

### Environmental initiatives undertaken by the AWG

Main Themes	Sub-themes	Meaningful Units	Where	Source
<b>Eco-friendly food system</b>	Reducing food waste	-Plan to reduce, reuse and recycle in food service	AWG 2004	Archives
		-Leftovers from the Lunch Box were taken to the schools, together with fruit and bread, so there was something to eat after the Closing Ceremony as well.	AWG 2016	Archives
	Providing sustainable food	-To provide sustainable food and beverage options	AWG 2020	Archives
	Reducing food packaging	-This will be the first Arctic Winter Games where 'boxed lunches' will not be used but replaced with 'off village grazing'. Off village grazing for lunches will be set up at different sporting venues according to sport schedule needs. This process will reduce waste from boxed lunches and will provide the athletes with a healthy lunch that they will build and control.	AWG 2020	Archives
		- ... reduce food packaging	AWG 2012	Archives
	Recyclable meal boxes	-The restaurants and shops used carton packages for food, coffee, etc.	AWG 2023	Observation
<b>Sustainable transportation system</b>	Utilization of electric car	-AWG 2020 has confirmed the use of the Yukon Government's electric car, which will be utilized by the Zero Waste Coordinator during the Games for visibility and education.	AWG 2020	Archives
	Electric vehicle charging stations	-Having electronic vehicle charge station	AWG 2023	Observation
	Providing public transportation	-Offering free bus transit	All host societies	Archives
	Encouraging public transportation	-Offering incentives to athletes for accessible public transportation services	AWG 2012-2020	Archives

	Vehicle usage log	-Provide a record of all vehicles used	AWG 2020	Archives
	Optimized route planning for travel efficiency	-Aiming for route planning efficiencies to reduce unnecessary travel (Examples of transportation planning strategies, combined travel opportunities, timing of schedules. Number of unnecessary travel)	AWG 2020	Archives
<b>Climate and energy management</b>	Petroleum usage tracking for carbon emission estimation	-From the final transportation fleet, capture the total volume (liters) of petroleum used during the games (Volumes of petroleum purchased. Consultant will convert to the approximate volume of carbon emission released)	AWG 2020	Archives
	Energy saving by having automatic entrance doors	-The entrance doors in some arenas like MacDonald Island Park were automatic.	AWG 2023	Observation
	Efficient arena coverage	-Another action was that the arenas were covered well, and there was a minimum waste of energy. Moreover, the door was closed, and I could not see too much waste of energy.	AWG 2023	Observation
	No helium balloons	-Helium balloon free event	AWG 2020	Archives
<b>Outdoor environment</b>	Trees For Planting	-Value -In-Kind (\$2200) donation from the City of Red Deer for legacy tree planting.	AWG 2020	Archives
	Nature conservation effort	-Another initiative that I saw in the ski area was that they surrounded the ski slope and the audiences place to protect the trees and wildlife.	AWG 2023	Observation
<b>Sustainable waste management</b>	The Zero Waste program	-AWG2020 brought on sustainability consultant early and zero waste plans underway with low threshold for volunteer numbers.	AWG 2020	Archives
		-Environment Services: waste management, compost, recycling	AWG 2012	Archives

		-Volunteer Jeff Yarman worked with Fairbanks North Star Borough School District's Nutrition Services Director Amy Rouse to collect organic waste. In tandem with the Lathrop High School kitchen personnel, Jeff collected a total of 3,000 pounds of organic waste to be used as garden compost.	AWG 2014	Archives
	Having composting program	-Reduce waste sent to landfill via source separation into compost, recycling and landfill/garbage streams -Collecting the organic wastes to contribute to City's composting program -Upon a survey of all venues, it was determined that many venues had existing composting and recycling waste collection systems that could be leveraged for the Games.	AWG 2020	Archives
		-I believe we're taking on some composting out at the village.	AWG 2023	Interview (general manager)
	Waste reduction policies	-To ensure an adequate supply of food at these venues, to reduce wastage and to provide the best possible service, it will be necessary for the Chef de mission or designate to follow the procedures	AWG 2012	Archives
	Measurement of the waste	-Measuring the approximate daily weight of organic food waste diverted for compost and any other waste stream diversion.	AWG 2020	Archives
	Recycling waste collection system	-Developing a plan for waste management (as a sport manager duty)	AWG 2002	Archives

