



## WHISTLER PUBLIC LIBRARY

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## 1.0 PROJECT AND COMMUNITY CONTEXT

### 1.1 Community Context

The Resort Municipality of Whistler (RMOW) lies in the Coast Mountains of British Columbia, about 125 km north of Vancouver BC. First established as a ski resort in 1966 it is now one of the world's premier destinations for alpine skiing and mountain biking – and a venue for a wide variety of other outdoor activities. More than 2 million people visit the municipality annually.

Whistler has a resident population of around 10,000, of whom more than 80% are aged 50 or less. Seasonal workers increase the resident population to more than 20,000 during the skiing season. Weekenders, who own recreational property in the area, constitute the third significant element of Whistler's unusual demographic. When these weekenders are in residence and tourist accommodation is full, the town can reach a population of 55,000.

Whistler will be the host mountain resort for the 2010 Olympic and Paralympic Winter Games, and venue for the alpine, Nordic and sliding events.

The area falls within the traditional territory of the Squamish and Lil'wat First nations, who used the valley as a trading route between the Interior and the Coast. The first European settlers established a wilderness lodge on the shores of Alta Lake in the early 1900s, and its success encouraged others to follow suit. Later logging became an important commercial activity and at its height there were four mills active in the area.

Since the establishment of the RMOW in the 1970s, the cultural life of the municipality has been strongly connected to the environment. Principles of environmental stewardship were formalized in 2000, when RMOW became one of the first municipalities in North America to adopt the 'Natural Step Program' as a way of guiding its policy-making and development toward the goal of community sustainability.

The Natural Step (TNS) framework was developed in Sweden in 1989 and is based on the four principles considered necessary to achieve a sustainable society. The overall goal is to maintain the natural balance of the Earth's ecosystems through stewardship of resources and minimizing the negative impact of human activity – which are dependent on social and economic systems that give individuals the power of choice.

A number of prominent community organizations adopted the TNS framework immediately, developing sustainability programs within their own organizations and supporting the broader rollout to the rest of the

community. As a result, *Whistler: It's our Nature* was developed as a community outreach program to help educate and inspire around sustainability.

The community soon decided that it wanted to develop a comprehensive and long-term vision, plan and process for its future that was rooted in sustainability. A program called *Whistler: It's our Future* was developed, again to reach out and understand community members' hopes and priorities for the future. The result is *Whistler2020*, the first comprehensive sustainability plan in North America to use the science-based TNS framework at all levels of development and implementation. (See Appendix 1: TNS: An Overview of the Science)

*Whistler 2020 - Moving Toward a Sustainable Future* has been recognized regionally, nationally and internationally as a leading edge sustainable development plan by organizations including the Province of British Columbia, the Federation of Canadian Municipalities, and the United Nations (See Appendix 2: Whistler 2020 Awards and Recognition for a complete list of these awards.)

Whistler's vision, as defined by Whistler 2020, is "To be the premier mountain resort community, as we move towards sustainability."

## **1.2 Project Background**

The Whistler Public Library was established in 1984 and, in the absence of a suitable permanent facility, was located temporarily in two portable buildings near the town centre. From the early 1990s, the Library Board was committed to the creation of a new facility, and began a campaign to raise awareness and to garner community support. In response, the RMOW identified a new building as Whistler's Millennium project and commissioned a needs assessment and programming study (now referred to as the Lord Report) which recommended a joint facility to be shared with the Whistler Museum.

In 2002, the British Columbia Buildings Corporation (BCBC) hosted a design charrette to establish the program and design direction for the proposed project. While the program for the library component could be clearly defined, that for the museum contained a number of uncertainties that compromised the project. Following an unsuccessful capital fund raising campaign and a downward turn in the economy, in 2003, RMOW separated the two components. In 2004 Hughes Condon Marler Architects was commissioned to lead the consultant team in the design of a stand-alone library.

