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## Abbreviations

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<th>Abbreviation</th>
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<tr>
<td>GHG</td>
<td>Greenhouse gas</td>
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<tr>
<td>GOC</td>
<td>Games Organizing Committee</td>
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<td>LCA</td>
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<td>SMART</td>
<td>Sustainable Management Action and Reporting Tool</td>
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<td>SOBC</td>
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Executive Summary

The 2014 Games in Vancouver were the first Special Olympics Canada Games to officially dedicate an entire team towards sustainability. Targeting areas from waste reduction, to health promotion and social cohesion, to sustainably sourced food, the Games Organizing Committee (GOC) consciously made an effort to improve their environmental and social footprints.

This report provides details about selected initiatives and provides an overview of sustainability efforts, outcomes, and recommendations with the aim of supporting the sustainability efforts of future event organizers.

These Games were organized in conformance with the Canadian Standards Association (CSA) Z2010-10 Requirements and Guidance for Organizers of Sustainable Events. A summary of results are provided on page 27.

Further information about the event and sustainability efforts are available on the following websites:

- www.specialolympics.ca
- www.specialolympics.bc.ca
- www.vancouver2014.ubc.ca
- www.css.ubc.ca

And in the following reports:

- Special Olympics Canada 2014 Summer Games Society Report to the Province of BC.
- Economic Impact of the Special Olympics Canada 2014 Summer Games on the BC Economy.
- Special Olympics Canada 2014 Summer Games: Transfer of Knowledge Report.
- Planat in Action: Accessibility Assessment of UBC Competition and Accommodation Venues for the Special Olympics Canada 2014 Summer Games.
- Life Cycle Assessment of the Special Olympics Canada 2014 Summer Games.

“Sport events have a unique ability to capture our imagination. From the start we wanted to promote both human and environmental wellbeing in a way that was exciting and inspirational. Working with our Host Venue, the University of British Columbia, was a tremendous opportunity that allowed us to tap into their deep research and operational expertise around sustainability.”

— Cathy Priestner Alinger
Games Chair

“The Games Organizing Committee was fully committed to sustainability from day one. While promoting health and social wellbeing through sport has always been in the DNA of Special Olympics Canada, the emphasis on sustainability at these Games allowed us to aim for an environmental legacy as well. We are thrilled with how sustainability increased both the engagement and event experience for our athletes, volunteers, and community.”

— Sharon Bollenbach
CEO, Special Olympics Canada
About the Games

The Special Olympics Canada Summer Games are a national multi-sport event for athletes with intellectual disabilities. Summer and Winter Games take place every four years, alternating every two years, and each time in a different Canadian city.

The national Games are overseen by Special Olympics Canada (SOC), the national governing body for Special Olympics. The Games Organizing Committee (GOC) for this edition was the 2014 Special Olympics Canada Summer Games Society (SOCSGS), a temporary not-for-profit entity set up for this sole purpose.

The 2014 Games took place at the University of British Columbia (UBC) and in the Metro Vancouver region from July 8-12, 2014. These were the largest Special Olympics Canada Summer Games in Canadian history. Approximately 1,800 team members (athletes, coaches, and mission staff) from 12 of the 13 Canadian Provinces and Territories competed; only Nunavut wasn't represented. Athletes competed in one of 11 sports — this was also the first time that basketball, golf and bocce were hosted at the national Games level.

The format celebrates competition with a unique emphasis on participation by grouping athletes in categories by skill level. Within each division, an athlete is eligible to win Gold, Silver, or Bronze medals. 2,045 medals were presented at the 2014 Games.

The Games budget was approximately $2.25 Million. The majority of the revenue came from Special Olympics Canada, government contributions and 16 Games partners, sponsors, and suppliers.

These national Games were also a qualifying event to select athletes to represent Canada at the 2015 Special Olympics World Summer Games in Los Angeles, USA.
Sustainability Strategy

VISION

The vision was to deliver a regenerative 2014 Games that leave a positive long-term legacy of human and ecological wellbeing for Games participants, stakeholders, and the community.

The main objectives of the Games sustainability program were to:

• Commit to and integrate a comprehensive and aspirational sustainability strategy.
• Collaborate with Special Olympics Canada, Special Olympics BC, UBC, the City of Vancouver, and the City of Richmond to align the vision of how an event can contribute to sustainability.
• Encourage innovative solutions and learning through community dialogue, place-based design, and systems thinking.
• Inspire participants, partners and community into positive action beyond the Games.
CONTEXT

The Games were fortunate to be hosted in a region committed to sustainability: the Province of British Columbia, the City of Vancouver, the City of Richmond, and the University of British Columbia. These hosts also partnered on the Vancouver 2010 Olympic and Paralympic Winter Games, widely recognized as the first Olympic and Paralympic Games to take a comprehensive sustainability focus by including the social pillar in addition to environmental and economic pillars.

