

CITY OF DUNCAN

BYLAW NO. 2095, 2010

**BEING A BYLAW TO AMEND CITY OF DUNCAN OFFICIAL COMMUNITY PLAN
BYLAW NO. 2030, 2007**

WHEREAS pursuant to the *Local Government Act R.S.B.C. 1996, Chapter 323*, Council may have community plans prepared or amended;

AND WHEREAS in accordance with Section 877 of the *Local Government Act*, it is required that Council amend the Official Community Plan to include targets for the reduction of greenhouse gas emissions in the area covered by the plan, and incorporate policies and actions with respect to achieving those targets;

AND WHEREAS in accordance with Section 919.1 of the *Local Government Act*, Council may designate development permit areas and within those Development Permit Areas establish objectives to promote the reduction of greenhouse gas emissions;

AND WHEREAS Council has considered the amendment in conjunction with its financial plan, and the waste management plan that is applicable in the City;

NOW THEREFORE the Council of City of Duncan enacts as follows:

1. This Bylaw may be cited as “**Official Community Plan Amendment Bylaw No. 2095, 2010.**”
2. Schedule “A” to “Official Community Plan Bylaw No. 2030, 2007”, shall be amended by:
 - a) In the Table of Contents in Section 7. RESPONSIBLE STEWARDSHIP OF THE ENVIRONMENT, after Section 7.1 Natural Environment Policies, add a New Heading worded ‘7.2 Climate Protection’ and renumbering the page numbers reflected in the Table of Contents.”;
 - b) Inserting after Section 7.1 Natural Environment, a new section “Section 7.2 Climate Protection” as per Schedule “A” attached to and forming part of this Bylaw;
 - c) Amending the “Category” under 12.2 DPA 1 – MULTI-FAMILY RESIDENTIAL AREAS by removing the word “Revitalization” and adding the words “/Reduction of Greenhouse Gas Emissions” after the words “Form and Character”;
 - d) Amending the “Category” under 12.3 DPA 2 – DOWNTOWN by adding the words “/Reduction of Greenhouse Gas Emissions” after the word “Revitalization”;

- e) Amending the “Category” under 12.4 DPA 3 – HIGHWAY 1 CORRIDOR by adding the words “/Reduction of Greenhouse Gas Emissions” after the word “Revitalization”;
- f) Amending the “Category” under 12.5 DPA 4 – OTHER COMMERCIAL AREAS by adding the words “/Revitalization/ Reduction of Greenhouse Gas Emissions” after the words “Form and Character”;
- g) In Section 12.2 DPA 1 – MULTI-FAMILY RESIDENTIAL AREAS, inserting the following bullet and wording after the first bullet beside the heading “Environmental Impact”;
 - “New multi-family residential developments should reduce greenhouse gas emissions by incorporating any or all of the following strategies: building siting; choice of building materials and colours; energy efficiency measures; highly insulated building envelope; use of renewable energy for heating and cooling; bicycle parking and storage facilities; electric vehicle parking and support facilities; and reduced automobile parking in accordance with relevant Bylaw provisions.”
- h) Move the section named “Environmental Impact” of Section 12.2 DPA 1 – MULTI-FAMILY RESIDENTIAL AREAS in its entirety to the end of Section 12.2 DPA 1;
- i) In Section 12.3 DPA 2 –DOWNTOWN, inserting the following heading and bulleted provision at the end of the section:

“Environmental Impact • New developments and redevelopments should reduce greenhouse gas emissions by incorporating any or all of the following strategies: building siting; choice of building materials and colours; energy efficiency measures; highly insulated building envelope; use of renewable energy for heating and cooling; bicycle parking and storage facilities; electric vehicle parking and support facilities; and reduced automobile parking in accordance with relevant Bylaw provisions.”;
- j) In Section 12.4 DPA 3 –HIGHWAY 1 CORRIDOR, inserting the following heading and bulleted provision at the end of the section:

“Environmental Impact • New developments and redevelopments should reduce greenhouse gas emissions by incorporating any or all of the following strategies: building siting; choice of building materials and colours; energy efficiency measures; highly insulated building

envelope; use of renewable energy for heating and cooling; bicycle parking and storage facilities; electric vehicle parking and support facilities; and reduced automobile parking in accordance with relevant Bylaw provisions.”;

- k) In Section 12.5 DPA 4 –OTHER COMMERCIAL AREAS, inserting the following heading and bulleted provision at the end of the section:

“Environmental Impact • New developments and redevelopments should reduce greenhouse gas emissions by incorporating any or all of the following strategies: building siting; choice of building materials and colours; energy efficiency measures; highly insulated building envelope; use of renewable energy for heating and cooling; bicycle parking and storage facilities; electric vehicle parking and support facilities; and reduced automobile parking in accordance with relevant Bylaw provisions.”;

- l) Amending the ‘Table of Contents’ by removing the words “- Needs page number” from 7.1 after the words “Natural Environment Policies”.

