candidate to initiatives to energy-efficiency improvements, but HRM does not have the funds to commission the work.
 - Traffic lighting was partially converted to LED, about 50 of the 250 HRM intersections have been converted.
 - Similar conversion being contemplated for street lights.
 - Currently HRM looks after about 13,000 street lights in the Peninsula.
 - NSPI not eager to change rates to reflect reduced lighting load after these conversions – lead time from conversion to recognition by NSPI very long.
 - Street lighting consists of metered and un-metered rates, and the exact number of streetlights under NSPI's service not known.
 - Currently, HRM (P&D department) allowing developers to own operation of lights. P&D collects a fee of approximately \$600/streetlight fixture from these developers. Generally, rates are lower for metered lights compared to unmetered.

- One success was HRM's achievement of a 3% reduction in rates for street lighting, which was a province-wide reduction but at HRM's cost and initiative.
- Julian referred to NSPI's latest DSM plan which was reviewed by Summit Blue of the USA. Plan still awaiting review and approval by Council.
- HRM Corporate Structure
 - To understand how HRM works, Julian outlined the HRM Corporate structure showing the size of its hierarchy and how energy requirements affect each of the various departments in different ways. Therefore many departments competing over very limited budget allocated for energy initiatives.
 - Some initiatives have been taken in the past, but have not been taken further. Cathy O'Toole commissioned assessment for "Combined Underground Services Trenching" as a measure to improved energy delivery security and sharing costs for underground structures – but she has since moved to different responsibilities within HRM. Report of the findings on this study might be available to CEP team?
- District Energy
 - Discussion on the previously studied community district energy for Dalhousie, St. Mary's and CDHA was concluded economically unfeasible.
 - Julian stressed that while this type of project is better used in a cogeneration configuration, in this case the aforementioned project might still be feasible if power generation were left out due heavy capital cost of turbines and related generation equipment. More attempts to produce independent power appear to sour relations with NSPI – so might as well put that aspect aside.

Other Initiatives of Interest

- A more likely feasible form of district energy might be one that is networked so that individual energy contributors/developers within HRM might have access to the network of end users. This would be a form that allows varying scales of thermal energy producers from small-scale biomass fired plants to contribute.
- If HRM were to be a catalyst for change, there is a need to go beyond EPCs and the switch to natural gas – HRM should consider changes to Regulations and Codes such as a requirement for a set minimum renewable energy mix in new buildings. Key stakeholders for this initiative would involve BOMA and building contractors within HRM.
- For more on what biomass utilization in HRM looks like today and in the near future under business as usual scenario contact Steve Stretch.

Other Suggested Stakeholders/Contacts

- Cathy O'Toole
- Mary Ellen
- Steve Stretch

CEP STAKEHOLDER MEETING/CONVERSATION

ORGANIZATION: HRM

DATE: February 7, 2007

DEPARTMENT: Transportation and Public Works

CONTACT PERSON:

Name: Ken Reashor

Tel: 490-6637

E-mail: reashok@halifax.ca

MEETING PARTICIPANTS: Ken Reashor, David Lea, Marty Janowitz

Discussion Points

- Department- handles traffic related issues; ops level; day to day; largely in the core- outside core is largely handled by province; includes bike lanes, active transportation; commuter trip reduction
- Objective- reduce congestion but not eliminate traffic delay (or would rob from mass transit); better pedestrian traffic accommodation- more efficiency at intersections;
- ROW trenching-permitting is a topic receiving attention- coordinating activities of utilities, Heritage Gas; potential of underground power- Now, shallow utilities are not in same trench as sewer and water → high cost for installing underground utilities , no requirement to do so .
- No gas lines into new Clayton Park West developments, only Dartmouth developments have gas lines installed. Some orphaned gas lines installed as part of Harbour Solutions project, will be turned over to Heritage and investment recovered once gas arrives in that area.
- Department needs additional staff, equipment, budget to accelerate progressive changes

Other Initiatives of Interest

- Internal to department- tele-commuting, flex hours , earned days off
- Trails groups- work with towards more active transport- emphasizing common user non motorized trails
- .LED traffic signals- huge issue due to age of original equipment (25+ years) \$3500 each equipment cost + same in labour; Issues re- provincial funding (Conserve NS) – funding only after installation; all new intersections are LED usually cost shared between HRM and developer), others intersections (overhead lights only) changed when there is maintenance) → 85% cost savings when whole intersection changed.
 - Reduction in number of streetlights in Halifax peninsula (now one per pole) → every two poles elsewhere , no consistent streetlight standard used in HRM
 - Canadian Institute of Traffic Planners are looking at means to reduce energy requirements of street lighting – cut off lights etc.

