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Item No. 5
Halifax Regional Council
February 16, 2010

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

A handwritten signature in blue ink, appearing to read "P. Townsend".

Phillip Townsend, Director, Infrastructure and Asset Management

DATE: February 3, 2010

SUBJECT: Corporate Knights 2010 Sustainability Rankings

INFORMATION REPORT

ORIGIN

This report originates from Staff.

BACKGROUND

On February 3, 2010, Corporate Knights announced the 2010 Sustainable City Rankings. Halifax Regional Municipality, the top medium sized city in 2009, was ranked at second place in 2010. (A copy of the Press Release is attached). This report gives Regional Council and the public some background on the ranking.

DISCUSSION

Founded in 2002, Corporate Knights Inc. is an independent Canadian media company focused on promoting and reinforcing sustainable development in Canada. Their comprehensive ranking identifies Canadian cities whose practices leave the smallest environmental footprint possible and create a healthy, thriving population.

Halifax Regional Municipality is committed to environmental sustainability. In 2009, Environmental Sustainability was deemed to be a priority by Regional Council in their Council Focus Areas as an overarching theme, along with accessibility. Since the early 2000's, Environmental Sustainability has been an official priority to Regional Council and staff, with the theme of Healthy, Sustainable, Vibrant Community being a pillar of the Regional Plan - the municipalities overarching policy and planning strategy.

Halifax Regional Municipality scored 63.3 and was ranked second medium sized city in the Canadian Sustainability Rankings in 2010. The score was derived as follows:

Evaluation Category	Score
Ecological Integrity	6
Economic Security	6.9
Governance and Empowerment	7.42
Infrastructure and Built Environment	4.74
Social Well-being	6.58

Overview of Indicators

Ecological Integrity	
Air Quality Water Use	Ecological integrity refers to the health and abundance of natural and managed ecosystems. Success is demonstrated if ecosystems are flourishing and resilient. Air and water should be clean, biodiversity levels should be high and toxin and pollutant concentrations should be low.
Achieved Corporate and Community GHG Reductions	Toxic and greenhouse gas emissions should be decreasing overall and be expelled at a rate that is in balance with the ecosystem. When present in industrial processes, persistent compounds and heavy metals should never enter the waste stream.

Consumption Achieved Waste Diversion	Development should demonstrate a thoughtful approach to the human-ecosystem relationship. Citizens should use renewable, locally-sourced resources and energy and show a commitment to zero waste.
Green spaces	There should be enough green space in the city for each person to have a refuge.
Ban on Insecticide	Human communities should honour the complexity of natural systems.
Economic Security	
Economic Diversity	Economic Security refers to the health of the economy in a context that balances the needs of all stakeholders, including the environment and the community. Success would be seen in a diversity of responsible, viable businesses. Products should be made of renewable and/or reusable resources and have closed-loop lifecycles.
Employment participation rate Unemployment Rate Unemployment Rate of Immigrants Incentives to attract Green Businesses	Those who want to work should be able to do so on account of a proliferation of green collar jobs.
Regional Trade Networks	Financial and other types of investments should enhance the vitality of the symbiotic relationship between the economy and the environment. Businesses, communities, and government should forge regional networks to promote local trade and self-sufficiency.
Governance and Empowerment	
City council ethnic and gender diversity Municipal voter participation	Governance and Empowerment refers to citizens of all ages and backgrounds being engaged and actively participating in activities that contribute to the well being of the city.
Reporting Standards	Success occurs when the power of decision-making rests firmly with those most affected by decisions to ensure positive feedback loops of accountability.
Sustainability Policy Filter Measurement of Sustainability Metrics Water Pricing Organic, Recycling and Garbage Collection Programs Corporate and Community GHG Emissions Target Waste Diversion Target	Legal and political systems should be built to preserve the long-term interests of natural and human communities while taking into account the short-term. Local stakeholders should be engaged in planning, design and development processes and actively measuring success.
Infrastructure and Built Environment	
Separation of Sanitary and Storm Water Systems	Infrastructure and Built Environment refers to development that is designed, built, and managed to enhance quality of life and to protect the integrity of local ecosystems. It should form the backbone of the community and contribute to our resilience.

