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**COMMUNITY DEVELOPMENT COMMITTEE**

*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

**SUBJECT: OFFICIAL COMMUNITY PLAN AMENDMENT  
INTERIM GREENHOUSE GAS REDUCTION TARGET**

**RECOMMENDATIONS:**

1. THAT Council approve an amendment to the Burnaby Official Community Plan (OCP) Bylaw 10709 to include an interim greenhouse gas reduction target of 5 percent below 2007 levels in order to meet Provincial legislation requirements, as outlined in Section 3.0 of this report;
2. THAT Council, following First Reading of the amending bylaw for the Burnaby Official Community Plan (OCP) Bylaw No. 10709, authorize staff to bring forward the required report to seek Council's consideration of the OCP amendment process, as required under the Local Government Act;
3. THAT Council authorize staff to undertake the next phase of a *Community Greenhouse Gas Reduction Strategy* for Burnaby as outlined in Section 4.0 of this report; and
4. THAT a copy of this report be sent to the Finance and Civic Development Committee, the Environment Committee, Metro Vancouver and the Ministry of Community and Rural Development for information purposes.

Copied to:	City Manager Deputy City Manager Director Engineering Director Planning and Building Director Finance Director Parks, Recreation and Cultural Services OIC, RCMP Fire Chief Chief Librarian City Solicitor
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To: His Worship, the Mayor and Councillors  
From: Community Development Committee  
Re: Official Community Plan Amendment Interim  
Greenhouse Gas Reduction Target  
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**REPORT**

The Community Development Committee, at its meeting held on 2010 April 27, received and adopted the *attached* report seeking Council approval for a required amendment to Burnaby's Official Community Plan with respect to a target for reduction of greenhouse gas (GHG) emissions.

Council noted the interim target is being recommended with the understanding that updated targets, policies and actions for GHG emission reductions would be established for incorporation into a subsequent OCP amendment once the City has completed a Community Greenhouse Gas Reduction Strategy. In addition, the strategy will help the City understand the various approaches on GHG emissions and energy use in Burnaby, and identify supportable and appropriate targets, policies and actions for reducing GHG emissions.

Respectfully submitted,

Councillor C. Jordan  
Chair

Councillor D. Johnston  
Vice Chair

Councillor P. Calendino  
Member

**TO:** CHAIR AND MEMBERS  
COMMUNITY DEVELOPMENT  
COMMITTEE

**DATE:** 2010 April 22

**FROM:** DIRECTOR PLANNING AND BUILDING

**SUBJECT: OFFICIAL COMMUNITY PLAN AMENDMENT  
INTERIM GREENHOUSE GAS REDUCTION TARGET**

**PURPOSE:** To seek Council approval for a required amendment to Burnaby's Official Community Plan with respect to a target for reduction of greenhouse gas (GHG) emissions.

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**RECOMMENDATIONS:**

1. **THAT** the Committee request Council to approve:
  - A. **THAT** Burnaby Official Community Plan (OCP) Bylaw No.10709 be amended to include an interim greenhouse gas reduction target of 5 percent below 2007 levels in order to meet Provincial legislative requirements, as outlined in Section 3.0 of this report;
  - B. **THAT** following First Reading of the amending bylaw for the Burnaby Official Community Plan (OCP) Bylaw No. 10709 that staff be directed to bring forward the required report to seek Council's consideration of the OCP amendment process, as required under the Local Government Act;
  - C. **THAT** staff be authorized to undertake the next phase of a *Community Greenhouse Gas Reduction Strategy* for Burnaby as outlined in Section 4.0 of this report; and
  - D. **THAT** a copy of this report be sent to the Finance and Civic Development Committee, the Environment Committee, Metro Vancouver and the Ministry of Community and Rural Development for information purposes.

