



# Swifter, Higher, Stronger. Greener?

*by* MAX FAWCETT

*Athletes from around the world will arrive in Vancouver with expectations of career-defining performances, but the organizers of the 2010 Winter Olympics may have set their own expectations even higher in promising to deliver the world's first sustainable Games.*

**G**iven that the Olympics typically requires the clearing of spaces and sites, the construction of new facilities, and air travel for thousands of spectators, athletes, and officials, the Games may well be the antithesis of an environmentally sustainable experience. Yet the Olympics are also a rare moment of global solidarity, a period in which the world's collective attention is focused on a single place, even if it is to watch a man slide down a frozen track head first at 100 kilometres per hour. For advocates of sustainability, that solidarity represents an opportunity to promote new ideas and better ways of living. Captivating the international imagination with world-changing ideas would make the environmental costs attached to the Games seem like a worthwhile investment. The question now, is whether the Vancouver Organizing Committee (VANOC) will be able to deliver on its promise of a sustainable Olympic Games, or simply run up another Olympic-sized bill of environmental costs.

The answer depends largely on one's vantage point. VANOC's bid for the games,

which built on the green foundations laid in Lillehammer in 1994 and fortified in Sydney in 2000, pledged to place the environment—the third pillar of the Olympic movement—at the heart of the experience that it would share with the world. To the casual observer, VANOC may appear to have fulfilled that promise. The estimated 2.3 million people attending the Games and the billions watching around the world will surely be awed by the Richmond speed skating oval, which was built in part with recovered beetle-kill wood and uses rainwater for irrigation, toilet flushing, and ice-making. Curling fans will be impressed by the venue at Hillcrest Park, where waste heat from ice refrigeration is used to heat the building and the nearby aquatic centre.

More striking is the glittering Olympic Athletes Village in southeast False Creek, which stands as a monument to green building practices and eco-friendly urban planning. In addition to being on track for LEED (Leadership in Energy and Environmental Design) certification (silver for all private buildings, gold for all civic buildings, and platinum for the community centre), the

village features North America's first sewer heat recovery system, a zero-emissions, energy-neutral building, state-of-the-art energy monitoring equipment in every unit of housing, and a new geothermal heating station situated beneath the Cambie Street Bridge.

"It is a world-class model of environmental design that is going to be doing things that haven't been done in residential construction before," city councillor Geoff Meggs says. VANOC has committed to using equally ambitious standards in

most of its other buildings, including the organization's own head office, which was recently certified LEED Gold. Linda Coady, VANOC's Vice President of Sustainability, believes that the organization's sustainability-oriented planning, building, and sourcing standards will leave a meaningful green legacy. "We're the greenest Games in relation to climate change," Coady says. In addition, VANOC's proactive approach to reducing Games-related emissions through alternative energy sources, green building standards, and fleet management policies

has reduced its carbon footprint by an estimated 57,000 tonnes, or 18 per cent of overall projected emissions. More importantly, VANOC extended the scope of its carbon management plan from the Torino organizing committee's 17-day window to a seven-year outlook.

But for those operating at a critical distance, VANOC's successes aren't nearly as impressive. Setting aside the equally complex discussion of the social and financial implications of the Games, many British Columbians say that the Organizing Committee's actions have not lived up to the promises made by its environmental sustainability platform. Derek Corrigan, the Mayor of Burnaby, a municipality of approximately 203,000 residents located just east of Vancouver, notes that VANOC's vaunted green building standards aren't a particularly great achievement. "It's not that hard to go out and demand that the buildings that you're building are going to be using green technologies," Corrigan says. "Everybody's doing that." Pina Belperio, a Whistler-based activist and founder of the citizen watchdog group Whistler Watch, shares Corrigan's dim view of the emphasis that VANOC has placed on LEED and other green building strategies. "Recycling, composting, or building venues to LEED standards is not innovative—it's simply following the norm," she writes. "Where are the solar panels, composting toilets, electric cars, and green jobs that can be showcased to the world?"

To be fair, VANOC has catalyzed some major green projects. For example, the new Canada Line, an extension of the existing rapid transit network out to the Vancouver International Airport (making Vancouver the first city in Canada to link its airport to the downtown core) and Richmond, is an important contribution to the Lower Mainland's public transit. While it had been under consideration for some time, it was the Games that catapulted the Line into existence. British Columbians have done more than just look at the new addition to their transit system. Ridership has exceeded even the most optimistic expectations, peaking at over 100,000 per day a full three years before those levels were expected to be reached.