Incentives for Green Buildings Energy Retrofit Programs LEED Buildings	Success means that all buildings are healthy, beautiful, and highly resource efficient.
Bike paths Car sharing	Transportation should be designed to move people quickly, cleanly, quietly, and conveniently — anywhere, anytime.
Urban Sprawl Index Population Density Dwelling Space	Development patterns should replenish our society and ecosystems, fostering a relationship of mutual benefit and respect.
Commuting Distance Mode of Transportation Residential Energy Consumption	Individuals should take responsibility for the impacts of their choices.
Social Well-Being	
Life Expectancy Life Satisfaction Sense of Belonging Volunteerism Prevalence of Obesity Occupations in art, culture, recreation and sport Public events and festivals	Social Well-Being refers to a city where programs, services, and infrastructure exist to promote subsistence, protection, affection, understanding, participation, leisure, creation, identity, and freedom.
Educational Attainment	Success includes citizens working in respectful and healthy environments for fair wages. Citizens should be engaged in life-long learning and have numerous opportunities to celebrate, learn about and contribute to the cultural development of the community.
Shelter Beds Physicians Affordable Housing Programs Crime Rate	Community-based social services should provide essential support to families and individuals as needed and affordable housing should ensure all citizens have access to safe and secure homes.

A copy of the survey submitted to enable the evaluation is attached. This survey was completed by SEMO staff in collaboration with the Sustainable Transition Team.

While staff and the community at large can take pleasure in being ranked second to Vancouver, a city that has been financially enabled to undertake extraordinarily progressive projects in the build up to the 2010 Olympic Games and have demonstrated exceptionally laudable results, we are committed to continuing on our journey to environmental sustainability. In receiving our briefing of the analysis, Corporate Knights remarked that our Solid Waste practices are exemplary and that our biggest opportunity for improvement is with bike lanes.

BUDGET IMPLICATIONS

There are no budget implications of this report.

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ATTACHMENTS

- Press Release
- Submitted Survey

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

Report Prepared by: Richard MacLellan, Acting Manager, Sustainable Environment Management Office, 490-6056

News Release

Halifax Places Second in National Sustainable Cities Ranking

(February 3, 2009) - Corporate Knights Magazine has unveiled their fourth-annual *Corporate Knights Most Sustainable Cities in Canada list* and Halifax has ranked second. "We are pleased to continue to rank in the top tier of medium-sized cities with Corporate Knights. Our Municipality is committed to being a healthy, sustainable, vibrant community. Over the last few years we have invested more than \$7 million in energy efficiency projects. We continue to work towards a sustainable future for all citizens", said Mayor Peter Kelly.

At over 5600 square kilometres HRM is geographically one of the largest Municipalities in Canada. Halifax was noted as having the best waste diversion levels, but this success was tempered by having the most sprawl, the lowest population density and the least green space of the considered set. HRMbyDesign is a priority initiative that takes direct aim at these issues. "HRMbyDesign's densification strategy and Neighbourhood Greenprint will ensure that many more people will be living and working sustainably in our urbanized core," said Andy Fillmore, HRM's Urban Design Project Manager. "The recently adopted Downtown Plan will mean that a walkable, beautiful, mixed-use downtown in conjunction with a streamlined new development approval process will draw future growth downtown rather than to suburban and rural areas."

Founded in 2002, Corporate Knights Inc. is an independent Canadian media company focussed on promoting and reinforcing sustainable development in Canada. Their comprehensive ranking identifies Canadian cities whose practices leave the smallest environmental footprint possible and create a healthy, thriving population. Cities are assessed based on five categories: Ecological Integrity; Economic Security; Governance and Empowerment; Infrastructure and Built Environment and Social Well-Being.

For more information on HRM's Sustainable Environment Management Office and energy efficiency projects visit: www.halifax.ca/environment/semo

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Contact:

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Corporate Knights

corporateknights.ca

Fourth-Annual Sustainable Cities Ranking

Sustainability is the ability of individuals and communities to flourish without contributing to the progressive degradation of the human and natural systems on which we depend. CK measures sustainability along five parameters: ecological integrity, economic security, governance and empowerment, infrastructure and built environment and social well-being. In this year's survey, we would appreciate if your responses reflected initiatives occurring from January 1, 2009 to present.

Sustainability planning and goals

1. Please provide the name, title and contact information for the person that citizens in your municipality should contact if they have concerns regarding sustainability initiatives.

Richard MacLellan, Acting Manager, Sustainable Environment Management Office (SEMO) maclelri@halifax.ca phone: (902)490-6056.

2. Has the municipality adopted a policy of using sustainability criteria as a filter to inform planning decisions? Please describe the influence that this filter has had on planning decisions.

Yes – In 2006 HRM adopted a 25 year Regional Municipal Planning Strategy which is based on environmental policy and sustainability principles first. A copy of the performance measures for the plan (Appendix A) is attached. Building on the Regional Development Plan, HRM continues to develop a sustainability filter against which all corporate decisions will be weighed, including those of procurement, capital works, municipal operations and community planning. This filter is undergoing an extensive testing, evaluation and review process with several pilot projects currently underway.