**REPORT****1.0 INTRODUCTION**

In September 2008, the Provincial Government enacted Bill 27 Local Government (Green Communities) Statutes Amendment Act, 2008, requiring all local governments in British Columbia to incorporate greenhouse gas (GHG) reduction targets and associated policies and actions for achieving those targets into their Official Community Plans (OCP) by May 31, 2010. To achieve compliance with this requirement, the City must amend the Burnaby Official

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Community Plan (OCP) to incorporate a specific GHG reduction target through the established OCP adoption and amendment procedures of the Local Government Act and Community Charter.

At the regional level, the provincial legislation also requires Metro Vancouver, and other regional districts, to incorporate GHG targets, as applicable, into Regional Growth Strategies by 2011. Notwithstanding, each local member municipality of Metro Vancouver is required to establish its own target.

This report seeks Council approval for the inclusion of an interim GHG reduction target within the City's OCP, and outlines an approach to be taken to establish a more comprehensive *Community Greenhouse Gas Reduction Strategy* with associated updated targets, policies and actions.

## 2.0 BACKGROUND

To date, the City of Burnaby has made significant commitments and taken key steps to provide for greenhouse gas reductions in response to air quality, energy conservation and climate change challenges at both the corporation and broader city-wide community level.

Through the City's land use planning function, and management of corporate operations, the City has been able to directly contribute to a reduction in GHG emissions, improved air quality and energy conservation through a broad range of policies, plan and actions. The City's existing OCP already incorporates a "smart growth" land use and development approach with a strong relationship to alternative transportation options and other support services and infrastructure. Plans for Town Centres and other multi-use higher density nodes result in more compact and complete communities that promote walking, cycling and transit use as opposed to lower density, more suburban forms with a higher degree of dependence on the automobile and energy use with related higher GHG emission levels.

Currently, some of the City's specific GHG emission reduction initiatives, at both a corporate and community-wide perspective, include:

- the City building energy retrofits
- fuel efficient vehicle purchases
- City car pool program
- anti-idling programs
- fuel efficient driver training
- use of biofuels in City fleets
- street and traffic lighting retrofitting
- traffic signal synchronization
- TransLink Employer Pass Program
- compressed work week
- incorporation of sustainable building guidelines in City and private developments

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- stormwater management program
- bicycle racks, storage, and end of trip facilities requirements for development
- density bonusing to contribute to more compact communities
- density bonus option to support extra-ordinary environmental enhancements
- transit area planning and integration of LRT into the City's urban fabric
- implementation of the BC Green Building Code requirements
- program for provision of pedestrian and cycling facilities and networks
- smart growth land use planning through development of urban centres
- support of car-sharing / car co-op programs
- community education / outreach
- water conservation / low flow toilet rebate pilot program
- waste reduction programs
- landfill gas collection program
- parkland expansion / conservation program

At the local level, these programs, initiatives and actions assist in responding to the increasing awareness that greenhouse gas emissions can accelerate the natural 'greenhouse effect' and global climate change. Many expect that global climate change will have serious impacts on our weather and ecological support systems. Issues such as more extreme weather events, droughts, and floods, declining fresh water reserves are often cited. The major sources of greenhouse gases are from combustion of fossil fuels such as oil, natural gas or coal, and from the decomposition of organic wastes in landfills.

At a provincial level, recent legislation has been enacted to further promote reductions in greenhouse gas emissions across broad sectors. Some of the recent provincial measures to advance energy efficiency and reduce GHG emissions across the province include:

- The *GHG Emissions Reduction Target Act (Bill 44, 2007)* sets province-wide greenhouse gas emissions reduction targets of 33% below current levels by 2020, and 80% by 2050. The Act also included interim targets of 6% below 2007 levels by 2012 and 18% below 2007 levels by 2016. Public Sector Organizations (including school districts, health authorities and post secondary institutions) are required to be carbon neutral in their operations by 2010. Bill 44 does not specifically apply to local governments.
- *The BC Climate Action Plan (2008)* utilizes the Carbon Tax on fuels and presents strategies for seven sectors that are intended to take BC approximately 73 percent towards meeting the goal of reducing greenhouse gas emissions by 33 percent by 2020.
- *Housing Statutes Amendment Act (Bill 10, 2008)* was intended to "green" the BC Building Code and introduce new Building Code requirements to increase energy and water efficiency.