The Province of BC was the first jurisdiction in North America to introduce a carbon tax and has a legislated target of reducing greenhouse gas (GHG) emissions 33% by 2020 and 80% by 2050 (from the 2007 benchmark level). Vancouver aims to become the Greenest City in the World by 2020, with an action plan focused in particular on carbon, waste, and ecosystems. Championed by its Mayor, the City of Richmond has seen strong commitments to sustainability and greening programs targeting economic development, energy, environment, open space and land use, and transportation.

The Games Host Venue, UBC, is a world-leading university in the application of sustainability principles to its teaching, learning, research and operations. Recent UBC achievements include:

• Becoming the first university in Canada to receive a gold rating in the STARS (Sustainability Tracking, Assessment, & Rating System) program developed by the Association for Advancement of Sustainability in Higher Education (AASHE).
• Setting the most ambitious GHG reduction targets of the world’s top 40 universities, committing the Vancouver campus to reduce owned and operational GHG’s 33% below the 2007 level by 2015, 67% by 2020 and 100% by 2050.
• In 2012, UBC opened the Centre for Interactive Research on Sustainability (CIRS), a regenerative building striving to be the most innovative and high performance green building in North America.
• The UBC Athletics & Recreation Department - working with the UBC Centre for Sport and Sustainability – was the first university athletics department to conduct an environmental life cycle assessment study and embed life-cycle-thinking into their operations.

SCOPE

Games Sustainability Performance Reporting Boundaries

Through the execution of this event, the Games Organizing Committee (GOC) collaborated with many partners, stakeholders and sponsors. The sustainability reporting boundaries encompass those issues and activities where the GOC had direct decision-making authority or the opportunity to significantly influence decisions of its stakeholders.
Examples of Areas of Direct Control

• Pre-Games and Games-related procurement
• Games transportation fleet operations
• Health and safety of the Games workforce (largely volunteers)
• Games-time operations at the athletes village at UBC. Nine events at UBC, two off campus

Examples of Areas of Influence

• Transportation of spectators and teams to and from the Games
• Food sourcing and packaging options of food vendors
• Raising awareness of sustainable lifestyle choices with Games spectators, sponsors, and partners
• Operation of competition and accommodation venues
Managing Sustainability

Starting with senior leadership within the executive board, the sustainability vision was represented at all levels of management.

HIGHLIGHTS

• First SOC National Games to include a dedicated sustainability team.
• First SOC National Games to conduct a Life Cycle Assessment to measure their environmental footprint.
• First SOC National Games to execute a bottled-water free mandate.
• These Games were the first large-scale, multi-sport event to comply with the Canadian Z2010 Sustainability Event Organization standard.

MANAGEMENT APPROACH

The Games integrated a Sustainable Management Action and Reporting Tool (SMART) into Games planning and operations. SMART uses the following road map for implementation:

• **Plan** - Set clear sustainability vision and strategies, define targets to measure success
• **Implement** - Deliver actions, assign responsibility, and record progress
• **Measure** - Monitor progress, share this with others, incorporate learning into future planning

SMART incorporates sustainable event management standards, guidelines, and principles from:

• Canadian Standards Association CSA:Z2010 - Requirements and guidance for organizers of sustainable events
• International Standards Organization ISO:20121 - Event sustainability management systems
• Global Reporting Initiative (GRI) for Sustainability: Event organizers sector supplement
• AISTS / VANOC: Sustainable sport and event toolkit (SSET)
• Olympic Movement's Agenda 21 for Sport
OPERATIONALIZING

The Sustainability function worked closely with UBC and Games’ partners to operationalize sustainability across all Games’ functions including transport, accommodation, food and beverage, waste, venue operations, management, and communication. The organization of the Games requires substantial economic, social and environmental resources and the GOC therefore adopted principles of regenerative design and life cycle thinking to, where possible, aim for a net positive impact. The areas of focus:

- **Environment**: Energy; Climate Change; Materials/Waste; Water
- **Social**: Intercultural fluency; Happiness; Inclusion; Health
- **Economic**: Affordability; Profitability

MEASURING AND REPORTING

A sustainability reporting framework and Environmental Life Cycle Assessment (LCA) methodology was embedded to measure and report on impacts. LCA is a sophisticated method of calculating the environmental impacts — such as climate change or biodiversity loss — of a given product or service over its complete life as defined by the international ISO 14040-44 standards. Embedding LCA tools into event planning allowed for the optimization of planning choices around key impact areas such as participant travel planning, operational energy use in venues, or food ingredient choice.