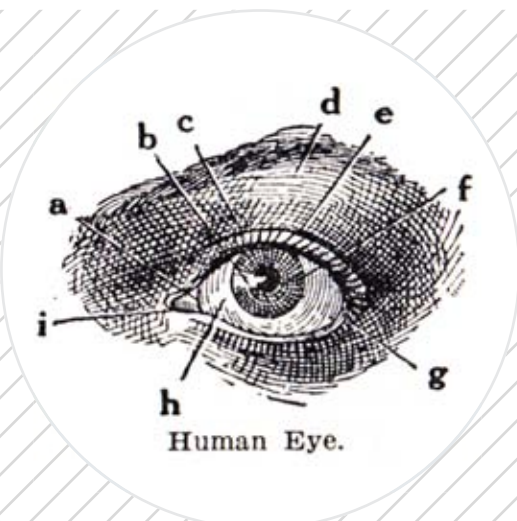
But not all Olympics-related transportation decisions have been as transformative. The "hydrogen highway," a network of zero-emission buses fuelled by liquid hydrogen, has disappointed critics such as Rob Fleming, the B.C. NDP's environment critic. "Translink [the Lower Mainland's transit authority]

## Our Vision

**JANUARY 26, 2024, LAUSANNE, SWITZERLAND**—After a 36-year hiatus, the Winter Olympics will be returning to continental Europe in 2030. On Monday, by a convincing 82-24 margin, the International Olympic Committee announced that the European Union will host the 2030 Winter Olympics.

The EU bid, which features a zero-construction, zero-waste, carbon-negative platform with a closed-loop water system, will invest hundreds of millions of dollars into comprehensive retrofitting projects in Lillehammer, Grenoble, Albertville, Torino, St. Moritz, and Sarajevo—all former Games sites. Those retrofitting efforts will reinvigorate these facilities, creating sporting and cultural opportunities for a new generation of residents as well as a collection of buildings that will be monuments to the most creative green ideas the world has to offer. These retrofits will make all facilities net producers of energy, and two former 50-storey skyscrapers will be turned into vertical "sky farms" to produce all the food for athletes and spectators. In addition to recycling pre-existing facilities rather than building new ones, the EU's decentralized bid will reduce spectator-related travel on the continent, significantly curtailing the volume of travel-related carbon emissions associated with the Games.

The EU bid also pledges to reinvest ten per cent of the overall Games' budget into local green energy projects, which corporate sponsors will be required to match as a condition of their participation. Potential sponsors will be subject to comprehensive environmental audits that will assess the full scope of their business activities and the effect of those activities on the environment. These audits, organizers say, will make it impossible for companies to use the



Olympics as an opportunity to greenwash their reputation in one part of the world, while committing crimes against the environment in another.

For spectators, the cost of the carbon offsets associated with their travel to and from the Games will be matched by a reduction in the price of event tickets, allowing them to minimize the environmental impacts of their experience. The EU Organizing Committee, meanwhile, has pledged to cover the cost of the remaining carbon emissions associated with Games-related travel, guaranteeing full carbon-mitigation.

Equally important, organizers say, is their decision to concurrently host the first "Green Innovation Games" in hopes of marrying the intense international interest in the Games with a showcase of the newest environmental innovations and solutions. In an effort to harness the power and visibility of Olympic iconography, medals will be presented to companies, groups, and individuals who deliver standout performances at the event. The hope, organizers say, is that the 2030 Winter Olympics will be remembered as much for the innovations it encouraged as the performances of its competing athletes.

did not want to buy these buses,” he says. “They did not want to maintain and operate them after the Games; they cost four times what a bio-diesel hybrid bus would cost, which they already have in their fleet.”

Cheeying Ho, the executive director of the Whistler Centre for Sustainability, says, “It’s hard to believe that the millions of dollars spent on the Sea to Sky highway expansion couldn’t have been used for more sustainable transportation options.”

