



# **Towards an Alberta Health Services (AHS) Environmental Sustainability Strategy**

November 4, 2009

## BACKGROUND & RATIONALE

### Why does AHS need an Environmental Sustainability Strategy?

#### 1) Health & the Environment

It is now widely recognized that there is a direct link between our natural environment and the health of our communities. Environmental contaminants, including air and water contaminants, as well as natural resource degradation, have been linked to compromised health status, including certain cancers, birth defects, respiratory and cardiovascular illness, gastrointestinal ailments and even death. These conditions result in an increased demand for health care services. Alberta Health Services (AHS) is committed to improving population health<sup>1</sup>. We believe that taking care of our environment will play a large role in achieving this objective.

The AHS mission is to provide a patient-focused, quality health system that is accessible and *sustainable* for all Albertans<sup>2</sup>. To become a more sustainable organization, we must be diligent in our use of today's resources such that we don't compromise our ability to use those same resources in the future<sup>3</sup>. In terms of healthcare, this means that we must take care of the environment and its natural resources in such a way that the environment and its natural resources can continue to take care of *us* for many generations to come. The healthcare industry as a whole has been identified as a significant contributor to greenhouse gas emissions with a high ecological footprint given its constant energy and water needs, and its continuous waste output. We can improve our environmental sustainability by taking an active role in mitigating, reducing or eliminating the damaging effects that health care activities may have on the environment.

Not only does environmental sustainability support the AHS mission statement, it is aligned with the core value of all health care professionals; "First, do no harm". In all aspects of healthcare, including waste creation and disposal, energy use, water consumption, transportation, and purchasing, the decisions made have an impact on the environment and the health of those who live in it. Many of these issues are shared with other large organizations in other industries, while others such as medical and pharmaceutical waste are unique to the healthcare industry. AHS cannot resolve environmental issues single-handedly, but as leaders in health we can make a conscious and continuous effort to mitigate the harmful environmental impact of our business.

#### 2) Financial & Economic Benefits

Environmental sustainability has a significant role to play in achieving fiscal stability and adapting to changes in economic conditions. Studies have shown that utility consumption and efficiency initiatives result in reduced cost over the long-term. Environmentally preferable purchasing decisions and waste reduction/recycling initiatives also create a leaner financial organization, both in terms of materials consumption costs and output-related costs.

<sup>1</sup> As per the 8 key areas of focus in the AHS Strategic Direction 2009-2012 document (pages 5&6)

<sup>2</sup> As per the the AHS Strategic Direction 2009-2012 document (page 5)

<sup>3</sup> Adapted from the definition of sustainable development given by the Brundtland Commission of the United Nations.

### 3) Past Successes & Future Opportunities

The twelve former health regions that were amalgamated to create AHS have had many successes in improving their environmental sustainability. All new AHS construction projects will be built to Silver Certification in the LEED (Leadership in Energy and Environmental Design) green building program, which aligns with the Alberta Ministry of Infrastructure's commitment to environmentally friendly building design. AHS is now developing an internal focus to support the 'greening' of ongoing operations and existing infrastructure throughout the organization.

The evolution of regulatory frameworks in the European Union and the US has resulted in affordable technologies that make sustainability more cost-effective, particularly over the long run. New initiatives such as carbon trading offer opportunities to create income while reducing utility costs and greenhouse gas emissions. Funds recovered from such initiatives can then be used towards other environmentally-focused projects, giving rise to internal *financial* sustainability as well as continuous improvement in environmental performance. Environmental sustainability has also become a significant factor in recruiting and staff retention efforts, as employees increasingly state their preference to work for "green" employers.

Given support at the senior executive level, and the enthusiasm for environmental initiatives on the front lines, the time is ripe for a province-wide environmental sustainability strategy. This is why **AHS is formally committing itself to becoming a responsible environmental steward and to strive towards an environmentally sustainable and healthy future for all Albertans.** This will be achieved by way of an environmental sustainability strategy, including both short and long-term goals that are congruent with changing circumstances.