The project parameters for the stand alone library were:

- 1,335 sq. m. (14,285 sq. ft.) GFA building
- Library (1,200 sq. m.)
- Multi Purpose Room (75 sq. m.)
- End of Trip Commuter Facility (60 sq. m.)
- Minimum LEED Silver certification
- Underground parking
- \$7,000,000 all inclusive budget
- Construction Management Delivery Model

## **2.0: PROJECT TEAM**

### **2.1 Primary Project Contacts**

Resort Municipality of Whistler (RMOW)  
Martin Pardoe, Project Coordinator & Manager Resort Parks and Open Space  
Planning  
604-935-8186  
[Mpardoe@whistler.ca](mailto:Mpardoe@whistler.ca)  
[www.whistler.ca](http://www.whistler.ca)

Whistler Public Library  
Lauren Stara, Library Director  
604-935-8433  
[Lstara@whistlerlibrary.ca](mailto:Lstara@whistlerlibrary.ca)  
[www.whistlerlibrary.ca](http://www.whistlerlibrary.ca)

Hughes Condon Marler: Architects  
Darryl Condon, Principal  
604-732-6620  
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Whistler Construction Company Inc.  
Jim Charters, Owner  
604-932-7111  
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[www.whistlerconstruction.com](http://www.whistlerconstruction.com)

### **2.2 Integrated Design Process Team**

The Whistler Public Library was designed using an Integrated Design Process (IDP) a technique used to quickly achieve consensus on project

direction and key design strategies, to ensure efficiency and economy in design and construction, and to optimize environmental performance and other objectives related to sustainability.

The IDP process began with an all day meeting with 35 participants That brought together all key members of the design team, and representatives of all community stakeholder groups including:

#### Project Steering Committee

- 2 RMOW Councilors
- RMOW Staff
- Members of Whistler Library Board
- Building User Group (Librarians and other staff)

Hughes Condon Marler: Architects

Fast + Epp Structural Engineers

Stantec Inc. (Mechanical engineers)

Acumen Engineering (Electrical Engineers)

Phillips Farevaag Smallerberg (Landscape Architects)

LMDG Building Code Consultants Ltd.

Whistler Construction Co Inc, Construction Manager

### **2.3 Project Champion**

This project had more than its fair share of challenges, and many different individuals demonstrated extraordinary commitment to keep the various aspects of the process on track. The success of the new library can be seen as a tribute both to the work of the Library Board, and the community at large.

### **2.4 Public Participation**

In addition to involvement in the IDP sessions, public participation included several Open House meetings, ongoing consultation with the Building User Group, four presentations to the Council appointed Advisory Design Panel, and several presentations to Municipal Council. The consensus developed at the second IDP session proved to be critical to the project's success.

Whistler has strong design guidelines relating to practical issues such as snow management, as well as to maintaining an overall aesthetic appropriate to the mountain setting. These guidelines have tended to encourage multi-storey buildings with relatively small floor plates, steep roofs and ground level arcades that form a snow shed over the sidewalks.

However for the new library, municipal staff and the Library board sought a building that would read clearly as an institutional facility, and that would outwardly communicate its internal uses and the community's emerging environmental values. The Library Board and Building User Group strongly favored a single storey, large floor plate building to minimize staffing requirements, a solution that would differ from the traditional form and scale of Whistler's Village area.

To inform participants of design practice elsewhere, and promote a common understanding of what might constitute an appropriate building form and appearance, the architects assembled images of contemporary buildings in alpine locations around the world. They then asked the participants at the second IDP session to identify their preference by marking their favourite images with colored dots. The results indicated a strong preference for traditional natural materials, but an acceptance of contemporary forms and details that could represent a departure from Whistler's dominant building aesthetic.

This feedback gave the design team a greater degree of flexibility in pursuing the projects' sustainability and urban design objectives, and the image boards became a valuable tool in arguing the merits of the project at a succession of design panel meetings.

### **3. PROJECT IMPLEMENTATION**

#### **3.1 Duration of Project**

The design process for the stand-alone library project began in September 2004, and the building was completed and occupied in January 2008.

#### **3.2 Project Challenges and Design Responses**

##### ***Urban Design***

By virtue of its location on Main Street and close to Whistler's pedestrian-oriented Village Stroll, the chosen site offered the opportunity to develop a building with an appropriate civic presence. However issues of topography and access made this goal particularly challenging. The site falls away steeply from Main Street to the extent that the roof of the existing library and museum portables (which occupied the North West portion of the site) was roughly at street level. While this left views open to the adjacent park and nearby mountains, the existing buildings were quite literally overlooked.

The desire was to elevate the new building so that its' entry would be at street level for maximum impact and accessibility and connectivity to the Village Stroll, yet keep its profile low enough so as not to unduly compromise the views. Constructing a lower level parking garage and end of trip bicycle storage and shower facility created a podium for the building, but the question of roof form, height and construction proved more difficult to resolve.