Appendix D Notes From HRM's Community Energy Planning Interviews And Focus Groups

- Negotiations are ongoing with NSPI which are difficult on a number of matters
 - Street lighting- HRM owns only on peninsula; goal to take over(at least maintenance) all-except exterior of buildings, sporting fields, high intensity applications
 - Fuzziness re inventory of who is responsible for what both with NSPI and to some extent within HRM (e.g. parks) – would like to employ advanced GIS tools to get an accurate inventory of streetlights
 - Maintenance- 3 day turn around in HRM area; months by NSPI plus they don't inform when things are done; inventory issues
 - New areas- lights still owned by NSPI- trying to change this (HRM to own- developer pays then hand over), HRM managing system
 - NSPI has no reduced cost unmetered service rate for energy efficient streetlights
- Streetlight dimmer project and timers being explored – connected to Conserve NS
- Traffic impact studies and analysis ongoing
- High Occupancy Vehicle Incentives being considered- pricing (parking – complex issue balancing retail and other concerns)- Calgary: restricted on street parking vs. here, streets are inundated; Carpooling lots downtown; shopper store coupons or rebates; Active strategy to develop a web-based central system – was a study → recommendations re: car pooling management (get copy); Business opportunities to contribute – pool cars, smart cars, taxi chits, flex time, discount transit passes; earned day off (8-4 in Calgary earns day off); bus passes deduct off marginal tax rate
- No comprehensive parking strategy in HRM , particularly downtown.
- Web based community strategy planned to allow commuters to post available space in vehicles to encourage car pooling. Approx 80% of commuter vehicles coming on to peninsula are single occupant.
- Bicycle strategies – a number of things either have happened or underway:
 - Bike lockers rented at transit terminals, bike racks in municipal facilities and all new buses; New By-Law requires bike racks with all new commercial developments; Would like to require shower facilities; possible lockable inside storage.
 - Bike routes- all 'red book' standards on new developments
 - Replacing curbs, widening multi user lanes where possible
 - Separate budget for bike routes (inadequate funding to meet objectives in short term) – maintenance. Grade replacement, trail connectors (Barrington. Bedford Hwy. etc.); Budget has increased from \$40K to \$400K – need \$2 Million to upgrade bike lanes on peninsula)
 - Obstacles- Province doesn't recognize bicyclists or pedestrians on provincial roads- won't pay for anything other than crosswalks, not sidewalks or bike lanes; One recent bit of progress – province agreed on new interchanges that there will not be bicycle 'barriers'.

Other Suggested Stakeholders/Contacts

- David McKusker – long term development and policy
- Phil Francis – Right of Ways, encroachments

CEP STAKEHOLDER MEETING/CONVERSATION

ORGANIZATION: HRM

DATE: February 16, 2007

DEPARTMENT: EUGS committee

CONTACT PERSON:

Name: Stephen King, on behalf of EUGS Committee Chair

Tel: (902) 490-6188

E-mail: kings@halifax.ca

MEETING PARTICIPANTS: Stephen King, Aftab Erfan, Jim Simmons, Wayne Lewis

Discussion Points

Project team delivered a short presentation and took questions/comments.

- The main concern was with the date of the open house (set of March 6th) which conflict with Council meeting. Aftab to work with Stephen and EUGS to find a better date. Councilors are interested in spreading the word about this through this own constituencies and networks.
- LED lights – there is an issue with LED Lights as brought up by Linda Mosher. Apparently HRM has LED lights that haven't been installed
- Mayor Kelley wants to ensure that transportation and rapid transit in particular is well tied in.
- Councilor Adam and Councilor Younger are concerned with listing NSPI as a key stakeholder considering that they are seen as not committing to energy sustainability.
- Councilor Utek warned of a few specific projects that are coming forward for funding – NASCAD, Public Market, and Ecology Action Centre – these groups will have a special self interest and might try to dominate public hearings. – CEP Team to make clear that we are not there to endorse a specific project.

Other Initiatives of Interest

NSPI is to present at the next COW committee meeting on the DSM plans. Additional consultations on the lager sustainability initiatives happening next week. Members of the CEP team to attend both meetings.

Other Suggested Stakeholders/Contacts

Councilors will share the notice about Open House with their constituents.

CEP STAKEHOLDER MEETING/CONVERSATION

ORGANIZATION: Chamber of Commerce

DATE: February 14, 2007

DEPARTMENT: Energy Security working group

CONTACT PERSON:

Name: Alexandre Pavlovski, Green Power Labs Inc.

