

DOCKSIDE **GREEN**

Annual Sustainability Report
2008



"Dockside Green has redefined the words bold and leadership when it comes to Green Development. In this one Project, what is possible has been redefined for cities everywhere, a brilliant achievement that will change our World"

Paul Hawken, Author, the Ecology of Commerce and Natural Capitalism

A partnership between:

Vancity





Message from the Vancity CEO

Dockside Green sets an example for the world and as majority owners and a partner, Vancity is extremely proud of all this project has accomplished and continues to accomplish.

Vancity is a British Columbian, member-owned and member-operated financial institution —“members serving members”— and we will continue to deliver on the promises we have made to our credit union members and our communities surrounding this project. We believe that the breakthroughs we are making at Dockside Green will continue to inspire others and serve as points of difference for this community, despite challenging economic times.

We have much to celebrate with Dockside Green this year: the opening of Synergy, our first residential phase; achieving the world’s highest LEED® (Leadership in Energy and Environmental Design) platinum rating for a new construction project; and the launch of our breakthrough sewage treatment facility, to name a few. We have won community awards and attracted sales and interest from around the world. We have had tours of local and international groups visit our site to see what we are doing here and how they can emulate our project in their communities.

The first baby was born at Dockside Green this fall. Noah Silzer came into the world via a home birth in his parents’ suite in Synergy – happy and healthy. As I reflect on this joyous news, it is a reminder of what we are doing at Dockside Green: Building healthier communities for future generations. The innovations and inspiration being offered here will transcend tough economic times to create a legacy of which we can all be proud.

Thanks to Joe Van Belleghem and the Dockside Green team for their unfaltering commitment to sustainable development.

A handwritten signature in black ink, appearing to read 'TV', written over a horizontal line.

Tamara Vrooman, Chief Executive Officer
Vancity

¹ The Leadership in Energy and Environmental Design (LEED®) Green Building Rating System™ encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria.



*Joe Van Belleghem, CA
Partner – Three Point Properties & Windmill West
Development Manager Dockside Green
Founder Canada Green Building Council*

Welcome to our third annual sustainability report.

This year has been a milestone year for Dockside Green, one that takes us well on the way to meet our initial goal of becoming a global showcase of sustainable community design using the principles of the Triple Bottom Line approach which allow us to demonstrate that it is possible for developers to embrace ecological regeneration and social principles while also enjoying economic success.

This year saw the opening of Synergy, Dockside Green's first residential phase. Synergy achieved LEED® Platinum certification with the highest number of points ever received worldwide. With the opening of this first phase of residential dwellings Dockside Green has come alive with roughly 115 new residents representing a broad spectrum of age groups and income levels. In 2008, we also launched the innovative sewage treatment plant which is now fully operational and completed Point Ellice Park. The park includes a new beach and tidal pools and the redesigned Galloping Goose Trail. In addition, the naturalized creek which is now 60% complete, adds to the development of an esthetically pleasant and pedestrian-friendly neighbourhood. Under construction and nearly completed are our first commercial building, the biomass heat generation plant and our second residential phase, Balance.

None of our successes would have been possible without the continuing participation of our partner, Vancity, and the ongoing support of the City of Victoria and the community as a whole. Without them we would not be able to continuously set new ambitious goals for ourselves.

This year, again, we want to share with you our achievements and the areas where we will continue to improve in order to push the limit of what is achievable. This report is about accountability and improvement. We are committed, in spite of the current unstable economy, to maintain our promises to you and to remain utterly transparent in all our efforts. We believe Dockside Green will continue to provide a well-diversified community through energy and water efficiency tactics and proximity to many attractive amenities.

We are pleased to celebrate with you the success of 2008 and share our past and future challenges. Thank you to those who contribute to what Dockside Green is and will become.

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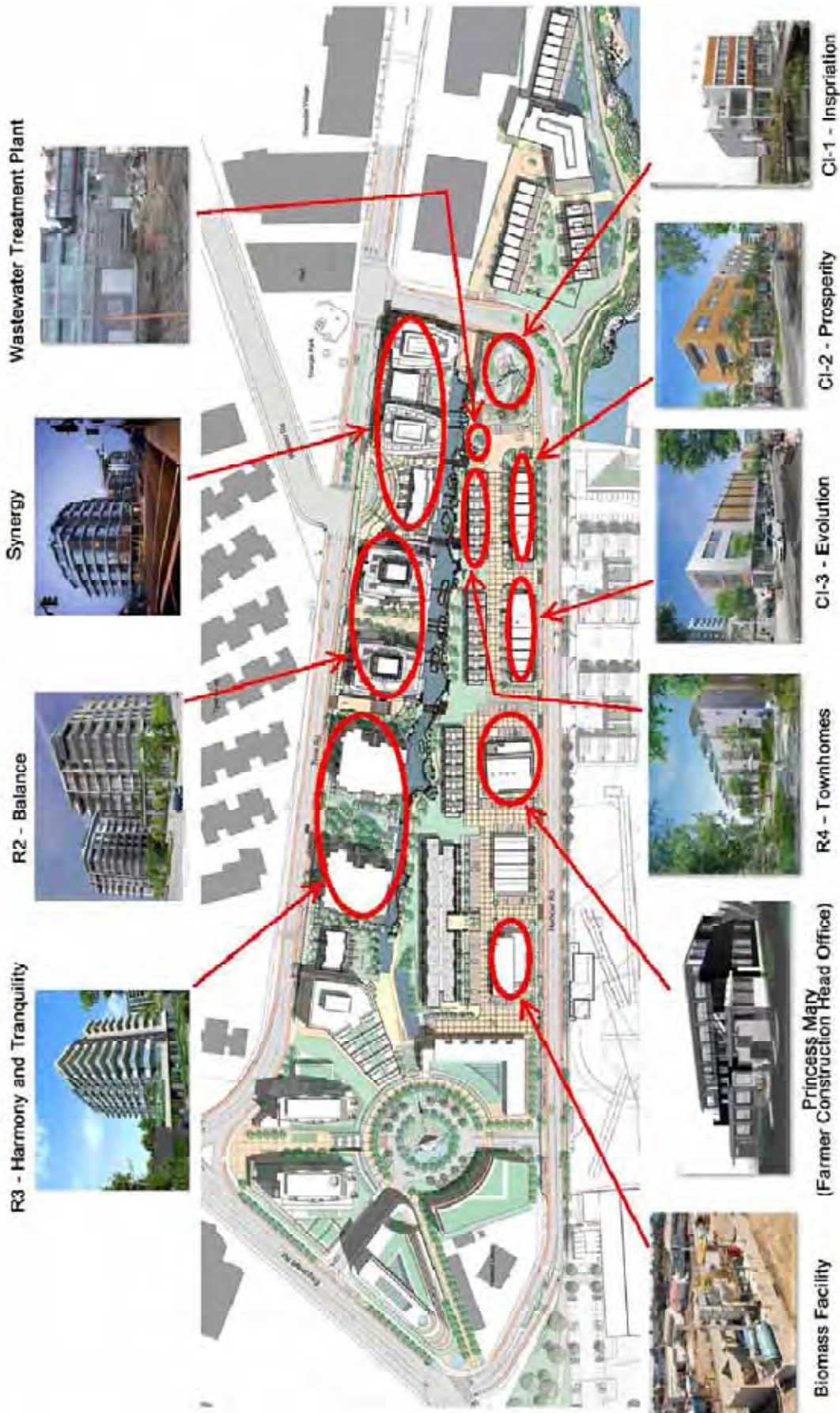
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Wastewater Treatment Plant

Synergy

R2 - Balance

R3 - Harmony and Tranquility

CI-1 - Inspiration

CI-2 - Prosperity

CI-3 - Evolution

R4 - Townhomes

Princess Mary
(Farmer Construction Head Office)

Biomass Facility

Buildings Completed or Nearing Completion:



(completed)

CI-1 – Inspiration
Office, Bakery, Coffee Shop and
Restaurant

(nearing completion)



Wastewater Treatment Plant
(completed)



Biomass Heat Generation Plant
(nearing completion)

Current Buildings under Construction or Design:



balance  DOCKSIDE GREEN

(under construction)



harmony  DOCKSIDE GREEN

(permit stage)



CI-2 Prosperity
(under construction)



CI-3 Evolution
(under design)



R4 - Townhomes
Flex Residential Space
(permit stage)



Farmer Construction Head Office
(under construction)



Greenway
(Phase I Complete)

Introduction

Dockside Green is a 1.3 million square foot mixed-use sustainable community development on a 16-acre former Brownfield site located in Victoria, British Columbia. The project is made up of residential, office, commercial and light industrial uses and is a global showcase of the Triple Bottom Line approach to development including environmental, social and economic principles.

Accordingly, this report tracks the progress that has been made to date on the stated environmental, social and economic goals including the successes, failures and challenges that have been faced.

We would like to thank acknowledge the support of the City of Victoria, the Capital Regional District, various provincial ministries, BC Hydro and the Federal Government all of whom are assisting in making our vision become a reality.

A special thank you to our staff, consultants, contractors, the many sub-trades and suppliers and to those who are on-site building the project. Without your dedication and hard work the project would not be what it is today; a global showcase of environmental, social and economic responsibility.

Vision Statement

Dockside Green will be a socially vibrant, ecologically restorative, economically sound and just community. It will be a distinct collection of beautifully designed live, work, play and rest spaces designed to enhance the health and well being of both people and ecosystems, both now and in the future.

Executive Summary

The 2008 Sustainability Report highlights the significant achievements made over the first three years of the project. We are pleased to say that the development is on track to live up to its original commitments, and that new and enhanced sustainability goals to the project have been added.

Project highlights include:

- Synergy receiving LEED® Platinum certification with 63 points, setting a new global record for the highest number of points ever achieved for a LEED® project.
- It was determined that Balance is on track to receive LEED® Platinum certification.
- The centralized biomass heat generation plant is under construction and expected to be operational in the spring of 2009. The plant will provide renewable heating to the development, resulting in Dockside Green being the first North American community development to be “greenhouse gas positive” from a building energy perspective.
- The sewage treatment plant was completed and is treating 100% of all sewage on-site.
- Treated sewage water is being used for toilets, irrigation and water features.
- Projected potable water savings are 66.5% below baseline LEED® water standards. It is estimated that 70 million gallons of water per year, at full build-out will be saved (equivalent to entire region’s water use on driest day of the year).
- A naturalized approach to storm water treatment has been designed and about 60% of the naturalized creek has been completed. The municipal storm water system will not be used.
- Meters will be used in each residential unit to measure hot and cold water, heat and electricity, ensuring that building occupants pay only for what they use and eliminating “free riders.” These meters are currently in use in Synergy.
- Building energy modeling projects 50 to 52% in energy savings compared to the Canadian Model National Building Code.
- Green roofs are showcased in Synergy and CI-1 (our first commercial building) and under construction in Balance.
- All amenities will be delivered as planned. Additional paths and view corridors have been added to the original design.
- Environmentally friendly building materials, fly ash, Triton wood and air quality techniques are being used.

- Several environmental products from Victoria, BC, and Canadian companies are being used, contributing to the promotion of a sustainable and bioregional economy.
- The remediation of the on-site park has been completed including plantings of native and adaptive species.
- The Community Liaison Group has been established and is meeting on a regular basis.
- An excellent working relationship with the Victoria West Community Association has been forged.
- A video has been produced to showcase support from Chamber of Commerce, Sierra Club and Vic West Community Association.
- A Housing Affordability Strategy was completed in 2007 and is being implemented in stages. The affordable-housing condominiums are built: nine are in Synergy (the first residential project – completed in 2008) and seventeen are in Balance (the second residential phase – completing in spring 2009). We are continuing to prepare the business plan for the rental housing project.
- A Memorandum of Understanding has been signed with the Songhees and Esquimalt First Nations. A First Nations job training program has been initiated and a First Nations art piece has been installed for public display. The First Nations training initiative is facing challenges that are being addressed.
- The Princess Mary building (formerly the Princess Mary Restaurant) has been preserved and is being redeveloped as Farmer Construction's new head office.
- Dockside Green is the first project in North America to register for LEED® ND (Neighborhood Development) certification. The LEED® ND application has been submitted and is being reviewed by the USGBC.

"The vision behind Dockside is impressive. Now that it is taking shape it becomes evident how this project will revolutionize green building and sustainable community development in North America."

Thomas Mueller, President & CEO Canada Green Building Council

Environment



LEED® Platinum Target



The built environment has a profound impact on our natural environment, economy, health, and productivity.

In the United States, buildings account for:

- 65% of electricity consumption
- 36% of energy use
- 30% of greenhouse gas emissions
- 30% of raw materials use
- 30% of waste output (136 million tons annually)
- 12% of potable water consumption

Breakthroughs in building science, technology, and operations are available to designers, builders, and owners who want to build green and maximize both economic and environmental performance.

The LEED® rating system administered by the Canada Green Building Council www.cagbc.org and United States Green Building Council www.usgbc.org is a green building rating tool that assesses the environmental impact of buildings. Under LEED®, a 70 point rating system, a building is independently audited to establish a certification level of a building performance. The system includes prerequisites and credits in five principal LEED® categories:

1. Sustainable Sites
2. Water Efficiency
3. Energy and Atmosphere
4. Materials and Resources
5. Indoor Environmental Quality

Points are earned by fulfilling the requirements laid out in each credit, the total number of points awarded in all credits and categories determines an overall rating of Platinum, Gold, Silver or Certified for a project. The points of each certification level are:

Certification Level	Points
Certified	26 to 32
Silver	33 to 38
Gold	39 to 51
Platinum	52 or more

Few projects in the world have achieved LEED® platinum and no development project in the world has made such a significant commitment for an entire project.

