



What We Have

- Green Building Strategy:
 - Current Council Policy for new construction and major renovations of City facilities
 - Build to LEED standards focusing on design elements to meet a point-target across a number of categories
 - Preference for points in categories pertaining to Energy and Atmosphere, Sustainable Sites, and Water Efficiency

CITY OF NANAIMO
COUNCIL POLICY

RCRS Secondary:	GOV-02	Effective Date:	2006-MAY-29
Policy Number:	COU-173	Amendment Date:	2006-JUN-12
		2008-SEP-29	
Title:	Green Building Strategy	Repeal Date:	2011-MAR-28
Department:	Engineering	Approval Date:	2006-MAY-29 Council


PURPOSE:
To ensure City facilities are built in a more efficient, healthy and ecologically-responsible manner that enhances the well-being of the community.

DEFINITIONS:
N/A

SCOPE:

POLICY:
Council adopted the following policy:

1. Use the Leadership in Energy and Environmental Design (LEED) building rating system and meet the requirements for the Silver standard or better (including full registration and certification under the CaGBC) for all new building construction and additions larger than 500 square metres; (2006-JUN-12)
2. Consider LEED certification for major renovations of its existing buildings;
3. Recognize green building practice in the community by establishing a new category for an Advisory Committee on the Environment environmental award for Green Building design;
4. Encourage learning and awareness of green building practice both within the organization and throughout the wider community;
5. Incorporate the LEED life-cycle cost analysis into the City's Life Cycle costing approach and report back with any recommendations; and,
6. Review the Green Building Strategy in six years, or after the next three City construction projects using the LEED approach are completed (whichever comes first), to determine its effectiveness and to make adjustments as needed.



What We Have

- Energy Conservation and Management Policy:
 - Focuses on annual energy use reduction
 - Behavior programs to highlight opportunities to conserve energy
 - Education opportunities for staff to better understand energy consumption
 - Considers payback timeframe

CITY OF NANAIMO
COUNCIL POLICY

RCRS Secondary:	GOV-02	Effective Date:	2009-OCT-19 COUNCIL
Policy Number:	COU-183	Amendment Date:	2015-OCT-26 COW
Title:	Energy Conservation and Management Policy	Repeal Date:	
Department:	Engineering	Approval Date:	2009-OCT-19 COUNCIL

PURPOSE:
The reasons for this policy are to:

- become more efficient with energy use;
- reduce waste and greenhouse gas emissions;
- use more environmentally benign sources of heating, cooling, and energy; and,
- reduce pollution.

To reduce energy consumption and lower greenhouse gas emissions, in a manner that is consistent with the:

- City of Nanaimo Corporate Climate Change Plan
- BC Hydro PowerSmart Partner Program Agreement

DEFINITIONS
N/A

SCOPE
N/A

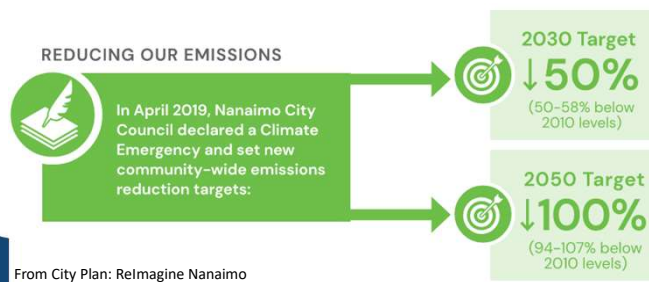
POLICY

1. The City will conserve energy by identifying and adopting, specific, quantifiable targets. The City has set a target of 1% reduction in the City's overall energy consumption per year for existing buildings (as of October 2009). Where growth/expansion of a building area is required, the energy intensity (e.g. kWh/square foot) should not be greater than the energy intensity of existing facilities of similar use.
2. The City's Infrastructure Planning & Energy Manager, in addition to other building, fleet and department managers will be tasked with contributing toward meeting these reduction targets. Energy usage in their respective buildings, facilities, vehicles and operations shall be considered. Opportunities to reduce energy consumption shall be identified.
3. The City will adopt a Fleet Anti-Idling Policy as an air quality and energy conservation measure. The City's Fleet Manager will be responsible for all Anti-Idling training and awareness programs.
4. All non-essential lighting and other electrical loads shall be minimized during non-business hours. Departments are expected to make a reasonable determination as to what critical functions must continue and inform the Building and Department Managers.
5. The City will commit to work with staff to help them better understand energy consumption and the means by which individuals can influence reductions through prudent use of resources. To

Energy Conservation and Management Policy Page 1 of 3

Where are we Going: Climate Targets

- Nanaimo's targets are ambitious and will require united action.
- As a partner in the community, Nanaimo's corporate emissions should also be targeted for reduction to match community targets.



New Construction of Corporate Facilities

- Increased understanding and advancements in technology used in energy-efficient building practices are more straight forward to implement with new construction.
- New buildings today are existing buildings in 2030
 - Energy efficient
 - Carbon neutral
 - Additional sustainable features as appropriate for each facility being considered

Application to Existing Corporate Facilities

- More complex to implement low/zero-carbon, and energy efficiency initiatives within existing systems, including considerations for:
 - Capacities of existing infrastructure
 - Physical space
 - Compatibility with existing systems and controls
- The City currently relies on natural gas at 30 facilities, providing about 18,000 eMWh of energy, or about 43% of the City's total energy usage.

Existing Buildings

- Example - Replace a single gas-fired roof-top unit with a new heat pump, with electric back up heating at an existing facility:
 - Is there capacity in the existing electrical service?
 - If not, is there capacity in the BCHydro power grid for the required service upgrade?
 - If there is, is the current renewal the place to use that capacity or is there something else?
 - Is there capacity for the next renewal?
 - Is there a backup generator and does it have capacity?

Existing Buildings

- Opportunity for tailored, portfolio approach
 - Maximize investment return, GHG reduction, energy efficiency across projects within the portfolio
- Possibility of competing interests
 - Climate action and mitigation vs adaptation and hardening
 - Balance a Green Approach with Affordable City objectives of City Plan
 - Consider the Value of the Outcome

Policy Update Timeline

- Research and Gap analysis: Q3 – Q4, 2022
 - Review interconnection to establish key internal stakeholders
 - Complete gap analysis to better understand required investments
- Consultation Phase: Q1, 2023 – Q3, 2023
 - Workshop with internal stakeholders
 - Understand implications of policy
 - Consider Asset Management initiatives and opportunities for integration
- Draft: Q4, 2023
- Review with internal stakeholders: Q1, 2024
- Return to the Committee for Feedback: Q2, 2024