Tel: (902) 466-6475

E-mail: ampavlovski@greenpowerlabs.com

MEETING PARTICIPANTS: Alexandre Pavlovski, Wendy Harrington, Wayne Adams ,Steve Foran, Shelley Wilcox, Marlene Moore, Mark Vande Wiel, Margaret MacDonald, Larry Hughes, John Crace, Donald C Dodge, Anne Rodger, Aftab Erfan, Jim Simmons, Stephen King

Discussion Points

Project team delivered a short presentation and took questions/comments.

- Shelf-life of the CEP is of interest. Both short term and long term options should be included.
- Questions about how to weight consultation input. It's important to get a sense for the clustering of ideas and most commonly cited suggestions, while acknowledging unique and creative ideas.
- It's important to publicize success – tell people what they can do

Other Initiatives of Interest

- CEP should focus on broad energy issues. Eg. How do we change the way we live, our life styles to consume less energy?
- CEP to consider the financing piece which is key to the success of energy projects. Idea: what if banks would calculate mortgage contributions based on the energy characteristics of a home? Can we get CMHC to ensure mortgages that have been linked to energy efficiency initiatives?
- CEP should consider encouraging/enforcing building energy efficiency through Building Permits and the Building Code.
- CEP to look into ideas of carbon sequestration (Shelley has info on this that she can share)
- CEP to consider “what does long term energy security mean in terms of long term quality of life”? public perception of energy needs to change. Connections between energy and life style to be make more apparent.

Other Suggested Stakeholders/Contacts

Contacts for a transportation focus group:

- Energy Consumers Group (Rate Payers Association?)
- Halifax Dartmouth Transportation Club
- Airport Authority
- Gateway Council
- Atlantic Trucking Association

CEP STAKEHOLDER MEETING/CONVERSATION

ORGANIZATION: Heritage GAs

DATE: February 21, 2007

DEPARTMENT: various

CONTACT PERSON(S):

Name: Ray Ritcey, President

Tel: 466-2019

E-mail: rritcey@heritagegas.com

Harvey Fedyk, VP Engineering and
Construction

Tel: 466-2047

E-mail: hfedyk@heritagegas.com

MEETING PARTICIPANTS: Ray Ritcey, Harvey Fedyk, Stephen King, David Lea, Marty Janowitz

Discussion Points

- Natural gas has economic and environmental advantages – clean burning; new product in NS (different than other parts of Canada and US) – brings flexibility, reliability – energy on demand plus cost competitiveness
- Avoidance of oil tank liability is one driver of transition → 20-25% reduction in home owner insurance
- Dartmouth Crossing entirely served by gas
- Heritage business model
 - Needs \$0.17/year revenue per \$1 capital expenditure
 - Getting gas to peninsula Halifax is key
 - Rest of HRM – can't justify capital expenditure within current business model
- If 4 major institutions on Halifax peninsula converted to natural gas → 50,000 tonnes of CO₂e reduction per year
 - Direct conversion of institutions is simpler (vs. district energy system) – get rid of electricity sales regulatory issue
 - More nodes → more extensive infrastructure – more high pressure steel pipe in ground (250 psi vs. 100 psi for plastic) → enables easier local extension of service
- Enablers –
 - Provincial or municipal policies – clean air; such as 0% or 1% sulphur limit on heating fuels; would need change to Municipal Government Act to accomplish
 - Need a dedicated HRM Natural Gas Implementation (or Conversion) Engineer – technical knowledge, full time focus, plus workable budget (estimate- \$200K/year)
 - Engineer could advise HRM of economic life cycle benefits of gas conversion of municipal buildings. More building conversions will increase the knowledge base of local gas contractors and help to decrease conversion costs.

Appendix D Notes From HRM's Community Energy Planning Interviews And Focus Groups

