Council Policy

Policy Title: Sustainable Building Policy
Policy Number: CS005
Report Number: UCS2019-0083
Adopted by/Date: Council / Date Council policy was adopted
Effective Date: 2004-09-13
Last Amended: 2014-07-21
Policy Owner: Corporate Analytics and Innovation

1. POLICY STATEMENT

1.1 The City of Calgary plans, delivers and maintains infrastructure that demonstrates smart infrastructure investment that goes beyond the one-time cost of construction, by addressing the lifecycle impacts on operating cost, the environment, and the people who use the infrastructure.

1.2 The City of Calgary refers to the Sustainability Principles outlined in Schedule 1 as the definition of sustainability and develop performance specifications that address these principles, while referring to the Sustainable Building Guidance Document found at www.calgary.ca/greenbuildings for further information on recommended minimum performance standards.

2. PURPOSE

The purpose of this Council Policy is to:

2.1 Ensure all City-owned and City-financed facility planning, design, construction, management, renovation, operating, and demolition is carried out:
- In a sustainable manner.
- Considering economic, social, and environmental impacts.
- While enhancing The City of Calgary's reputation as a long-term fiscally responsible municipal government.
- While addressing the health and well-being of the people who use and occupy City-owned and City-financed buildings.

3. DEFINITIONS

In this Council policy:

3.1 "Alternative Transportation" refers to the methods of transportation other than single occupancy vehicles.

3.2 "Biodiversity" means the promotion of wildlife, vegetation and landscapes.

3.3 "Building" refers to a structure with a roof and walls and its associated components including the building envelope, mechanical systems, electrical systems, controls, interior finishes, accompanying site and any additional infrastructure included in the scope of a project.

3.4 “Certification Selection Tool” refers to a tool in the Sustainable Building Guidance Document, developed by CAI, to assist a project’s Strategic Planning Team / Project Sponsor and the Policy Steward with the selection of an appropriate green building certification program.

3.5 “Construct” refers to the process of constructing or renovating a building.

3.6 “Council Policy Program CC046” refers to a City of Calgary Council Policy outlining procedures and requirements for all Council policies.

3.7 “GHG emissions” means green house gases that impact The City’s carbon footprint directly or indirectly.

3.8 “Green Building Certification” refers to third-party programs that confirm buildings are designed and/or constructed to industry accepted sustainability standards.

3.9 “Green Stormwater Infrastructure” means treating stormwater as a resource and managing it at or as close to the source of its creation using vegetation, soils or other elements.

3.10 “Minimum Sustainability Performance Requirements” refers to a list of minimum requirements included in the Sustainable Building Guidance Document.

3.11 “Occupant Comfort” means that comfort in buildings may be experienced in the physiological sense (thermal, visual, air quality, acoustics, etc.) as well as in the psychological, behavioural and social senses of well-being or contentment.

3.12 “Optimize for energy efficiency and conservation” means the improved energy performance of a building over a theoretical or measured energy consumption baseline.

3.13 “Passive Design” refers to the use of natural forces for the benefit of a building such as solar heat gain, daylighting and cooling through operable windows.

3.14 “Policy Steward” means Corporate Analytics & Innovation administration responsible for managing, proposing updates and compliance reporting on the Sustainable Building Policy and the Sustainable Building Guidance Document.

3.15 “Project Management Policy for Capital Projects” refers to a City policy approved by The City of Calgary’s Administration Leadership Team.

3.16 “Project Management Practices Guide” refers to one of the fundamental reference sources for City project management practitioners managed by The City’s Corporate Project Management Centre.

3.17 “Project Manager” as defined by the Project Management Policy for Capital Projects, means the project manager is the person accountable and responsible for project leadership, key results, deliverables and administration on a day-to-day basis.

3.18 “Project Sponsor” as defined by the Project Management Policy for Capital Projects, means the project sponsor provides strategic guidance and defines, promotes and supports the key results of the project. The project sponsor has overall accountability for the initiative, including the securing of financial resources.

3.19 "Project Team" means the design, construction and operation team members for a project that include but are not limited to the Project Sponsor, the Project Manager, the Policy Steward, architects, engineers, contractors, and building operators.

3.20 "Provide Access" means ensuring City facilities are accessible to all Calgarians following the Calgary Corporate Accessibility Policy

3.21 "Regularly Occupied Building" means a building where one or more people spend a continuous hour, or more, in a day.

3.22 "Resiliency" refers to the capacity of City buildings to survive, adapt and grow no matter what kind of chronic stresses and acute shocks they experience.

