

**Environment & Sustainability Standing Committee**  
**May 2, 2013**

**TO:** Chair and Members of Environment & Sustainability Standing Committee

Original Signed

**SUBMITTED BY:**

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Jane Fraser, Director, Planning & Infrastructure

**DATE:**

March 20, 2013

**SUBJECT:**

**Community Energy Plan Revision, Engagement Framework**

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**ORIGIN**

- CDAC Scope Review, RP+5, December 12, 2012;
- Strategic Priorities Discussion, Regional Council, December 4, 2012.

**LEGISLATIVE AUTHORITY**

HRM Charter, Purpose of Municipal Planning Strategy, 228

**RECOMMENDATION**

It is recommended that the Environment & Sustainability Standing Committee direct staff to prepare a project framework and a MOU for a revision to the Community Energy Plan, which includes a staff lead project and engagement with QUEST and the Halifax Chamber of Commerce, Energy Advisory Committee.

## **BACKGROUND**

At the July 5, 2012, Environment and Sustainability Standing Committee, a report titled Progress Report on Community Energy Plan was submitted.

The Community Energy Plan, approved in 2007 by Regional Council, requires revision due to emerging provincial and federal policy, technology advancement, and community expectations.

In early 2012, The Halifax Chamber of Commerce submitted their policy recommendation (Attachment One) as part of the RP+5 consultations.

## **DISCUSSION**

In response to the need to update the Community Energy Plan and respond to community input related to energy opportunities, including the Halifax Chamber submission, staff are developing a two year project to revise the Community Energy Plan.

The draft MOU, which provides the conceptual project framework including activities, roles, and timelines (Attachment 2), was developed during a preliminary collaborative meeting with the Executive Director of QUEST (Quality Urban Energy Systems of Tomorrow) and the Chair of the Halifax Chamber, Energy Advisory Committee.

## **FINANCIAL IMPLICATIONS**

Staff and consultant resources anticipated for the project are available within the 2013/14 Energy & Environment operating budget.

## **COMMUNITY ENGAGEMENT**

This report initiates a framework for a planning project and the associated community engagement.

## **ENVIRONMENTAL IMPLICATIONS**

Community Energy Planning has profound environmental impacts related to objectives of reduced and cleaner energy consumption.

## **ALTERNATIVES**

The Committee may direct staff to develop an alternative engagement framework.

**ATTACHMENTS**

Attachment One: Policy Recommendation, Halifax Chamber of Commerce, Energy Advisory Committee

Attachment Two: Draft Project Framework and Memorandum of Understanding

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A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/cc.html> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

**Original Signed**

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# HALIFAX CHAMBER OF COMMERCE

*stronger together*

## Input to the Regional Municipal Planning Strategy

Presented by the Energy Advisory Committee of  
the Halifax Chamber of Commerce

January 30<sup>th</sup>, 2012



# WE ARE

A not-for-profit business organization that takes a business - like approach to its operations.

Objective and non-partisan; we do not lobby for specific interests.

Funded exclusively through membership fees and fees for services we provide.

Experts in running conferences, publishing and disseminating information, helping people network, developing leadership skills, and building community capacity.

Specialists in the development and advocacy of public policy.

Not a government department or agency.

Independent from, but affiliated with, the Nova Scotia, Atlantic Provinces, and Canadian Chamber of Commerce.

A diverse organization made up of businesses that mirror the Halifax, Nova Scotia, and Canadian economies.



The Halifax Chamber of Commerce is a not-for-profit business advocacy organization that strives to strengthen the local business culture and shape its environment through effective leadership. On behalf of its 1,500 members and the Halifax business community at-large, over the years the Chamber has made Energy and Sustainability an important focus and an integral part of its advocacy work.

Energy security and sustainable energy development are two important aspects of any modern, competitive economy. To make Halifax more competitive in this global economy, we need to embrace progressive and sustainable energy policies enabling new economic opportunities and benefits. We need to leverage the city's leadership position as a leader of the emerging Green Economy by offering competitive and knowledge-intensive products and services with a net zero environmental impact.

Small businesses, comprising the majority of the Chamber's membership, are vital to the health of the Halifax economy. To support the growth of this core business group it is critically important to reduce its cost of doing business. Managing vulnerability to rising energy costs is a crucial task; it requires adopting new approaches to energy policy and energy management in Halifax and Nova Scotia. Incorporating sound energy policies into the Regional Municipal Planning Strategy is an important step in this process.