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- *GHG Reduction (Emissions Standards) Statutes Amendment Act (Bill 31, 2008)* applies to the management of GHG emissions at Waste Management Facilities – such as landfills, emissions from coal-based generating facilities and the reduction and offset of emissions from electricity generation to achieve a net zero emissions level.
- *BC Climate Action Charter (2007)* encourages local governments to voluntarily pledge to significantly cut GHG emissions from their operations by committing to:
  - being “carbon neutral” by 2012 in corporate operations,
  - create complete, compact, energy efficient communities, and
  - become reporting entities under the Climate Registry.

Communities that sign the Charter are eligible to receive a rebate on their paid carbon tax (paid on directly purchased fossil fuels) through the *Climate Action Revenue Incentive Program (CARIP)*. By July 1, 2012 the carbon tax is anticipated to be \$30 per tonne. Based on Burnaby’s estimated corporate emissions, the rebate is estimated at \$350,000 per year. However, as stated elsewhere, signatories must also acquire offsets in order to become carbon neutral in corporate operations by 2012. Current markets and speculation indicate that the cost of offset purchases is expected to exceed the CARIP rebate. Regardless of whether or not a local government signs on the Charter, it will have to pay a carbon tax. However, those that do not sign on do not have to pay for carbon offsets, and maintain flexibility in how their carbon offsets are managed. At present, Burnaby is not a signatory to the *Climate Action Charter*.

- *Local Governments (Green Communities) Statutes Amendment Act (Bill 27, 2008)* introduced requirements for local governments to institute in their Official Community Plans by May 31, 2010, greenhouse gas emission reduction targets, and actions and policies for achieving them. At the time of writing, staff are aware that within Metro Vancouver, the City of Vancouver, and the City and District of North Vancouver have finalized their respective OCP GHG target amendment.
- The Provincial Government has also introduced the BC Energy Plan and the BC Hydro Long Term Acquisition Plan to deal with energy conservation and procurement in the province. All the above have contributed to significant new policy directions within the province.

Of the Provincial initiatives noted above, the one with the most direct impact on local governments is the *Local Government Statutes Amendment Act (Bill 27)* which introduces the requirement for local government to include GHG reduction targets within Official Community Plans that are supported by associated policies and actions. A proposed approach for the City in response to Bill 27 requirements is presented below.

### **3.0 OFFICIAL COMMUNITY PLAN AMENDMENT PROPOSAL – GHG TARGET**

#### ***3.1 An Interim Approach***

In order to comply with Bill 27, the Official Community Plan of all local governments (by May 31, 2010) must contain at least one numeric target that specifically states an amount of GHG reduction. It is also noted that Bill 27 addresses only community-wide targets and leaves corporate-level (City) emissions as the subject of voluntary actions. The target may be defined as total emissions, or it may address a specific sector (e.g. “reduce transportation emissions”). The policies and actions to support the target are not required to be incorporated within the OCP and can be in accompanying documents (e.g. State of the Environment Report, Budget Documents, or other Community Plans and strategies). Bill 27 does not define monitoring or reporting requirements. As such, communities are able to establish individual approaches to evaluating achievement of progress towards a community reduction target. The amendment of the OCP to incorporate a GHG reduction target will bring the City’s OCP into compliance with the requirements of the Act.

To assist local governments in meeting their Bill 27 commitments, the Province has provided a Community Energy and Emissions Inventory (CEEI) which provides high-level energy and GHG emission estimates, based on year 2007 information, in three primary sectors – on-road transportation, buildings and solid waste for individual municipalities, including the City of Burnaby. For Burnaby, it is estimated 96 percent of emissions are generated from combustion of fossil fuels, while the remaining 4 percent comes from decomposition of organic material attributable to land filling of solid wastes.

