



# 2015 SUSTAINABILITY PLAN



A Five-Year Strategy



# Executive Summary

FortWhyte Alive (FWA) believes that sustainable communities are built on three essential and interdependent cornerstones: a healthy natural environment; a healthy, vibrant economic environment; and a healthy and equitable social environment. As a place that celebrates interconnectedness of society, economy and environment, FortWhyte is rooted in sustainability.

With approximately 640 acres of diverse habitat that include lakes, forests, meadows, and prairie grasslands, FWA is well-equipped to provide leading-edge programming, natural settings, and facilities for environmental education, outdoor recreation and social enterprise programming. Given its unparalleled natural, built and intellectual assets, FWA is positioned to become a national leader in sustainability.

The FortWhyte Alive Sustainability Plan is a formal roadmap to guide personnel in making informed choices to enable more sustainable practices, and provides the foundation for improving FWA's long-term environmental performance. In this document, a Five-Year Sustainability Strategy is presented, which outlines a plan of action for the short-term. It describes a variety of environmental programs and initiatives, as well as systems for monitoring and evaluating sustainability performance.

FWA's Sustainability Plan will inform best practices in environmental performance for the short, mid, and long-term. Sustainability goals and targets outlined in this document will provide the framework for the development of new initiatives to enhance FWA's overall sustainability and help realise its vision of becoming a national leader in sustainability.

# FortWhyte Alive Sustainability Plan

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# Introduction

FortWhyte Alive (FWA) believes that sustainable communities are built on three essential and interdependent cornerstones: a healthy natural environment; a healthy, vibrant economic environment; and a healthy and equitable social environment. As a place that celebrates interconnectedness of society, economy and environment, FortWhyte is rooted in sustainability.

In the early 1900's, much of what is now FWA was used to mine clay for cement. In the 1960's, the then 'Fort Whyte Centre' was established by a group of citizens determined to revitalize an exhausted industrial mine site. Set up as a charitable organization, FortWhyte was envisaged as a place where people could enjoy and learn about natural ecosystems and become inspired to preserve and protect them. On Earth Day, 1999, the 'Fort Whyte Centre,' launched its \$5-million Reaching New Horizons expansion. It was a time to reflect upon, and celebrate, the first 18 years of successful environmental education programming, which by now has touched the lives of over 1.5 million people, including many school children.

'FortWhyte Alive', as it is now branded, successfully completed its expansion in 2000 and secured 440 additional acres of precious urban green space and saw the creation of exciting new facilities and exhibits. Starting out as a modest nature centre, FWA has evolved into one of Canada's pre-eminent environmental education and sustainable living centres, with 30,000 school children and 70,000 casual visitors a year benefiting from its many programs. These include: environmental education, natural and cultural heritage, outdoor recreation, as well as its exhibits, special events and social initiatives.

Approximately 350 active volunteers are involved in every aspect of the organization's work, from policy development at the Board level, to the delivery of over 45 school and public programs.

As FWA's capacities have grown, so has its commitment to sustainability. It has always strived to be a community leader in not only teaching the cornerstones of sustainability, but also demonstrating these values in the way we operate. When FWA recently took a critical look at its operations to analyze whether it could do more to show leadership in sustainability, the answer was a resounding 'Yes!' As such, in the spring of 2014, a new Sustainability Committee was launched with the intention of developing a plan to enhance the sustainability of its facilities, operations and services.

This document provides strategic direction for improving FWA's environmental performance. It begins by setting the context for the development of the plan, providing organizational background, outlining FWA's sustainability vision statement, and its sustainability principles and governance structure. A Five-Year Sustainability Strategy is presented that is designed to guide sustainability initiatives in the short-to-mid term. Green Building and Procurement policies (see Appendix 1 and 2), as well as an environmental monitoring and evaluation program, provide a framework to guide FWA's sustainability over the long-term.

# Background

## Mission

FortWhyte Alive is dedicated to providing programming, natural settings and facilities for environmental education, outdoor recreation and social enterprise. In so doing, FortWhyte promotes awareness and understanding of the natural world and actions leading to sustainable living.