Our Stated Goal

Deliver LEED® Canada NC (New Construction) 1.0 Platinum Certification on buildings developed on the lands purchased from the City, and LEED® Canada NC 1.0 silver on the Princess Mary lands (lands purchased from private hands).

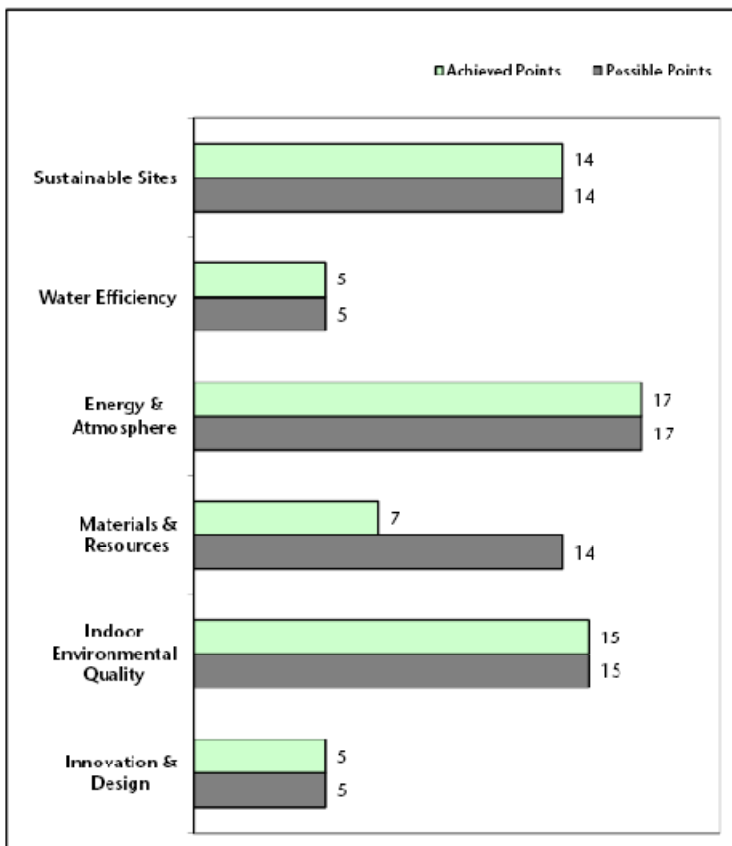
Enhanced Goal:

Achieve LEED® Canada NC 1.0 platinum certification on all buildings developed at Dockside Green that can be certified under LEED® Canada NC 1.0.

Phase I - Synergy:

Status

Synergy achieved LEED® Platinum with 63 points as follows:



synergy  DOCKSIDE GREEN

Phase II - Balance:Status

Balance is targeting the same number of points as Synergy.

**Other Buildings:**Status

The following buildings will also be pursuing LEED® Canada NC platinum:

- R3 – Harmony and Tranquility
- Princess Mary (Farmer Construction head office)

Enhanced Goal:

Achieve LEED® Platinum certification on all commercial buildings under LEED® Application Guide for Core and Shell Buildings and Lease Tenant Space.

The following buildings will be pursuing LEED® Core and Shell platinum

- CI-1 – Inspiration
- CI-2 – Prosperity
- CI-3 - Evolution

The following buildings will *not* be pursuing LEED® certification as they cannot be certified under LEED® Canada NC 1.0:

- Biomass plant and sewage treatment plant (infrastructure systems for the project)
- R4 – three-story townhome project (cannot be certified under LEED® NC)

In addition, Dockside Green is proud to be supporting its first commercial tenant, the BC Oil and Gas Commission, towards its goal of achieving LEED® Platinum under LEED® for Commercial Interior.



Greenhouse Gas Commitment: Biomass System

Climate change is increasingly becoming a major global environmental concern. Scientific evidence has concluded that significant action is required worldwide to address climate change. It is estimated that buildings are responsible for about 33% of greenhouse gas emissions.

There are many strategies that can be done in building design to reduce Greenhouse Gas emissions from the use of renewable energy, building energy efficiency design, the type of materials used, alternative transportation etc.

Green building design will become the norm as more and more green buildings are being developed in an effort to address climate change and reduce our reliance on fossil fuels. Our goal is to ensure our buildings are not outdated in the future as a result of higher energy costs.

Our Stated Goal

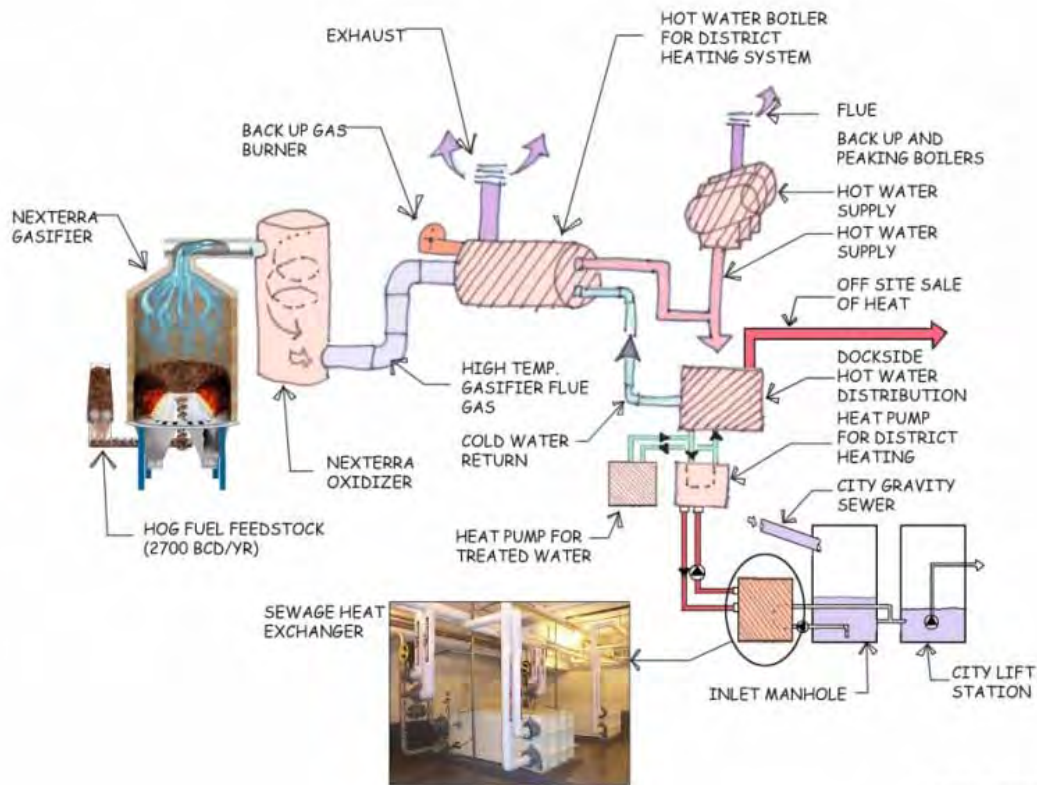
Provide a biomass co-generation facility to be "greenhouse gas neutral" from a building energy perspective, using biomass energy with the purchase of green power certificates.

Status

The centralized biomass heat generation plant is being built; we expect it to be in operation in the spring of 2009. The plant will be owned by Vancity Capital, Corix, Terasen and Windmill West. The plant will be backed up by natural gas boilers for peak loads and maintenance.

The technology is being supplied by Nexterra Systems, a BC company. The waste wood gasification process produces a gas that is burned to produce renewable hot water for buildings and domestic hot water heating. The process is smokeless, odourless and efficient and requires only 3,000 tonnes of bone dry waste wood per year.

Schematic of Biomass System



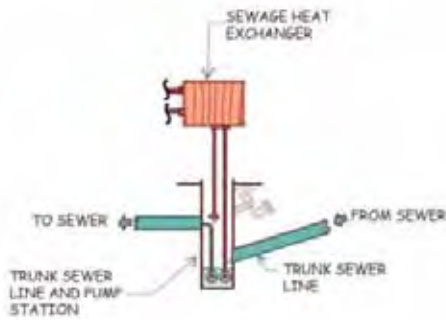
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The utility rates for biomass heat are set by the BC Utility Commission. The utility rates reflect savings from the avoidance of boiler maintenance and replacement costs and that heat delivered to the building will be 100% efficient.

One of the challenges with the economics of the plant is that it is being installed prior to the build-out of the development. This will result in significant excess heat in the early years and thus low project returns. At full build-out, the returns confirm the viability of the system for use in other applications or community developments.



The municipality provided significant support by allowing a necessary zoning application to go forward to facilitate moving the biomass plant to the Dockside lands, as well as a property tax exemption.



Research has also been done to recover heat from the city sewage trunk lines using a Canadian technology called DDI Technology. Heat can also be recovered from our sewage treatment plant. Whether these systems are implemented will depend on off-site heat sales because there will be excess heat from the biomass plant as a result of the energy efficiency of the buildings.

Greenhouse Gas (GHG) Implications

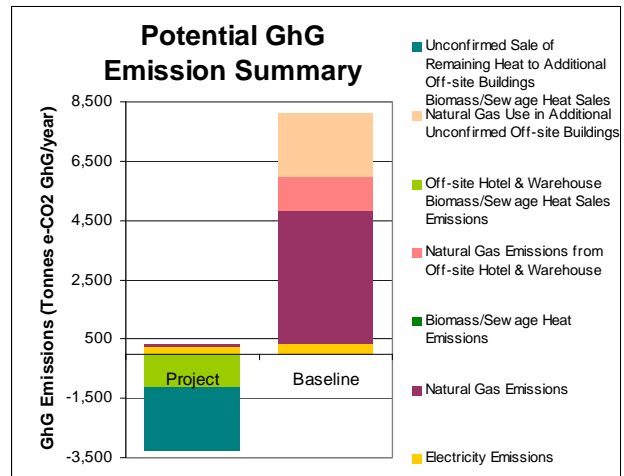
The renewable energy plant will make Dockside Green the first large community-scale development in North America to be “greenhouse gas neutral” or better from a building energy perspective.

Surplus heat is available for off-site sales to neighbouring properties, creating GHG credits to offset GHG created on-site from electricity and the delivery of waste wood to the site.

Dockside Green already has a Memorandum of Understanding with an off-site customer to displace their natural gas usage.

Dockside Green will be the first large community-scale development in North America to be GHG positive from a building energy perspective.

Summary Table of GHG		GHG (tonnes/yr)
Total Electrical Consumption		-289.0
Heat from Natural Gas to service Peak times		-6.0
GHB from delivery of biomass material		-41.0
GHG Deficit		-295.0
<hr/>		
Dockside Green Heat Production		0.0
Excess heat to Delta and city lands		1,824.0
		1,824.0
<hr/>		
Net Postive GHG		1,529.0
Potential for Other Heat Available for Sale		1,131.0
		2,660.0
<hr/>		
Total Net Positive GHG if all excess Heat Sold		2,660.0



The anticipated GHG savings from the biomass system and anticipated building energy efficiency are as follows:

GHG Emission Reduction Summary	tonne CO2 e/year
Electrical Energy Savings from Energy Efficiency in Dockside Green	95
Natural Gas Savings from Energy Efficiency in Dockside Green	2,759
Savings from Fuel Switching from Natural Gas in Energy Efficient Dockside Buildings to heating with Biomass Heat	537
Savings from Fuel Switching from Natural Gas in Off-site Delta Hotel and Warehouse to Heating with Biomass Heat	1,824
Total GHG emission reduction	5,215

*This is equivalent GHG savings to taking 870 cars off the road per year.

Location of Plant



The biomass plant has gained significant international attention and several requests for information. This, it is hoped, will lead to other installations in North America supporting a B.C. technology company.



Water Conservation

Water is the world's most valuable natural resource – and in Canada, we're lucky to be blessed with a lot of it with some 25% of the earth's freshwater. However, the cost of water treatment is rising and climate change impacts are affecting supply. Although, water is relatively cheap, it doesn't mean it's not precious and the cost of water supply is expected to significantly increase in the future.

In Canada, we use approximately 340 litres of potable water per person per day- twice the amount of Europeans. Toilet flushing alone uses the most water in buildings, accounting for approximately 4.8 billion litres per day.

At Dockside Green, all potable water that residents need for bathing, drinking, watering and washing will be provided from the regional water system. But thanks to a program of water re-use and sewage treatment, the development will be using treated water to flush toilets, for irrigation and to fill water features resulting in significantly less water use than typical developments in Victoria and whatever is leftover will not compromise the health of the environment and society.

Sewage Treatment:

Our Stated Goal

Treat 100% of all sewage on-site.

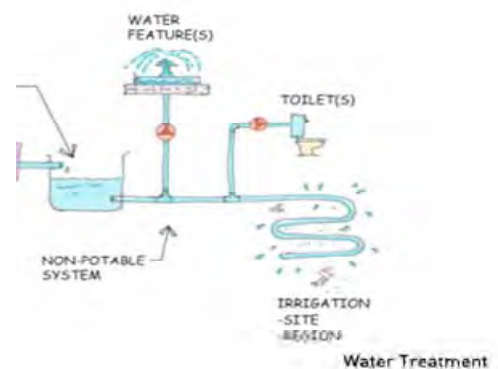
Enhanced Goal:

Use treated water from sewage treatment process to flush toilets, run irrigation and maintain the on-site creek and pond water system.

Status

The sewage treatment facility is finished and has been certified as fully operational. The sewage treatment process is manufactured by Zenon, a Canadian company (recently purchased by General Electric).

