



# Corporate Report

NO: R227

COUNCIL DATE: October 30, 2006

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## REGULAR COUNCIL

TO: **Mayor & Council** DATE: **October 26, 2006**

FROM: **Acting General Manager, Planning and Development** FILE: **6950-30**  
**General Manager, Engineering**  
**General Manager, Parks, Recreation & Culture**

SUBJECT: **Development of a Sustainability Charter**

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## RECOMMENDATION

It is recommended that Council:

1. Receive this report as information; and
2. Direct staff, in conjunction with the Environmental Advisory Committee to undertake a three-phase process outlined in this report to develop a Sustainability Charter and an implementation strategy.

## INTENT

The purpose of this report is to:

1. Summarize the City's current sustainability policies and initiatives;
2. Provide an overview of sustainability in the municipal context;
3. Outline alternative approaches to the promotion of sustainability policies;
4. Identify the potential role for a Sustainability Charter as a framework to guide the City in the implementation of its sustainability policies; and
5. Recommend a process to develop a Sustainability Charter and implementation strategy.

## **Policy Considerations**

Surrey's Official Community Plan ("OCP") contains a comprehensive set of policies and guidelines intended to promote sustainability and protect the environment. The creation of complete, compact and energy efficient communities, supported by a range of transportation alternatives developed using sustainable design and construction practices, is a key direction in the OCP. Best environmental practices, promotion of a sustainable economy and support for social well-being in the City are also addressed in the OCP. A summary of these policies and guidelines is included as Appendix 1 to this Report.

While Surrey has a range of high level sustainability and environmental policies, guidelines and targets associated with these policies are not fully evolved. Sustainability principles are not always applied in City operations and "triple bottom line" accounting practices, which consider economic, social and environmental factors, are not always fully considered in City practices or projects.

## **BACKGROUND**

City departments have undertaken a number of initiatives in support of the City's sustainability policies in addition to a number of interdepartmental corporate initiatives. A summary of these initiatives is outlined in the following sections.

### **Engineering Department Initiatives**

The Engineering Department oversees a wide range of environmental protection initiatives and has been active in establishing sustainable drainage practices. The Department has undertaken a series of initiatives to promote environmental responsibility and sustainability within its various Departmental mandates. These initiatives can be categorized as:

- Sustainable Land Development;
- Stormwater Management and Drainage;
- Water Quality and Conservation;
- Liquid Waste Management;
- Environmental Stewardship;
- Solid Waste Management and Recycling;
- Public and Community Education;
- Sustainable Agricultural Practices; and
- Transportation Alternatives.

### **Parks, Recreation and Culture Department Initiatives**

The Parks, Recreation and Culture Department has many programs, guidelines and initiatives to promote social and environmental sustainability in Surrey. The City's Social Well-Being Plan's program and services component is directed by the Community and Leisure Services Division and contains four initiatives:

- The Child and Youth Friendly Initiative;

- Breaking Barriers for Low-Income Families;
- Ethno and Culturally Appropriate Services; and
- The Active City Initiative.

These services promote social and economic sustainability in Surrey's diverse community.

- The Parks Division has addressed environmental sustainability through the creation of the *Environmental Guidelines for Planning, Design, Development and Operations* and the *Natural Areas Management Plan*. These guidelines cover both indoor and outdoor park and recreation facilities and are intended to minimize environmental impacts and promote best practices in sustainability. Many Parks, Recreation and Culture buildings, which account for a significant proportion of the City's facilities and require large amounts of energy, have undergone energy efficiency upgrades. New facilities incorporate advance technology, such as geothermal heating and Leadership in Energy and Environmental Design (LEED) standard equivalents. Most importantly, the Parkland Acquisition Program is able to secure the City's most valuable environmental assets for perpetuity and ensure the lands are managed in a way to maintain and enhance their value within the City's overall ecological systems.
- In cooperation with the Engineering and Planning and Development Departments, a network of Greenways is also being established throughout the City to support sustainable transportation modes.