## Mandate

To offer:

- > as primary focus: relevant programming on the dynamic interactions and interdependency between humans and natural systems;
- > outdoor recreational experiences that encourage individuals to enjoy, understand and sustain the natural world;
- > enhanced program opportunities for marginalized youth and families to participate in environmental education, outdoor recreation and social enterprise programs;
- > exhibits that interpret Manitoba's cultural and natural history and address critical environmental issues; and
- > outreach programs that build and nurture sustainable communities.

## Vision for Sustainability

To make FortWhyte Alive a national leader in sustainability.

## Process & Governance

The FortWhyte Alive Sustainability Committee formed in June 2014 with six members representing FWA's major departments and program streams (Business Development, Hospitality & Group Services, Education, Visitor Services & Retail, Maintenance, and FortWhyte Farms).

Sustainability Committee meetings are held on a bi-weekly basis. The Committee Chair provides weekly sustainability updates to FWA's Management Team, which consists of the President & CEO, Director of Operations, Director of Education & Human Resources, and Director of Business Development. Workshops are held with staff and volunteers on an annual basis to elicit feedback from internal stakeholders. Informal and on-going consultations also occur between Committee members and Winnipeg's leading sustainability professionals through participation in the Winnipeg Sustainability Coordinators Group and Winnipeg's Climate Change Connection Steering Committee.

The goal of FWA's Sustainability Committee is to **develop and implement initiatives that promote and enhance the environmental sustainability of FortWhyte Alive.**

The overall duties of the Committee are to:

- > Assist in the development and implementation of a Strategic Sustainability Plan;
- > Determine baseline of current sustainability performance;
- > Identify drivers and barriers to increasing FWA's sustainability (e.g. cost savings, improved employee health and safety, better environmental performance, favourable public relations potential);
- > Set targets for energy, water and waste consumption;
- > Monitor and track progress on sustainability initiatives; and
- > Identify opportunities for partnership and collaboration.

# Principles of Sustainability

The FortWhyte Alive Sustainability Plan adheres to a similar model of sustainability as the Province of Manitoba, which organizes sustainability in three interconnected dimensions: natural environment, economy and social well-being. The Plan is divided into six principles of sustainability, outlined below. While each area is presented independently, the Sustainability Committee recognizes that they are interconnected and highly interdependent. These principles are used to provide a general framework for guiding specific actions and evaluating specific areas of sustainability performance.



## Five-Year Sustainability Strategy

The Five-Year Sustainability Strategy is framed by these six key principles that also function as FWA's indicators for sustainability. The purpose of the strategy is to inform and guide FWA's sustainability initiatives over the next five years.

Outlined in this plan are specific actions that will serve to meet identified sustainability targets. The FWA Sustainability Committee is responsible for ensuring actions are carried out with the appropriate departments. It recognizes that this strategy may require modifications as other opportunities, risks and challenges arise, or are identified. To ensure resiliency over the next five years, a critical review of action items and targets will be undertaken on an annual basis, allowing for updates or modifications to be made.

Each sustainability principle includes:

1. **Goals:** Ongoing and directly linked to the principle
2. **Targets:** Parameters used to measure outcomes
3. **Benefit to FWA & Community:** Long-term outcomes
4. **Actions:** Specific initiatives to be undertaken between 2015 and 2020

Goals and targets set out for each principal have been established based on an analysis of FWA's current environmental performance and best practices. Actions may represent small or large steps towards target achievement, and will require on-going review as progress is made.

## 1. Energy, Emissions & Transportation

### **Goals:**

- > Reduce total greenhouse gas (GHG) emissions
- > Reduce the intensity of energy consumption
- > Provide enhanced sustainable transportation opportunities

### **Targets:**

- > Reduce energy consumption to 20% below 2014 levels by 2020
- > Reduce GHG emissions to 20% below 2014 levels by 2020
- > Offer new sustainable transportation options to staff and volunteers

### **Benefit to FWA & Community:**

- > Reduced energy consumption will result in lower operating costs for FWA
- > Reduced energy consumption contributes to reduced domestic energy demand
- > Modeling the reduction of GHG emissions, and implementing a Sustainable Transportation Program serves as an example for other organizations
- > Reducing FWA's GHG emissions has a positive impact on municipal, provincial and federal GHG performance