The Games Festival Lounge featured a Food and Farm day with live animals and local produce.
Water

HIGHLIGHTS

• First bottled-water free Games
• Every athlete and volunteer received a reusable water bottle
• Metro Vancouver Water Wagon provided free tap water on site

SOME INITIATIVES

Bottled-Water Free Event

In consideration of the fact that Vancouver has some of the cleanest tap water on the planet, a cornerstone sustainability project was achieving a bottled-water-free 2014 Games. To achieve this the GOC provided reusable bottles to all athletes, volunteers, and coaches, and made water dispensers and a Water Wagon (with 3 filtered, cooled taps) available at all venues. Cool, fresh tap water was made available wherever possible to increase convenience. A student-led course-based project conducted a survey with athletes and coaches ahead of the Games to identify barriers and educate participants about Vancouver’s tap water.

Water Conservation and Quality

Approximately four billion litres of potable water are consumed at UBC a year, at a cost of about $2.5 million. Over the past decade, UBC has achieved a 50% reduction in water consumption in institutional buildings. The latest water consumption breakdown showed that approximately 46% of end use consumption was in areas where the Games might have some degree of impact: 1% consumed for drinking, 13% for showers, 15% for irrigation, and 17% for washrooms. As a result, the following efforts were put in place:

Participants were encouraged to “Turn off the tap” where possible in accommodations and at venues. Through signage, education, and incentives, participants were encouraged to take shorter showers and turn off the tap when brushing teeth. All accommodation venues already conformed to best practices such as using low-flow toilets and encouraging minimal towel washing with guests.

Games venue managers also minimized the use of irrigation water at their facilities by watering during the cooler hours and celebrating yellow rather than green grass.
Stormwater and wastewater management

Stormwater and wastewater management was not considered to be a major issue at the 2014 Games as UBC and the City of Vancouver have comprehensive practices and requirements in place. UBC has integrated innovative stormwater management practices into campus planning and design since 1997. Approximately five billion litres of rainwater fall on the UBC campus annually. The University also has four watersheds that drain from campus, and sits on a natural aquifer, a porous, layered bed of sand and gravel that holds water. An integrated stormwater system for UBC is currently in development with the objectives to protect the campus from flooding, prevent overland flooding across the cliffs, ensure that the requirements of federal and provincial legislation are met, protect the campus environmental values and minimise the impact of campus discharge on neighbouring watercourses, and improve the quality of the stormwater that leaves the campus. As a result, it was not deemed necessary for the event to change or augment UBC’s stormwater management practices.

LESSONS LEARNED & RECOMMENDATIONS

• Ensure ample availability and convenience of tap water for athletes and spectators - particularly during hot summer weather.

• Adopt behaviour change programs to target athletes, family, volunteers and other Games stakeholders who bring bottled-water into Games venues from outside sources.

• Ensure availability of drinking fountains in all venues.

• Pursue early buy-in and requirements for food vendors regarding bottled-water free program, particularly with those who may see a loss in beverage sales.

• Reduce the level of water irrigation on outdoor fields and the golf course where possible and water during the cool hours.
Waste

The objective of the waste plan was to minimize all types of waste to landfill produced by the event while educating and engaging participants in zero waste goals.

HIGHLIGHTS

• First time a 3-stream waste system (garbage, recycling, compost) has been made available at all venues.
• Waste diversion from landfill rate of 68% exceeded the typical UBC and Vancouver rates.
• 80% of sport equipment and 100% of Ceremonies’ costumes were rented or borrowed, eliminating most waste at source and drastically reducing costs.

SOME INITIATIVES

Waste Plan

UBC and the City of Richmond provided garbage, recycling and compost bins at all venues, ensuring that bins were both available and accessible. These bins were accompanied by informative and engaging signage with consistent colours throughout the event venues. Sorting stations were set up at the sustainability booth with event-specific signage at all bins for participants and spectators. This was supported by volunteers who informed people about the different types of bins and how to sort waste, and encouraged people to continue recycling and composting at home. There was also a waste challenge at the booths, which involved sorting common waste items into the correct bins. This project benefited from a strong partnership with UBC, given its long track record of accomplishments in recycling and waste reduction, including early introduction of a food scraps composting program. Guided by a comprehensive Waste Action Plan, UBC aspires to become a zero waste campus. This mind set was carried throughout the Games, from minimal paper usage to effective waste diversion facilities.

Sustainability Food Procurement and Waste Guidelines

Food vendors were encouraged to limit their waste. This was done by distributing the ‘Sustainability Food Procurement & Waste Guidelines’ document to all vendors. They were encouraged to use compostable items where possible and to limit packaging. To encompass all of these efforts, an aspirational waste diversion goal was set: 99% diversion from landfill.
Rent and Reuse of Equipment and Signage

The Games prioritized rental and reuse of equipment wherever possible. 80% of equipment for sport, overlay (e.g. tents, tables, seating), and office was rented or borrowed. Where possible, purchased equipment was donated to Special Olympics BC and Special Olympics Canada. Virtually all signage was also repurposed. Some examples:

- For the Opening Ceremonies, all costumes were repurposed from existing Patrick Roberge Productions stock.
- JYSK provided patio furniture for participants to use in the Festival Lounge during the event and subsequently sold it off at a discount.
- Chloroplast signs were repurposed by UBC Athletics for their future events. Free-standing signs and flags were designed so they could be used by future SOC Games.