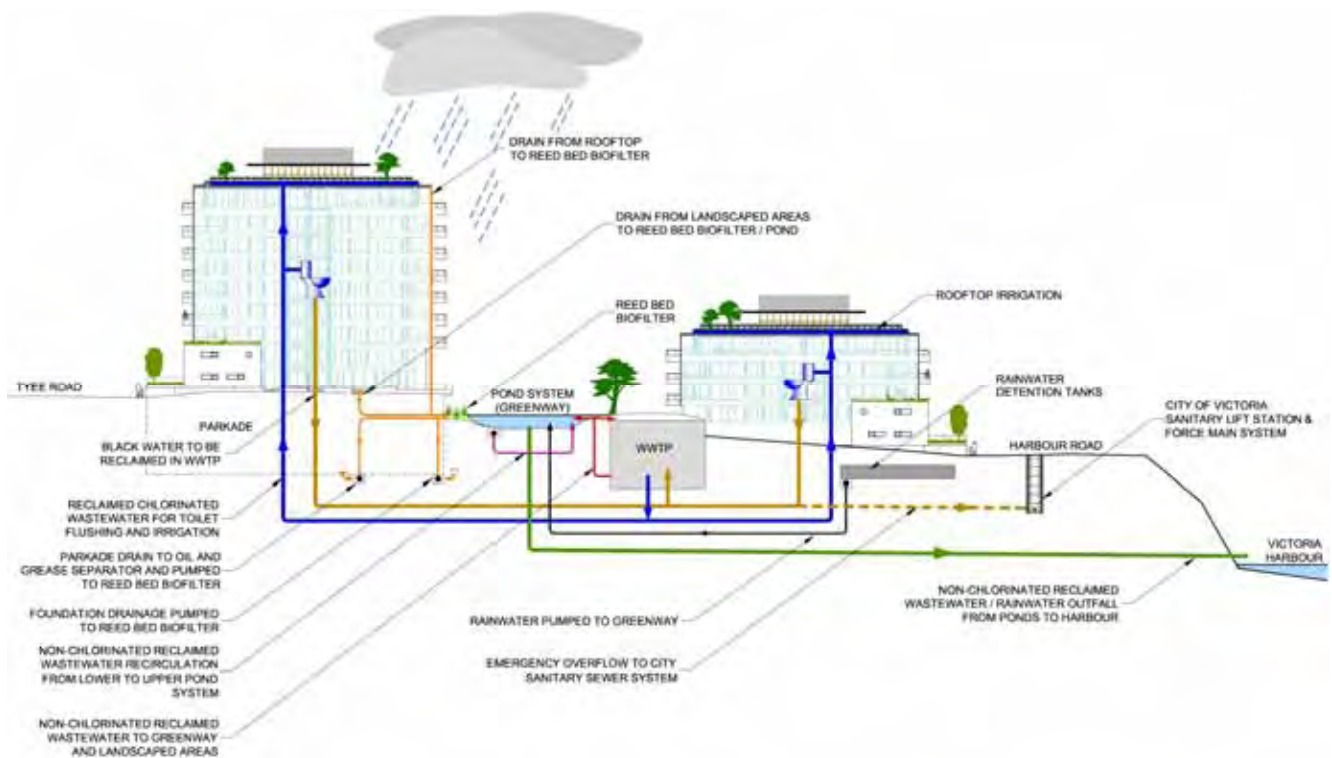
The sewage treatment plant produces water that is equivalent to the drinking water standards quality in Singapore. In the beginning stages of development at Dockside Green, the plant will process 140 cubic metres per day, or 1 litre per second of treated water.



At full build-out, treated flows from the site will equal 380 cubic metres per day (702,240 gallons in a week) – equivalent to the amount of water it takes to fill an Olympic-sized swimming pool.

The treated water will be used in all buildings for toilets, on-site irrigation and green roof garden maintenance.

It is estimated that the use of treated water will save about 30.8 million of water per year at build-out. The remaining treated water will be used to fill the naturalized greenway that will flow from the south end to the north end of the site.



The greenway's flow will be diluted with rainwater as it flows towards the discharge location in the Harbour.

Final approvals have been received from the Ministry of Environment and Capital Regional District for an operational certificate.

The plant has been operating since June 2008 to service the first building with the quality of the treated water being excellent. The plant is located under the greenway east of Synergy and Balance. Access to the plant will be off Harbour Road.





Water Efficiency – Buildings:

Our Stated Goal

Reduce potable water consumption by 60% as compared to the LEED® baseline requirements.

Status

The projected water reduction for Synergy and Balance is 67.5% with respect to the LEED® baseline requirements which **exceeds** our target. Our overall water consumption reduction, including appliances and irrigation, is anticipated to be in excess of 66.5%.

The table below compares Dockside Green’s water usage standards with those of conventional design.



Appliance	Standard	Dockside Design
Shower Heads	9.5L/minute	4.7L/minute
Lavatories	8.3L/minute	1.9L/minute
Kitchen	8.3L/minute	3.4L/minute
Toilets	6.0L	6.0/3.0 L
Urinals	1.0 G	0.0 G

In addition, water-efficient dishwashers (21.8 litres per load) and washing machines (regular cycle of 18.1–40.7 litres per load per cycle) were purchased in Synergy and will be for Balance. This will further reduce water usage on-site.

The water efficient appliances are anticipated to save approximately 39.2 million gallons of water per year at full build-out. This strategy of decreasing the water loads was an integral component in reducing the capital and operating costs of the sewage treatment plant.

The use of water efficient appliances and treated water in toilets and irrigation, combined with the potential sale of excess treated water to other developments, is projected to save approximately 70 million gallons of water per year -- an amount equivalent to the entire Capital Region's water use on the driest day of the year.

Meters were installed in each suite in Synergy and are being installed in Balance that measure hot and cold water use. The meters interface over the internet with a resident's personal computer. The hope is that with greater awareness being paid to consumption monitoring that this will result in a reduction of usage.



POTABLE WATER USAGE					
	Day	Week	Month	Year	
<i>Hot Water Usage Liters</i>	Current	3456.0	10234.0	40234.0	485678.0
	Previous	2356.0	9779.0	38567.0	789632.0
<i>Cold Water Usage Liters</i>	Current	789.0	8970.0	38759.0	412567.0
	Previous	1012.0	12987.0	48798.0	512876.0

Water Efficiency – Landscaping:

Our Stated Goal

Use no potable water for on-grade landscaping.

Status

Only treated water and rainwater will be used for landscaping. In addition, the use of native and adaptive species will significantly reduce the demand for treated water for irrigation.



Storm water Treatment:

Our Stated Goal

The development will treat its own storm water and meet the LEED® requirements by using a naturalized creek and pond system.

Status

Engineering reports have been completed and the storm water design has been completed. The storm water system is under construction.

The municipal storm system will not be used.



Dockside Green’s system uses the on-site naturalized creek and pond system, along with some underground storage to treat and control flows. The system is designed well beyond LEED® standards and can accommodate a 1-in-100-year rain event for the majority of the system and 1-in-25-year event for the balance of the system.



The design promotes integrated storm water and urban ecology features including green roofs. The plants selected in the naturalized creek and pond system (“greenway”) are native and adaptive species. The greenway will be a significant amenity and featured landscape area.



The Municipal Parks Department was concerned about the costs of maintaining a rain garden approach to “parking bulb” treatments on their roads. Dockside Green therefore agreed to install and pay for these as a pilot case for city.

In 2009, approximately 200 female crayfish eggs (each female produces 200 or more eggs) and 150 male crayfish were transferred into the greenway at Dockside.



The introduction and incorporation of these organisms into the greenway are a very environmentally friendly method of improving the quality of the water in the greenway. The crayfish will naturally clean the water by eating phytoplankton and algae.

Our initiative has attracted the interest of the *National Research Council of Canada*, which may lead to the creation of a research project to monitor the impact of this crayfish introduction to the greenway at Dockside Green. Their findings may be used to inform other efforts towards water remediation nationwide.

In addition dragon larvae and stickleback fish have been added. Flowing water is not conducive to mosquito larvae.



Energy Conservation

Although we benefit from a relatively clean source of energy, B.C.'s existing hydroelectric projects will not be enough to meet anticipated demand.

According to BC Hydro we already consume more electricity than we generate, and we buy more electricity than we sell. We have had to lean increasingly on imported electricity – not all of it clean – to meet our demands. And although British Columbians pay less for electricity than most areas in Canada, we use more energy on average.

One way to meet the challenge is through energy conservation. At Dockside Green every effort has been made to minimize energy used through the initiatives described below.

In addition, to addressing the issue of increasing demand improving energy efficiency at Dockside will result in lower operating costs for occupants and to future proof against rising energy costs in the future.

Building Energy:

Our Stated Goal

Design buildings that are 47% more energy-efficient than those designed to meet the Model National Energy Code (MNEC).

Status

Our first building phase, Synergy, is designed to surpass the stated goal. The modeled energy savings for the buildings in Synergy are 53% better than those set in the MNEC. The modeled energy savings will exceed Synergy's modeled energy results.

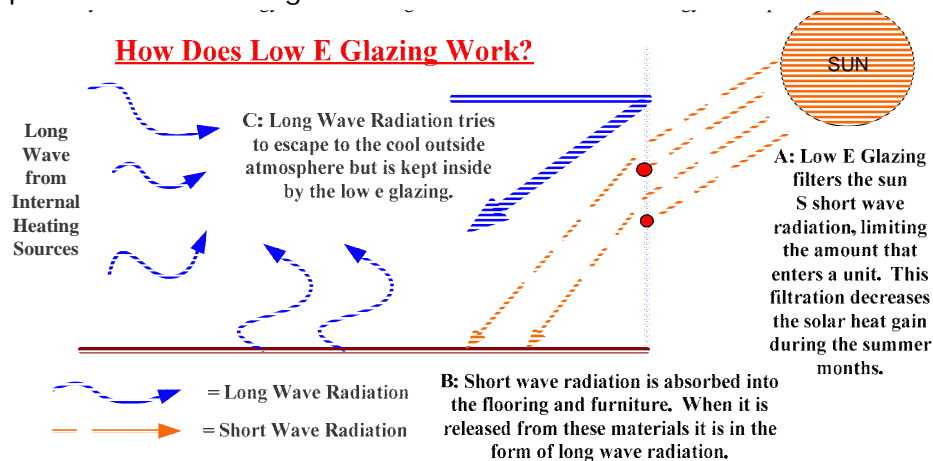


Our design strategy focuses first on passive design. This means understanding how building orientation affects energy performance and understanding that each face of the building will perform differently. Building insulation, window shading and day lighting all affect the size of mechanical systems needed and, as such, operating costs.

To address passive design, we have included a number of notable features in the design of Synergy and Balance:

- Averages of R17 wall insulation and R22 roof insulation have been used.
- Low E double-glazed windows provide a cool atmosphere in the summer and cozy, warm atmosphere in the winter. These also prohibit the escape of long-wave heat radiation that is produced by each suite's internal heat systems while at the same time prohibiting the transfer of short wave radiation produced by the sun's rays. The result will be higher indoor comfort and less energy consumption.

Most south-facing and west-facing windows are equipped with motorized exterior sun shades to provide shade during the summer months.



- LED lights are used in corridors and compact fluorescents are used in suites and common areas. These longer lasting lights save energy and maintenance costs.



- Motion sensor lighting controls will be used in closet and storage spaces to ensure lights are used only when needed.

- Heat recovery technology will capture the heat from ventilated air being exhausted to pre-warm incoming heat.

- A four-pipe fan coil system has been provided. Two of the pipes are used for the domestic hot water and cold water supply system (Thermal Comfort Solution). This will provide some free cooling to the retail spaces.

Energy – Measuring Performance:
Our Stated Goal (**Enhanced Goal**)
Provide meters to individual suites.

Status

Each residential suite in Synergy and Balance either has already or will be equipped with meters to measure cold water, hot water, heat and electrical consumption. The technology is provided by Reliable Controls, a Victoria company.



Using less energy by voluntarily modifying one’s behavior is seen as virtuous in a world where sustainable energy sources are scarce. Turning lights off, running appliances less frequently – these are examples of personal choices.

While not mandating this in any way, Dockside Green did wish to support these choices. That’s why individual controls have been provided in each suite to measure water, heating and electrical use. Studies have shown that when individuals are given the ability to monitor their own water and energy use, they traditionally use up to 20% less than those who don’t have access to a monitoring system. Other building science reports indicate that 30% of a residential building’s occupants use 70% of the energy. Even if the meters don’t result in substantial net reductions, at least people

will be paying their own way – an important first step towards sustainable consumption.



The technology used at Dockside interfaces over the internet with a personal computer. Residential and commercial users can determine how much cold and hot water, electricity and heat they use compared with that of previous days, months or years.

Furthermore, heat settings can be controlled remotely anywhere in the world where there is an internet connection. Heating can also be pre-programmed for a day or a holiday period.

BC Hydro’s new metering program may alter the use of these meters going forward, ultimately depending on the meter chosen by BC Hydro and the ability to interface with Reliable Controls meter system.

Energy – Energy Efficient Appliances:Our Stated Goal

Provide Energy Star® rated appliances.

Status

Every appliance at Dockside Green will be Energy Star® rated.



In fact, we have achieved **higher** performance over the base Energy Star® rating for certain appliances. For instance, front-loading clothes washers and dryers have been selected, which use less energy. These washers use the equivalent of less than a water cooler jug amount of water per every two loads.

As well, condensing dryers use less energy and are quieter and easier on clothes, protecting them from over-drying and damage due to imbalance in moisture and temperature levels.