With two street facades, and the desire to open up the back of the building to the existing natural forested park and mountain views, the library had no obvious rear façade that would facilitate snow dumping and removal. The alternative was to allow the snow to accumulate, meaning that the roof would at best have a shallow slope. Although a shed roof, low on the street side, and high on the park side fitted with the sustainability objectives (protecting south facing windows with overhangs and opening up the north side for daylight and views), it did not immediately sit well with the Advisory Design Panel. However the image boards from the second IDP meeting helped to persuade the panel that the solution would be acceptable aesthetically.

### ***Roof Form and Structure***

There remained the technical issue of how to construct a roof capable of dealing with Whistler's extremely challenging snow loads (815kg/m<sup>2</sup> or 165lbs/sq.ft.) while maintaining unobstructed floor space in the library area with free spans of up to 13.5 m (44 feet) A conventional solution using glulam beams and purlins would have required a roof thickness (structural depth) of more than 1.5m (5 feet), which seemed disproportionate to the one storey height of the building and, given the impact on building volume and envelope, inconsistent with the sustainability goals.

Other roof options were under consideration until well into the working drawings phase of the project, at which point the design team became aware of testing being done by the wood industry with a view to developing new markets for local Hemlock trees. Given the availability of a large quantity of 4x12 lumbers, and the support of the wood industry via the Coast Forest Products Association, it was decided to explore the possibility of using the library project as a showcase for the material.

Ingeniously lapping the solid timbers both horizontally and vertically, structural engineers Fast + Epp in conjunction with StructureCraft Builders Inc, devised a prefabricated, lag screw laminated panel system capable of clear spanning the required distance, and supporting the design snow loads within a structural depth of only 400mm (16 inches)

The completed building is striking for the visual impact of its exposed wood ceilings (the soffits of the Hemlock panels being left unfinished) but the environmental impacts of the panel system are even more significant. These impacts are addressed in Section 5 below.

### ***Construction Industry issues***

Even prior to the first IDP meeting in 2004, it was clear that realizing this project would be anything but straightforward. The BC construction industry was working beyond capacity, construction costs were escalating rapidly and contractors were refusing to bid on conventional stipulated sum contracts. It was therefore decided to prepare design and construction documents in anticipation of a construction management contract in which a series of sequential bid packages would be prepared for different phases or trades, for example concrete work. In the end, 35 separate bid packages were prepared.

This form of contract has the advantage in times of rapid price escalation, of fast tracking the design phase, enabling foundations to be tendered while the superstructure is still being resolved. It does however increase the burden of coordination required of the design team, as all the interfaces between different aspects of the work must be accurately transferred from one tender package to the next – and packages already issued can limit the options for aspects of the building still being designed.

To support local business, the client wanted to utilize as much local expertise and labour as possible. From the design teams' perspective, this involved them in considerable research into what skills existed in the local labour force, and what manufacturing or fabrication facilities were available in the area. The findings directed to some degree the final choice of materials for the building, and impacted the contractual arrangements – for example the separation of the wood and steel components of the roof system into two different packages to enable a local steel fabricator to bid on the job.

## **4.0 PROJECT BUDGET AND FINANCING**

### **4.1 Budget**

The project came in at a significantly higher cost than originally budgeted both because of construction escalation and some of the unanticipated ambitions of the project - which included raising the structure up to address the street, and putting in an end of trip facility. The total cost for the project was \$11,940,000. The source and magnitude of the various financial contributions to the project is shown in the table below.

## 4.2 sources of Funding

<b>Funding Source</b>	<b>Amount</b>
RMOW	\$7,797,000
FCM Low Interest Loan from Green Municipal Fund through BCFMA	\$3,539,000
Grant: Energy Efficient new Buildings	\$500,000
Grant: Project Reporting	\$30,000
Grant: LEED Certification	\$33,000
Coast Forest Products Association: VIK Hemlock	\$20,000
BC Hydro High Performance Small commercial building Grant Program	\$11,000
Community Foundation of Whistler Grant toward Green Roof	\$10,000

## 4.3 Escalation

Several factors contributed to the cost increases for completion of the WPL project. The project was realized during a period of maximum construction cost escalation (from 2005 to 2008), labour shortages, and direct competition for skilled labour with other significant Sea to Sky construction initiatives. The overheated construction market and boom in the building design and development industry was not limited to Whistler. Projects with similar timelines elsewhere in British Columbia, Alberta, and Washington State were also faced with delays and escalating costs due to the same factors.