Outcomes

Total waste was estimated to be approximately 4 tons per day and total 20 tons for the event. The approximate breakdown by mass was 54% compost, 9% recycling, 5% paper and 32% waste, with a total waste diversion of 68%. Although the Games did not achieve its waste diversion goal, it surpassed the diversion rates of UBC (61%) and the City of Vancouver (50%). The majority of waste came from food and food packaging, virtually all of which was compostable.

This was the first time that composting and recycling were added to some of the facilities. The knowledge legacy has already contributed to long-term plans for waste management in athletics facilities on campus. The introduction of the “bottled-water free Games” effort also led to a reduction in the amount of waste used, while a considerable effort was made to reduce the amount of paper used.

LESSONS LEARNED & RECOMMENDATIONS

- Physically mark out locations for bins at respective venues on a map so it is easier and less time consuming for volunteers to place them each day.
- Limit the number of garbage waste bins available to encourage recycling efforts.
- Have a thorough data collection plan with custodial services to track bin fullness regularly to achieve a consistent and complete data set.
- Attach the most commonly consumed items directly to waste signage for clarity. Where this was not done, recycling rates dropped (even with good signage).
Transportation

Transportation is usually one of the largest contributors to the environmental footprint of an event. Providing good transportation options is also vital to creating a positive event experience for participants. The impacts include GHG emissions, energy consumption, noise, air quality, congestion, and reduced access for local residents. The GOC encouraged thoughtful and low-footprint travel options for participants traveling to Vancouver, as well as during the Games.

**HIGHLIGHTS**

- 74% of team members walked or biked during the Games.
- Golf teams travelled by transit from the Athletes Village to the competition venue.
- 10% of Games vehicle fleet were hybrid or electric.

**SOME INITIATIVES**

**Bike Share and Bike Valet**

All Chefs (the captain of each team) and many core GOC staff members were provided with the free use of a bike courtesy of the UBC Bike Kitchen, allowing them to have a low-impact travel option for the duration of the Games. In many cases, biking between venues was the fastest way to travel. A bike valet was set up at the festival lounge for all participants and spectators. It was available for the Opening Ceremony of the Games and during sport competition hours for the additional days. It promoted the option of biking to the event and provided a safe place to store bikes.

**Walking Initiatives**

All venues were clustered within a 1 km radius with the exception of bowling. Athletes were encouraged to walk to venues and this was included as an action item in their Sustainability Passport (see p. 26). During the Games, the majority of team travel was by foot, bike, transit, or coach. Less than 1% of team members drove by car.

**Mapping and Communication**

Event and transportation-related information was communicated on the Games official website, on the UBC Games web portal, through messaging to community members, and with on-site signage and designated volunteers during the event. Careful attention was paid to
highlight bus stops, walking routes, shuttle routes, secure bike parking, and car-share zones on maps.

**Low Emission Transportation Options**

Public transport, shuttle buses and low-emission vehicles were used during the Games where possible. Friends, family and SOC staff who stayed at hotels in Downtown Vancouver, (10 km off campus) were encouraged to take public transport. While on campus, 100% of the trips to the Golf venue taken by team members were by public transit or by foot. “Public transit to golf” was a big success and the first time this had been done at a SOC National Golf event. A free shuttle bus service was provided to all team members and Games participants. The GOC significantly reduced the number of buses in service compared to previous Games due to the large number of participants who walked. The Games-time vehicle fleet totaled 41: 6 cars, 4 vans, 13 minivans, 3 pick-up trucks, 5 moving trucks, and 10 buses. 10% of the fleet were hybrid or electric vehicles.

**LESSONS LEARNED & RECOMMENDATIONS**

- For participants from the region, promote alternate modes of travel to minimize environmental impacts and reduce parking congestion.
- In line with the Games’ affordability objectives, parking was discounted for event-goers. Unfortunately, the parking cost was lower than transit in some cases, potentially a disincentive for some people.
- Incorporating bike share options was popular with participants but requires careful planning to meet demand. Sourcing bikes from a local bike shop proved a success but the logistics of storing and managing them only allowed for a fleet of 20 bikes.
Accommodation

Locating accommodation close to the venues was a major objective of the Games in order to enhance the experience of the participants, and to reduce the environmental and cost impacts of travel.

HIGHLIGHTS

- Four-stream composting program was introduced in athletes village for the first time.
- 2,000 disposable drinking cups were avoided in the rooms.
- Athletes Entertainment Lounges and Sustainability Booths were located in each village.