Two examples of successful adoption of the Green Filter include:

- i) Cleaning Supplies - In 2007, a significant opportunity to green the cleaning supplies HRM uses was identified. Procurement staff undertook a commodity and market analysis and recognized that not only was there an opportunity to integrate greener supplies, but a progressive solution would also reduce total long term costs to HRM. By consolidating cleaning supplies, involving multiple stakeholders, and adopting more strategic procurement HRM has greatly enhanced the environmental impact related to facility maintenance.
- ii) Green Fleet Filter for Fleet Services - In 2009, Regional Council approved

a Green Vehicle Filter to assist with Greening the Fleet efforts at HRM. This common sense filter, with a supplemental SUV justification process, is helping specify vehicles based on performance needs and enabling staff to solicit for the most appropriate vehicle. By using this filter, Fleet Services Management and Procurement staff are working together to reduce the environmental footprint of vehicle selections.

The HRM's Community Visioning Program has actively incorporated the draft sustainability filter into the visioning process for three local communities (Spryfield, Penhorn and Middle Sackville), including direct participation from selected community members and students from Dalhousie University's School for Resource and Environmental Studies.

3. Is the municipality measuring its own performance in key sustainability areas (including, but not limited to, emissions, waste diversion, citizen engagement, green space, homelessness, energy/land/water/materials conservation, etc.)?

Sustainability was identified as a strategic goal for HRM in 2009-2010 solidifying the need for enhanced performance measuring. Annual benchmarking of corporate energy use and associated emissions levels are conducted for all HRM owned properties. The Municipality continues to monitor water and air quality. Recently Regional Council adopted the Community Engagement Strategy which sets a new framework for improving and coordinating community engagement across HRM. The new framework is based on 10 Principles of Community Engagement and a continuum which defines the various levels of engagement, from information sharing and consultation to active engagement where the focus is on community capacity building and in some cases, collaboration and shared decision making.

A suite of draft sustainability measures for each of air, land, water and energy has been developed and more comprehensive Environmental Sustainability Reporting will follow in the New Year. This will be facilitated by the hiring of two environmental performance staff who will be dedicated to measuring the performance of corporate and community greenhouse gas plans, the corporate Climate Change Management Strategy, and a number of other corporate and community sustainability initiatives across HRM.

- a. If yes: Does the municipality have a greenhouse gas emissions target? If so, what is it (please express in baseline year, target year, and % reduction) and what progress (% reduction, initiatives, etc.) has been made towards reaching this target?

Yes, the target is a 20% reduction from 2002 levels by 2012, as established in the HRM Corporate and HRM Community Greenhouse Gas Emission Reduction Plans. Additionally, HRM was signatory to the World Energy Cities Partnership Climate Action Accord that provides a

longer term target of 80% reduction (from 2005 levels) by 2050.

In addition to these GHG plans, HRM has supporting plans in place, including a Clean Air Strategy, Climate SMART (climate change mitigation and adaptation plan), a comprehensive Community Energy Plan and a 25 Year Regional Plan (sustainable land use planning document which models a 10% reduction in regional GHG's - mainly from cars).

HRM was one of the first cities in Canada to become a member of the FCM Partners for Climate Protection Program.

- b. If yes: Does the municipality have a waste diversion target? If so, what is it (please express in baseline year, target year, and % reduction) and what is the current level of waste diversion? If possible, please separate waste diversion levels into residential and non-residential.

The HRM diversion target of 60% was set in 96/97 by Council and at that time there was no composting program, so our diversion was only 38%. Using fiscal reporting for the period 01 April 2008 - 31 March 2009, HRM has achieved 59% in diversion success. This is comprised of residential and institutional, commercial and industrial (ICI) material streams. The residential diversion rate is 51% while ICI is tracking at 63% due in large part to the HRM construction and demolition (C&D) diversion strategy unique to HRM where there are 70% recycling targets set for diversion of C&D debris. 89,000 tonnes of ICI C&D alone are diverted away from HRM disposal.

4. The following question measures municipal expenditures in key sustainability areas of your 2009 operating budget.

Expenditure Area	Dollars Allocated in 2009 Operating Budget
Public Transit	91,790,149
Road Infrastructure	5,889,420
Biodiversity/Naturalization/Green Space	4,328,500
Total Expenditure - 2009 Operating Budget	102,008,069

Building codes, zoning

5. Does the municipality have any residential or commercial solar or geothermal retrofit programs? Please describe.

The Province of Nova Scotia has jurisdiction over energy policy and offers financial incentive programs that support both residential and commercial geothermal and solar applications. The Halifax Regional Municipality does not.

However, HRM does have a number of geothermal and solar initiatives underway or in the planning stages. HRM has spent \$3.6 million to retrofit one large “campus” of properties, Alderney 5, to utilize geothermal energy. This project is expected to be commissioned in December 2009.

