



## A Natural Step Case Study District of North Vancouver



### A SUSTAINABLE PATH

Nestled snugly between the Coast Mountains and the waters of Burrard Inlet, the District of North Vancouver is the largest of the North Shore municipalities, with over 83,000 residents and more than 3,000 businesses. Spanning a total land area of just over 160 square kilometers, approximately two thirds of the land in the District is naturally forested, while the remaining one third is an urban area featuring a series of neighborhoods and a mix of commercial, light and heavy industries. Neighbouring communities include the City of North Vancouver, District of West Vancouver, Squamish Nation and Tseil-Waututh Nation.

The economic base is diverse with some world class technology companies, shipyards, port terminals, a national science laboratory, popular post-secondary education institution, significant film industry and popular tourism attractions. The District is connected with the rest of the metropolitan region by two bridges, including the Iron Workers Memorial Bridge, which is part of the Trans-Canada Highway.

The District of North Vancouver (DNV) employs more than 600 full- and part-time employees, who are tasked with everything from maintenance of transportation and water infrastructure to emergency response and social services. In addition to performing its traditional role in maintaining local infrastructure and services, the municipality recognizes its emerging role as a thought leader within the community, and is working to respond to citizens' concern about becoming a more sustainable place to work and live. The District's mission, adopted in its 2009-2011 Corporate Plan, is to "provide leadership and exemplary service that supports our community's needs today and aspirations for tomorrow."<sup>1</sup>



<sup>1</sup> <http://www.district.north-van.bc.ca/article.asp?c=1014>

## FOCUS ON SUSTAINABILITY

---

By the early 2000s, the District had already initiated a number of projects to help it become more sustainable, such as implementing alternative stormwater management, a comprehensive recycling program with adjacent municipalities, and pesticide reduction measures. In 2004, District councilors adopted [The Natural Step sustainability principles](#) as policy to help guide strategic planning toward sustainability. They found they could use the TNS Framework to bring together the many different projects they had already begun and develop specific action plans to help them move towards sustainability.

With the help of The Natural Step, the District began a comprehensive education process. The DNV saw internal awareness and municipal buy-in as prerequisites to approaching the wider community. They put together a cross-divisional sustainability team which encouraged staff to “step outside” their usual jobs and better understand each other’s roles. DNV councilors, managers, and the sustainability team participated in two-day training workshops led by The Natural Step to learn the basic components of The Natural Step Framework and how it can be used as a strategic planning process to help communities move towards more sustainable futures. District employees were encouraged to enroll in The Natural Step eLearning course, [Sustainability: Step by Natural Step](#), and the District offered multiple ongoing training opportunities for interested employees.

## ESTABLISHING A BASELINE

---

A Core Team of 15 staff members conducted a rigorous baseline sustainability analysis of their organization’s operations and practices in 2007. Supported by a combination of coaching, workshops, guidebooks and targeted feedback, the core team analyzed impacts across 14 functional areas, largely aligned with municipal departments. Using [The Natural Step sustainability principles](#) for guidance, the team was able to identify the ways in which the DNV wasn’t achieving these principles, as well as many current initiatives that were already helping to address sustainability challenges.



DNV cross-divisional team at an introductory workshop, 2007. Photo courtesy of the District of North Vancouver.

The baseline analysis helped DNV staff identify activities and practices to bridge the gap between where their operations stand today and where they need to be in a sustainable future.

That same year, the District signed the B.C. Climate Action Charter, committing it to the goal of becoming carbon neutral in its operations by 2012. Actions towards achieving carbon neutrality have included ongoing conversion of their fleet to bio-diesel and the gradual purchase of hybrid cars to replace low-efficiency vehicles, and the implementation of new technology at the Municipal Hall and Operations Centre. The District reports that the resulting reduction in CO<sub>2</sub> emissions is equivalent to the removal of 35 cars from the road annually.

## VISION AND VALUES

---

After completing the baseline analysis, the Cross Divisional Teams appealed to the larger body of District employees to choose the top characteristics that best described a sustainable DNV. At the same time, two focus groups were struck to debate these characteristics in greater depth, first with the TNS Core Team, and then with the District's People Plan committee. The survey and focus group conversations helped the teams draft seven major priorities to shape a "compelling vision" of a sustainable DNV.