### **Planning and Development Department Initiatives**

- Land Use is one of the key elements of sustainability in the municipal context. Through OCP policies, the Zoning Bylaw, General Land Use Plans, Environmentally Sensitive Area designations and Neighbourhood Concept Plans the framework can be established for creating complete, compact communities that use fewer resources, have lower environmental impact, reduce the need to travel and support sustainable transportation modes. A number of more transit oriented nodes and corridors are being created in the Surrey City Centre and in Municipal Town Centres. Specifically, plans to update the Semiahmoo Town Centre Plan are proposing to incorporate principles of intensification, pedestrian orientation, transit focus and high quality of design and urban landscape.
- There have been innovations in community plans, such as East Clayton, to create centres that require less land, have more sustainable servicing standards and provide residents with transportation alternatives. Similarly, a substantial part of the new Campbell Heights industrial area has been planned with more sustainable services.
- The Planning and Development Department has been working with the development community to promote more pedestrian and bicycle friendly neighbourhoods throughout Surrey that are transit oriented, most recently with the Surrey Central Transit Village, a part of the Urban Transportation Showcase with Transport Canada and TransLink.

## **Corporate Initiatives**

In order to demonstrate leadership in sustainability, the City is active in a number of areas:

- The Corporate Facilities Section has been leading efforts to improve energy efficiency and introduce alternative energy in corporate buildings;
- The City has promoted alternative transportation for employees through bicycle racks, showers and change facilities for cyclists and priority parking spots for carpool vehicles. The City is also offering an additional 20% discount on monthly passes for employees for one year once the City is successful in joining TransLink's annual Employer Pass Program;
- The Green City Reserve Fund, approved by Council in 2005, directs 2% of all building permit revenues, along with all cash-in-lieu of replacement tree funds, to a City reserve fund for use by the City for tree management and to plant trees on City property and street boulevards throughout the City;
- Council has recently adopted a new Tree Protection Bylaw, which enhances the City's ability to promote tree protection and replacement; and
- The annual "Nature Matters" program increases awareness of the community to the importance of protecting the environment. More information on the status of this program will be provided in a separate Corporate Report.

City staff also actively seek funding from available external programs to support sustainability initiatives. Recent examples of major project awards include:

- Transport Canada's Urban Transportation Showcase Program for the Surrey Central Transit Village Plan;
- British Columbia Community Action on Energy Efficiency – Grants to develop a Community Energy Plan for the Surrey City Centre and to organize a Surrey Energy Efficiency Workshop;
- The Real Estate Foundation, UBC and other partners for the East Clayton Sustainable Community study; and
- An FCM Environmental Grant for the Campbell Heights industrial area.

## **DISCUSSION**

### **Overview of Sustainability in a Municipal Context**

With increasing concerns about global warming, a potential peak in oil production in the near future, diminishing biodiversity, an aging population with reduced mobility, finite land supplies, increasing housing affordability problems and complex social issues, many

concerns are being raised about the long term sustainability of the urban centres where 80% of Canadians now live. Canada has been identified as being a country with one of the world's highest per capita use of energy and other natural resources.

Surrey's OCP, subtitled "Strategy for a Sustainable City," sets a strong policy context for the pursuit of sustainability. However the term "sustainable" and sustainability targets have not yet been defined, which introduces challenges for establishing the level of effort required to meet the intent of the sustainability policies.

The most common definition of "Sustainable Development," the precursor to the term "Sustainability," comes from "Our Common Future," published in 1983 by the World Commission on Environment and Development, generally known as the Brundtland Commission. This definition, also adopted by the United Nations for its Agenda 21 program, is development that "meets the needs of the present without compromising the ability of future generations to meet their own needs".

The avoidance of environmental degradation or resource depletion is considered to be a prerequisite for sustainability, while economic, social and environmental sustainability are all considered to be necessary to achieve overall sustainability. This approach has led to "triple bottom line" accounting practices in many organizations, i.e., decisions are based on social, environmental and economic considerations and not based primarily on a strict cost-benefit financial (economic) analysis.

Similarly, although the environmental policies are often referred to in connection with the OCP's sustainability policies, the term "Environment" it is also not clearly defined. The UNESCO definition, which is a variation of common dictionary definitions, is "the complex set of physical, geographic, biological, social, cultural and political conditions that surround an individual or organism and that ultimately determines its form and nature of its survival".