### **Actions 2015-2020:**

- > Initiate collection of utility data for all building from utility providers (2014-ongoing)
- > Undertake lighting retrofit to energy efficient LED light bulbs in all buildings and outdoor lighting (2014-15)
- > Develop GHG monitoring system utilizing Canada's National Inventory Reporting guidelines (Fall 2014-Spring 2015)
- > Install an electric vehicle charging station and educational signage on impacts of personal vehicles (2015)
- > Conduct green building audit for Interpretive Centre (2015)
- > Develop and implement FortWhyte Alive Green Building Policy to apply to all existing buildings and new development projects (Winter 2015)

- > Establish an online rideshare program (Spring 2015)
- > Develop an annual FWA GHG emissions report (December 2015)
- > Secure an electric fleet vehicle (2016)
- > Implement staff bike library (2016)
- > Develop Sustainable Transportation Program (2016)
- > Undertake a Green Building retrofit of Interpretive Centre (2017)
- > Incorporate 'green' renewable power sources at FWA to power new facilities (2020)
- > Convert 50% of fleet vehicles to electric or alternative fuel sources (2020)

## 2. Water

### **Goals:**

- > Enhance water stewardship and conservation in FWA's buildings and facilities
- > Improve the water quality in FWA's five lakes
- > Restore compromised wetland functions

### **Targets:**

- > Reduce total phosphorous content in all lakes to 0.1mg/L or less by 2020
- > Achieve 5.5 mg/L of dissolved oxygen or more in all lakes by 2020
- > Achieve water clarity of at least 50cm Secchi depth in all lakes by 2020
- > Reduce water consumption in all FWA buildings
- > Improve water flow in wetlands

### **Benefit to FWA & Community:**

- > Actions will reduce demands on regional water supply
- > Healthier lakes will result in improved swimming environments for summer day camps and general public
- > Healthier lakes will result in healthier fish populations for local fishers
- > Decreased lake odour for weddings and corporate rentals
- > Communication of progress will lead to greater community awareness about the importance of water conservation and stewardship, strengthening current messaging delivered in school program, public programs and events
- > FWA will serve as an example for other organizations by modeling localized water treatment, reduced water consumption, and restored lake health

### **Actions 2015-2020:**

- > Undertake monthly water quality measurements in all FWA lakes (ongoing - 2020)
- > Send water samples to professional laboratory for monthly phosphorus analysis (ongoing - 2020)
- > Continue to partner with the City of Winnipeg's Slow the Flow program (ongoing - 2020)
- > Install rainwater collection systems (rain barrels) at every FWA building (2015)
- > Install Energy Star-certified dishwashers at Siobahn Richardson Field Station and in Volunteer lounge (2015)

- > Monitor frequency and volume of drinking water deliveries (2015)
- > Educate staff, volunteers and the public about the importance and benefits of water conservation and stewardship (ongoing - 2020)
- > Install dual flush toilets in all buildings (2016)
- > Install low flow taps /motion sensors in all bathrooms (Summer 2016)
- > Research water quality recovery methods and technologies (ongoing - 2016)
- > Evaluate the efficiency of waste water cells (2017)
- > Implement lake water quality recovery strategy (2020)

### 3. Waste

#### **Goals:**

- > Reduce solid, hazardous and electronic waste

#### **Targets:**

- > Divert 90% of recyclable material from the waste stream by 2016
- > Divert 90% of organic material from the waste stream by 2016
- > Divert 100% electronic materials from the waste stream by 2017
- > Reduce the amount of non-recyclable packaging on site
- > Eliminate the use of hazardous materials on site
- > Decrease total volume of waste removed from site by 2020

#### **Benefit to FWA & Community:**

- > FWA will see lower operating costs related to waste pick up and disposal
- > Reduction in total GHG emissions
- > Modeling the reduction of waste produced will serve as an example for other organizations
- > Actions will promote community awareness and education on the environmental and economic benefits of waste reduction, and recycling/compost alternatives
- > Achieving a closed on-site compost loop will reduce spending on fertilizers for maintenance of greenhouse, vegetable gardens, bison prairie and other gardening activities

