
TO: Neil Connelly
General Manager, Community Services

DATE: October 3, 2005

FROM: Christina Thomas
Senior Planner, Community Services

FILE: 6780 30 50 GRBU

SUBJECT: GREEN BUILDINGS PROJECT – LOCAL GOVERNMENT GREEN BUILDING PROGRAMS

PURPOSE

The purpose of this report is to provide an update about the status of the Green Buildings Project and, in particular, the research report about local government green building programs.

BACKGROUND

A research report about key nearby local government green building programs, prepared by Hughes, Condon, Marler: Architects, is provided for consideration (*see Attachment 1 as a separate enclosure*).

The local government green building program report is one of the three components of the exploratory phase of the Green Buildings Project approved by the Board in November of 2004. The other two components of the Project, which is intended to provide the RDN with a basic understanding of green buildings and to help inform a decision about future RDN work to promote green building practices in the region, are: [1] a tour of green buildings for RDN elected officials and staff; and [2] the development of terms of reference for future green building related work. The green building tour took place in June of 2004, and the Board received a report about it on July 26, 2005. Staff intend to provide terms of reference for future green building work to the Board in January of 2006 for consideration.

Green buildings are buildings that require less energy to operate, contribute fewer emissions to the environment, conserve water, generate less solid waste, and provide more comfortable and productive environments for their inhabitants.

The research report profiles the green building programs/policies of the Greater Vancouver Regional District, the City of Portland, the City of Richmond, the District of Saanich, the City of Seattle, the City of Vancouver, the City of Victoria, and the Resort Municipality of Whistler.

The report provides information about the following aspects of these local government green building programs: [1] purpose; [2] components of current program and plans for program expansion; [3] opportunities and challenges experienced; [4] results or impacts of programs; [5] human and financial resources allocated; and [6] contact information.

Local Government Green Building Programs - Highlights

The following highlights some of the key aspects of the local government green building programs described in the research report:

- All of the local government green building programs share the common purpose of improving the sustainability of their jurisdiction by increasing the number of green buildings in their jurisdiction.

- Increasing the number of public sector (i.e. government) owned green buildings is the current primary focus of most local government green building programs (e.g. local government administration offices, city halls, town halls, recreation facilities, public works yards/facilities, any other building owned and operated by a government). A secondary focus of these programs is increasing the amount of private sector ‘green’ built space for multiple family housing developments, commercial space and office space. None of the surveyed green building programs focuses on green single family residential construction.
- The key components of the local government green building program are:
 - developing policies regarding the construction of green buildings in the jurisdiction (e.g.. “all municipal buildings over 500 m² will be constructed to the LEED Gold standard”);
 - raising awareness about green buildings (i.e. what is a green building?, why build a green building?, how do green buildings contribute to sustainability? how to build a green building? methods of evaluating green buildings, etc.) by conducting educational events and publishing reports;
 - providing the local building industry technical information/education/assistance related to green buildings (e.g. about materials that can be used in green building construction and local sources of these materials, the LEED rating system, methods and practices that can be incorporated to attain LEED green building status regarding the following: construction waste recycling/re-use of used building materials, demolition and salvage, stormwater management, wastewater management, water conservation, energy efficiency, the integrated design and construction process, etc.);
 - building long term partnerships with other governmental bodies (e.g. other local governments, CMHC, BCBC, BC Hydro, Natural Resources Canada, etc.) and non-governmental agencies (e.g. Canada Green Building Council, US Green Building Council, BC LEED Steering Committee, Community Energy Association, Association of Professional Engineers and Geoscientists of BC, Architects Institute of BC, BC Construction Association, Urban Development Institute, etc.) to leverage resources to develop and deliver programs and conduct research to support green building construction.
- The largest local government green building programs (e.g. GVRD, City of Seattle, City of Portland, City of Vancouver) include all of the above described elements on an ongoing basis.
- The smallest local government green building programs consists of a policy that requires local government buildings to be constructed to a specified LEED¹ certification level (i.e. District of Saanich, City of Richmond).
- The resources allocated to green building initiatives by the surveyed local governments range in size from no dedicated full time staff resources (e.g. District of Saanich, City of Victoria) to a department of full time staff dedicated to green building advancement consisting of two people (e.g. the City of Vancouver), three people (e.g. GVRD), four people (City of Portland), or five people (e.g. City of Seattle).