As the level of government closest to most people, municipalities have a significant and unique role to play in promoting sustainability and environmental protection at all levels. The expression "Think Globally, Act Locally" is one way to characterize this role. In addition to providing community leadership through their own internal practices, municipalities determine land use patterns, provide a wide range of the most essential services to residents and businesses, exert strong influence over transportation mode decisions and oversee land development and the construction of buildings. Larger municipalities, such as Surrey and associations of municipalities to which Surrey belongs, including the Union of BC Municipalities (UBCM) and the Federation of Canadian Municipalities (FCM), also have influence in creating support for sustainability legislation policies and programs at the provincial and federal levels. The Partners for Climate Protection (PCP) and Green Municipal Infrastructure programs are a result of this cooperation.

### **Approaches to Promoting Sustainability**

A number of potential approaches have been applied to promote sustainability at the municipal level that merit further research:

- **Overarching OCP Policies** - This could be a simple statement requiring that sustainability be an important consideration in all corporate activities, or that corporate policies, procedures and projects be subjected to a "triple bottom line" analysis of economic, environmental and social sustainability. Without targets, action plans, monitoring or dedicated staff supporting sustainability initiatives or conducting audits of corporate activities, this high-level approach does not lend itself to successful systematic implementation.
- **Specific Policies and Guidelines on Sustainability and the Environment** - The FCM, Surrey, Vancouver and other local municipalities do not have an official Sustainability Charter or adopted corporate Sustainability Plan, but rather a set of policies, plans and guidelines intended to address a range of specific sustainability issues. The District of North Vancouver has compiled a range of bylaws related to soil, water and tree protection that fall under municipal jurisdiction into an environmental bylaw.
- **Corporate or Departmental Sustainability Action Plans** - Action Plans can be undertaken in the context of either overarching policies or specific policies. Within Surrey, the Parks, Recreation and Culture Department's *Environmental Guidelines for Planning, Design, Development and Operations* is an example.
- **Adoption of Established Sustainability Models** - The "Natural Step" is an established model, which is a systematic approach to sustainability that was developed in Sweden and has been adapted to countries around the world. In Canada, the Natural Step has been adopted by the municipalities of Whistler, Canmore and Charlottetown. Using this established model, some communities in Sweden are implementing comprehensive action plans with the target of zero net environmental impact within a generation.
- **Sustainable Development Guidelines and Checklists** - A wide variety of these guidelines and checklists are now available "off the shelf" that could be readily modified for use in the Surrey context and provide a mechanism to promote the consideration of sustainability factors in land use and development activities as part of an overall sustainability implementation plan. Local examples include Port Coquitlam's Sustainability Checklist and New Westminster's Smart Growth Development Guidelines. The Port Coquitlam checklist has been applied as a test case to the Semiahmoo Town Centre Plan process.
- **Sustainability Indicators with Monitoring** - A number of jurisdictions have created key indicators against which to measure progress towards sustainability. The indicators are monitored regularly and often summarized in an annual report. Action Plans can then be created to identify new initiatives where shortcomings are observed in achieving established targets.

### **Sustainability Charters**

A well-proven approach for achieving sustainability is the adoption of a Sustainability Charter, which elevates the role of sustainability within an organization to that of a fundamental principle. As a charter outlines the principles, functions and organization

for a corporate entity, a Sustainability Charter outlines the principles, functions and organizational structure that a municipality would apply to achieve sustainability. The advantage of a charter is that it is not a general policy document, and it can be adapted to the specific context of an organization.

A review of Sustainability Charters shows that they vary from comprehensive documents with specific targets, action plans, budgets and monitoring plans (e.g., Sustainable Seattle, Whistler 2020, Toronto Sustainability Charter, Vancouver's "Principles for Sustainability/Cool Vancouver") to one or two page documents with high level statements of goals or aspirations (e.g., the City of Portland, the State of Queensland, Australia and the Philips Corporation) that are expected to be complied with throughout the organization.

In the municipal context, the Sustainability Charter usually applies at several levels:

- Institutionalizing sustainability practices into corporate operations;
- Adopting sustainability practices in areas under direct municipal jurisdiction (e.g., land use, development, transportation, green buildings); and
- Promoting sustainability in areas that affect the City, but are under the jurisdiction of senior levels of government or the private sector, such as provincial highways, building codes and federal/provincial infrastructure programs.