- Competitive challenge because of provincial acceptance of #6 fuel oil (the dirtiest grade) vs. #2 fuel oil (requirement in most jurisdictions) – makes gas less competitive – large factor for users such as DND and hospitals
 - DND- new energy performance contract with Honeywell
 - Province provides steady customer base for producers of heavy fuel oil and makes it a viable business for producers and keeps prices lower.
 - HRM as customer – could do more (see suggestion above about dedicated staff)
 - HRM need political leader- beyond group of Councillors – one Councillor who has mandate to report regularly and monitor natural gas progress within HRM
 - Common/shared trench can be advantageous, BUT there are challenges –
 - Width and location of trenches to accommodate telecom and competitors
 - Sidewalk and trees make repair costly and difficult
 - Municipal Carbon Tax (or provincial) – if you burn dirty fuel, pay for it;
 - Tax on delivery of energy might be worth exploring (NSPI and Heritage in essence do have to pay already – but not oil delivery = unfair playing field) , this is contentious , oil delivery companies pay to register vehicles , pay taxes on motive fuels used in delivery vehicles.
 - Advantageous pricing for indigenous energy – not enough of factor today; not recognized for contribution to province through royalty agreements
 - Benefit if monies flowed into energy fund to underwrite initiatives in HRM
 - Increase focus on commercial users – incentives or requirements
 - CNG – possible but needs investment in base vehicle fleet to make sense – buses or others
- Natural gas availability offers additional choice to customers and added energy supply security
 - When gas is available in greenfield area – almost always will be 100% take-up as base fuel so priority to figure out how to extend service to greenfield development areas of HRM near city
 - Conversion of thermal heating load from electricity to natural gas can assist in reducing the seasonal peak in electricity reduction which will reduce the operation of the NSPI peak load generators, which are the highest cost producers.

Other Initiatives of Interest

- Cross harbour decision soon – waiting on final 'precedent' decision including commitment to get major peninsula institutions (universities and hospitals) within 2-3 years; revenue is essential (either direct from load or indirect from district heating); Has \$1.2M revenue in current commitments, 4 institutions would add \$2-2.5M – need \$3.2M total new revenue on peninsula for viability – need a robust system –
 - Construction could begin as early as May with Sept-Oct gas available on peninsula

Other Suggested Stakeholders/Contacts

CEP STAKEHOLDER MEETING/CONVERSATION

ORGANIZATION: NSPI

DATE: March 8, 2007

DEPARTMENT: various

CONTACT PERSON:

Name: Alan Richardson

Tel: 902 450 0507

E-mail: alan.richardson@emera.com

MEETING PARTICIPANTS: Alan Richardson, John Aguinaga, Merle Maclsacc, James Taylor, Jim Simmons, Stephen King, Wayne Lewis, David Lea

Discussion Points.

NSPI considers that the changes necessary to achieve the GHG emission reductions contemplated by the Federal Government will be 'transformational' to the traditional Nova Scotia homeowners' way of life, and way of conducting business.

Nova Scotia population growth is flat. The NSPI customer base is growing due to an increase of electrical usage per capita. DSM must play a big part to flatten this load growth. HRM would like to integrate its CEP with NSPI's DSM Program.

NSPI will provide an estimate of HRM annual peak loads and annual energy consumption. The peak loads will be high level estimates only, because the peaks are not coincident at each HRM substation.

Consumption data and/or forecasts for at least ten (10) years are required in order to establish an appropriate trend.

Bottom up approach is considered best for a monitoring and verification program.

NSPI, and other large industries in Nova Scotia, will be required to reduce GHG emission intensities by 2010. These Federal Government GHG emission reduction targets are supposed to be announced on March 29, and are anticipated to be in the range of 15%. Future HRM emission calculations must consider these reduced NSPI emissions through its lower Emission Intensity Factor. NSPI will provide forecasts of the new lower Intensity Factor.

NSPI favours development of Tuft's Cove Unit 6 (when this project has been officially sanctioned) to increase system efficiency and reduce emissions. One consideration would be steam extraction from Tuft's Cove 6 to be used within a district heating scheme for that area of HRM. Another consideration could be using the C.W. discharge from Units 1 – 3, although this is very low grade energy.

Annual NSPI energy production currently is approximately 13,000 GWh/yr broken down as follows (approx.)

- Coal Plants – 9,500 GWh/yr
- Tuft's Cove (No. 6/Natural Gas) – 1,700 GWh/yr

Appendix D Notes From HRM's Community Energy Planning Interviews And Focus Groups

- Hydro Plants – 1,000 GWh/yr
- Wind/biomass – 800 GWh/yr

NSPI will provide advice on the most effective measures achieved by other utility DSM programs throughout Canada.

Discussion ensued around whether or not the Tuft's Cove plant should be kept within the HRM "boundaries" from the perspective of the HRM CEP, given that any retrofits to Tuft's Cove will impact the entire NSPI generation fleet from a GHG emission perspective. This impact, together with those from modifications to NSPI's other thermal generation plants, will be reflected in lower Intensity Factors for GHG emission reduction calculations for HRM in general.

Other Initiatives of Interest

NSPI has applied for funding twice in the past through the Atlantic Innovation Fund for research on CO2 storage, and been declined both times.