In considering the technical, staff resources and other challenges to meet the deadline associated with amendment of the Official Community Plan, as required under the Bill 27 legislation, staff recommends the adoption of an interim GHG reduction target for incorporation in the City’s Official Community Plan.

*As such, an interim GHG emissions reduction target of five (5) percent from 2007 levels is recommended as the basis for meeting the immediate requirement for an OCP amendment.*

In staff’s view, this target is within the ability of the City to meet through its existing environmental sustainability initiatives, community plans, and corporate programs as support through existing OCP goals and objectives, State of the Environment Report (SOER) directions, and established community plans and corporate policies, programs and initiatives. The interim target is being recommended with the understanding that an updated reduction target and implementation approach would be advanced for a subsequent OCP amendment.

The update would follow completion of further research and community consultation processes through a specific *Community Greenhouse Gas Reduction Strategy*, as outlined further in Section 4.0 of this report. The findings of strategy would also be considered through the City’s upcoming Environmental Sustainability Strategy process.

Through the development of a specific *Community Greenhouse Gas Reduction Strategy*, the City would be able to build on its existing “smart growth” land use and development approach and other current initiatives by pursuing other potential opportunities for further GHG emission reductions. While the specific merit and implications of various initiatives would need to be evaluated to identify those suitable for Burnaby, some examples that could potentially deliver benefits for Burnaby in achieve GHG reductions include: measures to encourage reduced car ownership and usage, supporting provision of alternative transportation measures in new development, supporting development of ‘green’ energy efficient buildings, and support for alternative energy programs for vehicles and buildings. As noted, the merit of these and other approaches to be considered would need to be evaluated through the proposed *Greenhouse Gas Reduction Strategy* process.

### **3.2 OCP Amendment Process**

During the development of an OCP (including an amendment or a repeal), the local government must provide appropriate consultation with “persons, organizations and authorities it considers will be affected” by the OCP. This authority is very broad and allows Councils and Boards to decide what level of consultation is needed within the specific circumstances of an amendment or plan. Following First Reading of the Bylaw, staff would prepare a report to seek the required Council consideration of the OCP amendment process, as required under the Local Government Act.

An OCP amendment is adopted by a local government as a schedule to a bylaw. The Local Government Act sets out very specific adoption procedures for an OCP Bylaw, including that it must hold a Public Hearing to allow all persons who believe their interests in property is affected the right to be heard or to present written submissions.

Following Council adoption of this report, the sequence of required steps for an OCP amendment is as follows:

- Council Consideration of the OCP Amendment Bylaw and First Reading.
- Council adoption of a further report on the proposed OCP Amendment including: consideration of the Bylaw in respect to: the consultation process; the City’s financial or capital expenditure plan; and the City’s waste management plan.
- Advancement of the OCP Amendment Bylaw for Public Hearing.
- Public Hearing.
- Second Reading of the Bylaw.
- Third Reading of the Bylaw and Adoption of Bylaw.

A final step associated with the proposed OCP amendment process would be the resubmission of an amended Burnaby’s Regional Context Statement (RCS) incorporating the GHG Reduction Target to the Metro Vancouver Board of Directors for acceptance through a future report to Council. Final adoption of the OCP Amendment Bylaw and Regional acceptance of Burnaby’s



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Regional Context Statement will bring the City's OCP into compliance with the requirements of the Local Government Act.

#### **4.0 BURNABY COMMUNITY GREEN HOUSE GAS REDUCTION STRATEGY**

The City has a wide array of means to help achieve GHG reductions including land use planning and zoning, land development regulatory powers, authority over road standards and on-street parking provisions, development approvals and controls, operation policies and actions, capital expenditures and other specific provisions available to local governments under legislation.

