Strathcona County's

Environmental Sustainability Framework

Strathcona County

June 2009

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Contents

Environmental Sustainability Framework

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1. Overview

Strathcona County cares about doing its part for an environmentally healthy and sustainable community.

The County's Strategic Plan emphasizes a triple bottom-line approach, which means striving for balance in social, environmental and economic perspectives as we plan and deliver service.

In March 2007, County Council adopted the Social Sustainability Framework, a comprehensive guide to building a healthy and compassionate community. Toward realizing the triple bottom-line approach, the Environmental Sustainability Framework (ESF) builds on this work, and will be followed with preparation of an Economic Sustainability Framework.

Together these three frameworks are important foundations to guide decision making in Strathcona County.

Sustainability Decision Making Context

An overarching Sustainability Framework will ultimately serve to guide long-term sustainability in alignment with these frameworks.

The Environmental Sustainability Framework is a guide to assist in facilitating informed decision making. It is intended to be primarily used by County staff and Council, though its direction and tools can be helpful to others in the business and community sectors.

This framework is designed to help decision makers at the governance and service delivery levels in Strathcona County determine the impact of their decisions on environmental sustainability.

Strathcona County is classified by the Province of Alberta as a "specialized municipality" to recognize unique needs of a municipality that includes both a large urban centre and a significant rural territory and population.

Strathcona County is also diverse in its make up, ranging from a major industrial base in the north of its boundary, to a portion of the Beaver Hills area — a stagnant ice moraine also known as the Cooking Lake Moraine — located in the southeast.

The urban and rural interface is reflected in the Environmental Sustainability Framework. At the same time, the quest for sustainability by Strathcona County requires that social land values, economic considerations and biophysical environmental quality be integrated to form a solid foundation for sustainable land use and development for the future.

2. Purpose

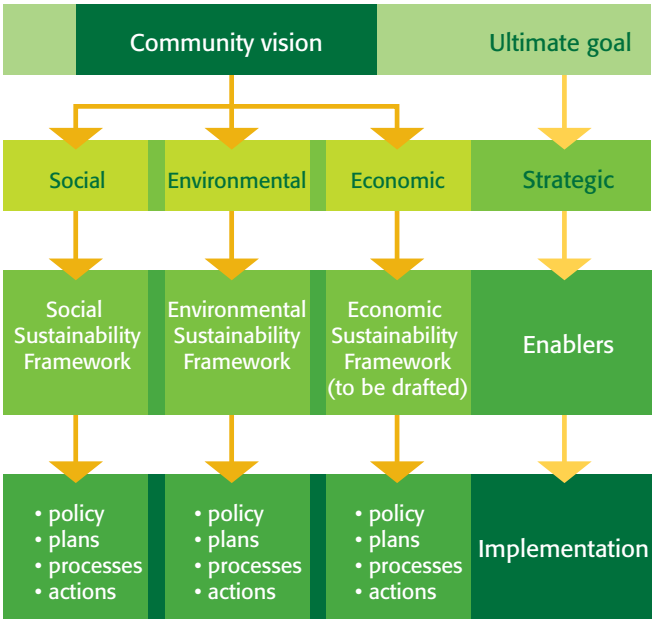
The Environmental Sustainability Framework is intended to:

- Be used as a guide for responding to environmental issues
- Assess the impact of changes in the environment on residents and municipal operations
- Prioritize and plan for future environmental concerns
- Maintain a focus on current studies, indicators and trends
- Guide new policies
- Strengthen the County's commitment to integrated planning (environmental, social, economic)
- Ensure we are a leader in new, innovative and efficient technology
- Assist with the advocacy efforts of Strathcona County for environmental grant opportunities
- Assist in engaging residents, businesses, community groups in becoming more environmentally aware and motivated

Environmental sustainability is...

> "The ability to maintain attributes or qualities that are valued in the natural environment."

The Environmental Sustainability Framework is one of three enablers for the development of corporate policies, plans and processes.



3. Development of the framework

The process of developing Strathcona County's Environmental Sustainability Framework began in January 2008, with assistance from an inter-departmental committee of municipal staff. Research and consultation over the proceeding months resulted in a science-based framework, reflective of both County priorities and community values.

Project phases

The Environmental Sustainability Framework involved a three-phase process:

Phase 1– Research on the State of the Environment

Research captured the current landscape to identify:

- the biophysical attributes within Strathcona County
- our environmental practices within County operations
- and where Strathcona County has impact and influence on the environment.

The primary work of this phase consisted of:

- compiling and review of environmental baseline data
- developing key environmental indicator options
- gathering environmental mapping

Phase 2– Stakeholder Engagement

Strathcona County drew upon several existing surveys and consultation findings that were recent and relevant to help develop this framework. The consultation program was designed to assess the values, issues, and concerns of the public, staff, and key stakeholder groups. Input gathered from key stakeholders assisted in developing the themes and guiding statements for the framework (youth, seniors, agriculture community, Council, County staff, small business, developers and builders, industry, community associations and environmental non-government organizations).

Specific consultation events were developed and delivered for each stakeholder group.
(See Appendix 1 – Consultation and Engagement Overview)

Phase 3–Development of the Framework

After researching our current status in relation to environmental sustainability, and asking stakeholders where we want to be, Phase 3 identifies how we are going to get there. This phase set out the:

- Themes for environmental sustainability
- Guiding statements that describe success
- County indicators with goals
- Recommended strategies
- Decision support tool
- Implementation plan

4. Our vision as a guide

A vision serves to guide a process at the highest level. It is a statement that unifies a group and ensures that all parties are working towards the same end point.

Strathcona County has a strong Council-approved vision that is broad and far-reaching, and which has been adopted for the Environmental Sustainability Framework.

Vision

Strathcona County is a safe, caring and autonomous community that treasures its unique blend of urban and rural lifestyles while balancing the natural environment with economic prosperity. Through strong, effective leadership, the County is a vibrant community of choice.