Attached are policy recommendations developed by the Chamber's Energy Advisory committee – a diverse group comprised of entrepreneurs and energy experts, and built upon the Chamber's past public energy policy work. We would appreciate an opportunity to discuss these recommendations with HRM Council and staff, and hope these recommendations could form a foundation of an Energy Chapter in the revised Municipal Regional Planning Strategy.

Dr. Alexandre Pavlovski, P. Eng.

Chair, Energy Advisory Committee, Halifax Chamber of Commerce

## HRM's Regional Municipal Planning Strategy: Energy Policy Recommendations

1. Energy Touches Everything: Energy to play a significant role in HRM's Municipal Planning Strategy.
2. Sustainable Urban Energy Planning: use proven, integrated and systematic approaches to urban energy planning.
3. Energy in Policy and Legislation: leverage Nova Scotia's advanced energy policies and legislation to aggressively deploy energy efficiency and renewable energy policies and by-laws in HRM and reduce the community's carbon footprint.
4. Energy and Environment: target significant reductions of HRM's energy-related greenhouse gas (GHG) emissions.
5. Energy and Housing: support and promote energy efficient housing in HRM with advanced Energuide ratings as an initially voluntary target.
6. Energy and Commercial Infrastructure: utilize established best practices, protocols and tools to support and promote a transformative green building market in HRM.
7. Energy and Transportation: advance clean energy public transportation infrastructure in HRM.
8. Energy and Utilities: support the investigation and deployment of "Smart Grid"-enabling technologies to facilitate "Smart Power" for a "Smart City" concept in HRM.
9. Energy and Municipal Economic Opportunities: identify, communicate, and enable economic benefits of sustainable energy strategies.
10. Energy and Communications: launch a municipal energy awareness program.
11. Energy and Education: establish advanced levels of energy awareness and energy literacy in HRM

## Introduction: Energy Touches Everything

Until recently, the role of energy in the growth of cities has been taken for granted. Cities, and the people who live there, now require larger and larger amounts of energy to sustain and grow, and Halifax Regional Municipality is among these growing cities.

Liquid fuels for transportation have offered us sprawling, low density urban geography. In HRM, car culture, and its pervasive and costly infrastructure, remains king. This must change as HRM evolves to the more sustainable urban model of higher density better served by public transit.

Except for a small percentage of buildings close to natural gas networks, most buildings in HRM, including houses, are also heated with liquid fossil fuels. All but a handful of buildings receive their electrical power from a grid distributing electricity generated by large power plants – this grid is transforming to a more renewable portfolio, however as of 2011 a large percentage of the utility grid is powered from fossil fuels.

Cities rely on potable water as much as they rely on energy for their enduring viability. Naturally it takes large amounts of energy to procure, treat and pump fresh drinking water and then, in turn, to deal with storm and sewer effluent.

HRM's Municipal Planning Strategy (MPS) is an evolving and dynamic document with its roots in urban planning concepts going back over 40 years. Up until now, energy has barely even been mentioned in the MPS and its myriad implications have not been a significant planning factor. This document recognizes energy as integral to the success of HRM's MPS and proposes to embed consideration of energy security, energy conservation, energy distribution and energy consumption into all aspects of HRM's planning procedures. The time has come to acknowledge that in imagining the city, as in all matters of human endeavor, energy touches everything.

### Sustainable Urban Energy Planning:

*Using Proven, Integrated, and Systematic Approaches to Urban Energy Planning.*

- Sustainable Use of Energy Resources: maximize the efficient use of energy resources across all end uses, while minimizing impacts on the environment;
- Ecological Community Form and Function: maximize the benefit of natural systems and preserve and restore the natural environment;
- Environmentally Sound and Energy Efficient Land Use Optimization: minimize the consumption of energy, material and natural resources by efficiently utilizing the existing urban footprint; enable cost-effective distributed energy resource applications and urban mass transit systems;
- Energy and Environmental Technology Integration: integrate cleaner energy systems into development projects, using “whole building” and “community-scale” approaches;



- Community Resources Management: decentralize resource management systems to the neighbourhood level; promote shared energy resources and material and process efficiencies;
- Social Equity and Economic Vitality: increase access to affordable housing, public services and employment for lower-income populations through energy-efficient planning and design.