As of May 2007, the library's construction cost increase from original estimates was 39 per cent. This cost increase is significant, but was also below that of local comparable construction projects, including the Vancouver Convention Centre (42 per cent) and Squamish L'ilwat Cultural Centre (50 per cent). The latter project is also located in Whistler.

Cost increases were also attributable to:

- Construction delays, which increased construction insurance costs;
- Additional fees required by sub-consultants due to increased administrative costs with construction delays
- Fees for revised tender drawings to incorporate cost savings measures
- Unforeseen events, such as challenges in installing the geothermal bore field, which caused other construction delays
- Heavier than average winter snowfall impeding construction

## **5.0 ENVIRONMENTAL BENEFITS**

### **5.1 The LEED Program**

The new library was designed within the framework of both the municipality's own Whistler 2020 policies and the Canada Green building council's Leadership in Energy and Environmental Design (LEED) program.

The LEED program awards credits for sustainable design strategies in six categories: Sustainable Sites, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality and Design Process and Innovation. According to the number of credits achieved a building can be awarded LEED Certified, Silver, Gold or Platinum status. The LEED Program requires a building to be in operation for 12 months and its energy performance to be independently verified before adjudication is made. While the Whistler Public Library's mandate was to achieve LEED Silver certification, it appears that LEED Gold certification is likely.

### **5.2 Sustainable Site Design**

Strategic decisions such as the location of the site are among the most important in determining the sustainability of a building. The Whistler Public Library is located within the village of Whistler, easily accessible by foot, bicycle and all public transit routes. In several important respects, Whistler is a more urban community than many larger municipalities in Canada, having a compact, walkable (and largely pedestrianized) central core, an extensive network of bicycle trails and a free Village public transit system. Incorporation of an end of trip bicycle facility storage and shower facility acknowledges the importance of bicycle transportation within the municipality and gains an additional credit under LEED.

### **5.3 Water Conservation**

The shallow roof form finally chosen for the library made it possible for a green roof to be installed, a feature that contributes to the environmental performance of the building in several ways including the control of surface water runoff (that in turn reduces the peak loads and the size of connection needed to the municipal storm water system) and the reduction of the urban heat island effect – a phenomenon that results in urban areas being several degrees warmer than the surrounding areas because of the heat absorbed and reradiated by buildings and paved surfaces. Water is

further conserved in the building through the use of low flow plumbing fixtures.

Total water consumption per occupant is projected to be 469 litres/m<sup>2</sup>/year. This represents, a 32.4% saving over a reference building conforming to the standards of Natural Resources Canada's Model National Energy Code for Buildings (MNECB 1997).

#### **5.4 Materials and Resources**

The low slope roof also stores snow as opposed to shedding it. Typically shedded snow needs to be removed from site and transported to a snow dump location using heavy equipment. Storing snow on the roof eliminates the need for snow removal and therefore eliminates any snow management related transportation costs and associated GHG production through use of the heavy equipment.

Although it gets little credit under LEED, solid sawn wood is by far the most environmentally sustainable of the major construction materials, being both renewable and extremely low in embodied energy. This is universally true because of the low processing energy, but additionally in the case of the Whistler Public Library because the material used was sourced from local forests and the solid wood roof panels fabricated close by in Metro Vancouver. The preference given to natural, locally sourced and renewable materials further reduces the overall impact of the building on the environment.

By value, the percentage of building materials locally sourced was 32.8 % and the percentage of materials with recycled content was 18.3%. In addition a construction waste management plan meant that 98.4% of construction materials were diverted from the landfill.

#### **5.5 Energy and Atmosphere**

The building has a geothermal heating system that uses 17 boreholes to extract heat from the ground during the heating season, and to dispose of excess heat during the heating season. A displacement ventilation system introduces conditioned air through a raised floor system, delivering heating or cooling directly into the occupied zone of the building. High efficiency hot water radiators add to the comfort of the study carrel areas. Cross ventilation is achieved through operable windows, controlled automatically by sensors.

The north facing window wall is composed of high efficiency double glazing that reduces heat loss while admitting copious quantities of natural light. This potentially reduces the building's dependence on artificial lighting and reduces lighting energy consumption.

The innovative wood roof also contributes indirectly to overall building energy efficiency. The shallow structural depth reduces the overall building volume and envelope area, which in turn reduces both embodied and operating energy. When one adds to this the fact that a large amount of carbon is sequestered in the wood (and will remain there for the life of the building) the reduction in greenhouse gas emissions and the overall environmental benefits resulting from the choice of wood is significant.