Energy use of appliances being installed in Synergy

Appliance	Standard	Dockside Green Ph1
Dishwasher	623 kWh/year/appliance	377 kWh/year/appliance
Refrigerator	527 kWh/year/appliance	476 kWh/year/appliance
Stove/Range	750 kWh/year/appliance	545 kWh/year/appliance
Clothes Washer	876 kWh/year/appliance	145 kWh/year/appliance
Clothes Dryer	909 kWh/year/appliance	340 kWh/year/appliance
Total per Suite	3,685 kWh/year/appliance	1,883 kWh/year/appliance

**Energy –Commissioning:**Our Stated Goal

Independently commission each building to review building systems to ensure they are installed correctly and working properly

Status

We have hired an independent commissioning agent for all buildings under construction or design. The commissioning agent reviews design intent and construction drawings and tests them upon building completion to ensure the systems work properly.

Commissioning has proven to be worthwhile as it identified problems that would traditionally go undetected in buildings, allowing the problems to be addressed.

In addition, we have signed a re-commissioning contract to have the commissioning agents return to the buildings to check the systems within two years of the opening of the buildings.

Studies show that commissioning and verification can improve building efficiency and performance by 5 - 15%.

Renewable Energy:

Our Stated Goal

Demonstrate various renewable energy systems and environmental techniques at Dockside Green.



Status



We will be using various examples of photovoltaics and solar hot water products on-site as demonstrations of these technologies, such as the integrated photovoltaic shading strategy used on CI-1.

We will also be using Carmanah Technologies' street traffic signals and bus shelter photovoltaic lighting products the harbour ferry shelter.



Wind turbines and photovoltaic technology are installed on the CI-1 building and in Point Ellice Park.



A solar compactor using photovoltaic technology has been installed on-site.

Elimination of CFC, Halons and Ozone Protection:Our Stated Goal

Avoid the use of CFCs (chlorofluorocarbons) and halons.

Status

The development team has selected refrigeration units, HVAC systems and fire suppressants that do not contain halons.

Both these agents and CFCs are harmful to the atmosphere and increase the rate of ozone depletion.



Sustainable Sites & Urban Ecology

Through proper site selection and attention to the impact construction that activity can have on local ecology developers can reduce impacts on previously undeveloped site and improve previously contaminated site as is the case at Dockside Green.

Every effort have been made through site selection, planning, landscaping and design strategies to use land more effectively, minimize construction and operational impacts and improve the site ecology. In addition by selecting a site close to the downtown core and to a large number of amenities and by providing a comprehensive transportation strategy the need for private transportation is also minimized.

Green Roofs:Our Stated Goal

Install green roofs.

Status

Synergy, Balance, Harmony and CI-1 all include green roofs. Green roofs reduce the heat island effect of urban settings while promoting urban ecology.

Balance



Synergy





Lower green terraces

The new office building (CI-1) has a roof design with sand, oyster shells, trees and green roof to blend into the shoreline.



(Recently planted)

Use of Vertical Green Wall elements:

New Goal

Introduce a vertical green wall element in the project.

Status

Balance is designed to have vertical green walls (or "living walls"). The green wall is visually pleasing, offers environmental benefits and integrates horizontal and vertical elements of ecology into building design.



Use of Native and Adaptive Species:

Our Stated Goal

Use only native and adaptive species in landscaping.

Status

All building landscape plans include only native and adaptive species. This approach will continue throughout the development.



Tree Planting and Site Landscaping:

Our Stated Goal

Plant 1,000 trees throughout the development.

Status

Native or adaptive trees will be planted in strategic positions throughout the site to reinforce the West Coast character of the project, provide shade from the sun in summer and wind breaks in winter, and attract birds. The trees planted (Synergy 60; Balance 81, CI-1 and CI-2 26) range from very small Japanese maples and Pacific crabapples to full-size canopy trees and berry trees. In addition, 47 trees will have

been planted along the greenway, 137 trees in Point Ellice Park and 7 trees on Esquimalt Road.

In total, the planting of 358 trees has already been committed to, and it is expected the 1,000 tree goal will be exceeded.



There is also one significant tree that was on-site prior to construction that will remain protected.

Integrated Pest Management Plan:

Our Stated Goal

Develop and implement an integrated pest management plan.

Status

Our integrated pest management plan was completed and approved by the Municipality.

Erosion and Sedimentation Control:

Our Stated Goal

Follow an erosion and sedimentation plan and during construction.

Status

An overall site erosion and sedimentation control plan has been developed by Komex International Environmental and Water Resource Engineering and Aqua-tex Consulting.

This plan conforms to the required standards and is now being implemented on-site. Monthly documentation of the various techniques used is published in construction submission binders prepared by Farmer Construction.

Rehabilitate Point Ellice Park Shoreline:

Our Stated Goal

Rehabilitate the shoreline along Point Ellice Park.

Status

The Park design was developed with input from a broad range of community members and other potential stakeholders, such as the Garry Oak Ecosystem Recovery Team, the Urban Agriculture Group, Natural Resources Canada and the City Environment and Shoreline Committee.

The park is now finalized and signage will be erected to showcase the various features.



A total of 137 trees have been planted in the park including 50 oaks, arbutus and pine.

The project is also part of the Green Shore Initiative and is being used as a case example by that group (www.greenshores.ca). Green Shore is an initiative of the Stewardship Centre of BC to develop tools for sustainable coastal design and development, including a rating and certification system for coastal development projects.

The plan also includes a new sand beach and tidal pool and all native adaptive plant species.

A new pedestrian pathway has been constructed.

The type of material to be used on the walkway was up for debate, Dockside Green and the Vic West Community Association both preferred compacted gravel paths rather than asphalt for environmental and aesthetic reasons. The municipality felt the path should be paved to avoid gravel being tracked off-site as experienced in other developments as such asphalt was used.

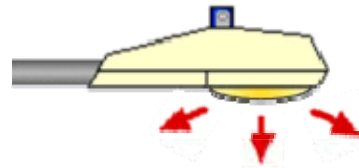


Light Pollution:Our Stated Goal

Create no light pollution.

Status

All buildings are designed to ensure that only full "cut-off" light fixtures are used.

**Alternative Transportation Strategies:**Our Stated Goal

Commit to the following:

- a 5-minute walk to downtown
- the purchase of 10 Smart Cars or electric vehicles for a car share program
- upgrade of the Galloping Goose Trail
- purchasing a mini-transit bus
- contribute a dollar amount to provide for the 75 affordable-housing units, bicycles, car share and transit subsidization
- build a dock facility for the Harbour Ferries
- sell residential parking stalls separately from residential units
- provide bike storage for residential and commercial space (and include showers in commercial buildings)
- provide car co-op stalls for commercial spaces
- work with BC Transit to add additional bus routes

Status

The following is an update of strategies to date:

- One Smart car has been leased for the car share program. Car share stalls have been located in both Synergy and Balance. An agreement has been reached with the Victoria Car Share Co-op to manage the program for Dockside Green. The program has been in place since March 2008.
- The upgrade design of the Galloping Goose Trail has been completed through the park and the safe interface between the bike trail and Harbour Road will be built shortly.





- The construction of the dock facility has been completed and Harbour Ferry service has commenced.

- A meeting took place to see if BC Transit would operate the mini-transit bus at Docksider Green Limited. BC Transit was not interested. Docksider Green will purchase the bus in accordance with the timing set out in the Master Development Agreement.

- Customized bike racks with have been installed.

- The 75 affordable-housing units will be provided with a dollar subsidization by Docksider Green for bikes, transit and car share memberships.

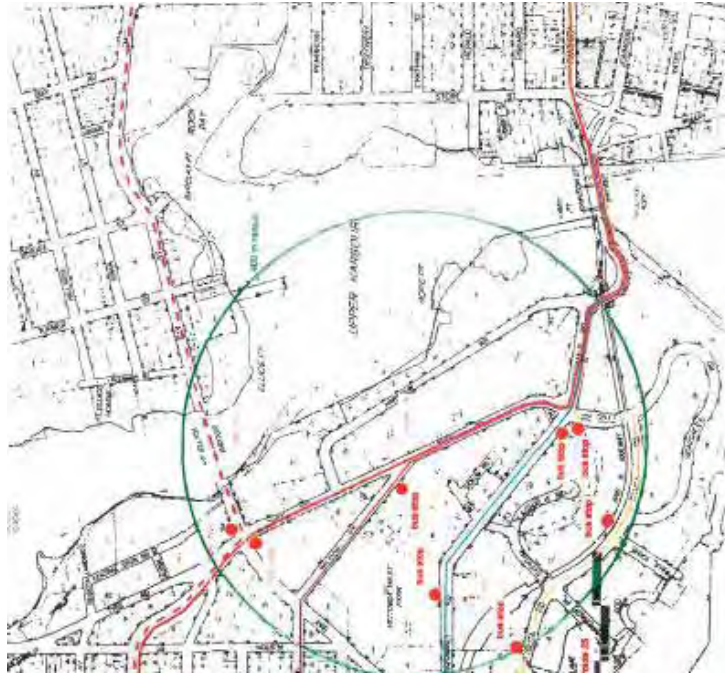


- A dedicated car share stall has been provided for the commercial spaces in Synergy.

- In Synergy, Balance and Harmony, 99, 171 and 381 (respectively) individual secure bicycle lockers are being provided in the underground parking for the safe storage of residents' bicycles. A shower is also being installed for the retail users in Synergy. As well, 18 on-grade bike stalls will be set up for Synergy and Balance and 14 for the CI-1 and CI-2 buildings.

- Discussions have taken place with BC Transit to add bus routes to Docksider Green. Currently, the #6 bus on Esquimalt Road makes 209 stops per day and the #14 bus on Bay Street makes 145 stops per day.

- Residential purchasers have been given the option to reduce the purchase price of their suite if they do not want a parking stall.



Remediation:

Our Stated Goal

Dockside Green will carry out the site remediation in accordance with the Ministry of Environment approvals; including ensuring buildings in risk-assessed areas have proper vapour barriers and controls.



Status

The Approval in Principle (AIP) by the Ministry of Environment was received. Under the requirements of the AIP, Dockside Green completed the removal of hazardous and contaminated materials from the site and Certificates of Compliance have been received on all parcels except lot 4 which should be secured shortly.

Hazardous waste materials were taken off-site to the Quantum Environmental facility in Princeton, BC, where they were put through a process called Thermal ReSorbtion. In this process, the materials are heated and dried in a kiln to a temperature that turns the contaminants in the soils into a gas. This gas is then pushed through a reactor and incinerated. The leftover "clean soil" is then tested to confirm it meets environmental standards. Once it has been approved, the soils are mixed with bio-solids and sent to the reclamation project at the Sunoco Copper mine. No contaminated soil was shipped by Dockside Green to the Cowichan Valley.



Human Health & Wellbeing

According to the Canada Green Building Council, Canadians spend an average of 90% of their time indoors. The environmental movement has long been effective in focusing attention on the quality of air outside, but not in focusing on air quality inside.

In fact, however, levels of pollutants can be 2-5 times higher indoors than outside (and sometimes much higher).

The causes of indoor air pollution vary. The culprits tend to be ineffective or inadequate ventilation and the off-gassing of resins, adhesives, paints and other synthetic and organic polymers used to coat, seal or manufacture numerous household furnishings and products.

Dockside Green is taking many steps to contribute to a healthier interior building environment:

100% Fresh Air into each Suite:

Our Stated Goal

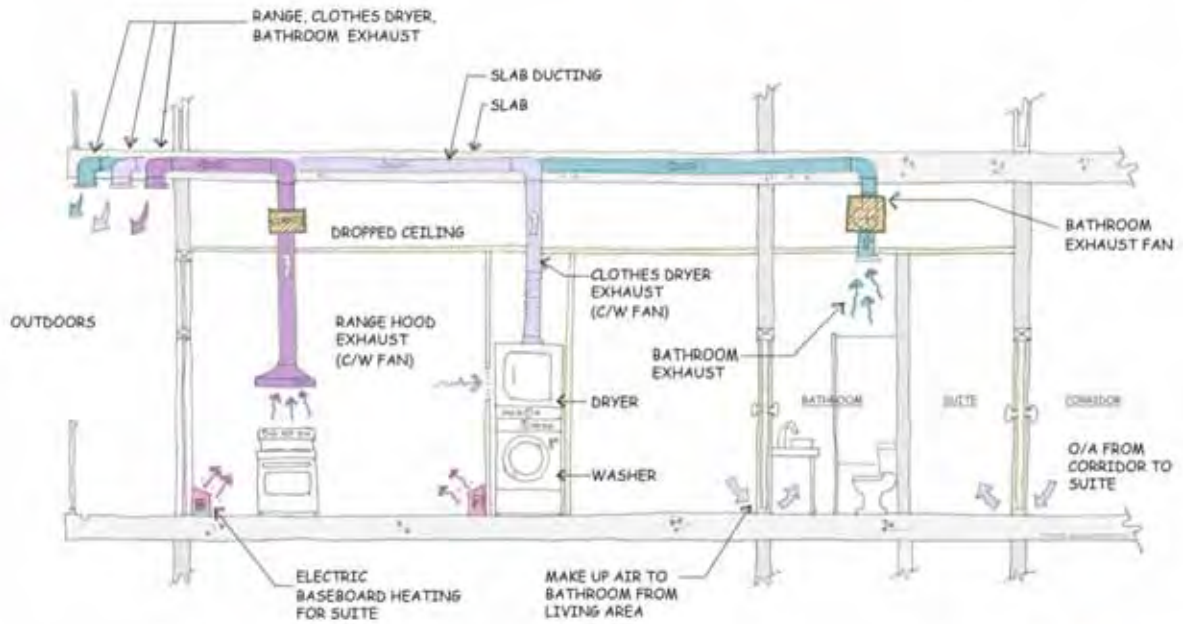
Provide 100% fresh air to residential suites.