### **Energy in Policy and Legislation:**

*Leverage Nova Scotia's advanced energy policies and legislation to aggressively deploy energy efficiency and renewable energy policies and by-laws in HRM and reduce the community's carbon footprint.*

- The Environmental Goals and Sustainable Prosperity Act (2007) commits to establish Nova Scotia as one of the cleanest and sustainable environments in the world by 2020;
- Nova Scotia's Climate Change Action Plan (2009) details 68 Actions which the Province has committed to undertake to reach carbon emissions reduction goals by 2020;
- Efficiency Nova Scotia Corporation Act (2009) establishes an administrator to manage electricity demand-side management programs in the Province and a fund to be used to defray the costs of electricity demand-side management programs, and provides the administrator with the authority to engage in energy efficiency and conservation programs other than electricity demand-side management programs;
- Nova Scotia's first Renewable Electricity Plan (2010) regulates that by 2015, 25% of Nova Scotia's electricity will be supplied by renewable energy sources. The plan includes Community Feed-in Tariff options for locally-based renewable electricity projects.

### **Energy and Environment:**

*Reduce HRM's carbon footprint by considerably reducing energy-related greenhouse gas (GHG) emissions.*

- Maximize the use of energy efficiency measures at each stage of the development and operations of the built environment;
- Maximize the use of cleaner energy sources in the three basic energy services: electricity supply, heating and cooling, and transportation;
- Maximize the use of indigenous clean energy sources (wind, solar, geothermal, biomass).

## **Energy and Housing:**

*Support and promote energy efficient housing in HRM.*

- Advance and incentivize energy conservation practices: establish advanced Energuide ratings as a voluntary, and subsequently – mandatory energy performance target;
- Advance energy efficiency and demand side management measures: establish an electricity consumption reduction target compared to existing household consumption;
- Facilitate and support market trends in choosing high-efficiency and clean residential space heating technologies both for new construction and retrofits;
- Increase on-site energy generation: establish an on-site energy generation target for heating and electricity supply;
- Establish a voluntary target for residential housing average carbon footprint;
- Establish a voluntary water usage target to lower overall distribution system energy demands.

## **Energy and Commercial Infrastructure:**

*Utilize established best practices, protocols and tools to support and promote a transformative Green Building market in HRM.*

- Utilize advanced rating systems as major enablers to moving the built environment from “business as usual” to carbon-neutral and zero energy building solutions;
- Introduce tax or other financial incentives for retrofitting energy conservation strategies in existing buildings;
- Introduce accelerated planning approvals to registered LEED projects targeting Gold or Platinum certification;
- Mandate building owners and operators to understand measure and compare on-going energy performance of their building portfolio; establish a voluntary target for energy use intensity in commercial buildings. Identify similar voluntary targets for all other non-residential type buildings;
- Establish and advance Building Energy Performance targets including third party Certification and Energy Labeling practices; encourage refurbishment to near-zero energy performance;
- Develop/support District Energy networks based on combined heat and power plants; permit and encourage inter-building energy flows;

- Develop advanced financial solutions supporting higher penetration of High Energy Performance Buildings and Communities.

### **Energy and Transportation:**

*Advance clean energy-based public transportation infrastructure in HRM.*

- Develop and establish a sustainable mobility policy;
- Advance an energy-efficient public transportation infrastructure;
- Establish an advanced congestion and traffic management;
- Reduce energy consumption by improving fuel efficiency on the vehicle side;
- Gradually replace oil by bio fuels, natural gas, hydrogen, electricity or other cleaner fuels;
- Encourage active transportation in core urban areas.

### **Energy and Utilities:**

*Deploy Smart Power for a Smart City.*

- Establish an efficient balance between centralized and distributed power supply;
- Support the development of an infrastructure for distributed power generation;
- Support the deployment of Smart Grid-enabling technologies, such as metering and communication technologies for the eventual efficient control of the two-way flow of electricity as an integral part of the Smart City concept deployment.

### **Energy and Municipal Economic Opportunities:**

*Enable economic benefits of sustainable energy deployment.*

- Support energy efficiency services in HRM;
- Benefit from energy-related jobs;
- Attract energy equipment manufacturing and energy service companies;
- Establish consistent Green Procurement practices.

### **Energy and Communications:**

*Launch a municipal energy awareness program.*

- Emphasize a positive gain from energy conservation, energy efficiency and clean energy generation;
- Clearly communicate incentives, rebates and other existing financial support;

- Encourage active involvement and commitment, use competition to motivate behaviour changes.