SOME INITIATIVES

Proximity to Venue

With the exception of the bowling venue, all competition, accommodation, and operational venues were located within a 1 km radius — a first for a Special Olympics Canada Games. Having the ability to walk or bike from accommodations to venues was a great achievement, significantly enhancing the event experience, operational, and sustainability goals. All 1,800 athletes, coaches, and mission staff and stayed in UBC accommodations for an average of 6 nights. The approximately 1,900 friends and family members stayed at a mix of downtown Vancouver and UBC accommodation options.

Sustainability-rated Accommodation

Participants were encouraged to select accommodations that are endorsed by recognized third-party assessment schemes for social and environmental responsibility.

UBC Accommodation: All UBC accommodation venues strive to meet UBC’s sustainability strategy guidelines. Recent efforts include “Throw in the Towel” initiatives, new efficient lighting installations, and extensive recycling programs. The facilities are cleaned with green certified cleaning chemicals using micro fibre cleaning implements that reduce overall use of chemicals. A painting program required the use of non-volatile organic compound (VOC) paint. There is also a program underway to install low flush toilets in all suites. Finally, a
large geothermal field supports hot water and heating in the Marine Drive residence. UBC Accommodations included:

- Walter Gage Towers (for teams)
- Totem Park Residence (for teams)
- Place Vanier Residence (for friends and family)

**Downtown Hotels:** All official and affiliated Games' hotels were Green Key certified. The Green Key Eco-Rating Program is a graduated rating system designed to recognize hotels, motels and resorts that are committed to improving their environmental and fiscal performance. Based on the results of a comprehensive environmental self-assessment, lodging facilities are awarded a rating from 1 to 5 Keys, 5 Keys being the highest attainable. The following affiliated hotels were used by visitors of the Games:

- Hotel le Soleil (Green Key certified level 3)
- Best Western - Chateau Granville (Green Key certified level 4)
- Best Western Plus Downtown (Green Key certified level 2)
- Georgian Court Hotel (Green Key certified level 3)
- Holiday Inn Downtown (Green Key certified level 4)
- Westin Bayshore (Green Key certified level 4)
- Coast Coal Harbour (Green Key certified level 4)
- Coast Plaza Hotel & Suites (Green Key certified level 3)
- Sutton Place Hotel (Green Key certified level 4)

**LESSONS LEARNED & RECOMMENDATIONS**

- Setting up a sustainability booth in the village and for athlete arrival helped raise awareness and engagement in sustainability efforts.

- Offer a variety of accommodation types and price points for friends and family members. For example, UBC created a special RV parking area during the Games.

- Accurate accommodation data was obtained for teams, however only estimates were possible for friends and family accommodations as some registration data was lost. This could be solved through a more robust online registration process or an agreement with accommodation partners to record this information.
Social Sustainability

From day one, the Games were committed to creating a strong, welcoming community for athletes, coaches, volunteers, and staff at the Games. From pre-Games engagement initiatives to exciting social events, the sustainability volunteers cultivated an atmosphere of camaraderie and fun.

HIGHLIGHTS

- Sustainability booth was set up in Thunderbird Park Festival Lounge to encourage participant engagement.
- A dedicated volunteer team made sustainability fun and engaging.
- UBC students increased awareness around diversity, accessibility, and health.

SOME INITIATIVES

Accessibility and Social Inclusion

In conjunction with the Rick Hansen Foundation, comprehensive assessments were conducted on all Games venues using the Plan@t tool. This resource highlighted venue accessibility ratings, features, and maps with the goal of making the Games more accessible to all. In addition, a number of student-run clubs at UBC used the Games to highlight accessibility issues and awareness around inclusive terminology.

Further information in the Games Accessibility report: Planat in Action: Accessibility Assessment of UBC Competition and Accommodation Venues for the Special Olympics Canada 2014 Summer Games.

Healthy Athletes Program

A record high number of 600 athletes participated in the Healthy Athletes Program embedded within the Sustainability Passports. The initiative offered 6 medical tests run by Special Olympics Canada and Special Olympics BC with the help of over 200 volunteers, many of whom were UBC medical, nursing, and pharmacy students. This piece highlights that sustainability does not stop at environmental sustainability, but encompasses social sustainability and wellbeing as well.
Disability Awareness at UBC

The B.U.I.L.D. Club (Building Understanding of Intellectual Disabilities) was a recipient of the 2014 UBC Equity Enhancement Fund. Led by four School of Kinesiology students as part of the Kinesiology 465 Course: Interculturalism, Health and Physical Activity, the club was formed to organize a series of awareness-building activities with athletes before and after the Special Olympics Canada 2014 Summer Games. The club's objective is to promote awareness, advocacy, and knowledge of intellectual disabilities — and the connection between discrimination and health — to members of the UBC community.