Status

A typical condominium design provides outdoor air to a suite by pressuring the corridors in the hope that air will move from the corridors under the doors and into individual suites. This is an extremely poor strategy and not allowed in certain parts of North America.

In Synergy and Balance, a central heat recovery ventilation system or an individual heat recovery system is being installed, which will provide 100% fresh air directly into each residential suite. These heat recovery ventilation systems pump fresh, filtered air directly into each suite and recover heat in the exhausted air to help warm the incoming air.

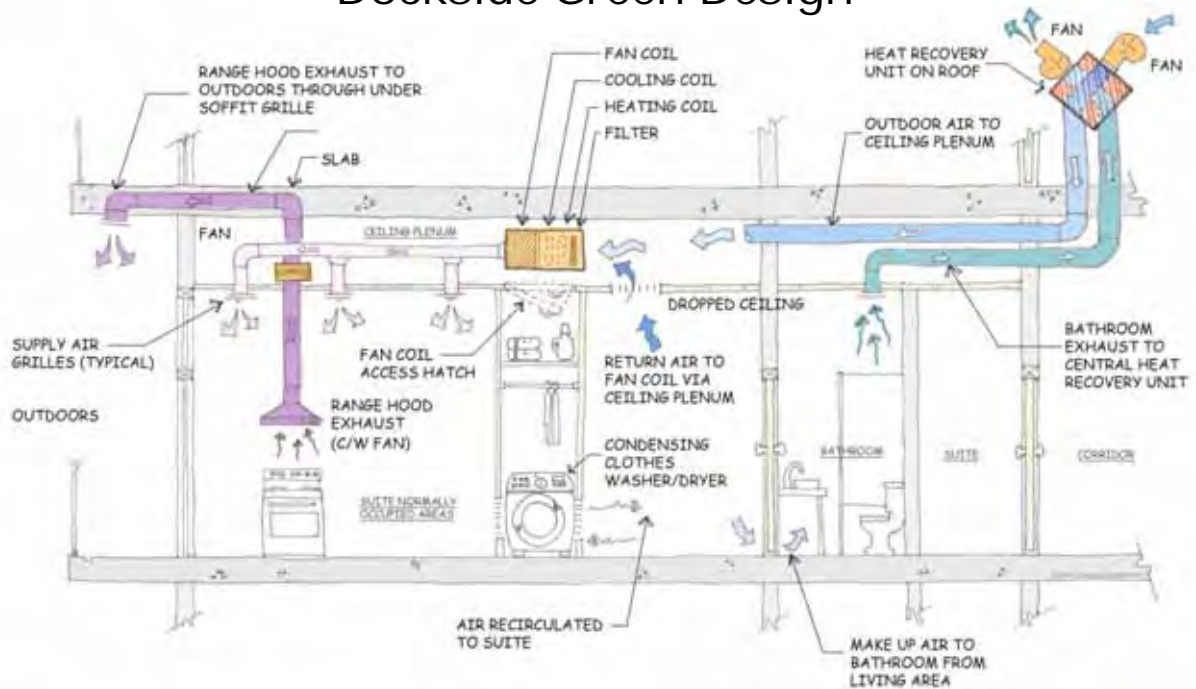
Typical Traditional Design



CONVENTIONAL SUITE



Dockside Green Design



TYPICAL SUITE AIR DISTRIBUTION



Materials -Low or No Emitting Materials Paints, Sealants and Adhesives:Our Stated Goal

Meet the LEED® requirements for providing low or no volatile organic compound (VOCs) in paints, sealants and adhesives.

Status

Building specifications under construction require that paints, sealants and adhesives meet strict low-emitting standards for VOCs.

Materials- Non-Urea Formaldehyde Composite Wood Products:Our Stated Goal

Avoid using urea formaldehyde composite wood products.

Status

All buildings under construction require wheat board as substrates in residential cabinets and the use of non-urea formaldehyde medium-density fiberboard to replace urea formaldehyde medium-density fiberboard.

Materials - Low emitting carpets:Our Stated Goal

Ensure all carpets meet the Carpet and Rug Institute's Green Label Indoor Air Quality Test Program.

Status

Synergy and Balance building specifications mandate that carpets must meet the Carpet and Rug Institute's Green Label program.

Indoor Chemical & Pollutant Source Control:Our Stated Goal

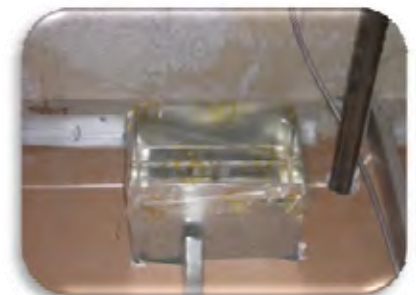
Install permanent systems at all high-volume entryways (such as grills and grates) to capture dirt and particulates and to prevent them from being tracked into buildings.

Status

Buildings under construction require permanent entryway chemical and pollutant control systems.

Construction Indoor Air Quality Management Plans – during construction:Our Stated Goal

Follow the LEED® requirements for instituting and following an Indoor Air Quality Plan during construction.

Status

An Indoor Air Quality Plan has been prepared for all buildings under construction and is being followed. This includes protecting installed absorptive materials from moisture damage.

Construction Indoor Air Quality Management Plan – testing before occupancy: Our Stated Goal

Follow the LEED® requirements for testing an Indoor Air Quality plan before occupancy

Status

To ensure good indoor air quality in all suites, a contract has been created let to measure the following in Synergy and Balance:

Contaminant	Maximum Concentration
Particulate Matter (PM10)	50 ug/m3
Formaldehyde	50 parts per billion
Total Volatile Organic Compounds	500 ug/m3
Carbon Monoxide	9 PPM and no greater than 2 PPM above outdoors
4- Phenylcyclohexene	6.5 ug/m3

The IAQ test performed in ten units at Synergy all units are well within the allowable limits as demonstrated in the following table:

Contaminant	Maximum Concentration	Average Test Results for Synergy
Particulate Matter (PM10)	50 ug/m3	26.9 ug/m3
Formaldehyde	50 parts per billion	26 ppb
Total Volatile Organic Compounds	500 ug/m3	309 ug/m3
Carbon Monoxide	9 PPM and no greater than 2 PPM above outdoors	1.8 ug/m3
4- Phenylcyclohexene	6.5 ug/m3	< 1 ug/m3

Each suite will be sampled to ensure good indoor air quality.

Indoor Cleaning Products:

Our Stated Goal

Promote the use of eco-friendly cleaning products.

Status

A Green Housekeeping Plan has been prepared and a six-month supply of environmentally friendly cleaning products is being provided to each resident and business.

Smoking:

Our Stated Goal

Meet the LEED® requirements for avoiding tobacco smoke in the building.

Status

Smoking has been banned in common areas in the residential building. Construction details provide for sealed doorways to help ensure that unwanted odours and contaminants do not migrate from one suite to another.

Testing the effectiveness of sealing was done on Synergy during construction, which identified problem areas that required remedial action.

This remedial action was undertaken and subsequent tests have shown compliance.

This testing and associated performance requirement, which is a prerequisite to achieve LEED® certification, was problematic for multi-unit residential buildings. Dockside Green in collaboration with its design and construction team worked with the Canada Green Building Council to develop an acceptable procedure and implement the procedure through a detailed Environmental Tobacco Smoke Control design and construction plan.

In addition, smoking will be prohibited within 7.5 metres of all commercial building's doorways, windows and air intakes.

Controllability of Systems:

Our Stated Goal

Meet LEED® requirements governing the installation of operable windows and lighting control zones.

Status

In Synergy, Balance and the CI-1 building, the drawings meet the LEED® requirements for operable windows and lighting controls.

Thermal Comfort:

Our Stated Goal

Comply with ASHRAE 55-2004 requirements to meet thermal comfort conditions for human occupancy and provide monitoring systems for temperature control.

Status

In Synergy, Balance and the CI-1 building, the drawings meet the requirements.

A four-pipe fan coil system is provided and residents have 100% fresh air systems and the means to control air flow and temperature individually.

Noise Mitigation Strategies:

Our Stated Goal

Ensure residential space does not exceed the following noise levels:

	Noise levels (decibels)
Bedrooms	35
Living, Dining	40
Kitchen, Bathrooms, Hallways	45

Status

According to the Synergy building permit, all residential spaces comply with the stated noise level maximums. Other noise abatement reduction strategies have also been used (e.g., installation of acoustic underlay, sound insulation)



Materials and Resources

Buildings are major repositories for a wide variety of manufactured products. Building materials have an impact on the environment all the way through its extraction, processing and transportation steps and eventual disposal.

During their entire life cycle they will contribute to air and water pollution, destruction of habitats and depletion of natural resources. According to the Canadian Green Building Council, the construction industry consumes approximately 40% of the global material flow and generates about 33% of the North American solid waste stream. That is why buildings have a significant “upstream” impact on demand for global natural resources and a significant “downstream” impact on land use (as a result of the need for safe disposal in landfills).

To minimize Dockside Green’s building eco-footprint, the plan is for each building to use recycled content, sustainably harvested materials and rapidly renewable resources. At the same time, construction and household waste are to be minimized.



Recycling Facilities:

Our Stated Goal

Include recycling rooms in all buildings.

Status

In accordance with LEED® certification, a recycling space has been provided in all buildings under construction. Residential buildings also include a carbon filter organics collector for each residential suite. Recycling bins were originally going to be provided under kitchen counters but, after reviewing the experiences in other projects, decided that an organic collection was a better approach.



Environmentally Friendly Products – Rapidly Renewable Products:

Our Stated Goal

Use rapidly renewable natural materials.

Status

The following products have been used:

- Bamboo flooring and cabinet doors. Bamboo is a fast-growing grass and is being sourced for Synergy and Balance from locations where it is being sustainably harvested every three to six years.
- Wheat board substrates in cabinets
- Wool carpets (used as an upgrade feature)
- Cork flooring and paneling in lobby areas. Cork flooring is made from the bark of the cork tree and is thus rapidly renewable.



Environmentally Friendly Products – Recycled Content:

Our Stated Goal

Use environmentally friendly products with recycled content.



Status

The following products have been used:

- Fly ash: The manufacture of each tonne of Portland cement results in the production of .87 tonnes of CO₂. Globally, 3% of greenhouse gas emissions and 5% of total CO₂ emissions are attributed to cement production. EcoSmart Concrete, a national non-profit research and advocacy group, worked with Dockside Green to optimize the use of fly ash, a byproduct of coal-fired power generation and cement production.
- Adding fly ash to concrete reduces the overall amount of Portland cement needed. The 35–40% fly-ash content in our cement reduces the CO₂ level emitted and strengthens the concrete
- Interface carpet tile: Approximately 1,000 square metres of Interface carpet tile is being used in corridors, lobbies and common areas. The tile is Interface's revolutionary 'Cool Carpet' which – thanks to the incorporation of recyclable materials, energy efficient manufacturing and use of alternative fuel sources – is a greenhouse gas neutral product. According to Interface Carpets Inc., the manufacturer of 'Cool Carpet', the Dockside Green community will save 14 metric tonnes of greenhouse gases by using the modular 'Cool Carpet'. Although the product is more expensive than rolled carpet, money is saved in the long-term. Worn or stained sections can be replaced by removing only the single tile instead of the whole roll as would be done with a traditional carpet. Carpets are one of the single largest components of North America's landfills. By using modular carpeting, the Dockside strata corporations will be able to maintain new-looking carpets without having to replace entire floor areas.
- Rebar with recycled steel
- Aluminum windows and railings with recycled content.
- Terrazzo with post-customer recycled glass.
- Recovered concrete crushed and used on-site.
- Cork flooring, in the lobbies of Synergy, made from the materials left over from wine cork production.



Construction Waste Management:

Our Stated Goal

Divert 75% of construction waste from landfill.



Status

Farmer Construction has prepared a construction waste management plan. The plan will be implemented for each phase of the project. Already 95% of Synergy's waste has been diverted from the landfill site, well **exceeding our goal**. Every month, a

contractor's report is submitted outlining the various steps that were taken to manage the waste materials and resources used and disposed of on-site.

Environmentally Friendly Products – Sustainable Wood:

Our Stated Goal

Use sustainable wood products.

Status

Wood is one the best sustainable building materials in the world.



Certain logging practices have had significant negative impacts on ecosystems, fish stocks and biodiversity. Some solutions are to use Forest Stewardship Council certified wood (wood harvested from sustainable forests), reclaimed wood, forgotten wood or other sources of wood from using sustainable harvesting strategies.

Dockside Green has gone to great lengths (and great depths) to find the most sustainable materials for the community. Thanks to a revolutionary underwater harvesting technology, which uses guided submersible tree fellers, we are able to use wood products from preserved trees submerged behind BC's large hydro-electric dams.

The technology is that of Triton Logging, a Victoria company. Triton is the world leader in underwater logging and a growing player in the environmentally certified wood industry. Using its patented Sawfish™ technology, Triton harvests standing forests flooded by hydro reservoirs. With 45,000 major dam reservoirs around the world containing an estimated 300 million trees, submerged forests represent a significant source of non-living timber that can be used for a wide variety of industrial and consumer applications. The Synergy townhouses incorporated Triton wood products.

Environmentally Friendly Products – Cement:

New Goal

Work with the Cement Association of Canada to maximize the sustainability of one of the principal materials used in the project and document the various innovation environment strategies with respect to the use of cement.



Cement Association of Canada
Association Canadienne du Ciment

Status

Concrete has many positive attributes, from durability to design flexibility and sound proofing.

Buildings made of concrete tend to last longer and can be easily altered into alternative building uses if the architectural design is done appropriately upfront. For example, Canada's first LEED® gold project, the Vancouver Island Technology Park, involved the conversion of an old concrete mental health institution into a high-tech park for some of Victoria's leading high-tech companies. The reuse of these old buildings saved significant dollars and provided an effective greenhouse gas strategy by maintaining all the embodied energy in the retained structure.