READ THE FIRST TIME THE 21st DAY OF JUNE, 2010.

READ THE SECOND TIME THE 21st DAY OF JUNE, 2010.

PUBLIC NOTICE IN ACCORDANCE WITH SECTION 892 OF THE LOCAL GOVERNMENT ACT PUBLISHED IN THE NEWS LEADER PICTORIAL THE 7th DAY OF JULY, 2010 AND THE 14th DAY OF JULY, 2010.

RECEIVED THE APPROVAL OF THE MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE THE 15th DAY OF JULY, 2010.

PUBLIC HEARING HELD THE 19th DAY OF JULY, 2010.

READ THE THIRD TIME THE 19th DAY OF JULY, 2010.

ADOPTED THE 19th DAY OF JULY, 2010.

Lynn Ketch
Director of Corporate Services

Phil Kent
Mayor

Schedule “A” to Bylaw No. 2095, 2010

7.2 CLIMATE PROTECTION

Subsequent to the passage of Bill 27, the “Green Communities Act,” Section 877 of the Local Government Act requires Official Community Plans to include community-wide targets, policies and actions for the reduction of greenhouse gas emissions in the area covered by the plan.

Bill 44, the “Greenhouse Gas Reductions Act,” identified province-wide targets as follows:

- (a) by 2020 and for each subsequent calendar year, BC greenhouse gas emissions will be at least 33% less than the level of those emissions in 2007; and
- (b) by 2050 and for each subsequent calendar year, BC greenhouse gas emissions will be at least 80% less than the level of those emissions in 2007.

The legislation is not prescriptive. Local governments may choose to set their own targets and are encouraged to establish secondary, community supported targets.

A corporate and community-wide greenhouse gas inventory was conducted in 2007 by HYLA Environmental Services Ltd. on behalf of the Province of British Columbia for all communities. In the summer of 2009 the City authored “Report on Energy & Emissions” which outlined its climate protection commitments, expanded upon GHG inventories of the HYLA report and identified strategies for reduction, many of which are incorporated in this section.

The goals, objectives, targets and policies set forth here have been considered and reviewed by the Environment Committee, City staff in consultation with community stakeholders, and by City Council.

The City’s commitment to climate protection has been well established as a signatory to the Climate Action Charter of the Union of BC Municipalities and its membership with the Partners for Climate Protection program, a partnership between the Federation of Canadian Municipalities and Local Governments for Sustainability.

Further, the City is undertaking an Urban Forest Strategy study and has pursued designation by SolarBC as a “Solar Community.”

Organization and Relation to Other Portions of the OCP

Specific targets, primary and secondary, are included in this section of the OCP, unlike other portions of the plan. References to more detailed policies in other sections of the plan are made as needed, reflecting the fact that climate protection requires a comprehensive, multi-disciplinary approach.

Goal

To minimize the City's impact on climate change by reducing community-wide greenhouse gas emissions.

Objectives

- To monitor and reduce community-wide energy consumption and emissions.
- To consider the impacts on climate change as an important factor in decision-making related to land use, site planning, building design, transportation and infrastructure.
- To promote the development of renewable energy sources that will reduce reliance on energy sources that create greenhouse gas emissions.
- To collaborate or partner with other organizations, government agencies, communities and other stakeholders, to achieve emissions reduction targets.

Community-Wide Target

- Reduce community-wide greenhouse gas emissions by 33% by 2020, and 80% by 2050, relative to 2007 levels.¹

Secondary Targets

Secondary targets are meaningful because they reflect specific community priorities and provide a more specific target within a particular sector.

Natural Resources

The current urban forest canopy coverage is 25.8%².

- Increase the urban forest canopy coverage to 30% by 2020 and to 40% by 2050.

Land Use

In 2007 the City's population was 5,017 with a population density of 2,491 persons per square kilometre.