Strategic Plan - Capstone Policy

Strathcona County practises sound environmental stewardship.

The vision speaks to the principles of sustainability in that it draws attention to the social fabric of the community, and highlights the need for responsiveness when dealing with the long-term challenges facing all communities. It is also reflective of the local rural and urban values determined through consultation.

Aligned with the Municipal Development Plan

Many County documents were consulted to develop the framework. Of these, the Municipal Development Plan (MDP), which builds from our vision and Corporate Strategic Plan, has emerged as the leading comprehensive document for sustainability planning in Strathcona County.

Sustainability for Strathcona County means:

Developing in a manner that meets the needs of the present without compromising the ability of future generations to meet their own needs, while striking a balance between economic prosperity, social responsibility and environmental stewardship.

As the MDP is a tool for decision making pertaining to growth in the County, the Environmental Sustainability Framework shares the same principles as they relate to the natural environment.

Municipal Development Plan sustainability principles

To achieve a sustainable community, Strathcona County has adopted four science-based sustainability principles.

Principle 1

Move toward, and ultimately achieve…
solutions and activities that conserve, enhance and regenerate nature and life-sustaining ecosystems.

Principle 2

Move toward, and ultimately achieve…
solutions and activities that free us from our dependence on substances that are extracted from the earth's crust and accumulate in nature.

Principle 3

Move toward, and ultimately achieve…
cradle-to-cradle solutions and activities in design, manufacturing and consumption such that substances produced by society do not accumulate in nature.

Principle 4

Move toward, and ultimately achieve…
social solutions and activities that allow every person to meet basic human needs and achieve their potential in life, now and in the future (Social Sustainability Framework).

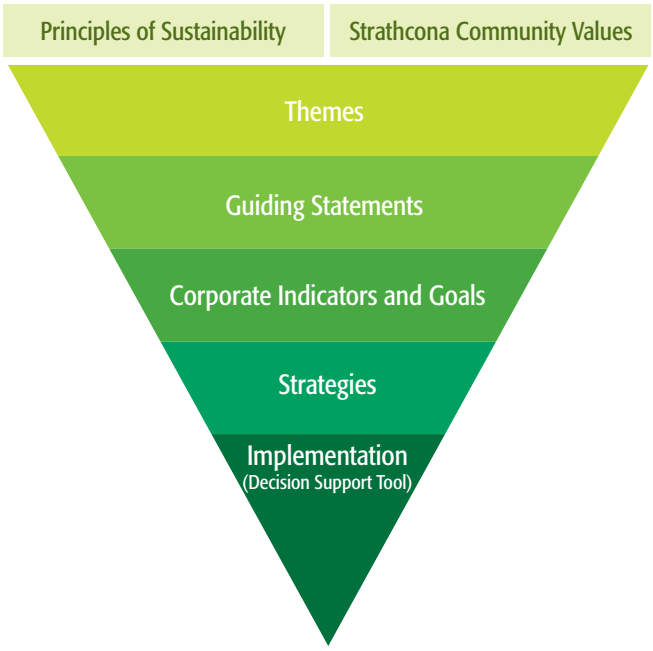
5. Themes and Guiding Statements for environmental sustainability

The Municipal Development Plan establishes 12 distinct themes, or focus areas, for policy development that follow the triple bottom-line approach to sustainability, and ensure conservation and longevity of social, economic and environmental resources.

The connectivity of these themes is core to sustainability in our community. The themes need to be considered when evaluating sustainable development.

Consideration of themes and guiding statements is built into a high-level Decision Support Tool, found on page 13. This tool, developed to support implementation of the Environmental Sustainability Framework, can be used to assess a range of projects or programs at the corporate and community level.

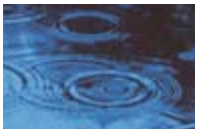
Environmental Sustainability Framework Structure



