

energy and environment

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INTRODUCTION

A critical component of urban planning today is the management of growth and development in a manner that not only maintains and enhances the health of natural ecosystems, but also addresses key issues such as climate change and energy security, and contributes to the overall livability of the urban area. Planning efforts over the past decades have resulted in a Downtown Core Area that is compact, walkable and livable. However, the Downtown Core Area's ability to accommodate further urban intensification and population growth over the next 30 years is dependent on significant improvements to its infrastructure and overall livability, while at the same time ensuring that growth and development are managed carefully to mitigate any potential impact on the area's natural ecosystems and quality of life for residents, visitors and businesses.

ENERGY AND ENVIRONMENT – OBJECTIVES

The energy and environment policies and actions contained in this Plan collectively address the following objectives:

1. That natural systems are preserved and enhanced as the result of more environmentally sustainable land development and redevelopment, building design and transportation practices.
2. That the Rock Bay District is transformed into a key employment centre that serves as a local model for the integration of green infrastructure related to wastewater, storm water, energy generation and transmission, building design and technology.

3. That green spaces and the urban forest serve to improve the overall livability within the Downtown Core Area.

ENERGY AND ENVIRONMENT – POLICIES AND ACTIONS

LAND DEVELOPMENT

- 8.1. Continue to encourage and support higher density development in locations that are within walking distance of frequent and rapid transit corridors within the Downtown Core Area's transit network.
- 8.2. Encourage the remediation of contaminated sites to accommodate new development and to improve on-site environmental conditions overall, where possible.
- 8.3. Encourage design and development practices that optimize energy and water efficiency and reduce greenhouse gas emissions.
- 8.4. Incorporate low impact development standards such as permeable surfaces, in the design of open spaces and building setbacks to reduce storm water flow.
- 8.5. Support adaptation and re-use of existing buildings where they result in improved building performance and support the overall land use and development policies of this Plan.
- 8.6. Encourage building designs that optimize active and passive solar gain.

- 8.7. Encourage the provision and maintenance of on-site facilities for recyclables, organic materials and general waste in new multi residential, commercial and industrial developments.

TRANSPORTATION

- 8.8. Continue to support development and transportation systems that encourage alternate modes of transport.
- 8.9. Employ a range of Transportation Demand Management strategies in the Downtown Core Area.

GREEN SPACES AND URBAN FOREST

- 8.10. Incorporate storm water management and urban forest management considerations into street redesign projects.
- 8.11. Encourage on-site development to increase the provision of green spaces, natural surfaces, trees, plants and streetscaping.
- 8.12. Encourage private and public development to expand and enhance on-site open space and landscaping to address storm water run-off.
- 8.13. Ensure City zoning regulations and design guidelines include landscaping standards that reduce overall water consumption and encourage native plants and trees.
- 8.14. Increase the overall urban tree canopy cover where possible in accordance with the goals, objectives and actions of the City's Parks and Open Spaces Masterplan and the Tree Protection Bylaw.
- 8.15. Encourage projects to incorporate opportunities for urban agriculture.

ENERGY AND EMISSIONS

- 8.16. Explore methods to encourage and facilitate private and public development to include renewable district energy systems able to serve portions of the Downtown Core Area.

WATER

- 8.17. Explore methods to encourage and facilitate the retention and re-use of stormwater on site.

HARBOUR AREA

- 8.18. Explore opportunities in conjunction with waterfront public or private development to restore shoreline ecological conditions and enhance aquatic ecosystems.

ROCK BAY DISTRICT

- 8.19. Consider the use of development standards and other regulatory tools to improve the overall environmental conditions in the Rock Bay District as a component of the subsequent Rock Bay local area plan.
- 8.20. Explore the feasibility of establishing a special Development Permit Area in Rock Bay that requires a higher level of environmental performance.