Strategies being used at Dockside Green:

- The thermal mass of concrete contributes to the building's energy efficiency.
- The condominium towers are constructed with a durable steel-reinforced, solid concrete structure of floor slabs, columns, sheer walls and roofs. Benefits included structural strength, noise reduction strategies, durability and adaptability. Durability results in longer lasting structures, reducing waste and maintenance costs over the life of the structure.
- Each mix incorporates industrial byproducts such as fly ash (a byproduct of coal-fired power generation and cement production), which is being used at a rate of 35–40% to replace cement. This reduces CO₂ levels emitted during production of cement while using a waste product and strengthening the concrete

This technique is recognized in LEED® as a desired strategy and contributes to our LEED® platinum target.

- Fly ash was used in the construction of the sewage treatment plant. This resulted in a mix that had a high degree of crack resistance and water tightness thereby eliminating the use of chemical additives and saved about \$40,000.
- We undertook a soil stabilization process using cement to "improve" the bearing capacity of inadequate soil conditions on which the biomass plant is being located by drying the soils and binding them, thereby providing increased capabilities avoiding unnecessary and expensive improvements such as floating, raft-slabs, piles or caissons.
- A cement-based solidification/stabilization process was also used to treat 10 tonnes of lead contaminated soil using Portland cement incorporated into the soil. The result achieved by an environmental consultant was non-hazardous soil. This strategy is now being promoted across Canada.
- Insulated concrete forms and a floor system were used to construct three townhouses on-site to showcase the benefits of the system.
- Any waste concrete from the site goes back to Ocean Cement's yard to be used to make lock blocks. The use of concrete tends to be mean less construction waste.



- Old concrete can be reused. At the Dockside site, we found several abandoned slabs buried. These were crushed and used for the road base and other building purposes.
- Concrete panels with recycled glass are being used for elevator lobbies.
- Concrete does not promote mould growth and can be easily cleaned.

Building Moisture Protection:

Our Stated Goal

Engage a building envelope specialist for moisture protection.

Status

Buildings under construction and design have rain screens to protect residents from unwanted moisture intrusion during wet winters. This investment aids in maintaining the dryness of the building.



Reuse Buildings on-site:

New Goal

Preserve existing buildings on the site.

Status

The site had two pre-existing structures. One was a concrete block building formerly used by Whitehall Industries. The other was the Princess Mary building, a former restaurant.

The one-storey Whitehall building was determined to have no economic or structural value and to be hindering future development that would have higher density. In addition, there was little embodied energy in the building. Waste materials from the building are to be recycled as much as possible.

The Princess Mary building consisted of three structures: the stern of the old Princess Mary vessel, a Russian freighter and a two-story wood structure.



Various groups put much effort into trying to salvage the old stern, but in the end we agreed to do it and provide it at no cost to the former owner of the vessel.

After discussions with Farmer Construction over what to do with the rest of the structure, they undertook a due diligence review of the building and then proposed to salvage the building and move their head office into it on-site. This was exciting news for the project to have our contractor move to Dockside Green. During the Canadian Construction Association, national conference held in Victoria in March 2008 the association was able to showcase the plan for the building (which is targeting a LEED® platinum certification), Farmer Construction and Dockside Green.

Farmer Construction has the most impressive LEED® documentation of any contractor we have worked with. At any time they can provide us with a monthly report of the environmental construction strategies and tell us what our construction waste reduction and recycled content percentages are, allowing adjustments to be made during construction.

The municipality has shown significant support to allow the salvage of the building and we look forward to a successful rezoning that shifts density lost from salvaging this building to other parts of the site.

Rendering of Farmer Construction's head office



Social

Although Dockside Green could be considered a community in itself, it is also part of a larger community. From the start Dockside Green was committed to making sure that not only the buildings on the site were brought together into a neighborhood, but also that this neighborhood be connected and engaged with the larger region and landscape that surrounds it.

The overall goal was to create a livable, sustainable community for people of all ages and income levels by working with the existing surrounding community to revitalize an existing urban area, preserve some green spaces, reduce automobile dependency, promote pedestrian and bicycling activities and decrease polluted storm water runoff.

LEED® for Neighborhoods:

New Goal

Dockside Green was the first project in the world to publicly commit to using "LEED® for Neighborhood" even before the pilot system was developed. We committed before we knew what the system would look like. This commitment required the approval of the municipality.

Status

Dockside Green was the first project to register for the LEED® for Neighborhood rating system. We were successfully selected as a pilot project and the submission package for certification has been forwarded to the US Green Building Council for review and certification.

Mixed Use Development:

Our Stated Goal

Create a mixed-use community using smart growth principles.

Status

The principles of "Smart Growth" are in effect with Dockside Green being able to house more than 2,200 residents on the 15-acre site. If the residents of this development were to be housed in single family dwellings, it would take a housing project of 115 acres, approximately 115 football fields of open space.



The development is to include three distinct neighbourhoods:



- Dockside Village, located on the south end of the site, will feature homes, offices, shops and services, light industry and live-work studios. In the heart of the village a community amphitheatre will be bordered by cafés, retail, light retail and office space – a true gathering place for visitors and residents.
- Dockside Commons, located in the middle of the site, includes Harbour Road industry. It will be characterized by a dense, small-scale light industrial atmosphere with office and residential to the east and west of the greenway. Open bike lanes and walking space will allow for increased connectivity between downtown, the site and the Galloping Goose Trail.
- Dockside Wharf will include residential condos located along Tyee Road, with beautifully landscaped street-oriented townhouses and high-rise condominiums insulated by garden flats facing an internal greenway. Open space between all buildings will allow for increased pedestrian traffic

throughout the site. This design will make the area user friendly and safe while promoting urban ecology. At the north end of Harbour Road, an office building with a restaurant, organic bakery and coffee shop is being constructed. Blending in with the harbour industry across the street, this area of Dockside Green will mix historical uses with modern flare and design. At the north end of Dockside Wharf, there will be waterside residences with direct access to the water, a public wharf, and the ever-convenient Galloping Goose Trail. Whether you want to hop on a harbour ferry to downtown or ride your bike to the BC Ferries terminal along the Galloping Goose, this end of the site allows for connections to both.

The master plan is continually being revised and improved based on input from the Community Association and the Municipal planning staff. For instance, Synergy and Balance have added more pedestrian connections. As well, Synergy has added some commercial uses near the Harbour Road and Tyee Road intersection and a new plaza.

CI-1 is now open with the organic bakery in full operation and the organic coffee shop and restaurant under design and construction.

New Urbanism Design:

Our Stated Goal

Use "New Urbanism" principles and "Smart Growth" in the design of Dockside Green.

Status

The project design has embraced the principles of New Urbanism and Smart Growth. Both Synergy and Balance have created interesting streetscapes, bringing the building close to the street and creating landscaped "bulbs" for parking to narrow the street.



Fol Epi Organic Bakery
Now Opened in CI-1

Townhouses have been provided along Tyee Road to create a friendly streetscape.



Both the municipality and the developer have also received numerous provincial and national awards for the design of the project:

Residential Development of the Year – 2008 CHBA-BC Georgie® Awards

Awarded by the CHBA-BC

Conferred to Dockside Green, February 2, 2009

Merit Award – Multi-Family Commercial (Synergy)

Awarded by Commercial Division of the Victoria Real Estate Board

Conferred to Dockside Green, November 28, 2008

Best Multi-Family/Townhouse Project

Best Condominium/Mixed-Use Development

Outdoor Environmental Achievement

2008 CARE (Construction Achievements and Renovations of Excellence) Awards

Awarded by Canadian Home Builders Association - Victoria

Conferred to Dockside Green, October 31, 2008

Partnership Award - BC Green Cities Awards

Awarded by LiveSmart BC

Conferred to Dockside Green, September 2008

LEED® Platinum Certification

Awarded by Canada Green Building Council for Phase I - Synergy

Conferred to Dockside Green, July 2008

The Award for Excellence in Urban Sustainability

Awarded by the Globe Awards for Environmental Excellence

Conferred to Dockside Green, March 2008

2007 Ministry of Environment Arbor Vitae Awards

Awarded by the Ministry of Environment

Conferred to Joe Van Belleghem

Building Better Futures Community Award -

2007 CARE Awards (Construction Achievements and Renovations of Excellence)

Awarded by the Canadian Home Builders Association

Conferred to Dockside Green Limited Partnership, October 2007

2007 Brilliant Awards - Brilliant Development

Awarded at the Discover Brilliant 2007 International Conference and Expo

Conferred to Dockside Green, September 2007

Business Leadership Award - Greater Victoria Business Awards

Awarded by Greater Victoria Chamber of Commerce

Conferred to Dockside Green and Windmill Developments, April 2007

**Smarty Award - Proposal or Process Award
Smart Growth BC**

Conferred to Dockside Green Partnership, the City of Victoria and the Victoria West Community Association, May 2006.

Royal Architectural Institute of Canada Award of Merit, Approved or Adopted Urban Design Plan

Conferred to Busby, Perkins+ Will Architects, June 17th, 2006

Award of Excellence - Planning Institute of BC

*In honour of outstanding accomplishments in the field of planning
Conferred to the City of Victoria, April 2005*

Award for Planning Excellence, Neighbourhood Planning

*Canadian Institute of Planners
Conferred to the City of Victoria, July 2005*

Brownie Award - Green Design and Technological Innovation

*Awarded by the Canadian Urban Institute
Conferred to Dockside Green Partnership, October 2005*

Brownie Award - Best Overall Project

*Awarded by the Canadian Urban Institute.
Conferred to Dockside Green Partnership & the City of Victoria, October 2005*

Award of Excellence - Canadian Architect magazine

Conferred to Busby Perkins + Will Architects, December 2005

**Mix of Residential Units to Attract People in a Range of Ages & Stages of Life:
Our Stated Goal**

Create a mix of unit types to attract a wide range of ages.

Status

Dockside Green is attracting residents of all ages and backgrounds who share a desire to live in a healthy, vibrant community.

The project has been carefully designed as a mixed-use community to reinforce New Urbanism principle including providing neighbourhood shopping, interconnectivity to surrounding neighbourhoods and numerous trails throughout the development.

The wide range of community amenities – such as the amphitheater, elegantly designed buildings, parks, dock facilities, urban ecology practices, greenway and access to waterfront – are all factors to attract a diverse range of ages.



Both Synergy and Balance include a mix of unit types (1 bedroom, 1 bedroom and den, 2 bedrooms, 2 bedrooms and den, and 3 bedrooms) in the form of condos, garden flats and two- and three-storey townhouses.

Synergy suite mix

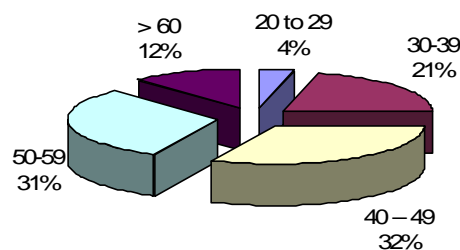
Condo – affordable-housing 1 bedroom	9
Condo – 1 bedroom or 1 bedroom/den	22
Condo – 2 bedroom or 2 bedroom/den	53
Condo – 3 bedroom	5
Townhouse – 3 bedroom	6
Commercial/retail	3

Balance suite mix

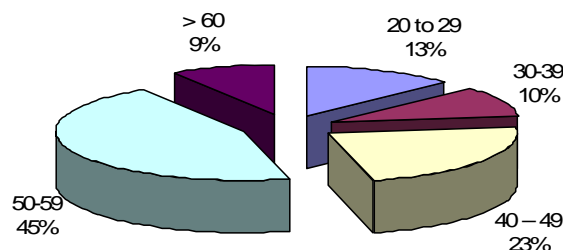
Condo –affordable-housing studio	5
Condo – affordable-housing 1 bedroom	12
Condo - studio	5
Condo – 1 bedroom or 1 bedroom/den	83
Condo – 2 bedroom or 2 bedroom/den	59
Townhouse – 1 bedroom	4
Townhouse – 2 bedroom/live-work	2

In addition, people from a diverse mix of ages have purchased in Synergy. This is a direct result of our efforts to create a community.

The mix of purchaser ages in Synergy:



The mix of purchaser ages in Balance:



Synergy and Balance have also been designed to meet adaptable housing guidelines, allowing for aging in place.

Mix of Residential Units to Meet a Broad Range of Incomes and Unit Tenure:

Our Stated Goal

Provide \$3 million fund for on-site housing affordability initiatives that target household incomes of between \$35,000 and \$60,000.

The original 300-point evaluation matrix prepared by the municipality and used in the original Request for Proposals (RFP) to evaluate prospective developers included a total of 5 points for housing affordability (1.7% of the evaluation).

There was little emphasis on affordability as the RFP focused on amenities being requested by the municipality, remediation concerns and the price of the land. Rightly, the municipality wanted to ensure recovery of its associated costs and the base price of the land.

There had been several failed development proposals on this land before in large part because of the clean-up costs. Given the allocation of points in the RFP under the triple bottom line matrix, any developer emphasizing housing affordability would have risked the chance of being selected.

Excerpt from RFP matrix

Category	Points	Requirement	Criteria
Social	5	Does the residential portion of the development provide a mix that satisfies the needs of a broad range of ages and stages of life, as well as income brackets and rental/ownership units? (RFP section 5.2.2, DC page 16/17)	5-provides a mix of residential units; 3 or 4-provides some mix of residential units; 1 to 2-provides poor mix of residential units; 0-provides no mix of residential units

In assessing the desire to create a diverse project, it was felt as the developers we needed to address housing affordability as a component of triple bottom line community developments.