12 themes – Municipal Development Plan

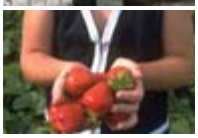

Land


Natural Habitat


Water

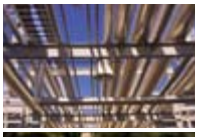

Carbon


Transport


Food


Materials

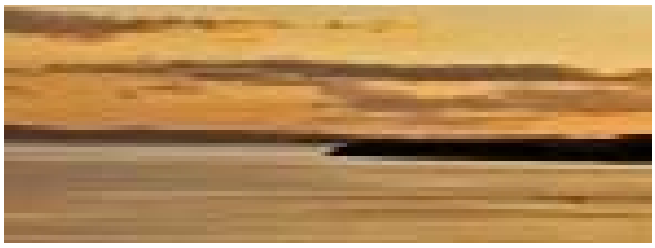

Waste


Economy


Well-being


Equity

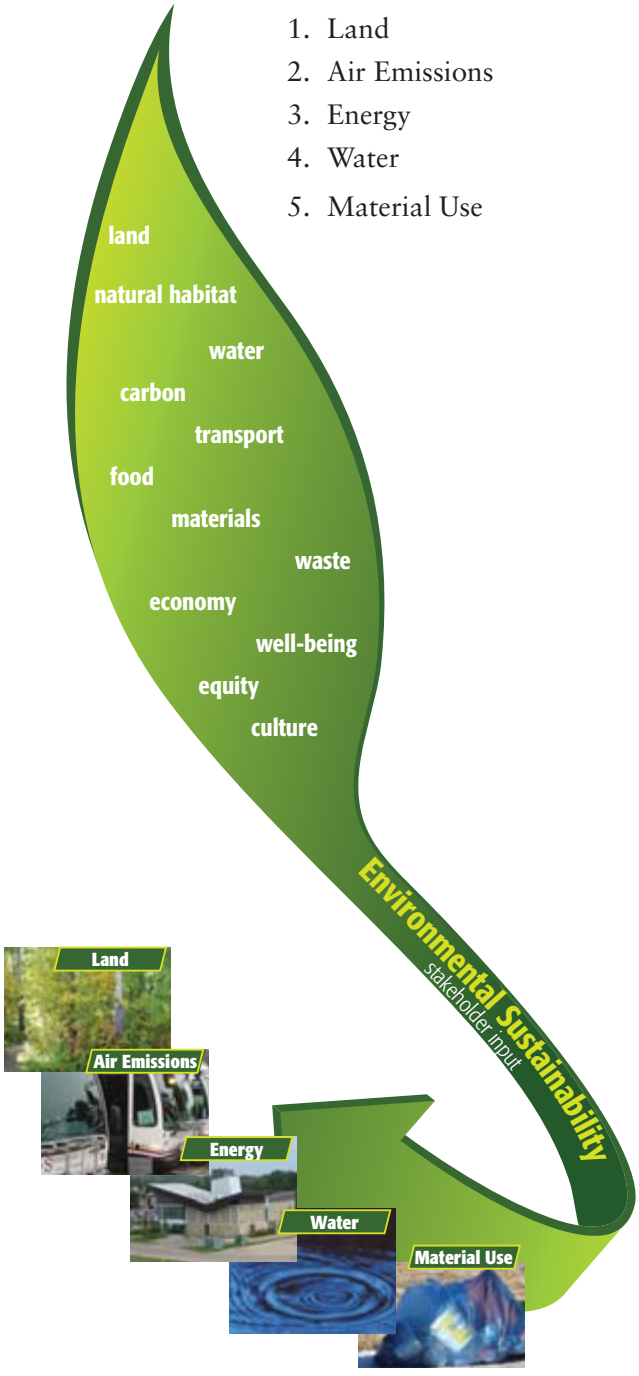

Culture



Guiding Statements

Using the input received by Strathcona County stakeholders (see Appendix 1) and existing MDP Themes, the Environmental Sustainability Framework establishes five environmentally specific themes:

1. Land
2. Air Emissions
3. Energy
4. Water
5. Material Use



Out of these come Guiding Statements that describe what success through the Environmental Sustainability Framework looks like in the future.

Land

Guiding Statement:

Strathcona County's urban areas are surrounded and connected by open green space and healthy natural areas, which are home to wildlife and provide recreation opportunities to County residents.

Air Emissions

Guiding Statement:

Air quality in Strathcona County supports the health and well-being of its citizens.

Energy

Guiding Statement:

Strathcona County employs advanced technology and sound management practices in its continuous efforts to improve energy efficiency.

Water

Guiding Statement:

Strathcona County's watersheds provide an adequate supply of quality freshwater for public and private use while ensuring a healthy ecosystem for future generations.

Material Use

Guiding Statement:

Strathcona County uses leading procurement and waste management practices, which result in reduced and responsible use of resources and materials.

6. Corporate Indicators and Goals

An indicator is a measure that reveals a condition, a trend or an emerging issue. These corporate indicators provide a way to determine whether the County is moving toward its stated vision over a period of time.

Land

Goal: Increase conservation of representative ecosystems

Target measure: No net loss of representative ecosystems protected

Indicator: Total hectares of representative ecosytems protected

Air Emissions

Goal: Zero occurrences of exceedance of the Canada-wide standard for PM2.5 and O_3

Target measure: Number of times exceeding the Canada-wide standard for PM2.5 and O_3

Indicator: Ability to meet and not exceed the standard

PM2.5 is particle matter such as smoke, mould, pollen, minerals and other airborne particles smaller that 2.5 microns or about 0.0001 inches. O_3 is Ozone. In the high atmosphere, ozone occurs naturally and protects the earth from ultraviolet radiation. At ground level, ozone is created when nitrogen oxide and carbon compounds react together in sunlight, generating smog. Ozone is usually higher in rural areas.

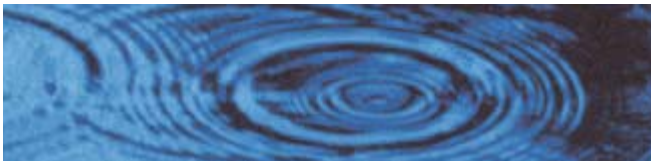
Energy

Goal: Decrease the kilowatt hours per square foot per year

Target measure: 10 per cent reduction by 2020

Indicator: Kilowatt hours per square foot per year

Water



Goal: Achieve provincial goals under the Water for Life strategy

Target measure: 30 per cent improvement in water efficiency by 2015

Indicator: Per cent improvement in water efficiency

Material Use

Goal: Net zero waste in Strathcona County facilities

Target measure: 90 per cent waste diversion in Strathcona County facilities

Indicator: Total waste diversion

These corporate indicators are intended as a tool for the whole organization to measure how well we are progressing together along our path towards environmental sustainability. It is recognized that these will not be the sole indicators for Strathcona County and that individual departments will have their own indicators. Department indicators will complement and assist with success with the corporate indicators.

Potential complementary Department Indicators

Land

Engineering and Environmental Planning

- Total hectares of wetlands protected
  - Wetland Conservation Policy
- Total hectares of Beaver Hills Moraine protected
- Total area of conservation easements
  - Conservation easements agreements
  - Environmental reserve easements

Recreation, Parks and Culture

- Total area of active green space

Air Emissions

Corporate Planning and Intergovernmental Affairs

- Total greenhouse gas emissions reduced through Strathcona County initiatives
- Number of employees travelling to work via single occupancy vehicle

Fleet Services

- Kilometres travelled per litre of fuel by Strathcona County fleet

Recreation, Parks and Culture

- Total urban tree inventory

Transit

- Total annual transit ridership
- Total annual ridership per capita
- Percentage of key rider groups using transit (mode share)
- Passenger kilometre travelled per litre of fuel

Energy

Utilities

- Kilowatt hours/cubic metre in pump house facilities

Planning and Development Services (SUN Guidelines)

