



# Vancouver 2010: Achieving Sustainability



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# Vancouver 2010 Bid Overview

- The Vancouver 2010 Bid Corporation (Vancouver 2010) competed internationally from 1998 to July 2003 to win the right to host the games
- During the Bid phase Vancouver 2010 committed to incorporating sustainability into the Vancouver bid
- This presentation reviews those commitments

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# Overview of the Presentation

- Vancouver 2010 Sustainability Vision
- Sustainability and Impact Assessment
- Vancouver 2010 Sustainability Programs
- Venues
- Questions

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# The 2010 Vision

To create sustainable legacies for athletes, sport development, our host communities, our province, our country and the global Olympic family by hosting an outstanding Olympic and Paralympic Winter Games.





# Sustainability and Impact Assessment

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# Sustainability and Impact Assessment

- A Strategic Environmental Assessment of the Vancouver 2010 Bid was completed in 2002
- A Biophysical Impact and Social and Economic Study completed as part of the Vancouver 2010 Bid in 2002
- A Sustainability Impact Framework was developed in 2002 based on Gibson, 2002 and Hassan, 2002
- Detailed impact assessments are being completed for primary venues i.e. Callaghan Valley, Whistler Sliding Centre and Cypress Mountain

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# Sustainability Impact Framework

1. Sustainability and Environment working groups develop Sustainability Strategic Goals
  - Environmental Stewardship
  - Social Responsibility
  - Economic Opportunity
  - Sport Development

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# Sustainability Impact Framework

## 2. Sustainability Objectives Developed

- Conserve Resources
- Prevent Pollution
- Protect and Enhance Natural Systems

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# Sustainability Impact Framework

## 3. Biophysical, Social and Economic Assessment Performed

- Venue description
- Baseline Inventory
- Potential effects
- Cumulative effects
- Residual effects
- Site specific BMPs and Mitigation and Enhancement Opportunities developed

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# Sustainability Impact Framework

4. Sustainability Assessment performed
  - Identify Values, Objectives and Criteria
  - Develop effects and Trade-off rules
  - Determine significance of effects
  - Determine significance of trade-offs
  - Develop Monitoring Plans
  - Assess Sustainability Indicators
5. Primary Sustainability Policies and Programs being developed

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# Sustainability Programs

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# Vancouver 2010 Sustainability Policy

- Vancouver 2010 committed to sport development and sustainable environmental, economic and social practices in our plans and actions. We will meet this commitment through:
  - Environmental Stewardship
  - Conserving resources
  - Preventing pollution
  - Protecting and enhancing natural systems
  - Maximizing Economic Opportunity
  - Supporting international trade and investment
  - Advancing social equity through economic opportunities
  - Strengthening community and stakeholder partnerships
  - Communicating openly and consulting with our stakeholders
  - Promoting diversity and celebrating cultural heritage
  - Increasing understanding of sustainability
  - Hosting inclusive and accessible Games
  - Contributing to sport development and health promotion

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# Integrated Environmental Approach

- Vancouver 2010 is committed to integrating its environmental approach into contracts with suppliers and sponsors through a **procurement system** that will weigh how they will assist the Vancouver OCOG in meeting sustainability objectives.
- A **Sustainability Management System** based on ISO 1400 principles will be developed
- A **legacy program** that advances the understanding and practice of sustainability by sponsors and suppliers is proposed to be delivered in partnership with leading corporations

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# Air Quality and Greenhouse Gas Management

- Air quality in Vancouver is considered to be among the best of any major metropolitan region in North America and is better now than it was 15 years ago.
- Vancouver 2010 identified a number of emission reduction strategies and developed a **spreadsheet tool to compare emission reduction impacts from options and scenarios** under consideration and to help develop emission reduction targets.
- The goal was to move towards a **zero net emissions Games** that is climate neutral.

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# Solid and Liquid Waste Management

- Both Vancouver and Whistler have leading-edge solid waste management plans that provide the platform to pursue a **zero solid waste management strategy** during the Games.
- The program will focus on reduction, reuse, recycling and rethinking.
- Concepts for leading-edge technology and practices to minimize the volume of liquid waste introduced into the existing systems will be used for venue and village designs where possible

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# Green Buildings

- The new buildings and infrastructure required for the Vancouver 2010 Olympic and Paralympic Winter Games propose to be a showcase of the best in green building design and construction techniques.
- North America's most respected green building rating system, **Leadership in Energy and Environmental Design (LEED)**, will be used as the standard for many new facilities.
- LEED defines high performance buildings that **minimize their environmental footprint** in five categories:
  - sustainable site selection
  - water efficiency
  - energy and atmosphere
  - materials and resources and
  - indoor environmental quality.