	<ul style="list-style-type: none"> <li>-Develop waste disposal/recycling plan for residences</li> <li>-Set up garbage cans &amp; recycling bins</li> <li>-Develop plan for waste management (one of the responsibilities of the Sport manager)</li> </ul>	AWG 2004	Archives
	<ul style="list-style-type: none"> <li>-Fairbanks 2014 Arctic Winter Games collected 8,156 pounds of plastic, aluminum and paper and 3,300 in organics for a total of 11,456 pounds of recyclables.</li> <li>-In addition to this collection during the Games' week, Arctic Winter Games staff took 1,156 pounds of recyclables to the Rescue Mission before and after the Games.</li> <li>-Having recycling bins</li> </ul>	AWG 2014	Archives
	<ul style="list-style-type: none"> <li>-Having recycling bins</li> </ul>	AWG 2018	Archives
	<ul style="list-style-type: none"> <li>-Upon a survey of all venues, it was determined that many venues had existing composting and recycling waste collection systems that could be leveraged for the Games.</li> <li>-Ensuring there is a waste collection/recycling program within all venues</li> <li>-Ensuring there is an office solid waste collection/recycling program</li> </ul>	AWG 2020	Archives
	<ul style="list-style-type: none"> <li>-Environment Services: waste management, compost, recycling</li> </ul>	AWG 2012	Archives
	<ul style="list-style-type: none"> <li>-On all the sites, waste sorting garbage cans have been set up</li> </ul>	AWG 2023	Observation
	<ul style="list-style-type: none"> <li>-We're working with the venues and the village specifically to try to ensure that recycling is very much accessible, easy.</li> </ul>	AWG 2023	Interview (general manager)

Minimizing plastic and avoiding single-use items	<ul style="list-style-type: none"> <li>-The decision was made to not serve single-use water bottles to the game participants and at volunteer lounges but to encourage use of existing water fountains at the venues.</li> <li>-Commercial plastic water bottles discouraged along with campaign programs.</li> <li>- Obtaining mass goods that can be reusable and/or recyclable. Aiming to reduce single-use plastic among the volunteers and games personnel. For instance, re-cycling used PC's, borrowing 2-way radios, borrowing cell phones and tablets for games use through VIK agreements”</li> </ul>	AWG 2020	Archives
	<ul style="list-style-type: none"> <li>-They tried to reduce bottled water usage by having water cooler machines in all arenas.</li> </ul>	AWG 2023	Observation
Water management	<ul style="list-style-type: none"> <li>-A decision was made to provide water coolers at all the lounges instead of having individual water bottles available. This was done for two reasons – cost and to reduce the impact on the environment.</li> </ul>	AWG 2012	Archives
	<ul style="list-style-type: none"> <li>-Water at venues and sport competitions was provided through reusable water jugs (96 in each community).</li> </ul>	AWG 2018	Archives
	<ul style="list-style-type: none"> <li>-The decision was made to not serve single-use water bottles to the game participants and at volunteer lounges but to encourage use of existing water fountains at the venues.</li> <li>-Free safe drinking water stations available at most venues</li> </ul>	AWG 2020	Archives
	<ul style="list-style-type: none"> <li>-I saw several water fillings stations in almost all arenas.</li> </ul>	AWG 2023	Observation

	Minimizing printing	-Ensuring efficiencies with all printing machine consumables (Description of practice: black & white, not printing if not needed, regular service, double-sided printing.) -Aiming to use electronic mass media communication, thus reducing paper and other waste.	AWG 2020	Archives
		-...but minimizing the amount of things we're printing and like just those general practices that kind of minimize a little bit of the waste.	AWG 2023	Interview (General manager)
		-Web-based apps to reduce paper wastage	AWG 2023	Observation
<b>Management and planning</b>	Resource reuse and equipment sharing	-To avoid buying equipment and then owning it, equipment was borrowed from the Air Greenland and Royal Arctic Lines canteens, the Queen Ingrid Health Centre, Piareersarfik and the school kitchen at USK.	AWG 2016	Archives
		-Reusing equipment, furniture, and accessories if possible, including obtaining donated materials. For instance, re-cycling used PC's, borrowing 2-way radios, borrowing cell phones for games use through VIK agreements	AWG 2020	Archives
	Having a sustainability plan	-Green committee was responsible for planning and reporting	AWG 2004	Archives
		-Plans for a Zero Waste approach began months earlier and was championed by the EOM, by early assessing the needs at venues. -An initial sustainability management plan to kick start and guide the process.	AWG 2020	Archives
	Procurement	-To manage the supply chain that enhances our sustainability performance by considering sourcing options and material allocation with a lower environmental footprint	AWG 2020	Archives