*"A vision without a plan is just a dream. A plan without a vision is just drudgery. But a vision with a plan can change the world."*

**OLD PROVERB**

### Draft Values for a Sustainable DNV

- **Carbon Neutral** – our operations will have a net zero contribution of greenhouse gases into the atmosphere
- **Zero Waste** – our operations will be based on a closed-loop system, having a zero contribution of materials to disposal
- **Non-Toxic** – our work and our workplaces will be free of materials harmful to human or environmental health
- **Healthy** – our workplace promotes physical, mental and emotional health through a well-balanced lifestyle
- **Fiscally Responsible** – all actions must be achieved on the basis of prudent stewardship for our natural and financial capital
- **Leadership** – the District will promote change and education through continual learning and innovation in the organization and community

## DOWN TO ACTION

---

Throughout the awareness building, baseline assessment and visioning process, the project participants came up with multiple suggestions for taking action. A small working group from the Core Team was tasked with analyzing the many possibilities for next steps and creating a list of priorities based on the values the team had already synthesized. Since the DNV's own employees are experts in the District and their own work, the Core Team used their suggestions as a starting point. The team tested each possible action against a set of criteria inspired by the TNS methodology.

**Prioritized actions had to be:**

1. **Specific enough to be actionable** – represents a project, program or policy that can be assigned to a project manager for further development;
2. **Broad enough to be systematic** – does not micromanage but provides clear direction;
3. **Relevant to the vision** – contributes to at least one of the values that will shape the DNV sustainability vision;
4. **A flexible platform for further actions** – does not tie the DNV down in ways that are rigid and unchangeable over time; and,
5. **Relevant to sustainability challenges** – contributes to addressing the types of problems the DNV has identified and that need to be solved at the District.

The resulting list of suggested actions was representative of a collaborative and participatory process, with many having been originally identified by the very staff members who could be tasked with leading them. Actions that met the team's criteria were divided between two main categories: those that were relevant across the entire District organization, and those that were specific to given service-delivery or operational challenges.

The following corporate-wide actions are those that address sustainability challenges of multiple functional groups and are generally shared throughout the organization. These stood out in the prioritizing process because they were encountered over and over again in the lists put forward by various sub-groups during the baseline, vision and action-planning stages. Generally speaking, these ideas are not unique to DNV. Many of them are applicable throughout the public and private sector, and are a part of acting responsibly as corporate and global citizens.

**Fleet**

The District owns and operates a fleet of more than 200 vehicles, including specialized vehicles used for waste management and fire trucks. Combined, these vehicles are responsible for approximately 1,128 tonnes of greenhouse gas emissions, accounting for 28 per cent of the DNV organization's total greenhouse gas emissions. As of December 2008, Engineering Operations has designated one co-operative vehicle for general use to improve efficiency and reduce the number of personally assigned vehicles.

**Waste Management**

Like most North American offices, the District is heavily reliant on paper. Prior to undertaking their sustainability planning process, the DNV was using an estimated 1.5 million sheets of paper each year. While District offices may not be going paperless anytime soon, they are already working to significantly reduce their use of paper. As of 2008, 75 per cent of all agenda packages were being distributed electronically.

**Purchasing**

The District has developed a green purchasing policy which allows it to include sustainability criteria in District Requests for Proposal. The DNV is also becoming more aware of emerging products and services being developed by continuously researching and soliciting input from employees, and plans





are underway to review current purchasing arrangements and determine if more sustainable alternatives are available.

### Built and Natural Environment Practices

A baseline assessment of 56 District buildings and recreation centers suggested that DNV facilities are responsible for more than 2,800 tonnes of green house gas emissions each year. This is equal to about 63 per cent of the total green house gas emissions from all DNV operations. The District is currently developing a Climate Change Action Plan which includes retrofit possibilities, and has begun to implement new technology at District Hall and Operations Centre to reduce energy consumption and annual CO<sub>2</sub> emissions.

The DNV is also working to conserve water, and has installed a centralized computer operated irrigation control system for all of its sports fields, medians, flowerbeds and golf courses to monitor water flow and reduce consumption.

### Alternative Energy

The District has won a \$20,000 grant to promote the use of solar hot water systems in the community, and will have access to additional funds to install a solar hot water system on a public building. The grant was supplied by British Columbia's SolarBC program and was also awarded to five other communities in the province.

In 2008, DNV council approved a Development Permit application for Grouse Mountain Resorts to build a 1.5 megawatt wind turbine on Grouse Mountain. When the project is complete, the turbine is expected to provide 20 per cent of the resort's electricity needs – powering the equivalent of 400 homes.



### Employee Health and Well-Being

To effectively integrate sustainability into all levels and departments within the organization, a commitment to sustainability education for staff is crucial. The DNV's internal Green Team provides tips to employees on ways to reduce energy and resource consumption, and District employees participate in Lights Out BC and Power Smart Challenge. The District is also working to reduce the carbon-footprint of its employees from their commute to work by supporting a shift to alternative modes of transportation and creating job-share and flexible work arrangements.

The DNV recognizes that healthy and active employees are typically more productive and happier, thus providing better service to their clients and the community. So far, they have established staff yoga and pilates classes at several facilities and provide employees with subsidized fitness passes.