- Energy efficiency of new development

Facility Services

- Total percentage of energy from renewable sources

Fleet Services

- Total litres of fuel used by Strathcona County fleet

Water

Utilities

- Total water used in municipal buildings per square foot

Material Use

Utilities

- Number of participants at Enviroservice events

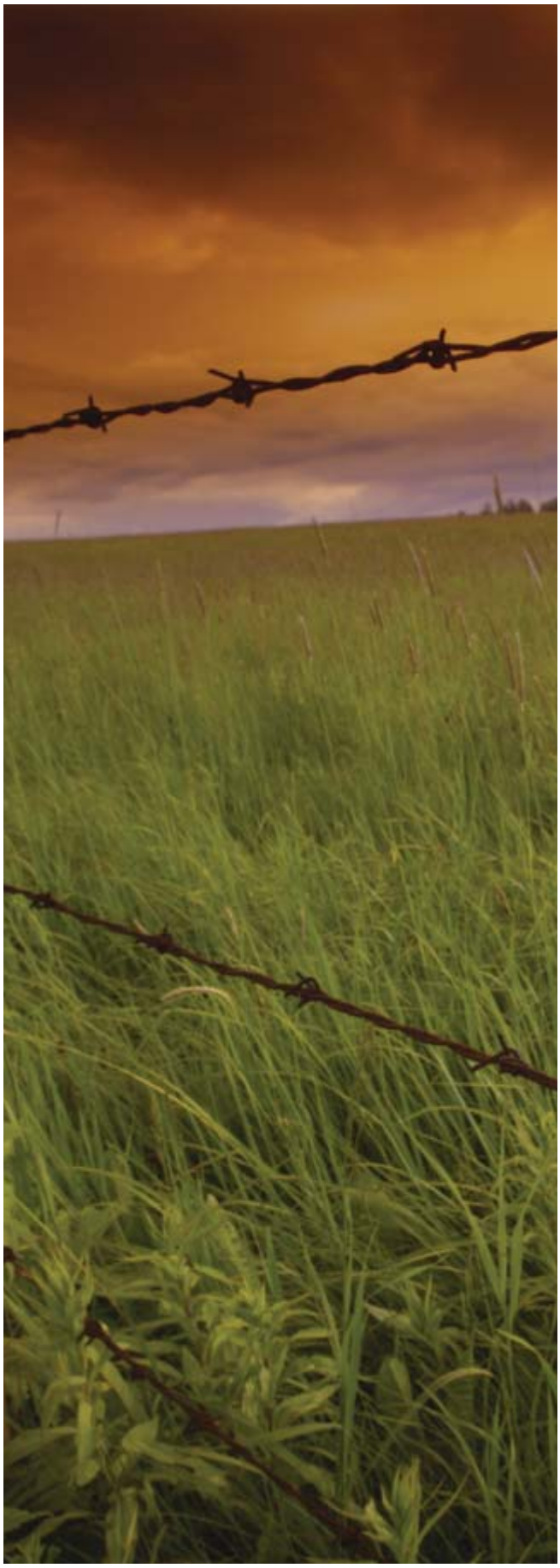
Facility Services

- Number of municipal buildings built to an environmentally recognized standard (e.g., LEED)

7. Recommended Strategies

These strategies are recommended to support, and ultimately achieve, the Environmental Sustainability Framework goals. Although designed for County operations, future efforts will be made to support community-wide implementation of these strategies as relevant.

1. Create policies for conserving land to ensure all representative natural landscapes are protected.
2. Develop a greenhouse gas inventory and management plan to maintain and update the County's emissions profile, assist in setting reduction targets, timelines and responsibilities, and monitor progress.
3. Develop an integrated transportation master plan to encourage effective and efficient multi-modal travel.
4. Improve energy efficiency in municipal facilities.
5. Develop a water conservation plan that affects both infrastructure needs and County practices.
6. Establish a waste management policy.
7. Enhance the existing procurement policy to ensure the goals of the Environmental Sustainability Framework are considered and include a sustainable procurement checklist.
8. Inject environmental sustainability perspectives into existing policies and procedures to ensure this perspective is considered.
9. Provide engagement, learning and training opportunities to increase staff and residents' acceptance and involvement in the Environmental Sustainability Framework.
10. Departments will review the Environmental Sustainability Framework and develop strategies that will assist in meeting the goals of the framework.



8. Implementation plan

The Environmental Sustainability Framework Implementation plan presents a timeframe (short term, medium, long term) and assigns lead responsibility for each strategy.

Strategy 1. Create policies for conserving land to ensure all representative natural landscapes are protected.

Immediate Action	Short Term	Medium (3-5 years) and Longer Term (6-10 years)	Lead Department(s)	Theme(s)
Determine baseline information on current areas of representative natural landscapes conserved.	Create and implement policy.	Maintain conservation land inventory to track success.	Engineering and Environmental Planning, Planning and Development Services	Land, Water

Strategy 2. Develop a greenhouse gas inventory and management plan to maintain and update the County's emissions profile, assist in setting reduction targets, timelines and responsibilities, and monitor progress.

Immediate Action	Short Term	Medium (3-5 years) and Longer Term (6-10 years)	Lead Department(s)	Theme(s)
Identify what contributes to our GHG emissions, how to capture data and possible solutions to reduce.	Set up a reporting template and targets for reduction. Establish carbon footprint.	Maintain data collection, track progress towards targets and introduce opportunities for more stakeholders to become involved.	Facility Services, Utilities, Fleet Services, Transit	Air Emissions, Energy

Strategy 3. Develop an integrated transportation master plan to encourage effective and efficient multi-modal travel.

Immediate Action	Short Term	Medium (3-5 years) and Longer Term (6-10 years)	Lead Department(s)	Theme(s)
Develop an inventory of all County infrastructure and services related to transport, and all previous transportation research on community needs.	Develop the scope for an integrated transportation master plan. Allocate funding for study.	Develop and approve an integrated transportation master plan.	Planning and Development Services, Engineering and Environmental Planning, Transit, Transportation and Agriculture Services, Recreation, Parks and Culture	Air Emissions, Energy, Land

Strategy 4. Improve energy efficiency in municipal facilities.