Festival Lounge and Friends and Family BBQ

Special spaces and events were also created to celebrate the dedicated friends and families of the athletes and staff. A Festival Lounge was created in the main venue cluster with lounge chairs, live music, sustainability booth, food truck, a water station, and a bicycle valet service. The Games also put on a 1,500 person Friend and Family BBQ featuring live music and a special thank you from Special Olympics Canada.
Food

During the Games, the GOC strove to provide teams, volunteers, and spectators with a variety of healthy, ecologically friendly, affordable, and delicious meals.

HIGHLIGHTS

• UBC students developed the Sustainability Food and Waste Guidelines for Events.
• A farm day showcased live animals and local farm food from UBC Farm.
• Pacific Spirit Place composted 100% of food and packaging waste from meal service.

SOME INITIATIVES

Sustainability Food and Waste Guidelines for Events

The food and waste guidelines targeted the sourcing, production and consumption of food during the Games to ensure sustainability practices were being followed. The guidelines included target/acceptable/avoid ratings for food and waste categories in order to encourage food service providers to improve practices in a step-wise manner. It should be noted that the ‘acceptable’ criteria were already based on current sustainability practices at UBC. Food providers included:

• UBC Food Services (met all ‘acceptable’ and some ‘target’ criteria)
• UBC Athletics (working towards meeting all ‘acceptable’ criteria and some ‘target’ criteria)
• University Golf Club (met most ‘acceptable’ criteria and some ‘target’ criteria)
• Food Trucks (met all ‘acceptable’ and some ‘target’ criteria)

Hungry Nomad Food Truck

UBC’s Hungry Nomad Food Truck was located in a Festival Lounge throughout the Games. Hungry Nomad is a new UBC project incorporating environmental sustainability and healthy food practices including requirements for exclusively Ocean Wise seafood, local and seasonal farming practices, and 100% biodegradable food packaging products.
UBC Food Service Partnership

One of the strongest partners supporting sustainability at the Games was UBC Food Services. They already incorporate sustainability principles in their food sourcing, for example being the first Canadian University to require the use of only Fairtrade bananas, coffee and chocolate in all their food outlets. They used the Games to push their horizons even further. A unique innovation was the development in cooperation with the GOC of a boxed lunch program eco-friendly reusable moving boxes to greatly minimize food and packaging waste. Another focus was scaling back food production to ensure there were little to no leftovers from meal services. Finally, 100% of food and packaging waste (what little there was) from team and volunteer meals served in Pacific Spirit Place was composted.

LESSONS LEARNED & RECOMMENDATIONS

• Recognize the need for sustainable food-sourcing early and work with event stakeholders such as food and beverage providers and sponsors. Developing the Games sustainability guidelines one year ahead was not early enough to influence all food contract and budget decisions.

• Prioritize food providers who already adopt sustainability efforts and encourage a step-wise shift in practices from business as usual for those who aren’t doing this yet.

• Food trucks are a great way to provide convenient, affordable and diverse food options in decentralized venues. Future organizers could create a competition among local trucks to select those which adhere most strongly to sustainability practices.

• The largest source of non-compostable/recyclable food packaging is usually from participants who bring their own items from outside sources. While some communication materials were used to raise awareness (e.g. in the volunteer handbook), more could be done to communicate directly to friends and family members.
Measurement and Life Cycle Assessment

Part of the Sustainability Team’s mandate was to capture data and measure aspects of the event with sustainability implications. An environmental Life Cycle Assessment (LCA) goes a step further by translating data related to the consumption of goods and services into common environmental impact metrics such as a carbon footprint — measured in kg of carbon dioxide equivalents (CO₂e). This information allows organizers to better understand which areas to prioritize efforts.

Further information is available in the following report: *Life Cycle Assessment of the Special Olympics Canada 2014 Summer Games*.

**HIGHLIGHTS**

- First Canadian multi-sport event to conduct an LCA — This work was done as part of a PhD thesis with UBC and embedded in operational planning of the sustainability team.
- Sustainability volunteers were instrumental in capturing operational data for the Games.

**SOME INITIATIVES**

**Data Collection**

The Games-time sustainability volunteer team incorporated data-tracking and assessment as part of their duties throughout the event. This included tracking spectator counts, waste bin recycling rates, and pictures of venue layouts during the Games. The sustainability team also worked with each GOC director and Venue Managers to ensure useful data was collected throughout. Some examples include gathering travel information from participants, capturing accommodation stay information in affiliated hotels, tracking food data from all vendors, and gathering energy and water consumption information from Games venues.

**Carbon Footprint**

A carbon footprint measured the global warming potential impacts of the event across organizational areas. Preliminary results show a total footprint of 1,800 tonnes CO₂e with participant travel dominant at 86% of the total, food at 6.5%, venues at 5%, and merchandise, communication, and waste combined at 2.5%. The objective of the LCA approach was to show relative impacts where the organizer has influence. Rather than aiming to show a net change in emissions, this
more inclusive approach highlights areas of potential influence up and down the supply chain.