HRM is also spending \$600,000 to retrofit Centennial Pool for solar heating. Centennial Pool will be linked with the Halifax Police Station sharing district heat. This will permit the removal of the oil burning boilers from the pool.

Several new community centres that utilize geothermal energy have recently been built or are under construction— Gordon R. Snow Community Centre, East Dartmouth Community Centre and Prospect Road Community Centre. These facilities are all expected to achieve a LEED Silver rating.

Social housing

6. Does the municipality have an affordable home ownership program? Please describe.

Although provincial legislation does not permit HRM to offer such a program directly, HRM has a broad interest and influence on the housing market, both non-profit and for-profit. HRM’s sphere of influence spans over several areas, including taxation, land use regulation, safety inspection, research, policy development, partnerships and supporting community capacity to address emerging needs. Affordable housing policy is a component of the new HRM Regional Plan approved by Council in 2006.

HRM supports low income home owners (approximately 1200 participants) through Residential Property Tax Exemption, Deferral of Property Taxes and Deferral of Local Improvement Charges Program. Rebate values are indexed with the Canada Council on Social Development low income cut-off scales (for income eligibility threshold) and municipal tax rates (rebate values increase automatically if the municipal tax rate increases).

HRM is able to support community-based initiatives through research, tax and fee exemptions for non-profit housing initiatives, land donations and small project grants. In addition to property donation for housing initiatives, HRM also provides modest capital grants to non-profit housing groups through the annual Community Grants Program (approximately \$50,000) and tax assistance to non-profit housing groups. Property donations made to non-profit organizations involved in supportive and affordable housing development often leverage provincial and federal project contributions.

HRM was also able to advocate nationally for housing through its engagement with the Federation of Canadian Municipalities, regionally through the Atlantic Mayors’ Congress, and locally by supporting the implementation of the Nova Scotia-Canada Affordable Housing Agreement.

Economic development

7. Does the municipality have any incentives for land developers if they build green buildings? This includes, but is not limited to, geothermal installations, solar installations, green roof installations, grey water management systems, and designated bike parking.

Yes – through the recent passage of special provincial legislation supporting a capital district design plan (HRMbyDesign), and subject to the results of one final vote at Regional Council, HRM has implemented a suite of incentives for land developers in this regard. These incentives are documented immediately below. Pursuant to these interests, HRM has hosted several workshops on LEED Standards for public and private sector participants. All Land Use by-laws require bicycle parking for multi-unit residential developments, Regional Council June 27/06.

Excerpt from HRMbyDesign (Municipal Planning Policy):

... 3.4.5 Sustainable Building Design

Sustainable design is defined as architecture, landscaping and engineering (the built environment) that establishes the conservation of energy, materials, and natural resources and systems as a primary consideration in their planning, design, construction and life cycle. This includes public as well as private development, and encompasses streets, parks, and buildings.

This Plan supports principles of sustainable building design as part of the design program for downtown Halifax development by encouraging the use of sustainable design practices. While there are many initiatives promoting and developing standards for sustainable design, Leadership in Energy and Environmental Design (LEED™) is the most highly recognized system currently being used in North America. HRM is committed to the concept of sustainable design and construction, and has therefore adopted the requirement that all new municipal buildings across the Municipality must achieve a minimum rating of LEED silver. This requirement will build LEED capacity amongst the local design and construction community. As this capacity grows, it is expected that the minimum requirement will be raised to gold and ultimately to platinum.

At the adoption of this Plan, mandatory requirements for energy conservation and sustainable design standards such as LEED are not enabled under the provincial Building Code Regulations, which regulate construction practices throughout the province. The province, under the leadership of the N.S. Department of Energy, is currently reviewing its policies and legislation in this area. It is HRM's intent to work with the province to advocate for stronger regulation in the areas of energy conservation and sustainable building design. In the interim, the Land Use By-law will include requirements to maximize sunlight penetration and minimize wind impacts on sidewalks, particularly in relation to high-rise developments. Beyond these requirements, HRM and other levels of government can lead the way in

achieving sustainable and energy efficient design in tendering of development projects for publicly owned lands.

Policy 19

HRM shall in the Design Manual section of the Land Use By-law establish sustainability design guidelines to encourage downtown development projects to incorporate sustainable building practices as part of the design review process enabled by this Plan. Additional heights may be considered through the bonus zoning provisions of the Plan in exchange for development projects that reflect significant investment in sustainable building design.