The overall propane\* consumption of the building is tracking to be \$3,600/year (124GJ/year) or \$300/month. Electricity is used for supplemental heating, lighting, and other typical office uses. Electrical consumption is tracking at \$22,600/year (157,000 kWh) or approximately \$1880/month. Total energy consumption is tracking at \$26,200/year or \$2183/month. These figures are based upon nine months of collected data, a substantially colder and longer than average winter, and represent a saving of 43.9% over that of a similar building designed to the Model National Energy Code for Buildings (1997).

*(Note: Until May 2009 propane was the only gas source available in Whistler. The Library was designed to accommodate a switch to natural gas.)*

## **5.6 Indoor Environmental Quality**

Indoor environmental quality is maintained by the use of finishing materials and cabinetry which contain little or no volatile organic compounds (VOCs), by construction and commissioning procedures that eliminate dust and other contaminants from concealed spaces and ventilation plenums and ductwork. Natural light and ventilation enhance indoor environmental quality both quantitatively and qualitatively.

## **6.0 SOCIAL AND ECONOMIC BENEFITS OF THE PROJECT**

### **6.1 Social Benefits**

Libraries contribute to the social sustainability of a community by enhancing its cultural life, by bringing people together and engaging them in activities of common interest. The Whistler Public Library is no exception, and by virtue of its location, program components and the

quality of its design contributes more than most libraries do. The library contains meeting facilities that are accessible to the public and community groups for extended hours, while its fireplace and casual seating areas extend an invitation to all residents – but especially seasonal workers – to treat it as a community living room. Natural materials, generous daylight and the views to the park and mountains create both a unique sense of place and a connection to the natural environment.

Since the new facility opened, use of the library has increased Significantly - there are now 850 visitors daily, and the library circulates 20,000 items monthly.

As of September 2008 there has been a:

- 450% increases in the number of programs offered for children
- 300% increase in attendance at adult programs
- 140% increase in attendance at children and young adult programs
- 185% increase in library visits
- 162% increase in the number of check-outs

Note Use increased substantially over the winter months to achieve the 300% increase over previous facility

The old library facility lacked space to hold programs. The new library has sufficient space in the Community Room, the Burrow and the Fireplace Lounge to host a variety of community programs. The new space has also facilitated partnerships with the o organizations, including Community Health, Literacy Now, LUNA (Late & Unique Night-time Alternatives), and the Vicious Circle Writers Club.

The new library has addressed issues of universal accessibility in several ways: The library is now equipped with accessible underground pay parking and elevator to the main floor and access to the Village Stroll, automatic entrance doors, accessible washrooms, an adaptive technology work station to accommodate a variety of users with disabilities, a TTY phone, and a prominent, accessible public meeting space.

## **6.2 Economic Benefits**

Local manufacturers, fabricators and contractors benefitted economically from this project.

- 41% of value of work awarded to Whistler trade contractors and suppliers
- An additional 32% of value of work awarded to Sea To Sky (Squamish to Pemberton) trade contractors and suppliers

Now the facility is complete, regular monitoring of the DDC (direct digital control) systems in the building is confirming the anticipated levels of energy savings – resulting in lower operating costs for the municipality, which in turn benefits the community as a whole.

## **7. LESSONS LEARNED**

The realization of this project was undertaken in the most challenging of circumstances under which the control of costs was extremely difficult and the availability of trades uncertain. The design process was also challenging as programming and sustainability considerations contributed to the generation of a building form that did not neatly fit within the municipality's existing design guidelines. Despite these challenges, the Resort Municipality of Whistler now has a new library that has received local and international recognition both from library associations and architectural institutions.

While RMOW does not immediately plan to rewrite its design guidelines, the library has opened the eyes of municipal government, design panels and the community at large to the legitimacy of other design approaches in the Whistler context. This has also been a value-added exercise in which the client and design team were able to extract greater potential from the chosen site than had originally been imagined. This has been manifested in the provision of the end of trip facility, and in the substantial civic presence achieved by raising the building to street level. While these contributed to an increased cost for the building, this cost has been more than repaid in additional benefits to the community.

The design of the building took into consideration some particular local conditions, including the availability of certain construction trades and technologies, and the short construction season which because of the early onset of winter conditions requires buildings to be closed in by the end of October. The decision to prefabricate the roof system was intended to help us meet this deadline however, despite these efforts, delivery was late and the overall construction schedule significantly delayed.