Immediate Action	Short Term	Medium (3-5 years) and Longer Term (6-10 years)	Lead Department(s)	Theme(s)
Investigate the effort required for an energy audit, whether they be costs and/or resources.	Budget for expenditure or effort required. Set target reduction goals. Conduct energy audit if economically feasible.	Continue to track progress and investigate best practices.	Facility Services, Utilities, Recreation Parks and Culture	Air Emissions, Energy

Strategy 5. Develop a water conservation plan that affects both infrastructure needs and County practices.

Immediate Action	Short Term	Medium (3-5 years) and Longer Term (6-10 years)	Lead Department(s)	Theme(s)
Develop a list of items that need inclusion in the plan as well as identify key stakeholders required for development of plan.	Creation and adoption of the plan. Setting targets and monitoring efforts required.	Maintain data and monitor success.	Utilities, Engineering and Environmental Planning	Water

Strategy 6. Establish a waste management policy.

Immediate Action	Short Term	Medium (3-5 years) and Longer Term (6-10 years)	Lead Department(s)	Theme(s)
Determine what a waste audit will look like. Determine what will be part of a Waste Management Policy.	Conduct a waste audit. Approve a Waste Management Policy.	Maintain data and monitor success. All municipal buildings will be zero waste.	Utilities	Air Emissions, Energy, Material Use

Strategy 7. Enhance the existing procurement policy to ensure the goals of the Environmental Sustainability Framework are considered and include a sustainability procurement checklist.

Immediate Action	Short Term	Medium (3-5 years) and Longer Term (6-10 years)	Lead Department(s)	Theme(s)
Become part of the process of developing the new Procurement Policy.	Design a checklist that will be usable for all employees that purchase goods or services.	Monitor compliance of the policy and usage of the checklist.	Facility Services, Corporate Planning and Intergovernmental Affairs	Air Emissions, Energy, Water, Material Use

Strategy 8. Inject environmental sustainability perspectives into existing policies and procedures to ensure this perspective is considered.

Immediate Action	Short Term	Medium (3-5 years) and Longer Term (6-10 years)	Lead Department(s)	Theme(s)
Investigate current policies and procedures that lack the ESF perspective.	Propose opportunities for the ESF perspective to be included into areas where it is lacking.	Have representation in all significant areas of the organization.	Corporate Planning and Intergovernmental Affairs	All

Strategy 9. Provide engagement, learning and training opportunities to increase staff and residents' acceptance and involvement in the Environmental Sustainability Framework.

Immediate Action	Short Term	Medium (3-5 years) and Longer Term (6-10 years)	Lead Department(s)	Theme(s)
Develop a list of actions staff, residents can take, today, to improve environmental sustainability.	Develop a comprehensive knowledge transfer tool for all aspects of sustainability in the organization.	Approval of knowledge transfer tool. Incorporate economic sustainability framework. Ensure employee training opportunities. Monitor numbers.	Corporate Planning and Intergovernmental Affairs, Human Resources	All

Strategy 10. Departments will review the Environmental Sustainability Framework and develop strategies that will assist in meeting the goals of the framework.

This will be a continual effort by departments.

9. Tools and resources

Resource report

Jacques-Whitford AXYS, one of the premier engineering and environmental services consulting firms in Canada, was engaged to assist with developing the framework. The firm has strong linkages with the FCM Centre for Sustainable Community Development.

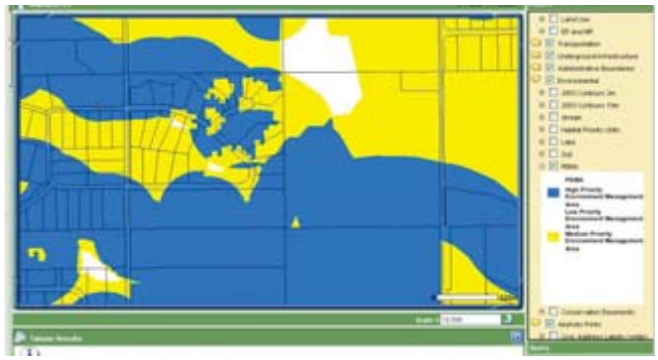
Working with the County committee, Jacques-Whitford AXYS produced a Resource Report providing research and data that includes best practices, baseline assessment and leading sustainability concepts. The Resource Report also presented options that guided the development of the Environmental Sustainability Framework indicators and goals. A biophysical review summary, environmental mapping and strategic environmental assessment inventory is also included.

Providing more background and technical information, this Resource Report is available as reference for staff in their work.

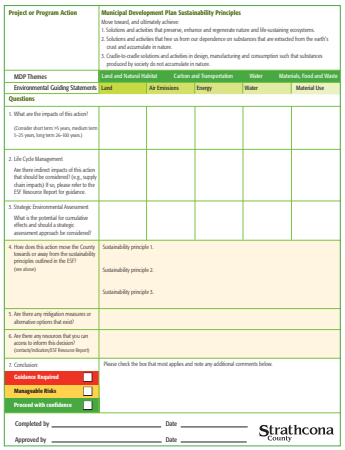
Environmental mapping and geographic information systems (GIS)

In tandem with the development of the Environmental Sustainability Framework, environmental-related data has been refined and improved to be accessible through the County's new GIS Wizard 2.0. This web-based geographic information system (GIS) tool is available to all Strathcona County staff to use in their daily roles and decision making.

Relating to environmental mapping, data on major ecosystems, such as watershed boundaries and significant water features, natural spaces, conservation areas, vegetation, wetlands, wildlife habitat, soil classification, and air quality monitoring stations is available to staff for decision making.



Decision Support Tool



A Decision Support Tool has been designed in tandem with the Environmental Sustainability Framework. The tool offers a high level assessment of initiatives and projects in relation to achieving the environmental sustainability principles and goals.