### **Energy and Education:**

*Establish advanced levels of energy awareness and energy literacy in HRM*

- Support conservation awareness education to reduce energy consumption: audiences include consumers, general public, public school system and a vibrant post-secondary network;
- Advance renewable energy deployment by supporting workforce technical training in site assessment, installation, commissioning and maintenance of renewable technologies;
- Increase deployment potential for advanced technologies like electric vehicles by supporting R&D and technology commercialization.

### **Conclusion:**

The Halifax Chamber of Commerce Energy Committee believes energy has a crucial role in the future of the Halifax Regional Municipality, as it touches every aspect of municipal activities. We see a critical need for an Energy chapter in the revised Regional Municipal Planning Strategy. This document presents the vision of the Chamber on the key energy-related aspects of municipal regional planning and includes recommendations for the revised planning strategy.

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**Memorandum of Understanding:** Creation of collaborative project working group with the role of delivering a revision to Halifax Regional Municipality Community Energy Plan.

**Overview:** In 2007, Halifax Regional Council approved a Community Energy Plan. After five years, due to changing Provincial regulation, policy, and strategy, and emerging commerciality of technology and alternative it is time for a revision to the Plan. Halifax Regional Municipality is seeking a partnership with QUEST Canada and Halifax Chamber of Commerce, Energy Advisory Committee to undertake a two (2) year project to prepare a revised plan for the consideration of Halifax Regional Council.

**Intent:** It is intended that the project will develop an action plan from 2015 to 2020 for HRM with respect to achievement of community energy objectives.

**Roles:** The intent of the project framework is to describe a relationship whereby HRM staff lead a project which features contribution, engagement, and endorsement by QUEST Canada and Halifax Chamber, Energy Advisory Committee. The work will be recommended by HRM Staff to the HRM Environment & Sustainability Standing Committee.

**Regional Plan Direction:** A Community Energy Plan (CBCL & Associates, November 2007) was endorsed by Regional Council in 2007 with the following vision statement adopted: *In partnership with other agencies, HRM intends to achieve the most significant improvement to energy sustainability, security, renewable technology, and environmental emissions among similar sized cities in Canada over the next 10 years.*

The Plan established eight main goals:

- Improve the energy efficiency of buildings;
- Increase transportation choice and efficiency;
- Increase industrial energy efficiency;
- Encourage energy efficient land use planning and neighbourhood site planning;
- Increase efficiency of infrastructure;
- Increase energy security and diversify energy supply;
- Educate and engage residents and businesses; and
- Demonstrate local government leadership.

Various action plans were recommended to achieve these goals and progress reports have been prepared.

Among the revisions to be considered are:

- (a) Clarification of municipal roles, authorities, and responsibilities;
- (b) Alignment with approved provincial energy policy;
- (c) Identification of roles of community stakeholders;
- (d) An updated strategy to reduce corporate energy consumption

**Project Framework:**

Activity	Halifax Regional Municipality	QUEST & Halifax Chamber, Energy Advisory Committee	Time
Regulatory and Policy directional review and identification.	Staff assembly of the framework of legislation, policy, and strategy that will form and contain the project.	Informational Review	Year 1 Duration: 2 months
Development of Plan Objectives and Status Quo performance data	Staff facilitation of input from QUEST & Chamber; Staff review of submissions and survey; Staff recommendation to ESSC of Plan objectives.	Member survey, input, submissions; Assistance with identification and assembly of required performance data;	Year 1 Duration: 4 months
Opportunities Assessment	Review of municipal authorities to impact approved objectives; Presentation of deliverables to ESSC (Information Report)	QUEST Canada: Lead on National Best Practices scan; Halifax Chamber: Host an Ideas Expo to identify made at home opportunities and solutions;	Year 1 Duration: 4 months
Development of Action Plan	HRM Staff development of proposed Actions; Identification of Municipal and Stakeholder Roles; Engagement and discussion with QUEST & Halifax Chamber; Economic Impact Assessment of Proposed Actions;	Input on Actions; Member survey; Informational Review of Economic Impact Assessment;	Year 2 Duration: 6 months
Development of Performance Metrics and Targets	Preparation of Performance Measurement framework;	Identification of data sources;	Year 2 Duration: 2 months
Assembly of 2015 to 2020 Community Energy Plan	HRM assembly and development of final plan; Presentation to QUEST & Halifax Chamber; Recommendation to ESSC and Regional Council	Review of Draft Final Plan, comments to HRM; Endorsement of Final Plan;	Year 2 Duration: 2 months