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# Consultation and Collaboration

- Vancouver 2010 established an **Environmental Working Group** with broad-based representation from all levels of government, environmental non-governmental organizations, academia and industry environmental specialists.
- The **sustainability framework** was developed through the Environmental Working Group with input from Bid partners, sustainability experts and key stakeholder groups. The framework was then communicated through public information workshops and has been continuously improved based on input received.
- The Vancouver OCOG will continue the process of consultation and collaboration with partners and stakeholders

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# Sustainability Management System

- Vancouver 2010 committed to **moving beyond environmental stewardship** to embrace the economic and social components of sustainability in order to support balanced decision making, a long-term view, inclusiveness, equity and healthy communities.
- This will be passed onto the Vancouver OCOG through a **Sustainability Management System** comprised of policy and commitment, education and awareness, monitoring and reporting, and environmental, social and economic actions.

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# Monitoring and Reporting

- Vancouver 2010 proposed drafting **key performance indicators** and targets associated with each of the sustainability policy objectives.
- The Sustainability Management System was proposed to measure performance and procedures for following up non-performance would be set.
- Monitoring and **publicly reporting** on progress towards the stated sustainability goals and objectives.
- This monitoring will allow for both a system of **continuous improvement**, as results of activities are regularly fed back to the management team, and a source of public accountability for actions
- Vancouver 2010 proposed key stakeholders be engaged in the selection of an **independent third party to conduct a sustainability audit** of the Games planning and operation

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# Sustainable Energy Management

- The Vancouver 2010 Olympic and Paralympic Winter Games will provide an opportunity to **showcase world leading energy management practices.**
- Using the high standards set for energy efficiency in buildings through the LEED program, energy needed for power, heat, light and air conditioning will be minimized as natural day-lighting and ventilation will be emphasized.
- **Energy required will be sourced through renewable supplies.** These may include:
  - micro-hydro installations
  - photovoltaic technology
  - fuel cell generators and solar heating
  - ground-source heat pumps.

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# Sustainable Transportation

- based on a multi-modal public transportation system in which the **use of private automobiles will be actively discouraged.**
- Vancouver venues have been sited in clusters within easy walking distance of existing public transit. In Whistler, compact venue and village sites combined with a top rated public transit system and **prohibition of spectator car parking at events** will encourage the use of more sustainable forms of transportation.
- **Event tickets will include the use of public transit** in Vancouver and Whistler and a subsidized private transportation system will be developed for Vancouver to Whistler requirements.
- Proven low and zero emission technology including hybrid, natural gas, electric and fuel cell vehicles are planned for use during the Games.
- **Hydrogen fuelling infrastructure necessary to support the use of fuel cell buses and vehicles is planned for Vancouver and Whistler.** Installation of hydrogen fuelling infrastructure will create a lasting community legacy that will accelerate transition to a zero emission transit system

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# Sustainable Olympic Villages

- Vancouver 2010 planned **two Olympic Villages**, one in Vancouver and one in Whistler.
- The Vancouver Olympic Village will be located in the downtown core within walking distance of the Olympic Stadium and 20 km of all competition venues. The Village is located on land historically used for industrial purposes that is being rehabilitated and developed as a **model sustainable community**.
- The Whistler Olympic Village will be within 17 km of all competition and training venues in Whistler and immediately accessible from the Sea to Sky Highway. The Village will provide a **critically needed source of non-market housing** for Whistler residents and seasonal employees.

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# Education and Awareness Programs

- The Vancouver 2010 Bid Corporation implemented an extensive public information, education and awareness program.
- Sustainability themes will be incorporated into **educational programs** targeting schools, athletes, tourists, sponsors, suppliers and the media throughout the life of the Vancouver OCOG.
- Those involved with the Vancouver OCOG will receive **sustainability education and skills training** that will benefit their communities and workplaces.

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# Venues

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# Questions

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