3.23 "Site Selection" means the process of considering the sustainable properties of the location of a building including but not limited to access to existing amenities and alternative transportation methods, the impacts on rivers and streams, an evaluation of green fields verses brown fields etc.

3.24 "Social Wellbeing" refers to design and operating parameters that impact the health and wellbeing of the users of a building.

3.25 "Sustainable Building Guidance Document" developed by the Policy Steward within CAI, means a document outside the Council approved Sustainable Building Policy that supports the intent of the Policy.

3.26 "Sustainability Principles" refers to a list of eight guiding concepts to be evaluated in the planning, design, construction and operation for projects where the Sustainable Building Policy is applicable.

4. APPLICABILITY

4.1 The Policy applies to the planning, design, construction, operations, maintenance, renovation, and de-commissioning of all buildings that are City-owned and/or City-financed where The City provides a minimum funding contribution of 33 per cent of total project costs and The City contribution is equal to $1,000,000 or more (not including project development costs, design costs, and land).

4.2 Compliance with the items listed in the table below is required.

[1]Project Type	Design & Construction Requirements	Operations & Maintenance Requirements
New Construction *Regularly occupied building* with a project floor area ≥ 500 m^2.	• [2]Evaluate and include strategies to address the *Sustainability Principles*.	Building Stewards shall: • Sustain or improve building performance
Addition or Major Renovation *Regularly occupied building* with a project floor area in scope ≥ 500 m^2. Additions with		

a new separate mechanical system are classified as New Construction.	• Plan, design and *construct* the building as per the *Sustainable Building Guidance Document*, including but not limited to the *Minimum Sustainability Performance Requirements*.	through operations. • Utilize energy consumption tools provided by the Energy Management Office to monitor, analyze, and benchmark building performance.
Affordable Housing Housing projects delivered by the Affordable Housing business unit or delivered by partner organizations receiving funding from The City. See Scope and Applicability for funding thresholds.		
Interior Renovation *Regularly occupied building* with a floor area in scope ≥ 500 m^2. Under the Policy, Interior Renovations do not include building envelope or primary HVAC systems in scope. Projects that include these components are classified as a Major Renovation.		
All Other Building Projects Projects <500m^2 in scope and unoccupied facilities including those that house automated and industrial processes, transit stations and platforms and +15 structures. Industrial processes themselves are exempt.		

1. Linear infrastructure projects, including roads, bridges, track and way, potable water, stormwater, and waste water conveyance are out of scope.
2. Where applicable depending on project scope.

4.3 Green Building Certification provides value to The City of Calgary through third-party confirmation that buildings are designed and constructed to industry accepted sustainability standards. The green building certification industry has evolved considerably since the 2008 Sustainable Building Policy update and numerous worthwhile certification programs exist in the market. The building type and project scope will dictate which, if any, certification program is most appropriate for each specific building project. The Certification Selection Tool within the Sustainable Building Guidance Document shall be completed by the Strategic Planning Team / Project Sponsor with the Policy Steward to determine appropriate certification targets during the pre-design stage of a project. The most current Sustainable Building Guidance Document can be found at www.calgary.ca/greenbuilding.

5. PROCEDURE

5.1 Roles, Responsibilities, Governance and Reporting

5.1.1 Roles & Responsibilities of Corporate Analytics and Innovation as Policy Steward:

- Work with and support the *Strategic Planning Team / Project Sponsor* to set Policy targets and objectives, including *Minimum Sustainability Performance Requirements* and certification targets.

- Support the *Project Manager* with delivering on Policy targets and objectives.
- Manage and update the Sustainable Building Policy and the *Sustainable Building Guidance Document* as needed. Policy updates are to adhere to The City of Calgary's *Council Policy Program CC046.*
- Report on Policy outcomes to the Accommodation and Infrastructure Steering Committee (AISC) annually and SP.C on Utilities and Corporate Services on a biennial basis.
- Approve any changes to policy targets throughout the project, in agreement with the *Strategic Planning Team / Project Sponsor*.

5.1.2 **Roles & Responsibilities of the Strategic Planning Team / Project Sponsor:**

- The function and responsibilities of the Strategic Planning Team / Project Sponsor are defined by the Project Management Policy for Capital Projects and the Project Management Practices Guide.
- Accountable for ensuring in scope buildings comply with the Sustainable Building Policy and the Sustainable Building Guidance Document
- Work with the Policy Steward to set Policy targets and objectives, including Minimum Sustainability Performance Requirements and certification targets.
- Ensure the project team understands Policy requirements at the commencement of the project.
- Approve any changes to policy targets throughout the project, in agreement with the Policy Steward.
- In the event of non-compliance with a Policy objective or target, prepare a written rationale for the Director of CAI and the project sponsoring business unit explaining the cause of non-compliance with the Policy.