NSPI is part of a clean coal consortium with other utilities that are examining new technologies to reduce coal plant emissions.

NSPI has applied for funding through SDTC for in-stream tidal power development.

NSPI and ACAP are presently co-funding a 100 home demonstration project in Cape Breton using PowerCost Monitors for homes.

NSPI will ask Provincial Government for funding assistance with a variable resource integration study planned for 2007 that will, amongst other technologies, include in-stream tidal.

Other Suggested Stakeholders/Contacts

CEP STAKEHOLDER MEETING/CONVERSATION

ORGANIZATION: Nova Scotia Department of Energy and Conserve NS

DATE: February 14, 2007

DEPARTMENT: various

CONTACT PERSON:

Name: Scott McCoombs , Director Energy Management

Tel: (902) 424-5364

E-mail:

MEETING PARTICIPANTS: Allison Scott, Deputy Minister; Heather Foley Melvin, CAO CNS; Allan Crandlemire, ED CNS; Scott McCoombs; George Foote ; David Lea, Marty Janowitz, Wayne Lewis

Discussion Points

- Details of new federal program is as yet unknown- blank slate; will allow HRM participation but not clear how or to what extent
- Release of Robert Carey Report will be key reference point for provincial direction
 - Largest concerns – impact on rates; energy market trading; integration of renewables
 - NS coal-fired backstop → GHGs won't come down; so finding optimal balance is key
- Competition with other municipalities to participate in new plan
- Prospect of federal or provincial emissions standards
- NSPI Integrated Resource Management Plan needs to be integratable with new provincial plan
- Provincial EnerGuide Program- uncertain about whether there will be a claw back in connection with new federal program (won't know until after March 31) – looking at possibly one integrated program.
- S King shared info on HRM interest in evolving opportunities - green power purchase, airshed management, climate change adaptation, credit trading
- GHG credits vs. green energy credits, only one is a tradable commodity. NSPI currently insists on retaining ownership of all GHG credits for renewable generation projects.
- Biomass projects raise other types of emissions issues
- HRM co-gen project - \$20M in hiatus from feds is stumbling block; Eco-Trust \$40-\$45M for NS, HRM may get proportional share; Dalhousie University in desperate need of upgrading infrastructure; hospitals have high annual year round energy demand; no real financial payback for private sector investor under current scenario; who gets GHG credits is issue; benefits of expanding natural gas nodes on peninsula – DND, hospitals and universities
- NSPI – conversion from heavy fuel to natural gas → 40-50% GHG reduction, but strongly resisting

Appendix D Notes From HRM's Community Energy Planning Interviews And Focus Groups

- S King raised issue of Municipal Governance Act resulting in current obstacle due to fixed \$100K limit on operating leases → results in ESCO agreement disincentive; tangible capital asset become a long term capital liability even though off book – Department will review likely prospect of adjusting this to accommodate situation of HRM and possibly other larger municipalities
- Discussed opportunities to use Municipal Code by-law changes as lever; e.g. Toronto; - require EnerGuide rating is possibility
- Renewables in mix by 2013; 10% or 500MW likely maximum

Other Initiatives of Interest

- Deputy's Forum on Environment – cleaner and greener energy research and development
- Load serving entity – NSPI or could it be municipality – new regulations issued January 25
- NS Energy Strategy by end of March

Other Suggested Stakeholders/Contacts

CEP STAKEHOLDER MEETING/CONVERSATION

ORGANIZATION: Nova Scotia Home Builders Association

DATE: February 19, 2007

DEPARTMENT: NSHBA

CONTACT PERSON:

Name: Paul Pettipas, CEO

Tel: 450-5554

E-mail: pettipas@nshba.ns.ca

MEETING PARTICIPANTS: Paul Pettipas, Stephen King, David Lea, Marty Janowitz

Discussion Points

- NSHBA builds ½ - ¾ of all homes in NS – most members are in HRM
- Renewables in mix by 2013; 10% or 500MW likely maximum
- 2008 provincial initiative – will require EnerGuide label on all new homes; cost of \$400 per unit, first evaluators are selected (e.g. Hawkeye Consultants), initiative of Conserve NS (Ted Ross)
 - '80 by 11' – provincial initiative in works, energy component in building code, 72, 77, 80 (EnerGuide) by 2011; train evaluators
- Need municipal building permit support – possibly require EnerGuide 77 or 80, to get occupancy permit; possible incentives to do so
- Discussed possibility of putting EnerGuide rating on existing homes at time of transaction – possible over time, need support of real estate industry.
- Have make it as easy as possible – attitude change
- Promote ETS systems – in- floor radiant heat with solar backup and air to air heat pumps
- Obstacle to conversion to high efficiency oil burning appliances – low quality oil product allowed in our market (#2) – not up to basic European standard
- HRM Enablers –
 - Don't put obstacles in front of innovative builders – implement objective based code, not prescriptive code; train and expect building inspectors to accept innovative initiatives that meets objectives
 - Examine Calgary approach (Donna Moore is CEO of Calgary Homebuilders Association) – reduced building permit fee for high efficiency home (potential for rebate of \$250-\$1000 based on range from 77 to R2000)
 - Saskatoon approach – tax free for 5 years for inner city building renovation or building
 - Need education for homeowners to recognize the value of enhanced energy efficiency in homes.
 - Ensure public housing units are build to high energy efficiency standard

Appendix D Notes From HRM's Community Energy Planning Interviews And Focus Groups

- Commercial sector seriously lagging – (e.g. Home Depot markets energy efficient building technology but their building is conventional; same with Dartmouth Crossing – not too late to enforce some changes?)

Other Initiatives of Interest

- Building Canada – program to train builders – look at enhancing efficiencies in the building process and investing the savings in improving energy efficiency.
- Scotian Homes – standard house is 77 on EnerGuide
- Habitat for Humanity in NS- houses are R2000, the people who most need savings
- NSHBA offers CRB , Certified Residential Builder , designation – voluntary for members
- Certified Residential Renovator Program being implemented – will need to take R2000 course as a requirement to achieve certification , voluntary only
- NSHBA website – link to consumer building package

Other Suggested Stakeholders/Contacts

Construction Association of NS – Carol McCullough

CEP STAKEHOLDER MEETING/CONVERSATION

THEME: Economic Development Focus Group

DATE: March 9, 2007

MEETING PARTICIPANTS: Jim Donovan and Steve King (HRM), Chris Giddens (ACOA), Judy White (NS Department of Economic Development), Mislal Balogun (Greater Halifax Partnership), Aftab Erfan, Jim Simmons

Discussion Points

Jim D – diversification of the energy sector, generally a good idea from economic development perspective – helps attract business, bring stability in pricing

Suggestions for “evaluation criteria”

- Employment
- Attracting investment
- Expanding existing businesses
- Local market for materials
- Create stability in pricing
 - Mislal to forward the GHP indicator on economic opportunities
 - Look also at the Corporate Knights indicators

Suggestion: seeing if CMHC can have solar subdivision as a priority

Suggestion: building a business case e.g. for building energy efficiency

Suggestion: emphasizing personal responsibility – graphical display of a person, house, bike etc

Seeing this as a parallel to how HRM dealt with solid waste - transformational

The links with the Economic Strategy: Transportation, Clustering in the CBD

Suggestion: emphasizing quality of place – “best in class”, attraction, retention, expansion

Suggestion: need to publicize plans from key consumers that show leadership/ champion the CEP

Other Initiatives of Interest

- Provincial Strategy – Prosperity document, progress report was done in Nov, talks about ownership of supply at the legislative level
- ACOA's funding criteria: they fund case studies, pilots, feasibility analysis, front end studies, enabling, coping (but don't fund for example wind turbines)– Are interested in compatibility with ACOA's goals and the track record of the group making proposal, Key question: what are the economic benefits that result? And Is this a priority project for the propose? – Jim D. must remember ACOA's role as an advocate for the region to other federal bodies to get money for project implementation

Appendix D Notes From HRM's Community Energy Planning Interviews And Focus Groups

- Provinces funding: local programmes available for eco-development, help our at the pilot stage, demo projects, showcasing SD competitiveness
- Coastal Community Network's conference generate three priorities: energy efficiency, supply, and transportation (Ishbel Munro P.O. Box 402 New Glasgow, NS B2H 5E5 Tel: (902) 485-4754;)
- Eco-efficiency centre, Smart Business Action Team, Tool kit for small businesses

Other Suggested Stakeholders/Contacts

- NS Business Inc (Martin Walker)
- HRM to keep ACOA posted and in the loop

CEP STAKEHOLDER MEETING/CONVERSATION

THEME: Environmental NGOs Focus Group

DATE: March 15, 2007

MEETING PARTICIPANTS: Steve King (HRM), Gerry Ternan, Brendan Haley, Wayne Groszko (Ecology Action Centre), Emily McMillan (Sierra Club), Heather Takerer (Clean Nova Scotia), Ray Cote (Eco Efficiency Centre), Aftab Erfan

Discussion Points

Brendan H – District heating project – is this really the best bang for the buck? Would we be better off putting the same budget into energy efficiency? , Steve K- Remembering that the reasons behind the district heating project are clean air and bringing natural gas to the peninsula.