- Increase the City's population density by 20% by 2020 and by 40% by 2050.

Transportation

The current modal split for commuting trips³ is as follows:

○ Driver of car, van or truck:	66%
○ Passenger of car, van or truck:	11%
○ Walking/cycling	19%
○ Transit:	1.7%
○ Other	2%

¹ All targets have a base line year of 2007.

² Diamond Head Consulting Ltd., April 2010.

³ Statistics Canada 2006.

- “Green” the transportation modal share⁴ in favour of increased shared vehicle use and increase travel by walking, cycling and transit so that the following modal shares are achieved:

By 2020:

- Driver of car, van, truck 50%
- Passenger of car, van or truck 15%
- Walking/cycling 30%
- Transit 3%
- Other 2%

By 2050:

- Driver of car, van, truck 30%
- Passenger of car, van or truck 20%
- Walking/cycling 40%
- Transit 8%
- Other 2%

Buildings

- By 2020 reduce average energy demand for buildings as follows:
 - residential homes by 20%; and
 - in commercial and institutional buildings by 30%;
- By 2050 reduce average energy demand for buildings as follows:
 - residential homes by 50%; and
 - commercial and institutional buildings by 70%.

Resource Recovery

- Reduce GHG emissions of City resource recovery⁵ operations by 33% by 2020 and by 80% by 2050.
- Achieve near zero waste for organic collections by 2020.

Policies and Actions

Natural Resources Policy

7.2.1 Preserve existing trees and encourage the planting of additional trees on public and private lands (*see also Natural Environment policy 7.1.8*). The City will consider and may initiate the following actions:

7.2.1.1. Adopt a comprehensive urban forest strategy.

7.2.1.2. Adopt a tree preservation bylaw.

7.2.1.3. Increase tree planting in public spaces.

7.2.1.4. Encourage tree planting by private landowners.

7.2.1.5. To support these actions, work with partners such as the Cowichan Green Community, Garry Oak Society, Cowichan Valley Land

⁴ The City intends to measure and track in the future the mode share of all trips, not only commuting trips.

⁵ The extraction of useful materials or energy from solid waste. Formerly referred to exclusively as “waste.”

Trust and the Downtown Business Improvement Association Society.

Land Use Policy

7.2.2. Increase population density through a variety of regulatory techniques in accordance with the Land Use Map (Map 1). (See also *Section 5 –Growth Management, Multi-family Housing policies 5.2.2.1 and Low-density Housing policies 5.2.3.2 and 5.2.3.7*). The City will consider and may initiate the following actions:

7.2.2.1. Amend the Zoning Bylaw to allow secondary suites.

7.2.2.2. Undertake a comprehensive Zoning Bylaw review that will identify “upzoning,” opportunities and the modification of standards to enhance appropriate density increases.

7.2.2.3. Amend the Off-Street Parking and Loading Bylaw No. 1556, 1988 in order to reduce space requirements by promoting parking facility sharing, providing incentives for active transportation, and to establish more sustainable standards.

7.2.2.4. Incentivize the redevelopment of brownfield sites.

7.2.2.5. Explore density bonus provisions that support GHG emission reduction techniques.

7.2.2.6. Create and use a sustainability checklist to evaluate the energy efficiency and GHG emission impacts of development and redevelopment proposals

Transportation policy

7.2.3. Encourage and promote active transportation (see also detailed Transportation policies for cycling and walking, policies 8.4.5 through 8.4.12). The City will consider and may initiate the following actions:

7.2.3.1. Create an active transportation plan in conjunction with adjacent jurisdictions. This plan may incorporate a “low Velocity network” for low speed vehicles.

7.2.3.2. Adopt “complete streets⁶” standards.

7.2.3.3. Construct and improve walkways, trails, sidewalks.

7.2.3.4. Facilitate the construction of end-of-trip cycling facilities such as secure parking, storage and shower and change facilities.

⁶ Complete streets are **designed and operated to enable safe access for all users**. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street.

Creating complete streets means transportation agencies must change their orientation toward building primarily for cars. Instituting a complete streets policy **ensures that transportation agencies routinely design and operate the entire right of way to enable safe access for all users**. Places with complete streets policies are making sure that their streets and roads work for drivers, transit users, pedestrians, and bicyclists, as well as for older people, children, and people with disabilities. Source: completestreets.org.