VANOC’s carbon management program is similarly disappointing. While it has expanded the range of emissions it associates with the Games, it has not agreed to a similar expansion of its responsibilities for offsetting them, despite pressure from Canada’s own Olympic athletes, who published an open letter in February 2009 encouraging VANOC to cover all Games-related emissions. Despite continued assurances that climate change is at “the top of its agenda,” VANOC is taking responsibility for fewer than half of the Games-related emissions. The organizing committee will offset the 118,000 tonnes of direct emissions, but leave the other 150,000 tonnes of indirect emissions to its corporate sponsors, competing nations, and Games visitors. Yet, the David Suzuki Foundation estimates the price tag on offsetting the balance of emissions at a miniscule 0.3 per cent of the overall Games budget—less than the cost of the opening ceremonies.

VANOC’s waste management measures are also flawed. Burnaby Mayor Derek Corrigan notes that he, along with other regional mayors, suggested that VANOC promote the use of local drinking water and discourage the use of bottled water, but VANOC rejected their suggestion. Corrigan suspects that VANOC’s refusal was animated, at least in part, by the desire of leading Olympic sponsor Coca-Cola to use the Games to promote its new “PlantBottle,” a plastic hybrid that uses 30 per cent plant-based waste material. “I think they missed a real opportunity to be able to walk the walk, and not just talk the talk; to actually make a commitment that was going to require them to do something special,” Corrigan says. “If you’re talking about the greenest Olympics ever, you would be promoting the fact that the local water supply should be utilized wherever possible.”

For Corrigan, VANOC’s decision to privilege the interests of one of its sponsors over local residents and their environment reflects a refusal to honestly grapple with the challenges of sustainability. That refusal is rooted, its critics believe, in an unwillingness

*Like those assigned to judge figure skating at the Winter Olympics, our experts were faced with a vexing task in trying to determine which completed Olympic Games qualifies as the greenest on record. In awarding our medals, we considered carbon management, materials usage, waste reduction, water conservation, building practises, and energy usage, with a particular emphasis placed on the legacy of a Games’ green commitments.*

## Bronze: Beijing, 2008

**Why:** A heavily polluted city with an ever-expanding economy, Beijing’s promise of a green Olympics seemed delusional. Yet seven years and over \$17 billion US later, the city went from 164 “blue sky days” in 2000 to 256 in 2008, thanks to the renovation of 16,000 coal-burning factories and the closure of 1,000 small coal mines. The Beijing Olympics also reduced its carbon footprint by 1.2 million tonnes by switching to green fuel in public transportation, enacting ambitious traffic control measures, and imposing pollution control standards on industry.

The 2008 Games proved to be a catalyst for China’s green energy industry, as the country plans to derive 15 per cent of its power from alternative energy sources by 2020. But journalist Christina Larson notes the paradox between China’s green ambitions and skyrocketing emissions: “It may soon be both the greenest and blackest place on earth.” Still, China’s successful Olympic bid played an important role in the country’s emerging green energy leadership.

## Silver: Sydney, 2000

**Why:** Sydney, the first Games to be advertised in advance as “green,” did for the Summer Olympics what Lillehammer did for the Winter Games. Where the Lillehammer Organizing Committee sought to blunt the environmental damage caused by the Olympics, Sydney’s green approach blended economic, social, and environmental objectives. That commitment was reflected in the five key principles that guided the Sydney Games, most importantly “integrating economic and environmental goals in policies and activities” and “ensuring that environmental assets are properly valued.”

The Olympic Athletes Village, built on a former toxic waste dump, set the standard for restorative development. The 665 homes formed the world’s largest solar suburb at the time, with both power and hot water provided by photovoltaic generators. Through ambitious standards for waste and water management systems and creative ideas like biodegradable utensils, the Sydney Games managed to achieve a recovery rate of 77 per cent of all generated waste (including 60 per cent of construction and demolition waste).

## Gold: Lillehammer, 1994

**Why:** A confrontation between environmental protestors and International Olympic Committee President Juan Antonio Samaranch over the proposed location of the Olympic Hall turned out to be a watershed moment for Norwegian environmentalists and the IOC. The hall was moved and redesigned, sparing the internationally recognized bird sanctuary that would have otherwise been destroyed. Consequently, the IOC made an important commitment to environmentally friendly policies.