We therefore agreed to make a \$3 million contribution towards a housing affordability fund to be used to provide affordable-housing units (ownership) and non-market units (rental). Under the Master Development Agreement, the target household income levels were \$30,000–60,000.

The municipality provided leadership on this important issue by agreeing to contribute 20% of the building permit fees to be collected from construction at Dockside Green to the housing affordability fund.

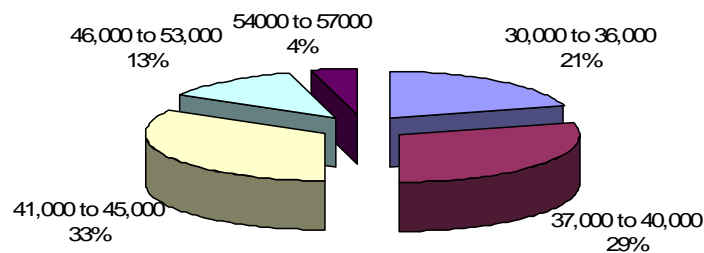
The approach by both the municipality and developer was innovative and has resulted in affordable-housing units being built on-site.

Status

In consultation with the Dockside Housing Advisory Committee and the Capital Regional Housing Authority, a Housing Affordability Strategy has been developed. All parties involved in the Housing Affordability Strategy supported it.

Under the strategy, 26 units have been provided and integrated into Synergy and Balance as affordable-housing units – 10% of the units. All 26 units have been sold.

The diagram below shows the percentage of units sold by household income. Note that lower household incomes were targeted than originally planned.



In total, the subsidy the developer totaled approximately \$800,000.

Over \$100,000 was spent by the developer on the plans and in excess of \$3 million was raised.

There were unexpected costs associated with affordable-housing units due to time incurred by the CRD Housing Committee and legal costs associated with developing the covenant for resale of affordable-housing units.

Also under the plan, another 47 units were to be provided as rental units to be managed by the Capital Regional Housing Authority. Under this plan, the developer would use \$2.2 million of its subsidy for these units. The focus was to attract additional government funding to focus on two-bedroom and three-bedroom units and targeting households with incomes of \$35,000–47,000. Capital Regional Housing was to also contribute funds and, collectively, we would seek assistance from other levels of government to cover the costs of having a greater focus on families.

As a result of lack of other funding, we have gone back to the drawing board and prepared a preliminary design for a 45 unit two-bedroom and three bedroom units at compact sizes. If we can get the costs down, we can determine how many two-bedroom and three bedroom suites can be built based on the available subsidized funds. We are also examining the possibility of additional, small affordable-housing units. We will live up to our commitments under the Master Development Agreement.

First Nations:Our Stated Goal

Work with First Nations to develop historical signage of their past connection to the lands.

New Goal

We established a new goal to undertake a meaningful and thoughtful relationship with First Nations people. A Memorandum of Understanding was signed with First Nations in October 2007.

Status

Several meetings have taken place with First Nations people while developing a meaningful relationship on-site.



During the rezoning process, an event occurred where several First Nations chiefs attended to celebrate the beginning of our relationship. We presented our ecological written pledge to be good stewards of the land.

Over the last year, continued dialogue has occurred, mainly in relation to the First Nations training initiative and art work.



Some of the initiatives underway are as follows:

- Dockside Green commissioned and has selected various pieces of art from a First Nations artist to be used on manhole covers, path stones and site signage.
- On-site ceremonies with the First Nations People have been held.



- Dockside Green has commissioned a totem pole for a public art piece. Tsartlip



artist Charles Elliott was selected and the Totem Pole entitled "Water Keepers' Pole" was inaugurated and installed on May 24, 2008.

- Dockside Green has completed the process of researching historical photographs of First Nations involvement on the site and will install the signage shortly.
- On-site construction job training has begun.

Job Training Program



In the early start of the program, up to 15% of our construction work force was First Nations. The program, however, has been largely ineffective because of poor retention.



As a result, a new program was implemented in coordination with First Nations, the BC Construction Association, Farmer Construction, Camosun College and the developer. The program was modeled after the successful Saskatchewan job training program and includes job coaches as explained below.

Results as of November 30, 2008

Herman Henry, our First Nations Job Coach, has completed 19 months of employment with the initiative.

During the past year, additional funding was secured by Chief Bruce Underwood, Program Manager for the Coast Salish Employment and Training Society (CSETS) that allowed the initiative to continue past its initial seed funding stage. This funding came to an end in November, 2008.

The initiative has experienced challenges during the past year including: construction slowed down, workers who had been placed in the industry left for various reasons; and partners were not being kept informed on a regular basis as to the progress.

With respect to these challenges a review of the Memorandum of Understanding will include the training initiative.

Industry partners over the past year have also worked to secure additional funding through the B.C. Construction Association and the VanAsep program in Vancouver. Both initiatives are following the protocol set out by the First Nations and waiting to hear from MOU partners, particularly the First Nations partners, as to their willingness to become part of these two initiatives.

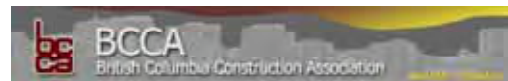
This has always been the vision of the Steering Group; to put the First Nations training initiative on a more sustained footing and tie it more closely to industry.

Partners:

This initiative and its success is only possible through the establishment of an open and trusting working relationship among the various partners – Songhees Nation, Esquimalt Nation, Vancity, Farmer Construction, BC Construction Association, Coast Salish Employment Society, WILNEW Committee, Camosun College and Dockside Green.



The partners have contributed freely of their time and expertise. Dockside Green, Farmer Construction and the WILNEW Committee (South Island Committee of the Coast Salish Employment Society) have contributed financially to this initiative.



Future:

For 2009, partners to the MOU will examine the successes and challenges of the MOU, in particular the First Nations training initiative. Industry partners have the resources and the program to begin placing Aboriginal people with construction projects in the South Island, not just Dockside. If this can be accomplished, Dockside will have served its purpose as the leverage point to a more robust and solid training program that will leave a legacy for the future.

Encouraging a Sense of Connectedness:

Our Stated Goal

Provide various pedestrian, cycle and vehicle connections and intersections and crossings, as committed under the Master Development Agreement.

These connections are highlighted below.



Status

The master plan continues to be refined, with connections being expanded to the neighbouring community. Improvements include the north/south greenway, numerous east/west pedestrian trails, a crossing on Tye Road, a safe interface between the Galloping Goose Trail and Harbour Road and the upgrade of the Galloping Goose.

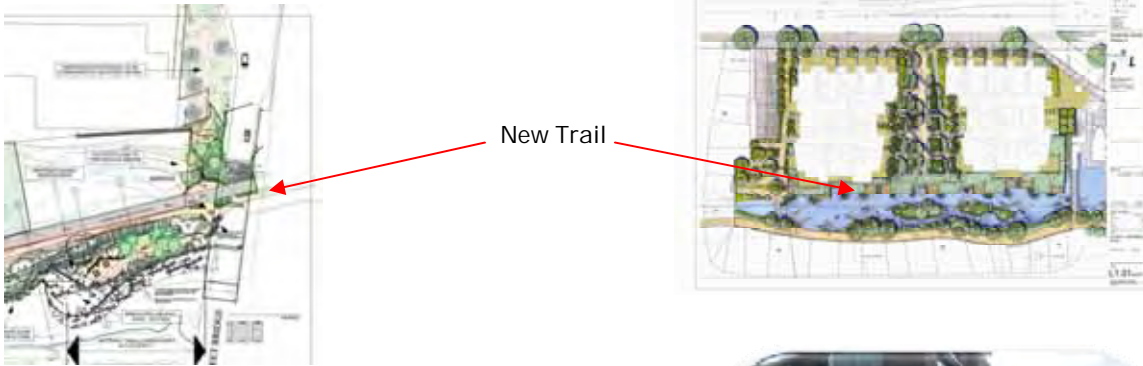
The greenway (north/south) trail has been designed and about half of it has been completed during Synergy and Balance construction.

Design improvements on Tye Road have been made to provide landscape "bulbs" and to slow traffic. As a result, the pedestrian feel of Tye Road will be improved and enhanced by the addition of walk-up townhouses and the retail added to Synergy at the plaza and the corner of Harbour and Tye Roads.

In Synergy, the plaza area and east/west connection have been completed.



Consultation with the community has led to additional public corridors. For instance, in Balance a new trail has been added to the south of the buildings and a new trail added along the Bay Street Bridge.



In addition, the design of the Galloping Goose Trail a new pedestrian trail has been completed and a pedestrian cross-walk has been added at Tye Road.



The new plaza by the CI-1 building, with outdoor seating for the bakery, coffee shop and neighbourhood pub, has been designed and construction has begun.



Encouraging a Sense of Community:

Our Stated Goal

Inspire a sense of community and establish a healthy working relationship with the local community association, environmental groups and the business community.

Status

We are proud of our relationship with the local community associations, in particular, the Vic West Community Association. They have been an integral part of our design team and their suggestions have improved our designs and enhanced marketability and livability.

Their input has been invaluable and we look forward to this continued relationship

Our relationships with the non-profit environmental community are also strong. We value their input and the insight they bring to the development. The project was featured on the "Nature of Things" hosted by David Suzuki.

The business community has also been very supportive of the development, as has the Chamber of Commerce. We are striving to support local business and BC technology companies. We have an excellent relationship with our contractor (Farmer Construction) and the various sub-trades and suppliers. Several of our suppliers have experienced significant public relations such as Triton and Reliable controls, from NBC Today, Fox News, *New York Times* and numerous other news agencies.

A video on the development has been produced and includes positive comments from the Vic West Community Association, Sierra Club and Chamber of Commerce. The video is available at: <http://docksidegreen.com/community/overview/overview.html>

The Community Liaison Committee has been established and has met quarterly, providing valuable community insights to the project.

In addition, staff of the municipality, Ministry of Environment and Capital Regional District have been very supportive of our innovative approaches and have proposed new strategies to enhance the triple bottom line elements of Dockside Green.

A sense of community is being cultivated and there has been a steady overwhelming acceptance expressed towards the development during the numerous rezoning, community and development permit meetings. We are committed to being open and transparent and to continuing to listen for new opportunities to improve the development.

We have arranged events and gatherings for purchasers so they can meet each other and begin the process of creating community.

Our goal is to create a model of how developers, municipalities and community, environment and business groups can work together to create sustainable developments.

Public Amenities:Our Stated Goal

Provide the amenities that improve the livability of the development and the surrounding community, including:

- public art
- dock and small boat launch
- upgrade of Galloping Goose Trail
- a sustainability centre on-site (Dockside Green agreed to work with non-profit groups to establish this centre, committing \$400,000 to it)
- historical and environmental education signage on-site
- amphitheatre, main plaza, Vista and Triangle pathway, playground, staircase from the Johnson Street Bridge and public washrooms

Status

The following is an update on the various amenities provided:

- A First Nations totem pole has been commissioned and installed as well as the "Shatters" a glass sculpture installed in the Synergy Plaza.



- Updates and modifications to the master plan have to better facilitate the use of the north end of the Dockside site. The final plan, now built has a water taxi connection, sufficient space for kayak, canoe or small boat launches, and enough area for pedestrians to walk about. Connecting to this small boat launch and to the rest of the Dockside site is the popular Galloping Goose Trail.
- Currently, we are exploring the idea of providing public fitness stations along the Galloping Goose Trail. These would be located just off the trail in a wood-chipped area. These would be sit-up stations, push-up stations, chin-up stations, etc.
- A fitness centre was added into Tower B of Synergy for residents.

- Dockside Green has spent approximately \$100,000 in investigating the creation of a sustainability centre. During 2008, several large non-profit organizations have come forward expressing renewed interest in spearheading the planning and development of the Victoria Sustainability Centre. Presentations will be made to these organizations early in 2009 and planning will continue leading to construction. Dockside Green has completed the process of showcasing First Nations historical involvement on-site. Past industrial usage and environmental signage is being developed for placement in 2009. Dockside Green has begun the process of showcasing First Nations historical involvement on-site. Past industrial usage and environmental signage still needs to be developed for placement in 2009.
- The design of the amphitheatre, main plaza, Vista and Triangle pathway, playground, staircase from Johnson Street Bridge and public washroom is underway.



View Corridors and Open Space:

Our Stated Goal

Continue to refine the master plan to improve view corridors and open space.

Status

As a result of consultations with the Vic West Community Association, the Planning Department and approval support from Council additional paths and view corridors have been added between buildings. In addition, we implemented the association's suggestion to develop townhouses along Tyee Road to improve the pedestrian feel of the street.

In Harmony, open spaces have been increased even further as a result of community consultation and input from municipal planning department.

New path

New view corridor





Open space has also been increased around the new CI-1 (Inspiration) office building.



Encouraging Innovations in Design and Sustainability:

Our Stated Goal

Share our knowledge with other communities, developers and interested parties to promote market transformation.



Earth Day at Docksider Green

Status

One of Dockside Green's initiatives from the beginning was to encourage similar types of development in the private and public sectors around the globe by sharing the lessons we have learned.

- We have met with developers and delegations from Victoria, across North America and around the globe. Teams from as far away as the Ukraine, Australia, Japan, Korea, Italy and China have visited Dockside Green.
- We have given numerous presentations on the project around the globe and locally. Dockside Green has also been featured in numerous articles, magazines and TV shows.
- The project has been featured on "The Nature of Things" hosted by David Suzuki.
- Various information pieces have been put together on Dockside Green and shared with others. Additional information will continue to be developed and placed on the website.
- A group of local professionals, with the facilitation of Dockside Green and Farmer Construction, meet on-site for a year to study together to become LEED® accredited.
- Tours have been held for various government officials – from Natural Resources Canada, Public Works, National Defense, CMHC and various municipal governments from Canada and the U.S. (e.g., Bellingham, Campbell River, City of Vancouver, City of Calgary, Nelson, Nanaimo, UBCM, and FCM).
- We participated in the Green Shores program, in which the shoreline remediation of Point Ellice Park is being used as a case example (www.greenshores.ca) to create tools for sustainable coastal design and development. An important component of the Green Shores project is the development of a ratings and certification system for coastal development projects.