## OVERALL STRATEGY

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### **Comment on Research and Resources Used**

*This document was created based on a review of the environmental strategies currently in place at leading-edge healthcare organizations throughout Canada and the United States. A significant effort was made to research, identify and connect with hospitals and healthcare organizations that are recognized as leaders in the field of environmentally responsible healthcare operations. This includes the Interior Health Region (BC), Vancouver Coastal Health Authority (BC), Kaiser Permanente (based on Oakland, CA), Boulder Community Hospital (Boulder, CO) as well as many others. The University of Calgary's Office of Sustainability was also leveraged as a resource, as were North American Healthcare organizations such as Practice Greenhealth, and the Canadian Coalition for Green Health Care. Leveraging these already successful methodologies will allow AHS to support the rigor that is required by this initiative.*

### **Scope**

AHS operations include a diverse range of professional staff, a large geographical area, and a multi-faceted service stream. The Environmental Sustainability Strategy will apply to all portfolios and functional centers within AHS, including both clinical and support areas, and will be supported by Corporate Policy. AHS will act within our sphere of influence to encourage environmental sustainability from our suppliers, vendors, contractors and other third parties involved in AHS operations.

## Key Objectives

Moving towards environmental sustainability will take more than just the implementation of “green” policies. A fundamental shift in the organizational culture of AHS must take place in order for the changes to be permanent and pervasive. Consistent and clear communication throughout the AHS organization will be a key factor in obtaining support and feedback for environmental initiatives and programs. As we transition towards more environmentally sustainable operations, performance will be base-lined, monitored and reported. This will ensure that we continue to move towards sustainability and can adapt quickly to changes in circumstances and technology.

The following three objectives will guide our environmental sustainability strategy programs and initiatives:

Objective	Description	Examples
<b>1</b> <b>Develop an environmental sustainability infrastructure</b>	Ensure that environmental sustainability programs and initiatives become permanently embedded in AHS operations and culture.	<ul style="list-style-type: none"> <li>○ Establish a “Green Coalition” of senior executives from various functional areas</li> <li>○ Develop a corporate environmental sustainability policy and other related governance documents</li> <li>○ Involve and engage staff at all levels throughout the organization</li> <li>○ Develop an environmental sustainability assessment process to be applied to all procurement decisions, capital equipment decisions, building projects, and operational initiatives.</li> <li>○ Engage external expertise and leverage external knowledge resources, including other private and public organizations that share a similar vision of sustainability.</li> </ul>
<b>2</b> <b>Practice environmentally sustainable operations</b>	Ensure that operations continue to support and advance the mission of the AHS Environmental Sustainability Strategy	<ul style="list-style-type: none"> <li>○ Develop an energy and water management plan and implement consumption reduction and efficiency initiatives</li> <li>○ Initiate an AHS waste reduction and recycling program</li> <li>○ Identify ways to incorporate sustainability in all aspects of operations (i.e. BOMA BEST)</li> <li>○ Develop a AHS-wide “green” communications platform</li> </ul>
<b>3</b> <b>Identify and monitor</b>	Ensure that the success of	





**environmental  
performance metrics**

environmental sustainability programs and the progress towards strategic goals can be measured and reported.

- Calculate the AHS environmental footprint and report on it regularly
- Establish baseline energy consumption for all sites and set emissions standards
- Enhance ongoing waste, energy and water use audits
- Compare AHS performance to industry benchmarks

**Key Areas of Focus**

Environmental sustainability touches on all areas of healthcare operations. A multi-focus strategy is needed to ensure that we encompass all areas. The following areas of focus, and the AHS department in which they reside, will be used to help guide our strategy goals and initiatives:

AHS Department	Area of Focus	Example objectives
	<p><b>ENERGY (Electricity &amp; Natural Gas)</b></p> 	<ul style="list-style-type: none"> <li>○ Reducing consumption &amp; increasing efficiency</li> <li>○ Measuring and tracking our carbon footprint &amp; GHG emissions</li> <li>○ Securing alternative (“green”) energy sources</li> <li>○ Development of internal carbon offset projects</li> </ul> <p><b>Combine this with water to say “utilities”?</b></p>
Capital Management	<p><b>WATER</b></p> 	<ul style="list-style-type: none"> <li>○ Reducing consumption and increasing efficiency</li> <li>○ Ensuring proper use/disposal of grey waste and waste water</li> <li>○ Development of a water management plan and a “Green Cleaning” plan</li> </ul>
	<p><b>BUILDINGS</b></p> 	<ul style="list-style-type: none"> <li>○ Development of an Environmentally Sustainable “New Construction” which incorporates the minimum LEED Silver certification standard mandated by Alberta Infrastructure.</li> <li>○ Development and commitment to a sustainable site operations plan which may include a third-party certification program (i.e. BOMA BEST)</li> <li>○ Formation of site-specific “Green teams” to ensure ongoing improved sustainable operations</li> </ul>
Clinical Support Services	<p><b>WASTE</b></p> 	<ul style="list-style-type: none"> <li>○ Reducing the amount of waste generated system-wide and from “factory to landfill”</li> <li>○ Enhancing and expanding current recycling programs province-wide</li> <li>○ Reducing our use of environmentally hazardous materials and ensuring proper disposal/removal of those without alternatives</li> </ul>

**Nutrition & Food**



- Reducing waste and use of non-recyclable/reusable materials & p the food production and distribution chain
- Development of an Environmentally Sustainable Food Services PL
- Investigating and implementing sustainable sourcing options (i.e. l sourced, on-site food gardens, organic producers etc.)
- Investigating and implementing innovative food services strategies (institutional composting)

**TRANSPORTATION & LOGISTICS**



- Reducing fuel consumption and increasing efficiency
- Development of an Environmentally Sustainable Transportation PL
- Investigating green transportation options and alternative workplace strategies

**Contracting,  
Procurement &  
Supply  
Management**

**PROCUREMENT**



- Development of an Environmentally Preferable Purchasing Policy
- Evaluating all purchasing decisions using a complete life-cycle fra that incorporates manufacturing processes, warehousing, and tran and distribution requirements, as well as waste/disposal/recycling issues.
- Development of an environmental management system for logistic (14001)

**Information  
Technology**

**INFORMATION TECHNOLOGY**



- Reducing e-waste (i.e. printer cartridges)and paper usage, and inc energy efficiency
- Development of an Environmentally Sustainable IT Plan, including more energy efficiency technology.

**ACTION PLAN (2009-2012)**

Recognizing that the road to sustainability is more a journey than a destination, we have developed a high-level short term and long term action plan. This action plan will be further defined with specific targets and reporting requirements, as input from the Environmental Coalition/Steering Committee is obtained (see below).

By October 2010, the environmental footprint for AHS will be baselined and 3-year improvement targets will be set. The action plan will remain a dynamic document, evolving as we continue to identify and pursue new opportunities to become more environmentally sustainable.

*Refer to appendix A "Detailed Action Plan 2009-2012" for specific targets and timelines.*

## **OPERATIONAL FRAMEWORK**

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The implementation and operationalization of this environmental sustainability strategy will require leadership and guidance from various groups throughout the organization.

### **Environmental Coalition/Steering Committee**

Given the large number of stakeholders that will be involved in the realization of the Environmental Sustainability Strategy, a mechanism is needed to ensure that efforts are coordinated and well communicated. This mechanism will take the form of a lean province-wide “Environmental Coalition”, comprised of key members of each of the identified stakeholder groups. The Coalition will update its members on a regular basis as to the initiatives under way, and ensure that consultation and cooperation amongst all affected stakeholder groups is maintained. One of the major roles of the Coalition will also be to suggest ideas and solutions to current environmental issues within AHS, including potential sources of funding (internal and external).