#### **Actions 2015-2020:**

- > Acquire Call2Recycle battery recycling boxes for all buildings (2014 - ongoing)
- > Conduct a waste audit to determine the garbage, recycling and organic material outputs of the Interpretive Centre and Alloway Reception Centre (2015)
- > Produce annual waste audit/performance report (2015 - ongoing)
- > Implement a FWA integrated composting program (2015)
- > Divert all organic waste produced in the Buffalo Stone Café kitchen to compost (2015 – ongoing)
- > Install public compost bin at Buffalo Stone Café (2015)
- > Develop educational signage to promote waste reduction program (2015)
- > Develop an internal e-waste recycling program (2015)
- > Monitor frequency and volume of septic waste disposal (2015)

- > Research the feasibility of a community composting facility at FWA (2016)
- > Install compost toilet at FortWhyte Farm (2016)
- > Replace all stand-alone garbage bins with garbage, co-mingle recycling, and composting (2016)
- > Replace all hazardous materials with environmentally friendly products (2016)
- > Pilot a community composting program that provides composting services to neighbouring businesses (2017)
- > Install air dryers in all washrooms (2017)

## 4. Procurement & Products

### Goals:

- > Prioritize sustainable procurement practices

### Targets:

- > Ensure 85% of products at the Nature Shop are ethically sourced, and either local, organic, and/or fair trade, by 2020
- > Ensure 95% of products in the Buffalo Stone Café are local, organic, and/ or fair trade products by 2016
- > Ensure 100% office supplies and internal purchases adhere to FWA's Green Procurement Policy by 2018
- > Ensure 100% of Buffalo Stone Café 'to-go' packaging is compostable by 2015
- > Increase efforts to minimize product packaging in the Buffalo Stone Cafe and Nature Shop

### Benefit to FWA & Community:

- > Purchasing local goods will support the local economy
- > Sustainability procurement will supply the community with healthier, more ethical options
- > Sustainable procurement will promote the importance of socially just communities
- > FWA will become a leader to organizations and members of the community by making better purchasing decisions

### Actions 2015-2020:

- > Partner with sustainable food service company to operate Buffalo Stone Café (2014 - ongoing)
- > Develop Sustainable Procurement Policy to guide procurement practices for Nature Shop, Buffalo Stone Café, and internal goods and services (2015)
- > Provide staff and volunteer training for effective implementation of Sustainable Procurement Policy (2014)
  - o Regularly review and amend in consultation with staff (ongoing)
- > Research local brands and products that offer healthy snack options to stock in vending machines (2015)
- > Purchase locally or ethically made goods to sell in the Nature Shop (2015-2020)
- > Reduce purchasing goods that require excessive packaging

## 5. Site & Facilities

### Goals:

- > Adhere to the principles of green building standards
- > Develop and maintain our natural landscape in a healthy and organic manner
- > Support the natural biodiversity of Manitoba by ensuring a diversity of native plant species on site

### Targets:

- > 100% of new buildings to be constructed in adherence to FWA's Green Building Policy
- > Retrofit Interpretive Centre to meet FWA's Green Building Policy by 2020
- > Maintain all buildings to reduce energy usage, water wastage and improve air quality
- > 100% of all facilities to be cleaned with green cleaning techniques and products by 2015
- > Prioritize accessibility by adhering to principles of universal design in all sites and facilities
- > Eliminate the use of toxic chemicals in landscape management practices
- > Ensure that 90% all new plants installed on site are native by 2018

### Benefit to FWA & Community:

- > Green buildings reduce resource waste and creates a healthier environment for staff and visitors
- > Adhering to green building standards will decrease FWA's overall GHG emissions
- > FWA will become a leader in green facilities by modeling new technology, products, and construction practices
- > Enhanced biodiversity and ecosystem health contributes to the resiliency of FortWhyte and community
- > Healthy and diverse landscape will act as a model for community and provide opportunities for educational & public programming