Energy and Water Consumption

Games-time water, electricity, and natural gas consumption were tracked at each venue. This information was used to target behaviour change programs in the relevant areas. Examples include: scheduling play during daylight hours to avoid field lighting, watering fields every other day, and encouraging participants to take shorter showers.

![Energy and water consumption of Games’ competition, food, and accommodation venues (Preliminary results)]

LESSONS LEARNED & RECOMMENDATIONS

- Data collection needs to be integrated in Games management and planning early and consistently, particularly where it informs operational decision-making. A major challenge is ensuring that all organizing committee members are aware of this and feed data into centralized documents. The event had some challenges with online survey tools which captured incomplete data.

- Environmental impact assessment is a powerful decision-making tool but can be labour- and expertise-intensive. Partnering with a university was a great way to incorporate new research and tools.

- Create a strategy to capture data. Pre-games, information was captured in a shared online repository. During the Games, online participant surveys and sustainability volunteers were used to collect data and take pictures.

- The Games-time participant experience survey was successful in capturing detailed information but would benefit from more communication and awareness to get higher participation rates.

Water usage data captured at all venues
Education and Engagement

The Sustainability Team wanted to demonstrate that there is an important social-engagement component to hosting a sustainable event. In addition to working toward a reduced carbon footprint, there was a strong focus on ensuring the community environment was positive, encouraging, and engaging; treating each environmental focus as an opportunity for learning and dialogue; and creating a fun and welcoming community for athletes, coaches, volunteers, and staff.

HIGHLIGHTS

• 1,300 Sustainability and Healthy Athlete Passports were created and distributed to each athlete to engage, track, and encourage sustainable behaviours.
• 5,000 sustainability/health behaviours were tracked and reported.
• Sustainability booths were set up across venues to engage athletes, coaches, volunteers and staff.
• A festival lounge with a prominent sustainability booth featured rotating daily themes of food, accessibility, water, and transportation.

SOME INITIATIVES

Featured Event Engagement Pieces

Water Day: A sustainability-themed ice sculpture was brought in to facilitate a tap water vs. bottled-water taste test to raise awareness about sustainable water consumption habits.

Accessibility Day: A wheelchair obstacle course for participants to try their hand at maneuvering through typical challenges like traveling up and down ramps.

Transportation Day: Bike-powered blenders were brought in for athletes and spectators to make their own smoothies from blueberries, bananas and orange juice with no added sugar.

Food and Farm Day: Featured local, organic produce (blueberries and cucumbers) from the UBC farm and a number of live animals (cows, rabbits and chickens) for the athletes and spectators to interact with.
Sustainability Passports

The GOC, SOC, and SOBC designed a passport to engage athletes in more sustainable and health-promoting behaviours while at the Games. The passports were distributed upon the athletes’ arrival by a team of sustainability volunteers. The athletes were encouraged to collect stamps each time they completed one of the action items or challenges which were related to six core themes: water, waste, energy, transportation, social, food. Action items included eating a zero waste meal, recycling, composting, going a full day without drinking from a disposable water bottle, and taking a waste challenge at one of the sustainability booths.

Pre-Games Engagement

Each week leading up to the Games, the Sustainability Team sent out electronic sustainability-themed newsletters to the athletes and coaches, filled with sustainability fun facts and challenges. Every week, a winner was selected from those who participated in the challenges and shared their experiences online via Twitter and Facebook.

LESSONS LEARNED & RECOMMENDATIONS

• Employ a “sustainability bootcamp” to set a baseline of sustainability knowledge for all sustainability volunteers prior to the event. This greatly assists with clarity of information, efficiency, and consistency of information across venues.

• Select visible engagement pieces. The more visible the piece, the more receptive the audience. For example, the animal farm and bike blenders were more prominently featured than the wheelchair obstacle course, and participation rates tracked accordingly.

• Focus on interactive engagement strategies. The passport idea is a hands-on, effective incentive for fostering sustainable behaviours.
Summary of Z2010 Conformance

The following is an overview of conformance related to components of the Z2010-10 Standard: Requirements and guidance for organizers of sustainable events. Results are designated in one of three categories:

✔ Fully Met
○ Partially Met or Not Applicable
✘ Not Met

Where results were either 'Partially met' or 'Not met', a brief explanation is provided. The results are self-reported and have not been audited by an external third party.

Getting Started

✔ Commit to organizing and executing a sustainable event throughout the planning, execution, and closure stages.
✔ Define the scope of the sustainable event.
✔ Internally and externally communicated commitment statement.

Planning and Management

✔ Designate a sustainable event team leader with the necessary authority and a sufficiently senior position within the organization to oversee the implementation of the sustainable event.
✔ A sustainable event implementation team should be established with clearly defined roles, responsibilities, accountability, and authority.