- 7.2.3.5. Encourage bike sharing.
- 7.2.3.6. Where warranted, reduce speed limits.
- 7.2.3.7. Promote the use of bicycle utility trailers.
- 7.2.3.8. Initiate a “Safe Routes to School” programme.
- 7.2.3.9. Encourage bicycle safety education.

7.2.4. Encourage and promote transit use, car-pooling, car-sharing and Transportation Demand Management⁷ strategies to reduce automobile vehicle miles travelled (see also Transportation policies, Transit and Rail 8.4.1 to 8.4.4). The City will consider and may initiate the following actions:

- 7.2.4.1. Promote commuter vans and internet-based ride sharing.
- 7.2.4.2. Review public parking rate structures with an eye to maximizing use and encouraging alternative transportation modes.
- 7.2.4.3. Amend the Off-Street Parking and Loading Bylaw No. 1556, 1988 to permit reductions in the off-street parking standards when active transportation facilities are provided and Transportation Demand Management strategies are employed.
- 7.2.4.4. Amend Payment in Lieu of Parking Bylaw No.1784 to permit payment in lieu of off-street parking requirements when active transportation facilities are provided and Transportation Demand Management strategies are employed.
- 7.2.4.5. Facilitate efforts with the CVRD to increase transit route bus frequency.
- 7.2.4.6. Adopt an anti-idling Bylaw.
- 7.2.4.7. Support carpooling programs.
- 7.2.4.8. Encourage Car Share programs.

Buildings policy

7.2.5. To increase energy efficiency of the existing building stock. The City will consider and may initiate the following actions:

- 7.2.5.1. Seek funding and opportunities for partnerships to achieve reductions, foster public awareness and gain support for climate change mitigation strategies
- 7.2.5.2. Provide incentives for property owners to obtain solar hot water heating installations.
- 7.2.5.3. Facilitate programs to improve insulation of residential buildings.
- 7.2.5.4. Facilitate programs to upgrade buildings with thermal windows.
- 7.2.5.5. Facilitate the replacement of oil and propane heating with renewable sources.
- 7.2.5.6. Where feasible, support the installation of ground source thermal heating.-

7.2.5.7. Adopt Revitalization Tax Exemptions that support GHG emissions reductions.

7.2.5.8. Support commercial and institutional property owners to achieve energy efficiency improvements. This may involve, for example, seeking grant funding from organizations such as the Real Estate Foundation to support innovation green building design.

7.2.5.9. Build an energy kiosk to provide education to the public about renewable energy sources.

7.2.6. To increase energy efficiency and green design standards for new buildings. The City will consider and may initiate the following actions:

7.2.6.1. Develop policy to require or incentivize land use and building permit applications to meet green design standards (such as LEED⁸ or Built Green⁹).

7.2.6.2. Support the installation of “green roofs.”¹⁰

7.2.6.3. Support the installation of vertical “green walls” and gardens.

7.2.6.4. Adopt “solar ready” standards for new construction.

7.2.6.5. Support district heat exchangers.

Resource Recovery (formerly referred to as Solid Waste)

7.2.7. Adopt a resource recovery approach to materials previously referred to as “solid waste.”

7.2.7.1. Explore the feasibility of renewable energy or energy conservation projects, such as a **resource recovery** energy plant that uses organic material to create heat and energy.

7.2.7.2. Include human power component (i.e. bikes and trailers) for resource pickup.

7.2.7.3. Explore resource recovery fees tied to volume.

7.2.7.4. Adopt a “near zero waste” policy for all downtown events.

7.2.7.5. Fully implement organics pick up service, including by bicycle.

7.2.7.6. Initiate a used cooking oil pick up service.

7.2.7.7. Establish partnerships with businesses to adopt “earth friendly” policies.

⁷ **Transportation Demand Management (TDM)** is a general term for strategies that result in more efficient use of transportation resources.

⁸ LEED stands for Leadership in Energy and Environmental Design. It is an internationally recognized third-party rating system and benchmark for the design, construction and operation of high performance sustainable buildings. In BC, it is administered by the Cascadia Green Building Council. <http://www.cagbc.org/leed/systems/index.htm>

⁹ Built Green is an industry driven voluntary program that promotes “green” building practices to reduce the impact that building has on the environment.

¹⁰ Green roofs means [roof](#) of a [building](#) that is partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane. It may also include additional layers such as a root barrier and drainage and irrigation systems.