The objectives of the Dockside's Green Shores case example are to:

- Work with the shore design team to incorporate Green Shores principles into the shore remediation plan.
- Apply the pilot Green Shores rating system to the final design plan.
- Identify any potential synergies and conflicts between Green Shores rating credits and LEED® Green Building rating credits.

These efforts are time consuming, but we believe that we have an obligation to share our lessons and trade secrets

Educating Our Youth on Sustainability:

New Goal

Work with local schools and youth around sustainability.

Status

Other initiatives with school children have been undertaken such as the environmental posters prepared by the grade 4 and 5 class of Victoria West Elementary School. This is the second year of the project. The program is part of Dockside Green's outreach program to schools. As part of the grade 4 and 5 curriculum, students learn about sustainability issues and environmental stewardship.



A member of Dockside Green's team made a presentation to Victoria West students about the triple bottom line philosophy behind the development (social, environmental and fiscal responsibility).

This was followed by a site tour of Dockside Green and then further research by the students. We have also made several other presentations to schools in the area and several university presentations.

A couple of letters we received:

First Nations Connections

Written by Sayaka

There is a strong First Nations connection with the Dockside Green Development. The First Nations Territory that the Development is on is the Songhees. The greenway beside Dockside Green is where many First Nations people canoed in days gone by. The land where the development is built is a natural environment that is important to First Nations culture because they relied on the natural environment for survival in traditional times. Dockside Green has done a great job of keeping the connection with First Nations culture alive.



Natural Environment

Written by Steve

The natural environment is made of all things that are from the earth. The natural environment is very important for many reasons. Something natural and important are trees because they give off oxygen, which people need to breathe. Natural environments are also habitats for animals to exist in. Most important of all, the natural environment provides fresh, clean, life-giving H₂O. Without water there would be no life whatsoever. Wonderful and flowing water; without it we would not be here. Natural environments mean life for all the living. Dockside Green honours and preserves the natural environment by making it part of their development. We love Dockside Green!



Dockside also facilitated having our contractors on-site to be involved in the Urban Rain Garden project at the Victoria West Elementary School. We wish to express our gratitude to Colin at C & R plumbing and Farmer Construction for helping the students.

Letter from student in Rain Garden project:



Preserve Our Heritage:

New Goal

Work with the City of Victoria to preserve and move the historic building on its site to Dockside Green, where it will be used as the sustainability centre, owned by a non-profit entity.



Point Hope Shipyard is supportive of this initiative and timing needs to be coordinated with this move. Preliminary discussions with the municipality have been held. Upon receiving approval, we will begin work to investigate the feasibility of moving the building. It appears unlikely this building will be used due to the complexities of the Point Hope Shipyard operations and timing but we will continue to pursue this option.

Treating Our Workers with Respect:

New Goal

Recognize the many men and women who work on-site in constructing our buildings and show our appreciation of their efforts, craftsmanship, quality work and enthusiasm for sustainability goals.

Status

We regularly host barbeques for the workers and give gifts to show our appreciation of the work. At one such event, we also invited members of the community association so they could meet our workers.

We are also very proud of our contractor and workers who raised money at Christmas last year for the Open Door and who delivered Christmas baskets to those in need.



Economic

Supporting Local Business:

Our Stated Goal

Support local business by using and showcasing their products at Dockside Green.

Status

Dockside Green is using products from a wide variety of local companies.

Some of these companies included:

- Carmanah Technologies (Victoria, BC): providing site lighting, photovoltaic bus shelter and bus stop, traffic signage.



TRITON LOGGING INC.
"Sustainable Logging Solutions"

- Triton Logging (Sidney, BC): providing reclaimed wood from hydro-electric dams using Triton's underwater harvester.
- Reliable Controls (Victoria, BC): supplying each unit in Synergy and Balance with individually controlled meters that measure and record water, heat and electricity usage.
- Juneau Bros: providing exterior blind systems on the west and south windows of Synergy and Balance.
- Ocean Cement (Victoria, BC): The developer is working with Ocean Cement to mix fly ash with cement to reduce CO2 emissions.
- Stone Designs: providing a glass-crete product for the elevator lobbies. All the materials have been salvaged from the downtown core of Victoria.



All of our contractors and consultants have local offices in Victoria: Farmer Construction, RJC (structural), DYS Architecture, Hughes Architecture, Stantec (mechanical and electrical), Kimberly Williams (interior design), Worley Parsons (civil), Aqua-tex (ecologist), CN Ryzuk (soil) and RCL Consulting.

Among our local marketing suppliers:

- GraphicFX
- Garside Signs and Displays
- CMAEON
- Spry New Media
- Eclipse Creative
- Tartan Group

- Island Blue Printing
- Treehouse Media
- J. Peachy & Associates

Supporting Innovative Environmental BC and Canadian Businesses:





Our Stated Goal

Support a sustainable economy by focusing on using environmental technologies from British Columbia and Canadian companies.



Status

Below is a short list of some of the many BC-made and Canadian-made products that can be found in our buildings:

- Nexterra (BC company): a biomass heat generation technology using waste wood 
- Sol-Air Systems (BC company): an ultraviolet air decontamination technology for the sewage treatment facility
- Zenon (Canadian company recently purchased by General Electric): a sewage treatment process. 
- Thermal Comfort (Canadian company): a system that allows two of the pipes in a four-pipe fan coil to be the domestic hot and cold water supply. 
- Delta (Canadian company): quality bathroom and kitchen faucets and shower fixtures. In our experience, products made by Delta are some of the best-made and most durable faucets in the world. 
- Quad Lock (BC company): insulated concrete forms being used in the three townhouses being built
- HVAC Systems (BC company): centralized heat recovery ventilators that will be installed to pump fresh air into each suite

Support Local Employment and Post-Secondary Education:

Our Stated Goal

Collaborate with local learning institutions to support education and training opportunities.

Status

The staff of Dockside Green has been involved in many initiatives to support local learning institutions:

- University of Victoria's Integrated Management Masters program
- University of Victoria's speaker series on brownfield development

- University of Victoria's business class
- Royal Roads University's Environment Management and Environmental Science MA and MSc programs
- Canadian Public Relations Society (local chapter)
- Camosun College's Construction Management and Civil Tech program
- Pearson College's environmental program

Numerous speeches on Dockside Green have been given locally, across North America and in Australia.

Many initiatives have taken place to create local employment:

- Dockside Green has created 15 jobs related to development and marketing.
- The consultant teams, with the exception of landscaping, all have local offices that have created new jobs.
- Commercial and office space in Synergy will result in approximately fifty new jobs.
- Three co-op students have been used by Dockside Green over the last two years.
- In 2006, Dockside Green hired three co-op students and one individual later moved on to a full-time position.
- A building is currently being completed that will house a restaurant and locally-owned organic bakery creating new jobs.
- The biomass system and sewage treatment plant will create three jobs.
- The First Nations Job Initiative resulted in 17 new jobs.

Tourism: We are seeing numerous groups visiting the city solely for the purpose of visiting Dockside Green and we expect this to continue and increase.

Bio-diesel Facility: We had agreed to build a bio-diesel facility and lease the building to Wise Energy on condition that the company completed its business case and arrange sufficient funding. Wise Energy has informed us it will not be proceeding with its plans to operate a facility because of economic and supply issues. **So far, we have not been able to achieve this goal.**



Limits Impacts on Municipal Infrastructure and Utilities (Sewer, Water, Storm, Roads and Landfill):

Our Stated Goal

Minimize impact on the municipal and the Capital Regional District infrastructure and utility costs (for sewer, water, storm, roads and landfill).

Status

The development has succeeded in minimizing impacts on the municipal infrastructure in many ways and has been a catalyst for encouraging other developments to use some of our strategies.

Sewage:

Dockside Green will not be using the city sewage system. Construction of the plant has been completed in early 2008 and is now operational.

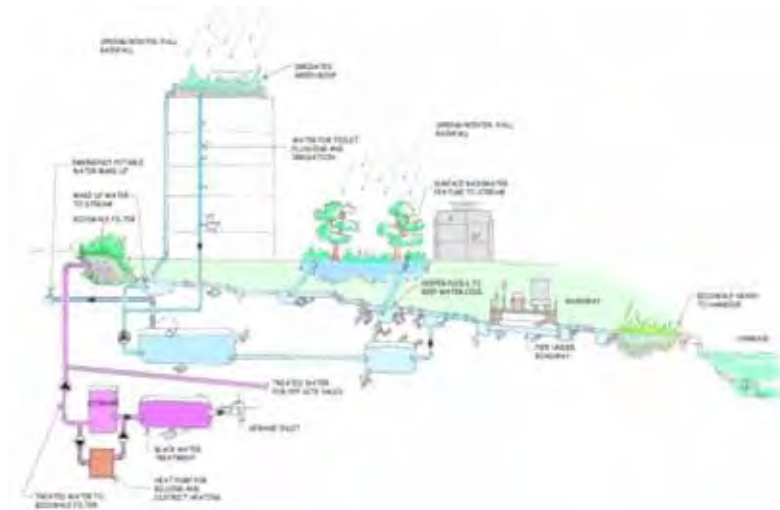
Dockside Green is treating its own sewage on-site. Staff has participated in several community forums to showcase the benefits of the project's system from a regional perspective, including its reuse of treated water and extraction of heat and cooling from the sewage treatment plant.

Water:

Dockside Green is expected to reduce potable water use because of the water-efficient appliances in its buildings and its reuse of treated water from the sewage treatment process. In total, more than 70 million gallons of water will be saved annually on full build-out, the equivalent of the entire region's water use on the driest day of the year. In addition, the meters in each suite will measure hot and cold water use, which will also reduce water consumption.

Storm water

Dockside Green will not be using the municipal storm water system.



Landfill:

Dockside Green will produce less waste than typical developments, contributing positively to regional landfill costs. We are on track to reduce over 93% of our construction waste.

Roads:

The various alternative transportation strategies will ensure the development has less impact on traffic than a standard development, as confirmed by the traffic demand study prepared by the municipality.

We expect the car share program to be a catalyst for the region. Improvements to the Galloping Goose Trail with bicycle storage and shower facilities will increase bicycle usage.

The car pooling and mini-transit will also result in a positive reduction in traffic.

Undertake Remediation at Developers Cost:

Our Stated Goal

The hazardous waste material be removed from site at our risk and cost with a maximum financial exposure to the Municipality of \$175,000.

Status

The final remediation cost will not be determined until completion of the development, however, based on work done to date it is expected that the municipality will not have to contribute any of the \$175,000 set aside for remediation costs and that all costs will be covered by the developer.

Economic Benefits to Residents and Business:

Our Stated Goal

Offer residents and businesses some protection against rising utility costs in the future by providing energy and water-efficient buildings with strategies that reduce ongoing maintenance costs.

Status

The water and energy efficiency of our buildings will reduce ongoing operating costs to residents and businesses.



This approach also protects residents and businesses against rising utility costs. For instance, if utility costs increase by 5% per year, the impact on Docksider Green energy will be less because of the energy-efficient design. The compounded impact of this year over year saves significant dollars.

Lastly, the installation of meters to measure hot water, cold water, heat and electricity in each residential unit and business provides immediate feedback on energy consumption. This leads to greater energy and water cost savings overall.

Concluding Remarks

Despite the achievement of a number of improvements and reaching a number of milestones this year there have been challenges in achieving some of our goals.

For example, the First Nations Job Training Program lost some momentum. We have been unsuccessful in obtaining additional government funding in addition to the partners' funding that has been provided to date. This long term funding is essential to ensure a sustainable long term program that goes beyond Dockside Green borders. Despite some significant early successes this lack of funding has resulted in a drop in numbers of First Nation people being trained. This is also partly due to less overall construction activity on-site. We will continue to work with our partners to put the First Nations training initiative on more solid footing and take a more progressive approach.

During 2008, we continued to explore options for housing affordability at Dockside Green. In addition to the 26 affordable-housing units in both Synergy and Balance, we explored alternatives to raise equity with partners outside of the affordable-housing field so that we might build non-market accommodation. We have struggled to find government funding for our rental housing project but continue to discuss the project with government housing agencies and local not-for-profit housing agencies. We are committed to finding a solution to affordable rental housing at Dockside Green and will make every effort to secure adequate funds from government sources to make the project financially viable for all stakeholder groups.

We are committed to staying true to our vision of developing a sustainable community based on solid economic, social and environmental principles. We are encouraged by our market successes to date and look forward to next year which will see the completion of the biomass heat generation plant, a second residential complex and three commercial buildings establishing Dockside Green solidly as a model for sustainability.

The success and milestones we experienced in 2008 would not have been achievable without the dedication of our management and consulting teams, our contractor and sub-trades. We want to thank each one of those who assisted us in our efforts to grow and develop "The Community the World is Talking About".

"Dockside Green inspires with both its ambitious vision and its concrete successes; few projects in the world can match Dockside Green's commitment to the triple bottom line. And Dockside Green's goal of achieving LEED® Platinum certification is exactly the kind of leadership we need as we work to address global climate change."

*Rick Fedrizzi, President, CEO and Founding Chairman
U.S. Green Building Council*

Note: The renderings, models and site plans in this report are artists' impressions and are subject to change based on final building and site design and ongoing community consultation.