Ray C – Looking at energy as both an environmental and economic issue.

Whatever HRM can do to encourage businesses to do energy efficiency work.

Efficiency should be prioritized over alternative energy initiatives, otherwise it is seen as a waste of time and NGOs cannot support it.

Consider funding mechanisms for efficiency – e.g. training auditors, contractors etc.

Heather T- Small businesses fall through the cracks of energy efficiency incentive programs
There is a need for incentive.

Brendan H- Need for an Energy Efficiency Trust – Revolving fund contributing to incentives and microgrants, deferred interest loans through Credit Unions (payment on loan less than what they save on energy), rewarding managers responsible for generating the savings

Ray C – Need to do an inventory of sources of waste heat (chillers, arenas, etc)

Brendan H – concerns around natural gas and its life span

Large capital investment – does it make sense if gas is going to run out in 10 year? Can we build the infrastructure so it can handle the next fuel coming after natural gas?

Wayne G- Co-gen is a good project assuming a 30 year life span for natural gas
If we know that natural gas will come to peninsula, using it as co-gen as opposed to electricity generation is preferable (in effect, an efficiency project)

Other opportunities: methane generation into the harbour solution project, solid waste energy

Heather T – Could we devise a program that allows HRM to get credit for reduction in community GHG emissions?

Emily M – the need to address specifically the needs of low income people through enabling funds (low rate loans are no good if you already have loans)

Appendix D Notes From HRM's Community Energy Planning Interviews And Focus Groups

There is an economic development opportunity in efficiency and renewable

Heather T – important to work with NS Home Builders Association

Idea of attaching an Energuide rating to home at the time they are bought or sold

Ray C – changes to development standards/building codes

Landuse and transportation, zoning and protection of land for wind turbines

Wayne G – solar access bylaws, best examples of legislation in California

Home builders should be encouraged to use passive solar exposure – need a set of principles to educate home owners on this

Brendan H – solar hot-water on the margin of cost effectiveness – HRM to do a demonstration project on this.

The Federal Eco-energy Renewable Heat Initiative gives a 25% rebate to commercial buildings

Bylaws should require plumbing hookups to be installed in new buildings to facilitate solar installation

Gerry T – the reductions in sulphate dioxide and particulate matter due to district heating are huge – there is a need to evaluate projects based on their larger environmental impact (not just GHG reductions.)

Other Initiatives of Interest

Clean NS is hoping to star an energy efficiency program for NGOs, churches, Rec Centres etc.

EAC has put forward a model legislation and resolution on energy efficiency.

Other Suggested Stakeholders/Contacts

NS Home Builders Association.

CEP STAKEHOLDER MEETING/CONVERSATION

THEME: Major Energy Users Focus Group

DATE: April 4, 2007

MEETING PARTICIPANTS: Jeff Lamb (Dalhousie University), Gary Schmeisser (Saint Mary's University), Greg McGragh (Capital District Health Authority), Debbie Stuart (Burnside Business Association), Earl McMullin (Halifax Regional School Board), Aftab Erfan

Discussion Points

Gary S – Need to work on bus service to universities. The UPass has increased bus ridership but hasn't reduced demand for parking.

SMU's goal is to eliminate parking and replace with green space.
An option might be mini community buses connecting with the quicklink

Jeff L – As a percentage, it is faculty and staff (not students) doing most of the driving. Only 10% of Dal students drive. Half of parking passes go to staff – they are the ones who need to change transport habits! There is currently no UPass for faculty and staff.

Greg M – In the case of hospitals, parking operations are a money generating business. No interest in reducing parking.

Interesting in less cars idling in traffic. Staggering the work day is one suggestion.

Gary S – The driver of concerns with energy is the cost.
Natural gas has been studied to death- it is feasible only if politically desired.

Jeff L – Co-gen would work well if you can concentrate development.
In the long term, district energy is the way to go.

Greg M – Capital funding is the major issue- Even when there if Federal funding available organizations don't have enough to match it. Hospitals are very bottom line driven.

NSPI needs to be onboard. There is currently no dialogue between NSPI and major users.

Jeff L – There is a deferred maintenance backlog.
Also, currently it is hard to make an argument that a certain retrofit leads to savings – hard to spot paybacks where so many users are in one place. Dal is currently working on introducing metering to make this easier.