In conjunction with the groups listed below, the Environmental Coalition will determine the measurement and reporting metrics for environmental performance, as well as the areas of top priority and targets within each of these. As required, the Coalition may invite adhoc members for additional expertise in specific areas of sustainability. *Refer to appendix B “Green Coalition Membership” for specific stakeholder groups and potential members of the proposed Environmental Steering Committee.*

### **A) Environmental Sustainability & Carbon Management (ESCM)**

This group resides within the Contracting, Procurement & Supply Management (CPSM) portfolio and its areas of focus include:

- Overall provincial strategic direction (related to environmental sustainability)
- Environmentally Preferable Contracting, Procurement & Supply Management
- Utilities efficiency\* (includes water, electricity, natural gas and other energy sources)

*\* In relation to purchasing, logistics and supply management activities, as well as real estate and facilities management activities, in conjunction with the Capital Management team..*

### **B) Clinical Support Services**

Responsibilities with regards to the Environmental Sustainability Strategy will include:

- Waste management and recycling
- Housekeeping and green cleaning initiatives
- Utilities efficiency\* (includes water, electricity, natural gas and other energy sources)

*\*\* In relation to clinical support services activities, and in conjunction with the Capital Management team.*

### **C) Capital Management**

Responsibilities with regards to the Environmental Sustainability Strategy will include:

- Sustainable building planning, construction & operations initiatives
- Energy consumption and efficiency projects
- Greenhouse gas (GHG) reduction projects
- Water conservation and efficiency projects

### **D) Business Advisory Services**

This group resides within the Financial Planning (Finance) portfolio and its responsibilities with regards to the Environmental Sustainability Strategy will include:

- Analytical support and business case preparation
- Financial guidance re: funding and ROI/payback etc

### **E) Other groups**

Depending on the specific initiative or program, the above four groups will require guidance, input and involvement from various other stakeholder groups:

- Infection Prevention & Control
- Legal & Privacy
- Communications
- Quality & Service Improvement
- Physician Executives & Staff
- Information Technology
- CPSM (i.e. Strategic Sourcing, Logistics & Supply Management etc )

### **Communication and Reporting**

The Coalition will be responsible for ensuring open and clear communication between functional areas, as well as reporting progress to the AHS Senior Executive. A formal and defined reporting framework will be developed by the Coalition as one of its first official tasks. Responsibility for specific targets and initiatives will be determined based on the nature of the project, with overall strategic responsibility resting with the ESCM team.

### **Frontline and site-specific engagement**

After the strategic framework and environmental sustainability policies are established, there will be a requirement for program/site-specific “green teams”, comprised of frontline staff and key members of site functional departments. These green teams will support the successful implementation of sustainable operations at the site level, and promote involvement in and general ownership of environmental concerns.

The green teams will also assist in the development site-specific communication and awareness activities, as well as suggest site-specific environmental initiatives and provide a direct feedback mechanism to the Green Coalition and ESCM & WMES teams. If a third-party building-certification program is pursued (i.e. BOMA BEST), these teams could assist in the preparation and maintenance of the documents required for recertification.

This “green team” model is currently in use at other large institutions throughout North America, including the Interior Health Region (BC) and the University of Calgary. The creation of a virtual community tool or platform for these green teams will also be explored, to enable those already involved in “going green” within AHS to step forward, work together and share their best practices.

### **Resources**

In developing environmental sustainability targets and initiatives, we will leverage internal experts as well as incorporating external knowledge sources:

- Green Guide for Health Care ([www.gghc.org](http://www.gghc.org))
- Canadian Coalition for Green Health Care ([www.greenhealthcare.ca](http://www.greenhealthcare.ca))
- Practice GreenHealth ([www.practicegreenhealth.org](http://www.practicegreenhealth.org))
- Contacts within other healthcare organizations recognized for their environmental focus (Interior Health Region, Kaiser Permanente, Vancouver Coastal Health Authority, etc.)
- Other contacts (University of Calgary Office of Sustainability, Alberta Infrastructure, City of Calgary, City of Edmonton, NRCAN etc.)