Analysis of sustainability risks	-A Sustainability Management Risk Analysis related to the 2020 Arctic Winter Games, subjectively completed by the sustainability consultant.	AWG 2020	Archives
Having continuous meetings about sustainability	-Weekly meetings of 1 hour, between the consultant and the EAO, began in early December 2019.	AWG 2020	Archives
Divisional meetings for sustainability introduction and vision sharing	-The individual divisional meetings were held with representatives of Sponsorship, Marketing & Sales, Volunteers, Culture & Ceremonies, Athletes, Logistics, Community Engagement & Protocol, Venues, and with the Executive Office Manager to introduce the Host Society's collective contribution to sustainability. The intent of these introductory meetings was to share a vision and definition of sustainability for these Games and introduce the policy statement and the sustainability management plan.	AWG 2020	Archives
Sustainable Purchasing Guide	-They developed a Sustainable Purchasing Guide to support the overall sustainability of the organization. The guide was intended to help procurement departments make responsible purchases of everything from food to promotional items.	AWG 2020	Archives
Progress monitoring	-The consultant participated in the M1 visit from participating contingents and visited 16 venues to observe and learn about the progress made to date and to ask questions of the representatives.	AWG 2020	Archives
Reusable procurement and equipment reuse	-Procuring mass goods that can be reusable. -Reusing equipment, furniture, and accessories, if possible, including obtaining donated materials.	AWG 2020	Archives

Implementing sustainability frameworks and standards	<p>-The consultant has been experimenting with this template as a final reporting tool to list various social, environmental, and economic indicators within the Global Reporting Initiative (GRI) Standards framework.</p> <p>-The contractual outcomes are for the development and implementation of a sustainability management plan, based on the ISO 20121 Standards for guidance, with a quarterly reporting time frame to the Host Society; and a final report of efforts made to be a sustainable game, using the Global Reporting Initiative Standard as a reporting guideline.</p> <p>-The framework for the AWG2020 review is in the utilization of sustainability projects associated with the 2019 Canada Winter Games and the 2018 Australian Gold Coast Commonwealth Games for an overall understanding of implementing sustainability.</p>	AWG 2020	Archives
Green committee/division	-Having environmental/green committee	AWG 2004, 2012, 2014, 2020, 2023	Archives
Official inspection	<p>-A waste audit was planned to be conducted for 1 full day at the main cafeteria to collect metrics on the compost amounts to understand waste diversion. Additionally, several waste audit metrics were collected from the AWG office during the months prior to the games to evaluate waste diversion at the office.</p>	AWG 2020	Archives
Conducting research	-The Zero Waste Coordinator has sought out information on unique waste streams from the various divisions, i.e., hazardous wastes streams and their management.	AWG 2020	Archives

Utilizing existing facilities	-Facilities already existed, and I found them in acceptable quality and condition.	AWG 2023	Observation
Recycling support and sponsorship	<p>-Kinross Gold Corporation-Fort Knox Mine was the sponsor for the recycling efforts during the Games. Kinross' slogan was featured on all the posters on the bins: "Athletes go for the gold. We'll take care of the green."</p> <p>-The Environmental Committee applied for and received a grant from the Fairbanks North Star Borough Recycling Commission which facilitated the establishment of the Legacy Recycling Project.</p> <p>-Alaska Waste donated all their services for the recycling effort. Alaska Waste also donated the use of about 60 recycling bins that were placed at high-volume sites.</p> <p>-The University of Alaska Fairbanks sited its own bins at the on-campus venues. Interior Alaska Green Star provided support throughout the Games in addition to scripting the video. Fairbanks North Star Borough Parks and Recreation's employees from Pioneer Park delivered all the bins to each site for the Games.</p>	AWG 2014	Archives