Staff resources would be required to oversee the effective implementation of a Sustainability Charter. A number of organizations have Sustainability Offices or Environmental Departments with responsibility for overseeing the application of sustainability policies and practices at all levels. Municipalities more commonly have either a small number of staff dedicated to sustainability initiatives or staff promoting sustainability in addition to other duties. Ideally, once sustainability principles become institutionalized within an organization, there is a reduced need for specialized staff and the incorporation of sustainability practices becomes as natural for staff as seeking the best value when awarding supply or services contracts.

Surrey currently has a Drainage and Environment Section in the Engineering Department, which primarily deals with aquatic habitat and drainage related environmental issues, plus there are a number of staff with expertise in sustainable planning, engineering and buildings in other City Departments. There are currently no dedicated environmental planners or staff assigned to support sustainability policies.

### **Other Initiatives Related to Sustainability**

There are a number of other related initiatives that would be reviewed in conjunction with the development of a Sustainability Charter, including:

- Partners for Climate Protection (PCP) greenhouse gas reduction strategy;
- GVRD Air Quality Bylaw updates to improve local air quality;
- Biodiversity Strategy to preserve green spaces and habitat;
- Solid and Liquid Waste Management plans;

- Integrated Stormwater Management planning;
- "Built Green" and other provincial and national energy efficiency and sustainable building initiatives such as Leadership in Energy and Environmental Design (LEED) and Community Action on Energy Efficiency (CAEE);
- Plan for Social Well-Being of Surrey Residents; and
- Surrey Economic Development Strategy.

### **Proposed Process for Developing a Sustainability Charter**

To ensure broad corporate and community support for a Sustainability Charter, and to identify the potential benefits and impacts, a three-phase process with appropriate consultation is proposed:

- **Phase I – Definition of Sustainability and Charter Scope**
  - Creation of an inter-departmental steering committee working closely with the Environmental Advisory Committee throughout the three-phase process;
  - Meetings with key stakeholders, including, among others, representatives of the development industry and external agencies, such as TransLink and the GVRD, utilities and senior governments;
  - Meetings with other City committees, including the Finance Committee, the Agricultural Advisory Committee, Parks and Community Services Committee and the Transportation Committee; and
  - Report back to Council on a proposed definition for sustainability, a recommended scope for a Sustainability Charter, a process theme (e.g., "Nature Matters"), immediate actions to promote sustainability, such as a sustainability checklist, and the resource requirements for these actions.
- **Phase II – Development of Sustainability Charter and Implementation Options**
  - Development of Sustainability Charter alternatives and identify potential implementation options;
  - Stakeholder input to solicit feedback on proposed alternatives and implementation options; and
  - Report back to Council on a proposed Sustainability Charter and implementation mechanisms.
- **Phase III – Development of Implementation Strategy**
  - Meetings with stakeholder groups and committees to develop an implementation strategy; and



- o Report back to Council on the proposed Implementation Strategy for the Sustainability Charter and the staff resources that would be required to implement the strategy.

It is proposed that the process be initiated in the fall of 2006, with a view to completing the work during 2007.

## CONCLUSION

There are concerns that urban areas will be challenged to be sustainable in the long term without effective policies and practices in place to promote sustainability.

While Surrey has a range of sustainability and environmental policies, further work should be done to ensure that guidelines and targets associated with these policies and sustainability principles are applied in City operations.

To address these issues, it is recommended that the City initiate a process to develop a Sustainability Charter and an implementation strategy in conjunction with the Environmental Advisory Committee and with appropriate consultation with the public and community stakeholder groups.

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Attachment

Appendix I - Summary of City OCP Sustainability and Environmental Policies

## City of Surrey Sustainability and Environment Policies

### Future Surrey Vision

The Future Surrey Vision, which was adopted by Council in 1995 and was the starting point for the development of the Official Community Plan (OCP), calls for the creation of a safe and environmentally sustainable city with a strong downtown, self-sufficient communities and pedestrian-oriented neighbourhoods.

