



The Richmond Olympic Oval is a model for cutting-edge sustainable design, breaking new ground for sports and wellness facilities. In addition to conferring direct environmental and social benefits, the Oval's green design features are also expected to yield significant operational cost savings over the building's lifespan.

- After the 2010 Olympic and Paralympic Winter Games, the flexibly designed building will be repurposed as a multisport and wellness facility.
- The Oval has achieved LEED® Silver certification – a highly unusual achievement for a facility of this type and size.
- In the creation of ice, heat energy extracted from the water is usually wasted. In the Richmond Olympic Oval, some of this heat energy is captured for use elsewhere in the building. As the size of the Oval's speed-skating rink is the equivalent of six international hockey rinks, this recovered heat energy is considerable.
- The City of Richmond is also exploring the possibility of creating an innovative thermal energy utility that will use waste energy from the Oval to supply low-cost heating and cooling for the entire new 32-acre urban waterfront neighbourhood surrounding the building.
- Rainwater from the Oval's massive roof is collected and reused. Much of the collected water flows into the building's utility systems to supplement toilet flushing. The rest is stored in a pond in front of the Oval for irrigation of the surrounding trees and landscaping. A fountain designed as part of a public art program oxygenates the pond.
- The Oval's ceiling is made of salvaged pine-beetle-kill wood. With a size of about 100 metres by 200 metres, the roof is believed to be the largest surface ever covered in the once-discarded wood. Showcasing the use of the wood will encourage its application elsewhere and mitigate the economic hardship the pine beetle epidemic has brought upon northern British Columbia communities.
- Other timber used in the building's finishes was salvaged from trees that were felled on the site.
- The building's positioning preserves the Fraser River foreshore and trees along the Hollybridge Canal.
- During construction, recyclable construction waste was diverted from landfills and recycled.
- Building materials such as paints, carpets, adhesives, sealants, composite wood, and laminate adhesives used throughout the Oval are low in volatile organic compounds.
- A site-specific, construction environmental management plan developed by the city identified best management practices used during construction.
- The Oval project also incorporates features that promise to improve existing environmental conditions, including enhancing the intertidal marsh along the foreshore adjacent to the Oval site and strengthening the estuary.
- Marsh plants in the rainfall collection pond act as natural purifiers, improving water quality in the pond and in the connected Hollybridge Canal.
- Interpretative trails along the foreshore adjacent to the Oval highlight the area's natural assets and showcase sustainable development practices.