The tool can help Council and County staff to make informed decisions in their daily work by considering the environmental sustainability implications of potential actions at the outset. It is not intended as a prescriptive tool, but rather as a guide that helps ask the right questions.

The tool is organized in a matrix with a series of questions relating to the environmental sustainability principles. Working through the matrix assists in identifying information gaps and deciding when additional input, study or direction may be required to complete the decision-making process.

The matrix directs staff to reflect upon the vision, principles, themes, guiding statements, indicators and goals presented in the Environmental Sustainability Framework. The tool's questions are designed to test a project or program action against multiple facets of environmental sustainability.

If negative conclusions are identified, the Decision Support Tool prompts staff to consider what options might exist to mitigate the identified impacts or what resources information or data may exist elsewhere to better inform decision making.

The tool can be used for a range of decisions: from salting roads, to the procurement of goods and services, to approving development projects or formulating growth management strategies.

The tool can support staff in conducting a full analysis of environmental sustainability considerations associated with a proposed decision or action at any stage of the decision-making process. It can also complement other existing decision-making processes within the County.

For example, an individual might use the tool to decide whether or not an action is appropriate to bring forward to a manager (e.g., purchasing new solvent supplies for the fleet mechanics). Staff might also use the tool to help inform when developing a departmental business plan. A manager might use the tool to supplement a report to Council asking for a decision on a major new corporate initiative or program. (Samples of the tool's use can be found in Appendix II)

The Environmental Sustainability Framework Decision Support Tool is designed to be flexible. Future versions will include suggestions from those using it, with the goal being a user friendly and easily understood resource for environmentally sustainable decisions. The Decision Support Tool presents the broader picture of sustainability, allowing for integration of the social and economic pillars at some future point.

Decision Support Tool

Project or Program Action	**Municipal Development Plan Sustainability Principles** Move toward, and ultimately achieve: 1. Solutions and activities that preserve, enhance and regenerate nature and life-sustaining ecosystems. 2. Solutions and activities that free us from our dependence on substances that are extracted from the earth's crust and accumulate in nature. 3. Cradle-to-cradle solutions and activities in design, manufacturing and consumption such that substances produced by society do not accumulate in nature.				
MDP Themes	Land and Natural Habitat	Carbon and Transportation		Water	Materials, Food and Waste
Environmental Guiding Statements	Land	Air Emissions	Energy	Water	Material Use
Questions					
1. What are the impacts of this action? (Consider short term >5 years, medium term 5–25 years, long term 26–100 years.)					
2. Life Cycle Management Are there indirect impacts of this action that should be considered? (e.g., supply chain impacts) If so, please refer to the ESF Resource Report for guidance.					
3. Strategic Environmental Assessment What is the potential for cumulative effects and should a strategic assessment approach be considered?					
4. How does this action move the County towards or away from the sustainability principles outlined in the ESF? (see above)	Sustainability principle 1. Sustainability principle 2. Sustainability principle 3.				
5. Are there any mitigation measures or alternative options that exist?					
6. Are there any resources that you can access to inform this decision? (contacts/indicators/ESF Resource Report)					
7. Conclusion: **Guidance Required** ☐ **Manageable Risks** ☐ **Proceed with confidence** ☐	Please check the box that most applies and note any additional comments below.				

Completed by _____ Date _____

Approved by _____ Date _____

Strathcona County

10. Success stories

Environmental stewardship has long been important in Strathcona County. Numerous environmental programs and initiatives have proven successful.

Here are descriptions of the more substantial initiatives being undertaken in Strathcona County.

Beaver Hills Initiative

The Beaver Hills Initiative (BHI) is a unique consortium involving partners from government, industry and environmental non-governmental organizations in the sustainable regional management of the Beaver Hills area east of Edmonton. The group has been working together since 2002, using a "Protected Landscapes" approach to sustain both the natural qualities and the social and economic well-being of the Beaver Hills moraine.

The Beaver Hills area encompasses portions of the County of Beaver, Lamont, Leduc and Strathcona County, as well as many parks and protected areas such as Elk Island National Park, Miquelon Lake Provincial Park and the Ministik Bird Sanctuary.

The BHI mandate includes collecting and analyzing data, identifying priorities and providing recommendations to policy-makers for informed decision making. The BHI approach to sustainable regional management garnered a partnership award from Alberta Municipal Affairs in October 2006, providing a roadmap for collaborative planning that incorporates nature and human development in a mutually beneficial co-existence.

Community Energy

As one of the early adopters of a community energy system, Strathcona County has illustrated its commitment to reduce the amount of air pollutants and greenhouse gases generated from heating and cooling the buildings. The system delivers hot water from a central source through insulated underground pipes to heat neighbouring buildings. Natural gas is used to heat the water, which is then delivered through underground pipes to heat buildings from one central source. The system, which began servicing customers in November 2006, will reduce 1,000 tonnes of greenhouse gases compared with a conventional system. Additionally, this centralized system allows for efficient local production and distribution of energy, contributing to healthier buildings and offering a flexible platform able to adapt to changing energy conditions.

Community Energy Centre building

Emerald Hills Urban Village

Strathcona County has used innovation to address population growth and the rising demand for housing and amenities in the region. The Emerald Hills Urban Village project is a mixed-use development that uses technologies to reduce energy and resource consumption. Emerald Hills is designed to integrate with the natural environment and enhance the well-being of its residents. The development will offer diversity of employment opportunities and amenities within walking distance from home, all designed to foster a sense of community within the village. Various house types will offer options for residents, from houses to multi-family residential units and seniors care facilities, to encourage a range of ages and lifestyles.

This project is Canada's first Sustainable Urban Neighbourhood (SUN) Pilot Project. SUN Living applies the 'sustainability lens" to all development decisions.