Identify and engage stakeholders in the event sustainability commitment. Most major stakeholders were contacted about the sustainability commitment, however this area could be improved by including sustainability activation opportunities in the initial ask and targeting sponsors who share these values.

✔ Identify major sustainability issues.
✔ Plan to create a positive legacy by leaving the site, venue, services, environment, or community better off after the completion of the event.
✔ Allocate sufficient human and financial resources to ensure effective implementation of the sustainable event commitments.
✔ Set relevant objectives, performance measures, and targets.
✔ Comply with applicable legal requirements.
**Executing the Event**

- ✔ Strive to reduce energy consumption and related GHG emissions.
- ✔ Conserve water, use water efficiently, and maintain water quality.
- ✔ Minimize impacts of wastewater on the environment.
- ✔ Ensure efficiency in the use of materials such as paper and packaging, avoid toxic waste, and reduce landfill waste.
- ✔ Implement responsible noise-management practices to reduce the impact of noise on event attendees and stakeholders.
- ✔ Ensure safe indoor and outdoor air quality.
- ○ Implement responsible snow and ice management practices. *N/A.*
- ✔ Develop and implement a site restoration plan.
- ✔ Ensure the event is accessible and inclusive to persons with disabilities.
- ○ Ensure that proper incident and emergency preparedness and response plans are established and communicated. *There is room for further improvement in this area by aligning host venue and Games emergency preparedness and response plans.*

**Selecting Sites and Venues**

- ✔ Select sites and venues that will have minimal environmental, safety, and security impacts during the life cycle of the event.
- ✔ Select sites that are centrally located, safe and secure for participants, accessible to all participants, energy and environmentally efficient, serviced by public transportation, and have the necessary infrastructure in place.
- ○ New venue construction considers community needs; respects local culture and heritage; uses environmentally sustainable designs, materials, products, and construction methods; employs the local workforce; and ensures environmentally sensitive ecosystems are not impacted. *N/A.*
- ✔ Select or construct sites and venues that are barrier-free and accessible to persons with disabilities, use efficient water technologies; and are energy efficient.

**Supply Chains and Hiring Practices**

- ○ Establish, implement, and monitor a sustainable purchasing policy. *Created sustainability guidelines for food and food packaging but not for other areas.*
- ○ Event organizer and event sponsors collaborate to enhance the sustainability performance of the event. *Implemented with a small number of sponsors and partners.*
- ✔ Recruit staff and volunteers from the community in which the event is being held.
Transportation

✔ Identify, assess, and minimize the risks and impact of event-related transportation on the environment and local community.

✔ Minimize the energy consumption and related GHG emissions resulting from event-related transportation.

✔ Encourage and promote the use of low- or zero-emission modes of travel.

Accommodation

✔ Identify, assess, and minimize the risks and impact of event-related accommodations on the environment and local community.

✔ Support the use of sustainable and socially responsible accommodations close to the event sites and venues.

✔ Ensure accommodation options meet the needs of people with disabilities.

✔ Encourage participants to select accommodations that are endorsed by recognized third-party assessment schemes.

Food and Beverage

✔ Minimize the ecological footprint of food and publicly communicate them.

✔ Promote a healthy diet by providing a selection of healthy food products.

✔ Ensure the provision of safe, reliable drinking water at event sites and venues.

✔ Minimize food waste and maximize composting and recycling.

✔ Reduce food packaging waste where possible while bearing in mind safety and security concerns associated with event participants.

Education and Engagement

✔ Develop and implement an education and communication program to engage participants and stakeholders and inspire sustainable behaviours at the event and sustainable lifestyle choices in their communities.

✔ Provide a dedicated education and engagement section on its website or in communication items and newsletters on key sustainable development initiatives.

✔ Share successes and challenges on a holding sustainable event.

✔ Invite local organizations to set up a kiosk at the event site to promote sustainable products.

✔ Provide a forum whereby event attendees can provide comments on the sustainable event.

“Volunteering in the sustainability group was really nice and I learned a lot about sustainability and the value of all people being active in promoting this issue.”

— Games Sustainability Volunteer
✔ Encourage participants to submit ideas on how to improve the event.
✔ Increase public awareness that sustainability is everyone's responsibility.

**Communications, Marketing, and Reporting**

- Integrated process is in place for communicating with internal and external stakeholders. *Partially achieve. This was a unique challenge given that the GOC was almost exclusively volunteer-based and therefore had limited hours for planning. Leadership and certain planning teams/stakeholders were regularly informed, however this could be done with a wider group of stakeholders in future if integrated earlier and at key opportunities.*

✔ Sustainability objectives and performance publicly communicated in a transparent and accountable manner.
✔ Reporting and other methods of communication conducted in an environmentally friendly manner.
✔ Reports and other communications are accessible to people with disabilities.