Policy 20

HRM shall in the Land Use By-law establish provisions to mitigate the impacts of development by including requirements to maximize sunlight penetration and minimize wind impacts on sidewalks, particularly in relation to high-rise developments. HRM shall through the Land Use By-law require all proposed developments for buildings taller than 60 ft. to be subject to a wind impact assessment. Rooftop landscaping shall also be a requirement.

Policy 21

It shall be the intention of HRM to ensure that all new municipal facilities within downtown Halifax are designed to show leadership in sustainable building design and at minimum achieve a LEED silver standard in the LEED or an equivalent certification system.

Policy 22

It shall be the intention of HRM to negotiate an agreement with provincial and federal levels of government and agencies including the Waterfront Development Corporation Limited, to establish LEED standards for the development of public lands throughout downtown Halifax pursuant to Policy 44 of this Plan.

8. Does the municipality have special tax incentives to attract green or clean technology businesses to the municipality? Please describe.

HRM's legislative authority under the HRM Charter is very limited in this area. Most business incentive programs are currently within the realm of the Province of Nova Scotia who provides loans, loan guarantees and wage subsidies to new businesses that match their specified profile and criteria. Additionally, ACOA may provide funding to certain businesses that might align with municipal, provincial and federal common objectives.

That being said, HRM appreciates the importance of clean, green projects and where possible supports projects that are aligned with municipal economic objectives and initiatives (such as HRMbyDesign). For example, this past year the Halifax Farmer's Market was able to secure funding commitments of \$1 million (HRM), \$2.25 million (Province) and \$3.5 million (ACOA) to construct a new

LEED-certified Seaport Farmer's Market on the Halifax waterfront. The project will be a leader in sustainable building design using geothermal, wind and solar power sources, green roof technology, etc. in order to bring locally grown, organic food to market here.

The Farmer's Market was able to be supported by developing partnerships with various program funding sources, including a new HRM "community infrastructure" fund that might be used to attract more clean and green technology projects here in the future. HRM is currently reviewing its municipal tax structure and among the various things being discussed are incentives to encourage heritage conservation and office development in the downtown.

9. Please describe any efforts that your government has made to create or develop regional networks for local trade and/or self-sufficiency

In 2009, HRM continued to enhance supplier development initiatives. These efforts included continued participation in Reverse Trade Shows (where purchasers are made available for the general public to approach to learn how to do business with the Municipality, what opportunities exist, and what the values of the Municipality are). In addition, HRM participated in a Supplier Development workshop with Landscape Nova Scotia which resulted in some further examinations, including follow-up engagement with Nova Scotian Nurseries about future opportunities with HRM.

Inspired after participating in the Atlantic Canada Sustainability Initiative, HRM Procurement staff created a network of public purchasers to collaborate and enhance the integration of sustainability into public procurement in Nova Scotia. With strong support from the Nova Scotia Department of Economic Development, local health authorities, and school boards, the Nova Scotia MASH Sector Sustainable Procurement Network is developing well. In Fall 2009, the third bi-annual meeting was held to continue to focus the efforts of the Network. A variety of focus areas were identified and working groups are being established to enhance consistent and progressive review of targeted procurement scopes. The Network is thriving and will have an immense impact on greening public procurement and mainstreaming more progressive offerings from local markets.

The aforementioned \$1 million grant to the Halifax Seaport Farmer's Market will encourage local trade and support regional suppliers. The new market at Pier 20 on the Halifax waterfront will provide year-around opportunities for Nova Scotia producers to sell their products daily, weekly or seasonally as best suits their needs, and to fill the growing demand for fresh local food. The weekly tradition of "Saturday Market Day" will continue and be enhanced with greater customer access and amenities. This next generation Farmers' Market demonstrates the extra value the producers deliver to the customers with every purchase.

Parks and Recreation

10. How many hectares of public green space (parks, wooded areas, gardens – any area that is predominately vegetated) does the municipality have?

There are currently 838 HRM Parks in our data base = 5205.308 hectares

There are 182 parcels coded Open Space / Buffer = 173.92 hectares

There are 44 parcels coded Open Space / Conservation = 86.635 hectares. So, the total in hectares is 5465.863.

- a. How many hectares of community gardens does the municipality have?

There are several community garden sites in HRM - approximately 1 hectare. HRM has just rolled out an operational plan to streamline the process for neighbourhood groups and associations who are interested in planting a community garden. A toolkit and formal application process is currently being developed to make HRM public land more accessible for groups for sustainability projects.

Transportation Services

11. What is the total number of kilometres of bike paths in the municipality? (This includes off-road paths, pedestrian paths that also allow cyclists, and shared roadways that have bike lanes.)

There are 214.3 kilometres of bike paths in HRM. These are comprised of 165 km of off-road multi-use trails and 49.3 km of on-road bike lanes. HRM recently amended the Municipal Service Standards to require bike lanes on certain types of new public roads.