Gary S – It would be interesting to get the Mayor to invite presecicents/CEOs etc of different organizations to build a movement /coalition to lobby for dollars from the Federal and Provincial government. It can be packaged as a one day event. It would allow for example for GMF application which needs to be fronted by the municipality.

Earl M – the School board's largest issue is maintenance of new buildings that are built to a high standard.

Other Initiatives of Interest

An Energy performance contract for the Dalhousie Life Sciences building has been proposed.

School Board has an "Energy matters" campaign. Goals is to save \$1 million/yr

Have done lighting retrofit but the savings get subtracted from next year's budget. The idea of a Reserve Fund is said to "violate GAP rules". Within these rules, avoided costs don't count.

Other Suggested Stakeholders/Contacts

None.

CEP STAKEHOLDER MEETING/CONVERSATION

THEME: Transportation Focus Group

DATE: May 11, 2007

MEETING PARTICIPANTS: Roxanne MacInnes, David McKusker, Alan (HRM Transportation and Public Works), Kenny Silver (MetroTransit), Steve Snider (Halifax- Dartmouth Bridge Commission), Dean Bouchard (Halifax Port Authority), Aftab Erfan

Discussion Points

HRM- Active Transportation Plan goal of 10% vehicle trip reduction

Natural gas buses have been tried on a trial basis- challenge is fueling

Prices are not driving behaviour very much. A doubling of prices has led to 10-15% reduction in driving. Instead need a strong policy.

Given inflation, the bridge toll is actually "less" in the 1950s than today. Similarly, price of gas has not increased. Transportation is cheap. Infrastructure is not.

Transit ridership on the bridge has increased from 13 million in 2001 to 18 million in 2006. Bus service over the bridge has increased by 25% between 2005 and 2006 – However, traffic numbers haven't dropped.

Some suggested initiatives:

Variable message signing – telling drivers which road is slow so they can choose the routes with least traffic.

Improving fuel efficiency by addressing wear and tear on the roads.

Downtown charge or per mile charge (might scare businesses away from downtown)

Setting up a Traffic Management Centre to do accident management (currently accidents shut down the whole Peninsula within 15 minutes) and enforce Clear the Road Legislation

The Traffic Management Software SCOOT (Adaptive Signal Control – user sensors in the road) is not being used and has been abandoned because it was too expensive to maintain. Need operating budget and system maintenance staff

Intensification is needed close to where the transit opportunities are. Developers have to adjust traffic signals close to them – standards need to be relaxed in urban areas. Lets not approve new suburban subdivisions. Density is hard to achieve on peninsula due to lengthy approval process- Urban Design Guidelines should help with that.

Roxanne: we haven't been doing a good job of linking energy/ghg/smog objectives to the hard decisions that council has to make.

Appendix D Notes From HRM's Community Energy Planning Interviews And Focus Groups

Taxi zone system – David M's study with Dal student suggested $\frac{3}{4}$ of taxis getting back from the airport were empty because of restriction around where taxis can pick and drop off. If we get rid of zones it will be much more efficient.

The Port – currently doing an inventory of ships/trucks/trains at the terminal
Energy efficiency as the terminal buildings has been a priority- reduced by 30% by changing lighting fixtures

Challenge with the ships – need to be careful with regulations so as not to drive ships away

Ships cannot get low-sulphur fuel in Halifax right now: Providers say there is no demand, ships say there is no supply

There is an opportunity with Fast Ferries to generate a need for our own fueling facility for natural gas or other alternative fuel.

Question around whether improving the flow of traffic (a main objective for many transportation folks) would be a plus or minus from an energy/environment perspective.

Other Initiatives of Interest

HRM Active Transportation Plan- implementation has started. Red book standards are being revised. A For Dummies Manual being drafted. Other initiative underway: Transport Demand Management and Parking Strategy study, Rural Transit Study, Trip Reduction Program, Workplace Options, Ride Matching Program

Inland Terminal Plan – under evaluation. This would be a terminal to transfer goods from the port coming on the trains into trucks. The port has looked into re-routing trucks through the south end but it's not feasible. 20-25% of load coming into the port goes into trucks and the rest into trains to go out west.

Bridge commission has a sub-committee focusing on peak period, considering a policy of increasing charge at peak periods (a few years away)

Bridge commission is currently doing needs assessment for a third bridge. Will only consider this if it is "part of the solution". For example might allow for HOV lanes across harbour.

Other possible initiatives: setting up tolling at different access roads downtown. Moving to open road tolling on Mackay Bridge to get ride of the booths.

Other Suggested Stakeholders/Contacts