
Municipal Sustainable Buildings

Date of Approval by Council: 06/22/2010

Resolution No.: 338/2010

Lead Role: Chief Commissioner

Replaces: n/a

Last Review Date: July 7, 2018

Next Review Date: 07/2021

Administrative Responsibility: Facilities Services

Policy Statement

Strathcona County recognizes the social, environmental and economic benefits that can be realized through the design, construction and operation of buildings. In order to further our commitment to sustainability, Strathcona County will be a leader in sustainable building practices by:

- Meeting all requirements of either the Strathcona County Sustainable Building Protocol or a LEED™ standard for the construction of all new County facilities that are over 500 m² or for major renovations of County facilities;
- Requiring owners of Buildings on County-owned land to meet the requirements of either the Strathcona County Sustainable Building Protocol or a LEED™ standard for the construction of all new Buildings on County-owned land that are over 500 m² or for major renovations of Buildings on County-owned land;
- Favouring strategies of regional significance, such as water conservation, in developing the Strathcona County Sustainable Building Protocol;
- Striving for on-going improvement in the sustainable maintenance and operation of County facilities;
- Undertaking regular monitoring and reporting on the sustainability of all County facilities;
- Adhering to the Canadian Model National Energy Code for Buildings and
- Achieving official green building certification from official certifying organizations as deemed appropriate.

Special Note: This policy is consistent with the Social, Environmental and Economic Capstone Policies in Strathcona County's Strategic Plan as well as the Social and Environmental Sustainability Frameworks.

Definitions

Buildings on County-owned land – Buildings that are constructed on land for which Strathcona County is the legal landowner.

County facilities – Buildings that are owned and managed by Strathcona County.

LEED™ Green Building Rating System – Leadership in Energy and Environmental Design™ is a voluntary, consensus-based system for developing high-performance, sustainable buildings. It was created by the United States Green Building Council (USGBC) in 1993 largely to stimulate green building market transformation. It is a recognizable “brand” that is also used to recognize industry leaders and raise consumer awareness.

LEED-NC – The Leadership in Energy and Environmental Design Program for New Construction.

Life Cycle Cost Analysis – An inclusive approach to costing a program, facility or group of facilities that encompasses planning, design, construction, management, renovation, operation, maintenance and decommissioning or disassembly costs over the useful life of the program or facility. Life cycle analysis looks at the net present value of various design options as investments. The goal is to achieve the highest, most cost-effective environmental and social performance possible, while achieving the highest health and productivity of its occupants, over the life of the facility.

Renovation – A **major renovation** is any renovation to a building that is to exceed 40% of the existing gross floor area of the building or any addition to a building. A **minor renovation** is any renovation to a building that is below 40% of the gross floor area of the facility or is to include general maintenance and replacement of building components.

Strathcona County Sustainable Building Protocol – A sustainable building rating system unique to Strathcona County used for designing, constructing, operating and maintaining buildings in a manner that balances social, environmental and economic considerations.

Sustainability – 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.

Sustainable building – Integrates building materials and methods that promote environmental, economic and social benefit through the design, construction and operation of the built environment. Sustainable building design encompasses the following areas: strategic site location, appropriate management of land, efficient use of energy and water resources, management of materials and waste, protection of occupant health/wellness and indoor air quality, ensuring universal accessibility, protection of environmental quality and reinforcement of natural systems through an integrated design approach. Sustainable buildings balance these environmental and social considerations with the fiscal implications of investments in infrastructure. Other terms used to describe sustainable buildings include green buildings and high-performance buildings.

Guidelines

Sustainable buildings reduce environmental impacts by:

- Using building materials that are recycled, renewable, regionally-sourced, or have low levels of toxicity;
- Managing construction waste in an effort to reduce, reuse and recycle building materials;
- Promoting use of alternative modes of transportation;
- Conserving water resources;
- Efficiently managing energy use;
- Reducing site disturbance;
- Preserving natural habitat and
- Reducing the heat island effect.

Sustainable buildings improve social sustainability by:

- Using materials that ensure healthy indoor and outdoor air quality;
- Using materials with low levels of toxicity;
- Preserving access to green space;
- Ensuring universal accessibility and
- Increasing indoor access to daylight and exterior views.

Sustainable buildings contribute to economic sustainability by:

- Considering the life cycle costs of investments in facilities and infrastructure and
- Reducing utility costs through water conservation and energy efficiency.

Sustainable facility operation and management practices include:

- Efficient management of energy and water resources,
- Continued promotion of alternative modes of transportation,
- Monitoring of indoor air quality and
- Effective waste management.

Roles and Responsibilities

Facilities Services Department is responsible for

- Establishing the administrative procedures for this policy;
- Developing the Strathcona County Sustainable Building Protocol in collaboration with other departments;
- Ensuring adherence to either the Strathcona County Sustainable Building Protocol or a LEED™ standard for all new County facilities over 500 m² or for major renovations of County facilities;
- Ensuring that facilities are operated and maintained in a manner according to the policy requirements;
- Determining on a project-basis whether or not to pursue official green building certification;
- Monitoring utility usage in facilities and
- Ensuring that financial feasibility of facility projects is assessed in terms of Life Cycle Cost Analysis.

Planning & Development Services Department is responsible for

- Including a clause pertaining to the requirements of this policy in the Land Use Bylaw;
- Amending the Building Bylaw to reflect the requirements of this policy;
- Ensuring that the Development Permit approval process supports the policy requirements;
- Ensuring that the Building Permit approval process supports the policy requirements;
- Providing guidance to Facilities Services on how building plans reflect the requirements of the Alberta Building Code and barrier-free design and
- Providing a land base free of any environmental impediments.

Procedures

Facilities Services will work with other affected departments to develop the Strathcona County Sustainable Building Protocol and to ensure effective implementation of this policy.