12. What is the total number of kilometers of paved roadways (including major arterial roads/highways, streetcar lanes, and side streets) in the municipality?

HRM owns and maintains approximately 1800 kms of paved roads.

Water and sewage

13. Does the municipality's commercial and private water pricing cover delivery costs and infrastructure maintenance?

In accordance with the Halifax Regional Water Commission Act and the Nova Scotia Public Utilities Act, water, wastewater and stormwater services are regulated by the Nova Scotia Utilities and Review Board (NSUARB). This governing legislation requires that separate rates be set that cover the full cost of providing each service, including depreciation charges, to fund infrastructure renewal. With the transfer of HRM's stormwater and wastewater assets to Halifax

Water in 2007, wastewater and stormwater services are currently in a transition from rates set by Municipal Council to rates set by the NSUARB.

14. Does the municipality have bulk water pricing?

The Halifax Regional Water Commission (Halifax Water) does not have bulk water pricing, i.e. as in selling to another utility, town or jurisdiction. Halifax Water does not sell bulk water but it does have bulk water (filling) stations available for water haulers at full cost recovery.

15. Does the municipality have separate stormwater and sewage sewer systems?

We have quite a few separated sewers. While we have a lot of combined sewers, they are limited to older areas such as the Halifax peninsula and central Dartmouth. There are, and have been, a number of projects that are separating sanitary and storm flows. Some of these, such as the Duke and Salter Streets sewer separation project, were implemented in conjunction with the Harbour Solutions Project. Currently a large separation project is underway in the south end of Halifax (Freshwater Brook Sewer Separation Project). This project will see a large portion of the combined flows in the area separated. It should be completed this year. The separating of flows reduces volumes to wastewater treatment facilities thereby reducing potential for overflows to receiving waters and unnecessary loading and wear & tear on infrastructure.

By-laws

16. Is there a municipal ban on insecticides and other pesticides? If there is an Integrated Pest Management program in place, please indicate.

Yes, HRM was the first major North American municipality to put in place (2000) local pesticide use legislation (By-law P-800) and companion educational programs on sustainable maintenance practices. Since then, over 140 other municipalities across Canada, including Canada's largest cities, have followed HRM's example putting in place similar legislation.

HRM's pesticide use reduction and public education programs on sustainable landscape maintenance have been very successful, enhancing the health and well being of the community.

In October 2009, Halifax Regional Council endorsed a resolution to be considered by the Union of Nova Scotia Municipalities for a province wide ban on non-essential sale and use of pesticides.

Other

17. What other sustainability initiatives does the municipality have? This includes, but is not limited to, a Styrofoam ban, local food programs, car-free days, pedestrian days, local art projects, etc.

In 2009, Halifax Regional Municipality undertook a number of new sustainability initiatives, including:

In co-ordination with the deliberation on **bottled water**, the Municipality is reviewing its infrastructure to assess its ability to deliver free, clean drinking water to staff and citizens in all HRM facilities. The purchase and sale of bottled water has been restricted at City Hall. The Municipality is assessing the remaining facilities and will be returning for further deliberation in 2010.

Installed **VendingMiser** in 10 HRM locations with 20 more to come in the next few weeks. Research leads us to believe HRM is the first municipality in Canada to utilize this technology. VendingMiser technology uses an infrared sensor to power down the vending machine automatically if movement is not detected for 15 minutes, potentially resulting in significant savings during evenings and weekends when the area is unoccupied. When off, the lights are out and the compressor is stopped. To ensure the product remains chilled, the VendingMiser monitors room conditions, re-powering approximately every two hours for the compressor to run a cooling cycle as required. One week after installing the VendingMiser on a test machine, energy consumption was reduced by 45%. According to the meter, the machine's consumption decreased to 0.32 kWh per hour which is equal to 7.7 kWh of electricity per day. By installing VendingMisers, vendors can potentially cut their consumption by 30-50%, resulting in significant savings.

A group of senior HRM staff visited Sweden on an 8-day **sustainability study tour** organized by the Municipality. The group, which also included representation from the private sector, the Province of Nova Scotia and Dalhousie University, toured southern Sweden experiencing first hand district energy, active transportation, social, environmental and economic sustainability. Twin presentations were made by study tour participants providing for a true knowledge exchange. Since returning, a number of presentations outlining "Lessons Learned" from the study tour have been made to staff, stakeholder groups and Council. Considerable media coverage has, and continues to be, generated about the trip.

Development of an application process to enable community groups to establish **community gardens** on HRM property with greater ease.

The Sustainable Environment Management Office is in the process of growing to include an **Environmental Performance Officer** responsible for the Clean Air / Clean Energy folio of strategies and policy and an **Environment Performance Officer** responsible for Environmental Due Diligence.