### Actions 2015-2020:

- > Develop Green Building Policy by 2015
  - Consult with Green Building/LEED-certified professionals to identify the best standards to adopt in the development of a FWA Green Buildings Policy (2014)
  - Retrofit/Renovate all existing buildings to the protocols developed (2019)
- > Research, develop and implement a plan for all new construction that adheres to green building principles, including maintenance protocols to ensure that all maintenance issues are fixed in a timely manner (2015)
- > Conduct a managed burn of the south meadow to remove thistle, increase diversity of wildflowers and grasses, and improve overall soil fertility (2015)
- > Undertake lighting retrofit of all existing buildings (2015)
  - Install light sensors in less-frequented rooms, to switch off automatically when not in use (2016)
  - Install dimmers on lights that react to the amount of solar light coming in (2016)
- > Install dual flush toilets in all washrooms (2016)
- > Survey areas of underused space to maximize usage by staff and visitors (2016)
- > Develop Green Building retrofit plan for Interpretive Centre (2016)

- > Establish building audit system to prioritize a list of green retrofits (2016)
- > Integrate opportunities for public and school programs on sustainable building design (2017)
- > Highlight sustainable design and relevant green building standards used by FWA through interpretive signage and displays (2017)
- > Quantify and monitor the health and productivity benefits of green buildings (e.g. sick days taken etc.) (2020)
- > Reduce overall expenditures through improved building performance and full cost accounting (2020)
- > Develop a Sustainable Site Maintenance Plan (2016)
- > Include an ecosystem based management approach to land use decisions
- > Develop a system to monitor for invasive species and disease in FWA landscape (2016)
- > Increase health of wetlands & lakes (see water)
- > Eliminate the use of pesticides on site (2017)
- > Develop interpretive information for various landscapes at FWA (ongoing)
- > Integrate opportunities for public and school programs on sustainable landscaping and plant management ( ongoing)
- > Decrease use of fertilizer by using compost produced on site as part of the integrated composting program (2018)

## 6. Social & Governance

### **Goals:**

- > Promote a culture of sustainability in the FWA community

### **Targets:**

- > Support a system of governance that prioritizes sustainable values
- > Provide opportunities and supports to staff and volunteers to further develop sustainable lifestyles
- > Prioritize and evaluate education and public programs as they apply to sustainability
- > Foster programs which promote sustainability in Winnipeg and the province
- > Foster an environment that promotes inclusion and celebrates Manitoba's cultural diversity

### **Benefit to FWA & Community:**

- > Public awareness will increase accountability for progress made and completion of long term goals
- > Actions will create awareness and educate the community and staff members about sustainable goals
- > Activities will result in increased public awareness of the importance of social justice issues in building sustainable communities

### **Actions 2015-2020:**

- > Develop a Sustainability Policy & Reporting Structure (2015)
- > Review Sustainability Plan to ensure that it reflects current best practices on sustainability (December 2015 - ongoing annually)
- > Establish a Workplace Safety and Health program under the Manitoba Workplace Safety and Health Act (2016)

- > Improve communication on sustainability initiatives and processes
  - Increase transparency on sustainable initiatives by posting Sustainability Plan on the FWA website, as well as sending out quarterly updates on successes and challenges (2015)
  - Monthly sustainability tips and methods emailed to FWA Staff and Volunteers (2015)
  - Develop forum for ongoing feedback and ideas sharing among all Staff and Volunteers (2016)
  - Improve communication methods among Staff and Volunteers through the use of whiteboards, social opportunities, staff retreat, etc. (2015 - ongoing)
  - Produce annual monitoring reports to share with the general public via FWA's website ([www.fortwhyte.org](http://www.fortwhyte.org)) and other communication methods such as Constant Contact
- > Implement four (each season) "Living Sustainably" professional development lunchtime workshops (i.e. lunch hour sessions) (2015)
- > Organize staff outing to volunteer at a local not-for-profit (2015)
- > Review FWA governance structure to ensure that it: supports grassroots initiatives, is adaptable and flexible, and highlights bottom-up initiatives among staff (ongoing)
- > Develop a Pledge of Sustainability among Staff and Volunteers (2015)
- > Provide incentives and recognition for staff and volunteers who succeed in integrating sustainable initiatives into their daily routine, through the Pledge of Sustainability (e.g. composting, Christmas tree drop-offs, active transportation, ethical consumer choices, etc.) (2015)
- > Re-evaluate school and public programming to ensure the integration of sustainable values (ongoing)
- > Increase awareness on alternate transportation routes to FWA (i.e. bike maps) (2015)
- > Implement Sustainable Rental Policy for weddings, individual and corporate bookings (2016)
- > Provide a yearly survey in membership renewals to assess needs for improved sustainability opportunities at FWA (2016)
- > Conduct Indigenous Program Feasibility Study to identify opportunities to enhance and create new Indigenous programming at FWA (2015)
- > Further develop opportunities for low-income youth and families to participate at FWA (2015-2017)
- > Further develop programming that reflects Manitoba's cultural heritage and diversity (2015-2017)
- > Host a sustainability gathering (similar format as a festival or conference) at FWA for the public to learn about FWA's sustainability initiatives, meet champions of sustainability locally and globally and learn about practical tools to adopt these initiatives (2016)
- > Provide shuttle transportation in Winnipeg's downtown on large public programming days from central locations (2016)
- > Implement online Rideshare forum for staff and volunteers, and eventually visitors (2017)
- > Investigate opportunities for transportation assistance to volunteers who may be limited by transportation (2017)