### Official Community Plan (OCP)

A number of OCP sections identify policies in support sustainability and environmental protection, as listed below:

- Introduction

*"This Official Community Plan is adopted by Surrey City Council to guide land use and development over the next 5 to 20 years. It is Council's intention to achieve orderly growth for complete sustainable communities with sensitivity to the environment."*

- Build a Sustainable Local Economy - Economic Sustainability

*"The Official Community Plan is committed to the concept of a complete city. A complete city builds upon a strong and sustainable local economy, and balances it with a high quality residential environment."*

- Manage Growth for Compact Communities - Statement of Principle

*"Surrey's Official Community Plan promotes planned community development - bringing together business, residents, and City resources for policies to guide growth in a manner consistent with City and regional goals for complete and sustainable communities."*

- Balance Residential and Business Development

*"The City will promote economic development to achieve and maintain a balance between the number of City residents in the workforce and the availability of local jobs, and to achieve a sustainable ratio of residential to business components of the City property assessment and tax base that supports the provision of City-funded community facilities and services."*

- Build Energy Efficient Communities

*"The City supports energy conscious community planning and building design that makes communities more energy efficient, and supports all efforts to promote energy conservation and alternative energy sources which are environmentally friendly and sustainable."*

*Efficient use of energy resources contributes to a cleaner and more sustainable environment. The City supports energy efficiency and conservation in the planning and design of communities."*

## **Strategic Plan for Lowlands Drainage Flood Control**

The objective of the drainage study is to identify a cost-effective and sustainable drainage and flood control standard in the Serpentine-Nicomekl lowlands, and to recommend a strategy to achieve this standard.

## **Surrey Transportation Plan**

*"Be environmentally sustainable."*

### **Increase Transportation Choice - Statement of Principle**

*"The City intends to develop a transportation system to provide residents with transportation choices, that facilitate the movement of goods in methods that are efficient, safe, attractive, affordable and that minimize environmental impacts."*

### **Protect Natural Areas - Statement of Principle**

*"The City recognizes the need to maintain a clean, healthy environment and is committed to protecting and enhancing natural and environmentally sensitive areas by establishing parks, open spaces, protected habitats and conservation areas. The City's commitment to achieving a sustainable compact development pattern and complete communities will contribute towards maintaining or enhancing Surrey's environmental quality."*

### **Fraser River Estuary Management Program (FREMP)**

*"Fraser River Estuary Management Program (FREMP) is a co-operative effort among federal, provincial and local governments, to co-ordinate land use and water use decisions and to protect and enhance the environment in the Fraser River estuary. The City is a partner in developing policies with FREMP ranging from improving the environment, sustaining the quality of life in and around the estuary to improving public access to the Fraser River estuary and providing economic development opportunities."*

## **Follow Environmentally Sustainable Practices in Development**

### **Protecting the Natural Environment**

*"Conserve areas containing significant natural features (e.g. treed slopes, riparian areas) and wildlife as open space."*

### **Tree Preservation**

*"Retain significant trees native to the site and replace trees based on guidelines in the City of Surrey Tree Preservation By-law."*

### **Environmentally Sensitive Areas**

*"Maintain the City's inventory of Environmentally Sensitive Areas (ESAs) as a reference document for reviewing compatibility of developments on or adjacent to an ESA."*

### **Agency Regulations and Guidelines**

*"Consider supplementing the City's environmental policies with regulatory programs and appropriate guidelines of regional, provincial and federal agencies, co-ordinating agencies (such as the Fraser River Estuary Management Program) and commissions (such as the Fraser River Harbour Commission)."*

### **Construction Practices and Stormwater Runoff**

*"Provide adequate control of sedimentation and erosion in runoff water during construction."*

### **Maintain Natural Water Flow**

*"Attempt to maintain water quality, base flows and the natural flow pattern in any receiving watercourse to avoid flood damage and to protect aquatic biota (vegetation and wildlife) and habitats."*

### **Stormwater Runoff and Aquatic Habitats**

*"Manage the quality and quantity of stormwater runoff to help protect and enhance aquatic habitats."*

### **Quality and Integrity of Ecosystems**

*"Protect the quality and integrity of ecosystems, including air, land, water and biota (vegetation and wildlife); and, where quality and integrity have diminished, encourage restoration to healthy conditions."*

### **Environmental Advisory Committee**

*"Maintain the Environmental Advisory Committee as a public forum on environmental issues towards promoting environmental sustainability in all City initiatives."*

### **Increase Environmental Education, Awareness and Stewardship**

*"Promote an ethic of environmental stewardship in the community through civic leadership and education on ways to reduce, reuse and recycle resources, as well as lifestyles and development that will help improve environmental quality."*