2009 Municipal Finalist for Summit Magazine Leadership in Green

Procurement Award (second year in a row) for the Green Battery Initiative (to change battery usage to rechargeable recyclables and provide a waste management solution in house to ensure diversion).

Leadership of Nova Scotia Sustainable Procurement Network (Provincial, Municipal, Academic, Hospitals) - In November 2008, HRM initiated the Nova Scotia Sustainable Procurement Network, a collaboration of the public purchasers in Nova Scotia with a focus on aligning efforts to progress the greening of procurement in the province on a consistent and progressive base. In 2009, HRM remained on the steering committee, in conjunction with the Province of Nova Scotia and Dalhousie University staff. The collaboration is growing and developing focus.

Revision of **Procurement Policy** to embed sustainability criterion into policy by adding into the Guiding Principles that: Halifax Regional Municipality shall include consideration of environmental, economic and social factors in procurement processes and decisions.

Implementation of **Green Vehicle Filter** and **Life Cycle** evaluation template. Regional Council approved the mandatory utilization of a Green Vehicle Filter adopted to assist with Fleet Rightsizing initiatives and a Life Cycle Evaluation Methodology which incorporates fuel efficiency and emissions in the valuation process.

HRMSmarttrip.ca including Parking Smart - HRMSmartTrip.ca is a state of the art ride matching system that allows commuters to quickly and securely find carpool partners. The system matches people based on proximity to origin, destination points and travel route as well as similar working hours and compatible carpooling preferences. The initiative was expanded in 2009 to include a parking match component. The enhancement is a permanent feature of the website which allows the public to find a parking partner. Residents needing or offering a place to park can log onto the website and register. This parking match registration is a free service supported by HRM, however all parking arrangements/costs are up to the discretion of participating individuals.

HRM Corporate Smart Car Program (Commuter trip reduction) In 2009, as part of the Commuter Options Program, HRM purchased three Smart Cars. This initiative works with staff to encourage the use of sustainable modes of transportation for commuting to work. The hope is that staff will choose more sustainable modes of transportation for commuting when they have the option of using the Smart cars to attend work-related meetings during the workday. HRM anticipates over the next few years there will be a reduction in personal local expense claims as well as a reduction in greenhouse gas emissions through the use of fuel efficient cars.

Community Art Projects –

i) From July 1 through August 31, 2009 HRM presented a new live theatrical production called **Ferry Boat Tales** aboard the Halifax-

Dartmouth ferry. From the founding of the city and shipwrecks in the harbour, to daring nighttime escapes during war and the Halifax Explosion, residents and visitors experienced Halifax's history in a unique and exciting way, while traveling aboard the oldest, continuously running, salt water ferry service in North America.

ii) HRM began an **Artist-In-Residence Program** in 2009.

iii) **Youth On the Radar** - (in partnership with Arts Express as part of the Halifax Regional School Board) Youth from the J.L. Ilsley family of schools created three large sculptural murals each with themes relating to relationship with self, friends and the community. The students learned about copper embossing, wax encaustic painting and clay. These three striking piece will be hung in the Spring Garden Court House waiting room between court rooms 2 and 4. It will be one of the first youth created art pieces to adorn the inside of the building to beautify the space and reflect the inspiring and positive contributions of young people in our community.

iv) **Dartmouth Cove Mural Project** - After three years of building relationships within the graffiti community, 2009 proved to show our progress. HRM has been actively promoting legal opportunities for young people as an alternative to vandalism by having the Community Arts Facilitator available to organize legal mural projects upon request. We had 18 graffiti writers contact the Municipality to request legal opportunities for mural painting. Many of these artists had their work realized at the Dartmouth Cove Mural Project. In partnership with the Waterfront Development Corporation, who owned the property walls, four large scale murals were painted, each involving several artists. The largest wall measured 100' x 25'. Their colourful work has had an impact on beautifying the waterfront in Dartmouth.

Guaranteed Ride Home - In 2009 HRM, with financial support from Transport Canada and Conserve Nova Scotia, launched a pilot program for staff and a handful of other local employers (Patterson Law, Dalhousie University, Nova Scotia Power and the Department of National Defense) called Guaranteed Ride Home (GRH). The GRH programs address the significant barrier of using sustainable transport for the commute to work: employee concerns about not having access to transport in the event of an emergency during the course of their work day. The GRH program may offer a taxi ride home, or to other relevant destinations (e.g. schools, medical facilities), for employees that used a sustainable travel option to commute to work on the day of the emergency. Acting essentially as an insurance program, GRH initiatives have proven an extremely cost-effective approach to attracting both new alternative transportation users and maintaining or increasing participation by existing users.