As noted above, the City's current significant initiatives make a positive impact on GHG emission reductions. At this time, however, there are no established quantitative measures of performance to reliably assess the impact on overall GHG emissions and of the specific reductions being achieved by these initiatives. In order to provide for this ability to appropriately set refined targets, define further initiatives, and to track, report and monitor achievements, the development of a *Community Greenhouse Gas (GHG) Reduction Strategy* is recommended. The Strategy would set associated performance indicators, as well as provide new opportunities and strategies for energy and GHG emissions management in support of the City's broader land use, transportation and infrastructure planning. Recommendations of the strategy would be intended to form the basis for a defined City role for reducing GHG emissions on a community-wide basis. They would also lead to revised GHG reduction target proposals, actions and initiatives for Council consideration for a subsequent OCP amendment. The process would also consider the definition of a management framework for energy and GHG activities to assign responsibility for implementation, monitoring and reporting progress on GHG reductions relating to specified targets. It will also involve the development of more formalized approaches to define and implement strategies and initiatives at both the operational and broader community levels for realistic, meaningful and achievable responses to GHG reduction targets.

Is it important to note, however, that while Burnaby has primary control over land use and zoning, its influence over building energy efficiency and broader transportation matters is more limited and often indirect as these can be more directly controlled or influenced by Provincial and/or Federal level decision. For example, the recent decision by the Provincial Government to advance the Port Mann/Highway 1 Gateway Project and introduce significantly increased east-west vehicular capacity, and therefore increased vehicular emissions by traffic moving through Burnaby, with induced lower density growth further east, has the potential to undermine the ability of the City to achieve local targets. At the same time, significant initiatives at the Provincial and Federal levels also have the potential to result in the achievement of greater reductions within Burnaby than can be achieved through local initiatives only.

The task of developing a comprehensive *Community Greenhouse Gas Reduction Strategy* with the aim of identifying appropriate policies, actions and defensible and measurable GHG reduction targets for incorporation into Burnaby's OCP will represent a significant undertaking by the City. It is anticipated that this process would have public outreach components and would

be the subject of Committee and Council workshops to fully assess the scope and implications of alternative scenarios in helping define the desired approach for the City.

A proposed three phased approach to completing this work is outlined below.

**4.1 A Three Phase Approach**

The development of a *Community Greenhouse Gas Reduction Strategy* would involve three phases of work, as follows:

**Phase One: Community GHG Inventory and Forecast**

Building on existing information, this phase would establish the base context for strategies and actions by totaling and categorizing the City’s community wide energy and GHG emissions profile and forecast.

It would analyze a range of technical information related to the community including existing land use and transportation patterns, solid waste, and buildings; and consider the quantitative effects of existing policies set out in the Official Community Plan and other policy documents. This analysis would provide the framework for considering the various opportunities and strategies in addressing energy and emission reductions in Burnaby.

Once the base Community GHG Inventory is complete, this Phase would also include the development of a “business as usual” forecast of GHG emissions for the City of Burnaby looking forward to the years 2020 and 2050.

**Phase Two: Exploring Multiple GHG Emissions Reduction Scenarios**

The second phase of the strategy development would assess the potential implications of high-level changes in policy and practice as related to alternative GHG reduction target scenarios. It would include consideration and analysis of various opportunities and their associated policies, targets and actions, as well as an assessment of their implications. The emission reduction potential of the different scenarios would be quantified to assist the City in establishing updated reduction targets.

In order to develop appropriate GHG reduction targets, an analysis of future emissions would be undertaken that considers future population and economic growth rates, projected land use patterns, the implications of projected transportation improvements, changes to total transportation movements and mode split rates, the rate of building energy efficiency retrofits, district energy opportunities and likely Provincial effects on building codes and improved fuel efficiency standards. This range of factors would be varied to develop different hypothetical scenarios to help quantify the effects and implications of various emissions reduction measures that the City could consider.