# Monitoring & Evaluation

For each sustainability principle, the Committee will develop a program for monitoring to evaluate and track sustainability performance. Data will be collected on an on-going basis and will be analyzed and compiled into an annual Sustainability Performance Report. Outlined below are the areas to be monitored and the methods used for gathering data:

## 1. Energy

- a. Collect energy data (electricity and natural gas usage) for all buildings (Alloway Reception Centre (ARC), Interpretive Centre, Siobhan Richardson Field Station (SRFS), FortWhyte Farms, Adventure Site, etc.) on a monthly basis using billings and reports provided by Manitoba Hydro.
- b. Conduct four (seasonal) online transportation surveys to obtain a baseline understanding of staff and volunteer commuter options

## 2. Water

- a. Collect data on the frequency and quantity of water truck deliveries for all FWA buildings. Input data into spreadsheet
- b. Research the average distance travelled by water trucks in transporting water from source location to FWA
- c. Collect data on the frequency and quantity of bottled water deliveries for water coolers in the Interpretive Centre
- d. Collect water quality data in all five of FWA's lakes on a monthly basis:
  - i. Take monthly measurements of total phosphorus, dissolved oxygen, and water clarity (Secchi disk)
  - ii. Send water samples to professional laboratory on a monthly basis for analysis of total phosphorous and chlorophyll
  - iii. Populate and maintain water data Excel spreadsheet

## 3. Waste

- a. Conduct annual waste audits for FWA's Interpretive Centre and Alloway Reception Centre
- b. Input data into spreadsheet.
- c. Track the quantity of full battery recycling boxes returned to Call2Recycle
- d. Collect the frequency and volume of sewage pumped from FWA's septic tanks.
- e. Input data into spreadsheet

## 4. Procurement

- a. Conduct seasonal audit of Nature Shop merchandise to quantify percentage of products that are locally sourced, organic, and/or Fair Trade certified
- b. Conduct seasonal audit of office supplies to quantify percentage of recycled and locally sourced materials

- c. Obtain food order history from Buffalo Stone Café on an annual basis to analyze the proportion of sustainably sourced products

## **5. Facilities & Site**

- a. Utilize Energy, Water and Transportation data to produce an aggregate GHG emissions analysis for each FWA building using formulas derived from the Canada's National Inventory Report guidelines

## **6. Social and Governance**

- a. Host bi-annual meetings for staff and volunteers to discuss ways to improve social sustainability (e.g. work environment, workplace health and safety, communication, operational awareness) and to document current successes
- b. Track the number of staff and volunteers who have submitted a "Pledge for Sustainability"

## Reporting

The annual Sustainability Performance Report will review FWA's environmental performance in the six principles of sustainability outlined above. The report will document progress relative to identified targets and will be shared with the general public via FWA's website ([www.fortwhyte.org](http://www.fortwhyte.org)). Actions will be updated annually to ensure that they appropriately reflect the direction of the project.

If goals are not being met, the Sustainability Committee will critically review the actions and targets to ensure that they fall within the scope and feasibility of the plan. The Sustainability Committee Chair will present the annual report to the Management Team and the Board of Trustees for review. Any feedback and suggestions from both parties must be reviewed by the committee.