5.1.3 **Roles & Responsibilities of the Project Manager:**

- Application of and compliance with the Sustainable Building Policy and the Sustainable Building Guidance Document.
- Follow the Policy targets and objectives established by the Strategic Planning Team / Project Sponsor and the Policy Steward.
- Work with the Policy Steward to further develop policy targets and objectives during the Project Initiation, Project Planning, Project Execution and Project Monitoring and Controlling stages of the project as defined in the Project Management Practices Guide.
- Ensure the project design and construction teams produce and submit all required deliverables to The City prior to the Project Closure stage, as defined in the Project Management Practices Guide.
- In the event of non-compliance with a Policy objective or target, the Project Manager shall work with the Project Team to prepare a written rational for the Strategic Planning Team / Project Sponsor and Policy Steward explaining the cause of non-compliance with the Policy.

5.1.4 **Roles & Responsibilities of the Director of Corporate Analytics and Innovation and the Director of the Strategic Planning Team / Project Sponsor:**

- Provide executive direction on the applicable policy compliance path in the event of a disagreement between the Policy Steward and the Strategic Planning Team / Project Sponsor. The Director of the project sponsoring business unit will have final decision-making power.

5.1.5 **Roles & Responsibilities of the Accommodation and Infrastructure Steering Committee:**

- Receive reports on policy outcomes from the Policy Steward on an annual basis.

5.2 **Governance**

5.2.1 The Policy Steward and the Strategic Planning Team / Project Sponsor set and sign-off on Minimum Sustainability Performance Requirements and green building certification requirements. This is initially done during the pre-design stage. Targets can be amended through the design and construction process, if necessary, by signatures from the Policy Steward and the Strategic Planning Team / Project Sponsor.

5.2.2 In the event of a disagreement on Minimum Sustainability Performance Requirements or green building certification requirements, the decision is escalated to the Directors of CAI and the project sponsoring Director for a decision. The project sponsoring Director has final authority.

6. SCHEDULE(S)

6.1 Schedule 1 – Sustainability Principles

7. AMENDMENT(S)

Date of Council Decision	Report/By-Law	Description
2008-02-25	UE2008-01	All City-owned and City-financed facilities are operated and maintained in a sustainable way including the appropriate adherence to sustainable building Rating Systems when developing new and occupied facilities, when redeveloping Brownfield sites and when undertaking all major building renovations, including those of an affordable housing nature.
2014-07-21	UCS2014-0426	Reporting period by Infrastructure and Information Services to the SPC on Utilities and Corporate Services from an annual to biennial basis.

8. REVIEWS(S)

Date of Policy Owner's Review	Description
2019-04-17	Major update to the Sustainable Building Policy to improve Policy clarity and to increase the value of Policy outcomes for The City of Calgary. Specifically, the following revisions have been applied: 1. The addition of guiding *Sustainability Principles* 2. The removal of mandatory certification requirements 3. The introduction of the Sustainable Building Guidance Document 4. The inclusion of non-regularly occupied buildings in Policy scope, excluding industrial processes 5. The introduction of roles and responsibilities 6. A clarified and revised governance model.

Schedule 1

Sustainability Principles

Sustainability is a term with a broad definition. By specifying Council and Corporate priorities, project teams can better identify sustainability strategies to be considered as The City develops new infrastructure and maintains and improves existing assets. The following *Sustainability Principles,* further defined in the Definitions section of this policy and described in detail in the *Sustainable Building Guidance Document*, are intended to help guide the *Project Team* in determining relevant project requirements and performance objectives. The most current version of the Sustainable Building Guidance Document can be found by visiting www.calgary.ca/greenbuildings

Sustainability Principles

 **Optimize for energy efficiency and conservation, specifically through passive design, thereby reducing and avoiding GHG emissions**	 **Reduce potable water use through conservation and efficiency measures**
 **Encourage the integration of green stormwater infrastructure**	 **Maintain and improve biodiversity**
 **Address occupant comfort, provide access, and maintain social wellbeing in design and operations**	 **Select sites that have access to alternative transportation and consider the impact of site selection on the environment, people and the building**
 **Design for resiliency to changing economic, social, and environmental conditions**	 **Divert waste from landfills during construction, occupancy and demolition**