### Strategic Directions

Sustainability action plans cannot succeed unless they become integrated into an organization's daily workflow. The plan must be aligned with departmental work plans and budgets, and progress should be monitored and reported on in annual reviews and reports. Annual reporting at the DNV has included

sustainability progress since 2004, and the District is starting to organize its strategic priorities and budget around sustainability principles.

It is also working to become a sustainability ambassador for the larger North Vancouver community. While the District operations will have some contribution to the overall sustainability of North Vancouver, it is the accumulated awareness and action on the part of the citizens that is going to make a much larger difference. The District is working with Legacy North Shore, a not-for-profit organization supporting citizen engagement for sustainability in the region. Their 2006 Annual Report was published online and included information on home, office and community actions for sustainability.

## FURTHER IMPACTS

---

Most staff members at the District are now well versed in a common language for sustainability, and this understanding has rippled out among individual departments and through internal communication channels. New ways of thinking are evident through budget discussions, health and social initiatives at the District such as Walking Wednesdays, and informal dialogues and presentations from inspired staff members.

DNV staff members are making the link between sustainability actions in the workplace and the sustainability decisions they make at home, bringing a new level of energy and connection to their jobs. Many district employees are participating in energy conservation initiatives such as Lights Out BC and Power Smart Challenge, and the internal Green Team continues to provide tips to employees on how to reduce their energy and resource consumption.

*“The Natural Step has allowed us to do work that we’ve been meaning to do for years and has made our approach systematic.”*

**SUSAN HAID**  
MANAGER, SUSTAINABLE COMMUNITY  
DEVELOPMENT, DNV

Ongoing organizational adjustments allow DNV to be responsive and adaptive in meeting sustainability challenges. Currently, the Sustainable Community Development department is responsible for long-term, integrated community planning and policy development in the areas of land use, transportation, environment and social matters. It plays a lead role in sustainability initiatives. Corporate Planning integrates DNV’s sustainability perspective into the strategic planning and decision-making framework, and Corporate Services, recently enhanced with an Energy Manager function, is taking action to reduce DNV facilities’ impacts.

## LAST WORDS

---

Often, the greatest challenge in a sustainability journey is reaching a point where sustainability objectives are fully embedded in everyday decision making, planning, and operations. Since 2004, the DNV has included sustainability updates in its annual reports, and its strategic priorities and budget are now organized based on sustainability principles to help ensure that sustainability is a part of all aspects of the DNV’s operations.

With a solid foundation of understanding and municipal staff buy-in built around a vision of a sustainable DNV, champions are working to build momentum into the next phase, which will involve considerable community engagement. Beginning in 2009, the District is initiating a rich course of

community dialogue to build its vision to serve future generations, supported by a foundation of principles, strategies and actions that will shape policies, work plans and individual behaviors.

An official community plan (OCP) is mandated for municipalities in the province of British Columbia and, with the passage of Bill 27, OCPs must now articulate how the community is going to reduce greenhouse gas emissions and set reduction targets. The District proposes to create a sustainable community plan as part of the review of its Official Community Plan in 2009-2010. The process to develop the plan is seen as an opportunity to shape the District's emerging sustainability vision with the community and articulate the challenges and strategic action opportunities that had already been identified by the sustainability team. A strategic planning approach – supportive of the principles of The Natural Step and closely linked with the milestones of the Federation of Canadian Municipalities Green Municipal Fund – forms the backbone of the planning process for the new sustainable community plan.

A number of recent initiatives have taken place which will support development of the new community plan. A District-supported Community Planning Working Group of 30 volunteer citizens have provided advice on key planning issues, principles, a framework and public engagement strategies to guide the OCP. The District participated in a series of broader visioning exercises including collaboration with their neighbouring municipality, the City of North Vancouver, on a 100-year sustainability visioning project and also participated in a North Shore visioning exercise organized by Legacy North Shore. The rich ideas from these processes will be fed into the community-based visioning process as a part of the overall OCP review process.



## ADDITIONAL INFORMATION

---

Additional resources can be found at:

[www.dnv.org](http://www.dnv.org)

[http://www.dnv.org/popular\\_report/2007/main.html](http://www.dnv.org/popular_report/2007/main.html)

[http://www.dnv.org/upload/documents/Annual%20Report/DNV\\_AR07\\_v15.pdf](http://www.dnv.org/upload/documents/Annual%20Report/DNV_AR07_v15.pdf)

[Toward a Sustainable Community: A Toolkit for Local Government](#), published by the University of Wisconsin, provides ideas and descriptions of specific actions that a local government can take to transform itself into a model of sustainable practices.

---

This case study was written and researched by Laura MacKay and Kim Mackrael for The Natural Step Canada. Thank you to Richard Walton, Susan Haid, Charlene Grant and Andrew Vander Helm for granting The Natural Step interviews, and thanks to Dominika Babicki for text excerpts in the Introduction and OCP sections. Creative Commons Copyright, 2009. Some rights reserved.