More than 20 environmentally friendly projects were initiated by the Lillehammer Olympic Organizing Committee and Project Environmental-Friendly Olympics, including ten arenas constructed with local materials and energy-conserving features, a comprehensive re-use program that aimed to recycle or compost 70 per cent of generated trash, a ban on private automobile traffic within a 60-kilometre radius of Lillehammer, and a massive tree-planting program. Most importantly, Lillehammer opened the IOC’s eyes to the importance of green issues, and started the entire Olympic movement down the path to sustainability. Without Lillehammer, it’s unlikely that any of the other Games on the podium could have achieved what they did.

to seriously address the inherent tension between environmental sustainability and the Olympics themselves. William Rees, professor at the University of British Columbia's School of Community and Regional Planning and creator of the ecological footprint concept, believes that a real commitment to sustainability and green issues demands that emphasis be placed not on negating new carbon footprints, but on erasing ones that have already been made. "The measure is an absolute reduction, not below today's levels but below 1990's levels," Rees says. "As long as you're talking about adding to our carbon load more efficiently, you're not even approaching sustainability."

That tension has led academics like Meg Holden, an associate professor of urban development at Simon Fraser University, to suggest a radical alternative to the "borrow, build, and bulldoze" model on which the International Olympics Committee (IOC) still depends. "I think the most revolutionary sustainability-oriented idea that has come up in our research has been that the Winter Olympics should operate in a small set of cities in appropriate locations around the world, and the Olympics should rotate around those cities," Holden says. "It is eminently unsustainable to keep building venues and carting the Olympic Games all over the world."


Rees agrees, noting that the idea of constructing a whole new set of venues every four years is both wasteful and ignorant of the ecological bind in which the world



*"I think they missed a real opportunity to be able to walk the walk, and not just talk the talk; to actually make a commitment that was going to require them to do something special."*

now finds itself. "Your project should be leaving the world with a lighter load, if you really want to qualify as being green," Rees says. "Instead of building new buildings, we should be going into old buildings and retrofitting them so they emit less carbon

dioxide than before." But that kind of commitment may still be some time in coming. The IOC awarded the 2014 Winter Olympics to Sochi, Russia, a city with relatively sparse sporting infrastructure that will require a huge program of construction to bring it up to Olympic standards.

If perfection is the enemy of good, it is particularly so in the realm of environmentalism, where the search for perfect solutions too often obscures the value of useful flawed ones. With that in mind, it's unfair to describe the 2010 Winter Olympics as a failure when it comes to its green record. There are a number of green success stories associated with the Games, and they deserve a full hearing. But so too do the voices of VANOC's critics, who believe that the vision of a green and sustainable Olympics still has a long way to go before it reaches its full expression. Instead of thinking like accountants, focused on calculating the negative impacts of the Games and finding enough credits to counterbalance them, the IOC and its host cities need to embrace the approach of the architect guided by a sense of space and its many possibilities. Until they do, efforts to depict the Olympic Games as contributing to environmental sustainability will be more hot air in a world that already has far too much of it. 

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## SUSTAINABLE SPONSORS

The Vancouver Olympics' \$1.8-billion operating budget includes about \$500 million in cash sponsorship (28 per cent). Some of these sponsors have been integrating the spirit of Olympic sustainability into their Games-related activities:

### THE FABRICATION SHOP

The **RONA** Vancouver 2010 Fabrication Shop, a woodworking facility for the Vancouver 2010 Olympic and Paralympic Winter Games, was launched in November 2008. The shop hosts a 30-week community-based training program providing carpentry skills training and job experience to individuals who have yet to successfully enter the workforce. By 2010, over 60 participants will have received Fabrication Shop skills training and job experience.

### POST-GAMES AFFORDABLE HOUSING

**RONA** will be contributing building materials for the delivery of post-Olympic Games affordable housing units in six communities across British Columbia. Up to 150 units of permanent affordable housing will be made available to people most in need after the close of the Games. RONA will also outfit these homes with furniture and decor.

### TEAM POWER SMART

**BC Hydro** aims to have 210,000 of its customers reduce their electricity use by 10 per cent—thus joining "Team Power Smart"—before the start of the 2010 Winter Games. Incentives to join included entry into a contest to win tickets to various Olympic events.

### EXHIBITING SUSTAINABILITY

Throughout the Olympic torch relay, **RBC** has been showcasing an interactive mobile sustainable living exhibit, the RBC Eco-Home. Four tents accompany the RBC Eco-Home to help demonstrate RBC's commitment to living sustainably through healthy, active lifestyles and stronger communities. Relay-watchers can enter to win \$25,000 towards an eco-retrofit.