This phase will help steer the City towards a preferred direction for more detailed development. This Phase would also include the quantification of the impact of ongoing policies and practices on GHG emissions, as well as any new proposals. Definition of a management framework would be proposed to best integrate energy and GHG management responsibilities within the existing organizational structure and include Key Performance Indicators (KPIs) and data collection and reporting systems to input, track and report progress on GHG targets and objectives.

### **Phase Three: Developing the Preferred Approach**

This phase would articulate the City’s energy and emission reduction approach, providing specific policies and actions detailed by sector (land use, buildings, transportation, and solid waste). Phase Three would become the basis for the Burnaby’s *Community Green House Gas Reduction Strategy* and would present the recommended GHG emission reduction target for the City, as well as the specific associated strategies, policies, and actions.

A finalized report would serve as the foundation for the City’s *Community Greenhouse Gas Reduction Strategy* that will describe in detail how Burnaby will reduce its GHG emissions. By analyzing current and forecasted GHG emissions within the City, the report will outline the contribution that various sectors (transportation, buildings, and solid waste) make to the total community emissions. It will also indicate how various factors such as urban form, density and transit, influence GHG emissions by examining some of the research and precedents and lay out a number of measures that are available to municipalities to reduce GHG emissions. More specifically, it is to provide an estimate of the contribution of some of the major initiatives to GHG reductions between now and 2050 through a varied “scenarios” approach.

Finally, the report would establish the basis for Burnaby objectives and targets for reducing community GHG emissions. One of the primary objectives of the study is to determine achievable targets for the City of Burnaby for emission reductions that can be incorporated into a future OCP amendment, as required by the Local Government Act.

To assist the City in preparing this work, staff would propose to retain an outside consultant with the necessary specialized expertise in this field to complete the project. The project would be organized around the three phase approach outlined above. It is further recommended that the necessary funds for this work be allocated from the City’s Gaming Fund Reserves given the project’s relationship to environmental protection. Approval for expenditure of funds on this project would be the subject of a subsequent report to the Community Development Committee and Council. Through this report, staff would also advise as to availability of any senior government funding to off-set the costs for preparing the recommended *Community Greenhouse Gas Reduction Strategy*.

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## 5.0 CONCLUSION

Over the past number of years, the City has undertaken a range of GHG emissions reductions initiatives, at both a corporate and community level. In responding to the specific requirements of Bill 27, it is noted that the Local Government Act (LGA) requires all municipalities in BC to include within their Official Community Plan by May 31, 2010, targets for the reduction of greenhouse gas emissions and policies and actions with respect to achieving those targets.

In considering the technical, staff resources and time challenges remaining to meet the requirements of the legislation, staff are recommending the adoption of an interim GHG emissions reduction target of five percent below 2007 level that is currently within the ability of the City to meet through its existing sustainability initiatives. The interim target is being recommended with the understanding that updated targets, policies and actions for GHG emission reductions would be established for incorporation into a subsequent OCP amendment once the City has completed a *Community Greenhouse Gas Reduction Strategy*, as outlined in this report. Completion of the strategy will help the City understand the implications of various future land use, transportation, building, energy supply and waste management scenarios and approaches on GHG emissions and energy use in Burnaby, and identify supportable and appropriate targets, policies and actions for reducing GHG emissions.

This report recommends that Council direct staff to initiate the process for Amendment Bylaw for Burnaby's Official Community Plan with respect to incorporating an interim GHG reduction target, and to pursue development of a *Community Greenhouse Gas Reduction Strategy*.



B. Luksun, Director  
PLANNING AND BUILDING

LP/JSB:tn

cc: City Manager  
Deputy City Manager  
Director Engineering  
Director Finance  
Director Parks, Recreation and Cultural Services  
OIC – RCMP  
Fire Chief  
Chief Librarian  
City Clerk  
City Solicitor