

# Greenest games ever?

## Sustainability played huge role in latest Olympic Games

By Heather Hudson

Despite copious amounts of snow and ice, the Vancouver 2010 Olympic and Paralympic Winter Games was one of the greenest in history.

That's because the environment was top-of-mind for organizers, sponsors and government from the earliest planning stages. With the country on the world stage at the pinnacle of the environmental movement, it was more important than ever to deliver a sustainable Olympic Games.

Working with the Vancouver Organizing Committee for the 2010 Olympic and Paralympic Games (VANOC) and other partners, Environment Canada played a

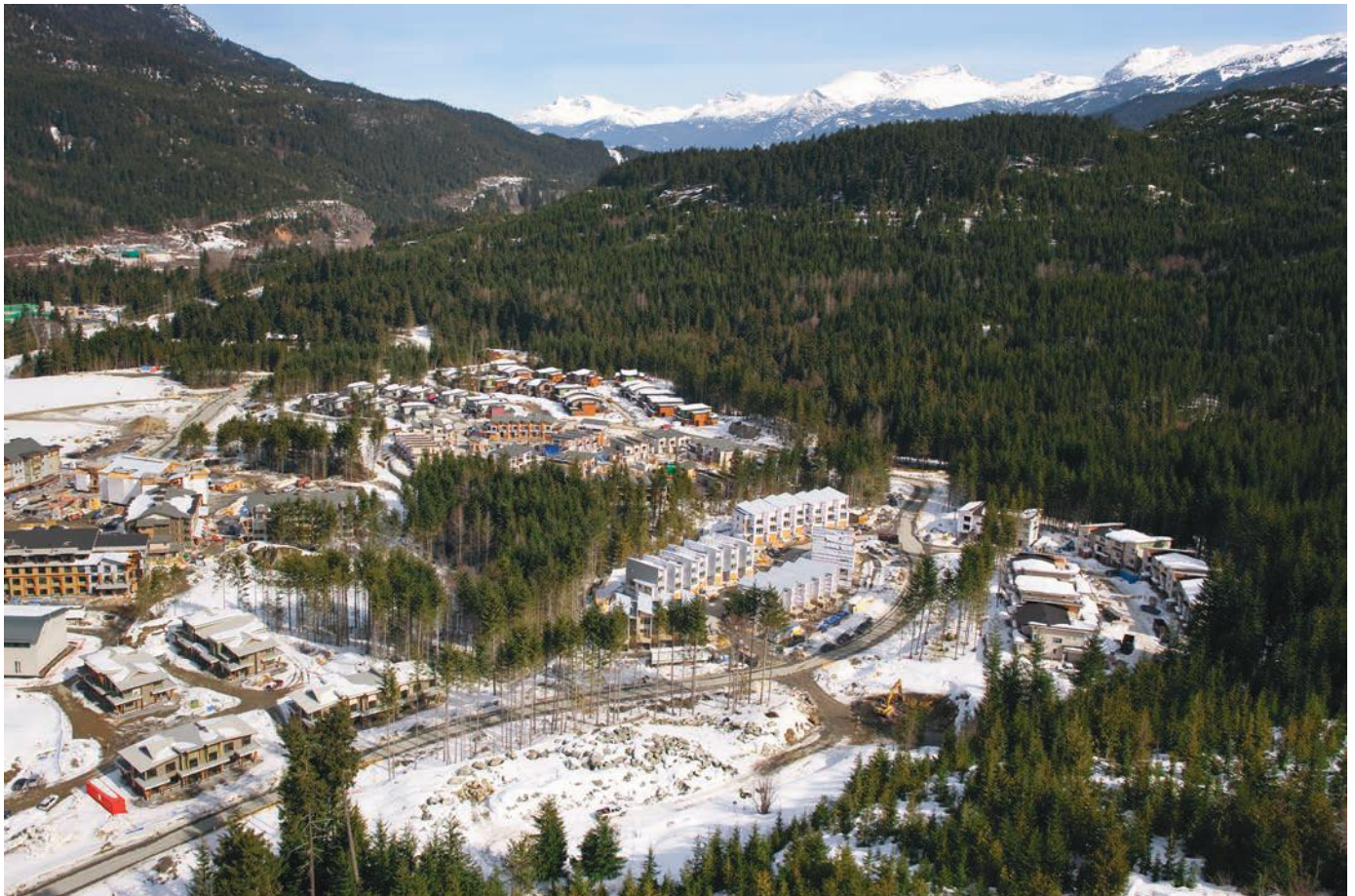
huge role in minimizing the environmental impact of the Games. Among other things, it worked to help incorporate green building design, reduce the federal carbon footprint and showcase "made in Canada" innovations in sustainable building and clean energy.