From an operational perspective, it is valuable to have building performance monitored and to be able to verify the efficacy of the choices made for various environmental systems. However, it would be even more valuable to be able to monitor all systems and to compare the hard data obtained with that from similar buildings within the same climate zone. If a suitable structure for data collection was in place nationally, this information could ultimately form a valuable database facilitating objective and quantitative comparisons of building performance.

Cost issues resulted in the deletion of some systems that would have contributed further to energy savings – notably photocell-based controls for the lighting system. Over time, the compilation of life cycle data from similar buildings will strengthen the arguments for increased capital expenditure in areas such as this, in recognition of the proven life cycle savings these systems deliver.

One problem of the Construction Management delivery model is that total project costs are not known until all items have been tendered and bids secured.

Typically, public projects follow specific procurement procedures and require a degree of financial “transparency”. While these are intended to provide a fair and secure means of spending taxpayer dollars, they have potential to place an owner in a disadvantageous negotiating position and therefore increase cost risk.

## **8. PUBLICITY AND PHOTOS**

### ***Awards:***

- 2008 Community Recognition Award - Canadian Wood Council for support of the BC Wood industry and its commitment to use wood in the Library;
- 2008 Red Cedar Award - Canadian Wood Council for use of cedar;
- 2009 Lieutenant Governor’s Award in Architecture - Merit Recipient - Architectural Institute of BC;
- 2009 World Architecture Festival Awards, Short List Civic and Community Buildings.

### ***Publications:***

- October 2009 Architectural Record
- February 2009 Canadian Architect
- June 2008 issue of Plus Magazine (Korean Architectural and Interior Design Magazine).
- July/August 2008 edition of *Innovation*, the Journal of the Association of Professional Engineers and Geoscientists of BC, a magazine with a professional membership of almost 25,000.

### ***Case Studies***

22009 Forestry Innovation Investment ‘Whistler Public Library’ – one of a series of case studies published as part of the BC Government’s promotional campaign around the 2010 Winter Olympic Games.

## APPENDIX 1: TNS: AN OVERVIEW OF THE SCIENCE

The First and Second Laws of Thermodynamics set limiting conditions for life on earth: The First Law says that energy is conserved—nothing disappears. Only its form may change. Another way of stating this is: "Energy cannot be created, or destroyed, only modified in form." The implications of the Second Law are that matter and energy tend to disperse over time. This is referred to as "entropy." Putting the two laws together and applying them to our planetary system, the following facts become apparent:

1. All the matter that will ever exist on earth is here now (First Law).
2. Disorder increases in all closed systems and the Earth is a closed system with respect to matter (Second Law). However it is an open system with respect to energy since it receives energy from the sun.
3. Sunlight is responsible for almost all increases in net material quality on the planet through photosynthesis and solar heating effects. Chloroplasts in plant cells take energy from sunlight for plant growth. Plants, in turn, provide energy for other forms of life, such as animals. Evaporation of water from the oceans by solar heating produces most of the earth's fresh water. This flow of energy from the sun creates structure and order from the disorder.

In 1989, Robert wrote a paper describing the system conditions for sustainability, given the laws of thermodynamics. He sent it to 50 scientists. He asked that they tell him what was wrong with his paper. On version twenty-two Robert had consensus on what was to become *The Natural Step*.<sup>[2]</sup>

## **Appendix 2: WHISTLER 2020 AWARDS AND RECOGNITION**

### **Federation of Canadian Municipalities**

Sustainable Community Planning Award - 2005

Whistler 2020 – Moving Toward a Sustainable Future

### **Federation of Canadian Municipalities**

Sustainable Community Planning Award - 2005

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### **Canadian Association of Municipal Administrators**

Award for Innovation – 2005, 2007

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### **United Nations Sponsored International Liveable Communities Awards**

1<sup>st</sup> Place overall, Best Planning for the Future – 2005

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### **United Nations Sponsored International Liveable Communities Awards**

Silver Award, Liveable Community <20,000 – 2005

### **Province of British Columbia Sponsored Green Cities Awards**

Population 5,000 – 10,000 – 2006

Whistler2020 and Whistler's on-the-ground sustainability initiatives  
(\$25,000)

### **Community Action on Energy & Emissions**

Awarded Community - 2007

Whistler Carbon Calculator (\$20,000)

### **Smart Growth Smarty Awards**

2008 Winner – Smart Growth People Award

Whistler 2020 Task Forces – Moving Toward a Sustainable Future