Sustainability Funding Mechanism for Energy Efficiency – is a funding program where the savings that are realized from energy efficiency projects are returned to fund future energy efficiency initiatives.

Active Transportation Trail Enhancement – Chester Spur Line Acquisition. The Chester Spur Line will be a paved active transportation trail 8.5 kms long and 4 metres wide. It is in an abandoned rail corridor that runs from Timberlea and branches off in two different directions ending at Joseph Howe Drive and the Armdale Rotary. This trail will create a connection from the suburban to the urban active transportation trail network. The bike trails will promote active transportation and provide alternative methods that will reduce the emission of GHGs.

Energy Performance Contracts (i.e. Metro Transit Facility) - Phase 2 of the energy retrofit which included work on the lighting and HVAC was completed in 2009. The project resulted in major improvements in air quality and thus reduced conflict between unionized staff and management. Lessons learned in this retrofit to the Burnside facility were applied to the new garage in Ragged Lake.

Wind Energy Master Plan - HRM hosted a series of public meetings to present proposed changes to the Municipality's by-laws for the siting of large and small scale wind turbines in HRM. These meetings were intended to obtain feedback from interested citizens prior to bringing the matter to Regional Council for consideration.

Landfill Methane Gas Recovery to Electricity – Landfills emit methane which is a 20x more powerful GHG than CO₂. By capturing the methane gas before it is emitted, the Sackville Landfill now avoids releasing over 100,000 tonnes of GHG/year. The gas is captured and then burned to generate electricity. This carbon neutral initiative has eliminated complaints from the neighbours.

LED Traffic Lights have been installed at 250 intersections in HRM. In addition to using less energy, LED lights have a much longer lifespan drastically reducing maintenance hours. It is anticipated individual lights will need replacement every 15-20 years versus every 2-3 years.

LED Street Lights Pilot– New breakthrough LED street lights are being piloted. Made in Nova Scotia by a Halifax company.

HRM was an official participant in **Earth Hour** 2009 hosting the event in Grand Parade and turning off the lights at City Hall. Many other HRM facilities also participated by turning off their lights.

Harbour Solutions – Halifax Wastewater Treatment Facility. The first phase of the two phase process to re-commission the Halifax wastewater treatment facility is essentially complete. The first phase was an initiative to divert dry weather flow through the treatment facility, screen the floatables and discharge via the plant's existing outfall pipe. The second phase will see the final recovery of all processes and the systems in the treatment facility with the expectation that the plant will be fully functional in the spring of 2010.

Feasibility Study – A feasibility study is currently underway investigating

heat recovery from the wastewater treatment plant.

Ragged Lake Transit Centre – Construction of a new transit centre on the Halifax side will permit expanded capacity of Metro Transit. It will save tens of thousands of dollars in operating expenses and drastically reduce GHG emissions. The building will be energy efficient and meet LEED Silver certification.

Greenest Projects in Canada- HRM is currently building some of the most energy efficient projects in Canada. The 4-pad Arena in Bedford will have an ice heating recovery system. The Canada Games Centre will have one of the largest solar installations in the country. A retrofit of Centennial Pool will use heat recovery from dehumidification, solar and district energy linking the facility with the main Police Station. A retrofit of the Sackville Sports Stadium will see the heat recovery from the ice making in the arena used to warm the pool. HRM has built and operates more geothermal buildings than anyone in Atlantic Canada using over 150 boreholes.

Education Efforts – i) Quarterly HRM distributes *Naturally Green* – a small tabloid size colour newsprint publication to every household in the Municipality. This publication provides an avenue to disseminate information on HRM’s sustainability initiatives. Many of the initiatives undertaken in 2009 were showcased in the publication.

ii) The **HRM Adventure Earth Centre** delivers many environmental and sustainability programs throughout the Municipality. The Centre develops leadership skills and inspires youth to go out into the community and share their passion and knowledge. Programs are offered beginning at the Grade 3 level. One of the biggest and most ambitious programs to date is **MindShift**. Piloted in 2008/2009 the Mindshift program is delivered by 6 teams of peer educators from 5 high schools in HRM. Over 60 youth have been trained to present this hard hitting, impactful and compelling look at the damage we are inflicting upon our planet and what the outcome might be if we don’t take immediate action.

18. CK appreciates your participation in the Sustainable Cities survey. We would like to make this metric a strong tool to help your municipality achieve its vision of sustainability. Do you have any suggestions about how this project could better address the sustainability planning needs of your municipality?

Perhaps having municipalities outline their short, medium and long term strategies/ initiatives. This might assist respondents in considering their vision, identifying future direction and planning the execution.