## Conclusion

Strategic plans are living documents that must be flexible to unexpected opportunities and circumstances. To ensure the resilience of FWA's Sustainability Plan, the Committee has built adaptability into its initiatives by committing to undertake an annual review to provide opportunities to update or modify targets and actions.

This Plan is intended to provide a framework for sustainability action at FortWhyte Alive that is responsive to the priorities identified through consultation and to the current organizational and external environment. By improving environmental and social sustainability performance, economic benefits will be realised.

With this comprehensive Plan as a guide, FortWhyte Alive will continue to strive to be a national leader in sustainability, serving as a model for organizations and businesses across Canada.

# Appendices

## Appendix I: FortWhyte Alive Green Building Policy

### **Purpose**

This policy demonstrates FortWhyte Alive's commitment to economic, environmental and social improvements by adopting high standards of sustainability in the design and operation of its buildings and facilities, providing leadership for other Manitoba institutions.

### **Policy Statement**

FortWhyte Alive is committed to ensuring the design, construction and operation of all existing buildings, facilities and future developments adhere to sustainable green building design practices that optimize the lifecycle performance from environmental, energy and economic perspectives.

### **Green Building Guidelines**

The following green building guidelines apply to FortWhyte Alive and will be considered in any decision:

#### **1. Cost Saving:**

- > Reduce overall expenditures through improved building performance, full cost accounting and a lifecycle approach to costing.

#### **2. Low Environmental Impact:**

- > Minimize the negative environmental impacts associated with building site selection, construction, renovation, operation, maintenance, repair, demolition or deconstruction, without impairing the intended use or function of the building;
- > Reduce greenhouse gas emissions by improving energy efficiency and expanding use of clean, renewable energy.

#### **3. Limit Waste:**

- > Reduce landfill requirements by encouraging the reuse and recycling of construction, renovation and demolitions, and other solid waste materials (which, in turn, closes the loop by encouraging the use of materials that contain recycled content).

#### **4. Protect Human Health and Well-being:**

- > Capitalize on other benefits often achieved by green buildings, such as healthier, more productive indoor environments and improved asset values

#### **5. Support Local Economy:**

- > Create economic opportunities for Manitoba businesses by stimulating the demand for green building products and services

## Green Building Standards Criteria

FortWhyte Alive's buildings will be measured in terms of minimum sustainability performance of the following criteria to provide a general system to guide its green building standards:

### **Water:**

- > Water use reduction
- > Water efficient landscaping
- > Innovative wastewater technologies

### **Energy & Atmosphere:**

- > Minimum energy performance
- > On-site renewable energy
- > Refrigerant management

### **Materials & Resources:**

- > Storage and collection of recyclables
- > Building re-use
- > Material re-use
- > Use of recycled materials in construction
- > Regional materials
- > Rapidly renewable materials
- > Certified wood

### **Indoor Environmental Quality:**

- > Minimum indoor air quality performance
- > Low-emitting materials (e.g. adhesives, sealants, paints, coatings, flooring systems, composite wood and agrofibre products)
- > Indoor chemical and pollutant source control
- > Controllability of system: (e.g. lighting and thermal control)
- > Daylight and scenic views

### **Innovation in Design:**

- > Local labour
- > Green cleaning
- > Environmental education program

## Appendix II: FortWhyte Alive Sustainable Procurement Policy

### **Purpose**

FortWhyte Alive, through its internal operations and procurement, has an integral role in promoting and implementing sustainable and environmentally responsible practices within its organization and as a model to the community. This policy is to reduce the environmental and social impact of FWA's procurement practices to the greatest extent practical.

### **Policy Statement**

FortWhyte Alive will align its purchasing decisions with its commitment to protect the environment, and will purchase environmentally preferred products and services to the greatest extent practical. Preference will be given to the purchase of goods and services that minimize adverse impacts on human health and the environment. Preference will be given to items that are recycled, organic, local, socially responsible and ethically sourced. This is to be practiced wherever environmentally preferred products and services and sustainably procured products and services perform satisfactorily and are available at a reasonable cost.