### **Improve Environmental Sustainability**

### **Sustainability Principles**

*"Integrate principles of sustainability in the planning, budgeting and development process within the public and private sectors."*

## **Waste Reduction**

*"Participate in and promote cost-effective, sustainable, and publicly acceptable waste reduction initiatives and practices."*

## **Reduction of Air, Land and Water Pollution**

*"Support regional and provincial initiatives to reduce air, land and water pollution."*

## **Alternative Modes of Transportation**

*"Support the use of environmentally-friendly alternative modes of transportation and their inclusion in the development of transportation networks."*

## **Protect Natural and Environmentally Sensitive Areas**

- "Update and use the Environmentally Sensitive Areas Map for the protection of environmentally sensitive areas through the development review process.
- Support policies and directions of various government and non-government organizations to maintain high environmental standards.
- Address environmental issues, such as water quality of the Serpentine River and aquifers for ground water in consultation with the Environmental Advisory Committee.
- Build complete communities and implement compact development strategies and alternatives (e.g. cluster housing, special setbacks, density bonusing).
- Implement policies consistent with the principles outlined in guidelines produced by Federal and Provincial agencies, advisory committees and management programs.
- Work with the community to increase awareness and stewardship of the environment through such initiatives as Environmental Watch Neighbourhoods.
- Use special tools such as development permit areas, density bonus zones, and comprehensive development zones to establish effective strategies to protect natural and environmentally sensitive areas.
- Co-ordinate by-laws for protection of the environment (see Best Management Practices by the Department of Fisheries and Oceans).
- Amend the Zoning By-law to incorporate special setbacks from natural features such as creeks, ravines, bodies of water, etc.
- Apply the City of Surrey Tree Preservation By-law to discourage clearing of trees and vegetation that may disrupt seasonal nesting areas for birds or mammals."

## **Natural Linkages**

*"Preserve ravines and watercourses in their natural state, and wherever possible, link them with green spaces to develop a continuous network of the natural environment throughout and between the developed areas of the City. These networks may provide for public access where such access is not detrimental to the environment."*

## **The OCP Economic Development Scenario**

*"The 2001 OCP establishes a set of economic goals and objectives to guide planning and policies for economic development. The goals as stated in Part 2, B. Build a Sustainable Local Economy, are to:*

- *Balance Jobs and Resident Workers - Balance the number of jobs to the resident work force in the City of Surrey to provide local employment opportunities for residents and to reduce regional commuting. A ratio of 1 job per resident in the work force is desirable.*
- *Achieve a Strong and Balanced Fiscal Base - Increase business land use and development within the city to achieve a balanced assessment and revenue base to support public infrastructure, facilities and services. A tax base revenue ratio of 60% residential to 40% economic is desirable."*
- **Manage Growth for Compact and Complete Communities - Complete Urban Communities**

*"Allocate land use and development opportunities to achieve full and efficient utilization of designated Urban areas, infrastructure and public amenities, and to provide a broad range of residential, commercial, and workplace development options.*

*Promote complete development of urban areas by prioritizing development among the following growth categories:*

### *1 Infill Development of Urban Land*

*Utilizing Vacant Land - Encourage development of remaining vacant Urban land in existing neighbourhoods to achieve full utilization of currently designated lands, existing City infrastructure services and amenities.*

### *2. Development of New Urban Neighbourhoods*

*Adequate Supply of Land for Housing - Maintain an adequate supply of Urban land and housing through the planned and phased development of new Urban neighbourhoods.*

### *3. New Development Options in Existing Urban Areas*

*New Development Opportunities in Urban Area - Provide new development and redevelopment opportunities to enhance the growth capacity within the existing Urban areas and primarily within the Greater Vancouver Regional District's Growth Concentration Area."*

## **Facilitate the Development of a Strong City Centre**

*"The role of Surrey City Centre, both within Surrey and the region will be strengthened through land use designations and a land use mix that supports increased development of high density general office functions, such as corporate head offices and commercial and business services, mixed use facilities including commercial, retail and high density residential uses, and civic facilities such as libraries, museums, and cultural venues."*

**Encourage High Quality and Environmentally Responsible Development**

*"The OCP encourages businesses that contribute qualitatively to the character of the City and that operate in an environmentally sound manner."*