Emerald Hills Urban Village
A SuN LIVING Pilot Project

Wetland Conservation Policy

Strathcona County has committed to the conservation of wetlands during the process of developing land and constructing buildings and infrastructure. All development initiated by a landowner or a third party, including Strathcona County, is now subject to the new Wetland Conservation Policy. Its goal is to realize No Net Loss of wetlands within urban and rural areas. No Net Loss means balancing the loss of wetland functions through rehabilitation of former degraded wetlands or enhancement of healthy, functioning wetlands.

No Net Loss requires proponents to conserve wetlands, as set out by legislation:

- *Water Act*
- *Public Lands Act*
- Federal Policy on Wetland Conservation
- Provincial Wetland Restoration/ Compensation Guide

No Net Loss requires proponents to work through a strict series of mitigation activities- with clear criteria and defined outcomes:

1. Avoidance to wetland damage or destruction
2. Minimization of the impact and provision of applicable compensation
3. Compensation for wetland damage or destruction

Get with the Green Routine

The Green Routine, launched in June 2008, puts Strathcona County on the growing list of Canadian municipalities who see the benefits of reducing the environmental and economic costs of waste removal, and instead use waste materials as local resources, and engage residents to play their part in diverting waste from landfills.

This new waste management program introduced convenient curbside recycling of many types of materials from container recyclables to paper products, and added organics collection to the program.

The Green Routine's goal is to divert 89 per cent of County waste from landfills. In the first 10 weeks of the program, Strathcona County residents were diverting 74 per cent from landfill.

Recognizing municipal leadership

In 2007, the Federation of Canadian Municipalities (FCM) brought a delegation of senior municipal staff and elected officials to Strathcona County as part of its 12th annual Community Energy Planning Mission. While all previous Missions visited European countries, the 2007 Mission marked the first time that delegates saw innovative projects in Canada.

Delegates learned about leading sustainable community development initiatives across Alberta, including Strathcona County's Community Energy System, Emerald Hills Urban Village and Centre in the Park.

Centre in the Park

Strathcona County has embarked on the creation of a walkable, multi-use urban centre in the heart of Sherwood Park. The new centre combines municipal services, local government, private residences, retail services and inviting public spaces that link to existing amenities such as Broadmoor Lake Park, Festival Place, the trail system, businesses and schools. The buildings will be heated through the Community Energy system, ensuring a reliable, non-traditional, clean energy source for Strathcona County's new community hub.

The new Community Centre in Centre in the Park will be a model of environmental innovation. Building design, technology and materials are being chosen for greatest operating efficiency, cost effectiveness and benefit to the environment. The building is designed to meet the LEED® Gold standard. LEED or Leadership in Energy and Environmental Design is an internationally recognized rating of the environmental impact of buildings.

Even in preparing to construct the Community Centre good environmental practices were conducted. For example, as the former Family and Community Services building was demolished, all reusable materials were reclaimed for use in other construction projects.

May 2009

Environmental Advisory Committee

The Environmental Advisory Committee (EAC) was established in May 2008 to advise Council on issues related to the environment and assist with environmental policies and initiatives by providing a resident perspective. The committee consists of six public members, three from Sherwood Park and three representing rural Strathcona County.

The committee's focus is toward three environmental policies and initiatives per year. Responsibilities are to:

- provide strategic advice and information on best practices involving the development and implementation of the County's environmental policies and initiatives
- recommend partnerships with environmental interest groups, community groups or other levels of government
- recommend sources of funding to be pursued to support environmental policies and initiatives
- identify issues and provide input on the priorities of the County's short, intermediate and long-term environmental policies and initiatives
- provide an annual report of environmental recommendations for Administration and Council.

The first of its three initiatives is the Strathcona County Reduction of Abandoned Products (SCRAP) Program that focuses on the removal of materials that can harm or damage the landscape.

Other environmental sustainability efforts

Strathcona County has implemented many other programs that support environmental sustainability including:

- Backyard composting
- Built Green rebate program
- Conservation easements
- Ecoscape workshops
- Enviroservice events for recycling and safe disposal options
- Open Space and Recreation Facility Strategy
- Hybrid/solar vehicles and buses
- Mow & Go education
- Think trees and 2008 Urban Forest Conference
- Water conservation program

The community, business and industry also play a large role green initiatives such as:

- Community Gardens
- Communities in Bloom
- Environmental and conservation easements
- Pitch in program
- Good Growing Neighbours and Integrated Pest Management
- Tree plantings, and seedling give-aways in conjunction with Arbor Day
- Shell Integrated Transportation Plan
- Shell Quest Project (carbon capture and storage)
- Petro Canada Waste Management Centre of Excellence
- Sherwood Park Toyota Water Management Program


Good Growing Neighbours
Beaver Hills Initiative
Ecoscape Workshops
Water Calculator
Get with the Green Routine
Hybrid/Solar Vehicles
Mow & Go
Low-flush Toilet Rebate Program
Heritage Hills Wetland
Many people think about reducing their impact on the environment.
We make it easier for you to live it.
Centre in the Park
Conservation Easements
Strathcona County
Emerald Hills
Built Green Rebate Program
Composting Program
Water Conservation
Community Energy

Appendix 1

Consultation and engagement overview

Jacques-Whitford AXYS designed the consultation program to assess the values, issues, and concerns of the public, staff, and key stakeholder groups toward building a framework to support decision making that reflected those values, issues and concerns.

The consultation plan involved engagement activities with the general public and nine key stakeholder groups:

- Council
- County Staff
- Agriculture
- Small Businesses
- Youth
- Seniors
- Industry
- Developers and Builders
- Community Associations
- Environmental NGO's

Specific consultation events were developed and delivered for each stakeholder group. Below is an overview of these activities.

Canada Day Booth: County Staff went to the public during the July 1st Canada Day celebration in Strathcona County. A promotional booth was set up at the event, and staff talked with the public about issues of sustainability. The public filled out questionnaires and obtained information on the Environmental Sustainability Framework.