The FortWhyte Alive Procurement Policy is intended for various categories of products and services. These may include, but are not limited to:

- > Paper and paper products
- > Office supplies
- > Computer and other electronic equipment and supplies
- > Office and other furniture (including major appliances)
- > Vehicles and other transportation equipment
- > Food services and catering
- > Nature Shop products
- > Cleaning supplies
- > Promotional materials
- > Official publications

To assist with implementation, the Sustainability Committee will work with purchasers and suppliers to determine products and services that have a less adverse impact on human health and the environment.

The FortWhyte Alive Procurement Policy will be regularly reviewed and amended to adapt to changing needs, circumstances and conditions to continue to be a progressive, green procurement policy.

### **Procurement Guidelines**

The following green procurement guidelines apply to FortWhyte Alive and will be considered in any procurement decision:

#### **1. Conserving resources**

- > Evaluate and reduce the need to purchase goods, materials and services;
- > Make use of available online catalogues and electronic purchasing formats to reduce use of paper
- > Reuse, recycle and recover goods and materials

- > Purchase goods, materials and services that:
  - use recycled products
  - require less material to manufacture
  - require less packaging
  - wherever practical, have multifunctional capabilities

## **2. Conserving energy**

- > Purchase goods, materials and services where:
  - the consumption of energy (electricity and fossil fuels) is minimized during production, transportation, delivery & usage
  - renewable forms of energy are substituted for non-renewable forms of energy, during production, transportation, delivery and usage
- > Purchase and use goods, materials and services that have or use a structure that facilitate energy efficiency and resource conservation.

## **3. Promoting pollution prevention, waste reduction and diversion**

- > Purchase goods and materials that:
  - are easy to recycle
  - allows for disassembly for processing, recycling and waste management
  - are package with recycled products or with materials that are recyclable
  - avoids the creation of waste and pollutants during manufacturing at the source
  - are used or remanufactured
  - minimize adverse environmental impacts
  - have greater durability and longer life-span
- > Use goods and materials in a manner that minimizes adverse environmental impacts

## **4. Protecting human health and well-being**

- > Purchase goods and services that have ethical standards in their manufacturing processes including, but not limited to, items that are:
  - ethically procured
    - Fair Trade certified
    - minority owned firms
    - Aboriginal businesses
  - socially responsible
    - support not for profit businesses
    - support social enterprises
    - support human rights for employees
    - support workplace health and safety
  - procured fostering economic development
    - 'buy local' initiatives
    - Aboriginal businesses
- > Wherever practical, purchase goods and materials that do not pose an elevated risk to human health, safety and the environment.

## Appendix III: Glossary

### **Environmentally Preferable Products:**

Products that have a lesser impact on human health and the environment when compared with competing products. This comparison may consider but is not limited to raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product.

### **Environmentally Preferable Services:**

Services that have a more beneficial or less adverse impact on human health and the environment when compared with competing services.

### **Fair Trade:**

Fair trade is trade in which producers (most often in economically disadvantaged countries) achieve better trading conditions while promoting sustainability. A component is payment of higher prices to exporters, as well as higher social and environmental standards.

### **Life-Cycle Performance:**

A practice which looks at the full concept, design, development, utilization, support and retirement of a building, including how it changes over time, requirements to uphold standards, etc.

### **Local:**

Products that are produced and processed in an effort to enhance the economic, environmental and social health of a particular place, where the distance between producer and consumer is limited.

### **Organic:**

Goods, mainly food, that are produced using environmentally and animal friendly methods, where the majority of ingredients are free of synthetic additives such as pesticides, chemical fertilizers, and dyes.

### **Practical:**

Means that the environmentally preferred products and services are able to perform the intended function with sufficient performance.

### **Recycled Products:**

Products manufactured with waste material that has been recovered or diverted from landfill.

### **Reasonable Cost:**

Price that provides the best total value, consideration given to availability, delivery, fitness for purpose, payment terms, quality, quantity, and service. A reasonable cost is not necessarily the lowest price.

### **Sustainable Procurement:**

Sustainable procurement considers not only the environmental impact but the health and social impacts of the goods and services being purchased and may include considerations related to:

- > ethical procurement (e.g. no sweat shop, fair trade);

- > socially responsible procurement (e.g. human rights, workplace health and safety);
- > procurement fostering economic development (e.g. 'buy local' initiatives)