¹ Leadership in Energy and Environmental Design, a widely known and accepted method of obtaining third party assessment and classification of a green building.

- Some local government green building programs are relatively new (e.g. the District of Saanich initiated work on green building policy in 2004, the City of Vancouver approved a program to promote green building policy in 2004, the City of Victoria established a committee to provide recommendations regarding green buildings in 2005 and is now embarking upon a process to shape the future of its green building initiatives, the City of Richmond approved a high performance building policy in 2004), whereas others have been established for many years (e.g. the City of Seattle started its program in 1997, the GVRD and City of Portland programs started in 2001).
- Most local government green building programs do not presently provide any financial incentives to construct green buildings, other than provide information and assistance that is intended to make it easier to construct green buildings in the jurisdiction. The City of Portland green building program is an exception: it annually awards \$100,000 in grants to green building projects in the City through its Green Investment Fund, and it provides special technical assistance to private sector development projects meeting the LEED Silver standard or higher. Some of the more comprehensive local government green building programs plan to explore the provision of incentives for green buildings (e.g. GVRD), such as lower Development Cost Charges to reflect green buildings' reduced need for wastewater processing and other services, and expedited permit approvals processes.
- The most tangible results of the local government green building programs is an increased number of buildings in the jurisdiction that are LEED certified² or registered³. Other results of local government green building programs include increased awareness about green buildings among the construction and development industry and residents in the community. Some post occupancy analyses of green buildings have been completed, and these studies confirm that green buildings provide multiple environmental benefits (e.g. reduced consumption of water, increased waste reduction, reduced CO₂ emissions, etc.) and cost savings to building owners.

ALTERNATIVES

1. To receive the report.
2. To receive the report, and request additional information about a specific aspect of the Project.

FINANCIAL IMPLICATIONS

Receipt of this report has no financial implications. Twenty thousand dollars (\$20,000) was included in the Regional Growth Management Services 2005 budget, at the Board's direction, specifically for the exploratory phase of the Project. The allocated budget is sufficient for the work delineated in the RDN Board approved terms of reference for the exploratory phase of the Green Building Project.

GROWTH MANAGEMENT IMPLICATIONS

Green buildings and a green building program would help make the region more sustainable, the overall purpose of the Regional Growth Strategy. It would provide a direct contribution towards the achievement of the Regional Growth Strategy environmental protection goal, which is to protect the environment and minimize ecological damage related to growth and development.

² Buildings that have completed the LEED certification process and been granted a particular LEED standing by the Canada Green Building Council of the US Green Building Council.

³ Buildings for which an application for LEED certification is being considered, but has not yet been granted.

ENVIRONMENTAL IMPLICATIONS

Green buildings and a green building program would help address environmental problems caused by poor building performance. It would result in the construction of buildings that are more environmentally compatible because they require less resources to construct, operate and maintain, and because they result in fewer harmful emissions to the environment. A green building program would result in less solid waste disposal at the regional landfill and contribute towards the achievement of the Regional District's Solid Waste Management Plan objective of 'zero waste' because green buildings typically involve the reuse of existing materials. A green building program would also result in reduced consumption of potable water and reduced generation of liquid waste because green buildings typically include more efficient appliances, and infrastructure.

SUMMARY

The second of three deliverables of the RDN Green Buildings Project, a research report about local government green building programs, is provided for Board consideration (*see Attachment 1 as a separate enclosure*). The research report will be used by staff in the development of terms of reference for a potential future phase of the Project. Staff anticipate that the final Project deliverable, terms of reference for a future phase of the Project, will be submitted to the Board in January of 2006 for consideration.

RECOMMENDATION

That the report on local government green building programs undertaken as a part of the Green Buildings Project be received.

Report Writer

General Manager Concurrence