Key Stakeholder Meetings: A series of eight key stakeholder meetings were organized between May 21 and 23, 2008. These meetings followed unique formats depending on audience. Each were designed to assess current local environmental sustainability issues, determine principles that could guide environmental sustainability efforts in Strathcona County, identify resources (e.g., plans, monitoring programs, projects, initiatives, etc) that may be incorporated into the framework, and determine whether and how each stakeholder group would like to be engaged in future framework processes. The outcomes of these meetings informed the values component of the framework.

Council Interviews: Council interviews were conducted in the summer of 2008 with the Mayor and all eight Councillors. A series of questions was asked concerning issues, values, and resources. Responses from these interviews were incorporated in consultant's analysis and recommendations for the framework.

Staff Interviews: Sixteen interviews with key staff from each department were held in the summer of 2008 by Kelly Rudyk, Senior Advisor - Strategic Initiatives Corporate Planning & Intergovernmental Affairs. These interviews asked three main questions:

1) What operations and activities do you currently engage in that have an effect on the environment (both at a micro and macro level)?
2) What should the organization be aware of, in your department's future, that will require more attention in the area of the environment?
3) Are there practices that you would like to implement that would move your department forward in a more environmentally conscious manner?

Responses from these interviews will be used when developing departmental action plans.

Web Surveys: The public were invited to participate in an online opportunity to express their thoughts for Environmental Sustainability within Strathcona County. Feedback was used in helping determine the Themes and Guiding Statements in the Environmental Sustainability Framework. A staff survey was also conducted for internal operations. Employees of Strathcona County will play a large role in determining future successes in environmental sustainability.

Thank you to everyone who participated.

Appendix 2

Project or Program Action	**Municipal Development Plan Sustainability Principles**				
Green Commute	Move toward, and ultimately achieve: 1. Solutions and activities that preserve, enhance and regenerate nature and life-sustaining ecosystems. 2. Solutions and activities that free us from our dependence on substances that are extracted from the earth's crust and accumulate in nature. 3. Cradle-to-cradle solutions and activities in design, manufacturing and consumption such that substances produced by society do not accumulate in nature.				
MDP Themes	Land and Natural Habitat	Carbon and Transportation		Water	Materials, Food and Waste
Environmental Guiding Statements	Land	Air Emissions	Energy	Water	Material Use
Questions					
1. What are the impacts of this action? (Consider short term >5 years, medium term 5–25 years, long term 26–100 years.)	N / A	GHG emissions	N / A	N / A	Perhaps increase to County fleet (car pooling)
2. Life Cycle Management Are there indirect impacts of this action that should be considered? (e.g., supply chain impacts) If so, please refer to the ESF Resource Report for guidance.	No	No	No	No	No
3. Strategic Environmental Assessment What is the potential for cumulative effects and should a strategic assessment approach be considered?	No	No	No	No	No
4. How does this action move the County towards or away from the sustainability principles outlined in the ESF? (see above)	Sustainability principle 1. Decreasing single occupancy vehicle use decreases GHG emissions, improving air quality Sustainability principle 2. Reduces dependence on fuel Sustainability principle 3. GHG reductions				
5. Are there any mitigation measures or alternative options that exist?	The initiative spells out alternatives to the status quo				
6. Are there any resources that you can access to inform this decision? (contacts/indicators/ESF Resource Report)	Yes, ESF report, indicators				
7. Conclusion: **Guidance Required** ☐ **Manageable Risks** ☐ **Proceed with confidence** ☑	Please check the box that most applies and note any additional comments below.				

Completed by Kelly Rudyk Date March 27, 2009

Approved by _____ Date _____

Strathcona County

Project or Program Action	**Municipal Development Plan Sustainability Principles** Move toward, and ultimately achieve: 1. Solutions and activities that preserve, enhance and regenerate nature and life-sustaining ecosystems. 2. Solutions and activities that free us from our dependence on substances that are extracted from the earth's crust and accumulate in nature. 3. Cradle-to-cradle solutions and activities in design, manufacturing and consumption such that substances produced by society do not accumulate in nature.				
Applying salt to winter roads					
MDP Themes	Land and Natural Habitat	Carbon and Transportation		Water	Materials, Food and Waste
Environmental Guiding Statements	Land	Air Emissions	Energy	Water	Material Use
Questions					
1. What are the impacts of this action? (Consider short term >5 years, medium term 5–25 years, long term 26–100 years.)	impact to vegetation by roadsides habitat degradation	emissions from salt truck/dust when snow melts	depends on vehicle technology	salt in runoff and impacts to water sources poor water quality	N / A impacts to roads and infrastructure
2. Life Cycle Management Are there indirect impacts of this action that should be considered? (e.g., supply chain impacts) If so, please refer to the ESF Resource Report for guidance.	Supply chain impacts investigate where salt is mined and how it travels consider storage issues				
3. Strategic Environmental Assessment What is the potential for cumulative effects and should a strategic assessment approach be considered?	Maybe. Consider cumulative impacts associated with salt in the natural environment and on infrastructure				
4. How does this action move the County towards or away from the sustainability principles outlined in the ESF? (see above)	Sustainability principle 1. Fuel consumption and emissions associated with salt trucks and increased number of vehicles on roads in winter Sustainability principle 2. negative impacts of salt on vegetation and water quality; impacts of mining salt on natural habitat Sustainability principle 3. increased mobility/accessibility for residents				
5. Are there any mitigation measures or alternative options that exist?	Put up snow fences to control snow drift. Apply salt only on major routes. Apply sand on non major routes. Review alternatives to salt adjacent to water bodies.				
6. Are there any resources that you can access to inform this decision? (contacts/indicators/ESF Resource Report)	Transportation Association of Canada's "Synthesis of Best Practices for Road Salt Management"				
7. Conclusion:	Please check the box that most applies and note any additional comments below.				
Guidance Required ☐					
Manageable Risks ☑	Proceed with caution. Do more research on impacts and alternative measures				
Proceed with confidence ☐					

Completed by Jill Brown Date December 1, 2008

Approved by Jack White Date December 3, 2008

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