"Overall, we were extremely pleased Canada hosted one of the most environmentally friendly Games the world has ever seen," said John Beveridge, acting director of Environment Canada's Sustainability Division.

"The president of the IOC, Jacques Rogge, praised Vancouver 2010 for establishing new standards for environmental sustainability and providing a blueprint for future Games."

The most visible and revolutionary achievements included:

- Sustainable attributes found in many of the Olympic venues, including the Vancouver Olympic and Paralympic Centre, which featured sustainability elements influenced by a federal/VANOC study on how to maximize environmental performance at minimum cost;
- The Vancouver Olympic and Paralympic Village, which featured Canada's first net-zero energy, multi-use residential building; and
- The Richmond Oval, whose innovative wood wave roof was made from pine beetle-killed wood.



The Olympic and Paralympic Village in Whistler illustrated Environment Canada's role in sustainability of 2010 Games.

Photo: © VANOC/COVAN



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There were several components of the Government of Canada's role in the sustainability of the Games.

### Offsetting federal emissions

A mindful approach was taken to reduce greenhouse gas (GHG) emissions for the 2010 Winter Games, but Canada became the first national government in Olympic history to commit to offsetting its GHG emissions for the Games. Its offset investments support technologies that reduce GHG emissions.

### Environmental assessments

Every competition venue as well as the two athletes villages were subjected to environmental assessments intended to reduce the impacts on surrounding environments.

Environment Canada focused on the protection of air and water quality, migratory birds and species at risk. As part of the assessments, the ski jump at Whistler Nordic Centre was moved to reduce effects on old growth forest, wetlands and local species. A section of a stream at the Whistler Sliding Centre was also relocated to protect habitat for the rare tailed frog.

### Sustainability Star program

Six Government of Canada-supported initiatives were recognized by VANOC's Sustainability Star program for demonstrating positive and measurable social, economic and environmental impacts.

### LEED Business Case for Olympic Facilities


This study helped improve the environmental and energy performance of the Vancouver Olympic/Paralympic Centre and other Olympic venues. By demonstrating how to maximize building sustainability at minimal cost, the study has gone on to be used in workshops for the Vancouver construction industry.

### ecoTECHNOLOGY "Green" Vehicles

The eTV program helps establish Canadian use of light-duty vehicle technologies that reduce greenhouse gas emissions, pollutants and fuel consumption. During the 2010 Winter Games, several advanced green vehicles from this program were used.

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On-the-road performance data gathered from this experience will help build a cleaner transportation system for Canadians.

### Homeless Partnering Strategy

Human Resources and Skills Development Canada's Homeless Partnering Strategy (HPS) makes strategic investments in community priorities. It encourages cooperation between governments, agencies and community-based organizations to find local solutions for people who are homeless or at risk of becoming homeless. For the 2010 Winter Games, training participants of the RONA Vancouver 2010 Fabrication Shop had support for their housing needs provided for through an HPS pilot project.

### BC Hydrogen Highway

The BC Hydrogen Highway showcases Canadian hydrogen and fuel cell technology development. It connects Whistler, Victoria, Metro Vancouver and the Vancouver International Airport.

### Canada Line

The Canada Line is a 19-kilometre extension of Metro Vancouver's rapid transit network from downtown Vancouver to the City of Richmond and the Vancouver International Airport. Placed in one of the region's biggest transportation corridors, the new rapid transit line provides a sustainable alternative to carbon-intensive travel.

### Richmond Oval

The Richmond Oval is best known for its one-of-a-kind wood-wave roof made from wood affected by the mountain pine beetle infestation. Inside the Oval, the energy used to refrigerate the ice surface is recycled back into the building's heating systems using a Canadian technology called ECO CHILL.

The Canada Green Building Council has also recognized the unprecedented achievements in green building for the 2010 Winter Games. At least 31 Vancouver 2010 buildings pursued Leadership in Energy and Environmental Design (LEED) certification, the highest ever for an Olympic Games. The Vancouver Olympic Village was also awarded LEED Platinum status, making it the "greenest neighbourhood in the world."

Now that the skiers, skaters, lugers and 'boarders have vacated and Vancouver is once again seasonally green, the legacy of the Games will go on in the lessons learned, including making clean technology choices, number of sustainable new structures and an expanded transport system for the city.

The Games' green performance will be reviewed by the vaunted UN Environment Program in an environmental assessment report to be published later this year.

In the meantime, check out the Vancouver 2010 Sustainability Journey at [www.youtube.com/environmentcan](http://www.youtube.com/environmentcan). This five-minute video highlights the initiatives that made the 2010 Winter Games the most sustainable to date.



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– David Beveridge, Acting Director of Environment Canada's Sustainability Division



The Richmond Olympic Oval, the competition site for speed skating at the 2010 Winter Olympic Games.

Photo: © VANOC/COVAN