	<p>Creating legacy for the community</p>	<p>-The Environmental Committee went beyond the mandate to recycle at the Arctic Winter Games venues by establishing a Legacy Recycling Project. The intent of the Legacy Project is to use the games here in Fairbanks as the impetus to encourage more public-oriented sites to offer recycling to their clients.</p> <p>-The AWG Environmental Committee recycled during the Games and created a Legacy Project for the community. Contributions from Kinross Fort Knox Mine and the FNSB Recycling Commission facilitated the purchase of 44 recycling bins to be permanently located at facilities owned by the FNSB such as Pioneer Park, Birch Hill Ski Area and other facilities. Legacy Value to the Community: \$50,000</p> <p>-With monetary contributions from Kinross Gold Corporation-Fort Knox Mine and the Fairbanks North Star Borough Recycling Commission, AWG purchased 26 three-bin indoor units and 18 two-bin outdoor units for a total of 44 recycling bin units. These bins are to be permanently located at facilities owned by the Fairbanks North Star Borough, such as Pioneer Park, Birch Hill Ski Area, and area schools, as well as non-profit organizations open to the public, such as downtown-based Project Fairbanks and the Morris Thompson Cultural and Visitors Center.</p>	<p>AWG 2014</p>	<p>Archives</p>
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<b>Education and Awareness</b>	Green education	<p>-Many individual volunteers took care to educate other volunteers and guests as well as diligently sort through the recyclables on site.</p> <p>-The Mission uses its “Green Collar Jobs Program” to create an employment environment in which participants are trained to run the Recycling Center.</p> <p>-The Environmental Committee through the assistance of Interior Green Star plans to educate those organizations and businesses on the other costs associated with recycling - such as sorting and collection, the resources available for recycling hauling/drop-off and disposal - so that they can make an informed decision on recycling at their facility.</p>	AWG 2014	Archives
	Educational content/video	<p>-Explore Fairbanks teamed up with Interior Alaska Green Star to produce an educational video that featured the spokesperson for the corporate sponsor Kinross Gold Corporation-Fort Knox Mine as well as the AWG mascot Raavee.</p>	AWG 2014	Archives
	Waste management communication and awareness	<p>-Communicating to athletes any efforts and initiatives made around sustainability.</p> <p>-Provide awareness to the game participants, attendees, and other volunteers of the waste reduction and other sustainability goals &amp; efforts of AWG2020.</p> <p>-The team has been working on creating messages for the handbooks and wall signs that will guide the waste management process.</p>	AWG 2020	Archives
	Awareness through online platform	<p>-The Mission’s website explains:  “Recycling is good for the environment and for our city.  When you recycle with the Mission, you are doing more than just recycling materials! You are helping us provide shelter, meals,</p>	AWG 2014	Archives

	and clothes for our residents, as well as job training.”		
Political involvement in sustainability initiatives	-Territorial and municipal dignitaries/politicians were invited to sign up for a 2-hour shift at the cafeteria to provide awareness to and support the sustainability efforts of the Games.	AWG 2020	Archives
Sustainability policy statement on the website	-A sustainability policy and policy statement posted on the games website.	AWG 2020	Archives
Quarterly sustainability reporting for knowledge transfer	-Developed four quarterly reports on sustainability activities for knowledge transfer legacy. -Giving the quarterly report to the Host Society	AWG 2020	Archives
Encouraging eco-consciousness	-Games branded reusable tote bags were given to each teacher and student to pack up their personal belongings as well as to build excitement prior to the Games.	AWG 2018	Archives
	-Encourage the use of green cleaning products	AWG 2020	Archives
Forward thinking on sustainability	-In the speeches, the upcoming 2024 games in Alaska are mentioned, which supports the AWG’s commitment to sustainability.	AWG 2023	Observation
Land acknowledgment and indigenous environmental stewardship	-The only thing they acknowledged and repeated several times was land acknowledgment and the importance of the Arctic, which can be related to preserving the environment. -The speeches talk a lot about recognition of ancestral lands, which highlights the indigenous	AWG 2023	Observation

		culture's strong attachment to the natural environment.		
	Nature-inspired anthem	-The AWG2023 song evokes elements of nature ("We're gonna fly like the Eagle, Soar over the valley", "Like the mighty river, Under the Shimmering skies", etc.).	AWG 2023	Observation
	Arctic nature display	-Video spots during the opening ceremony showing the richness of nature in the Arctic territories.	AWG 2023	Observation
<b>Human resources</b>	Collaborative recycling efforts	-The Green Committee, along with the Sports Manager, Sports Assistant, and Care & Comfort Coordinator, collaborated to create a waste management plan.	AWG 2004	Archives
		-The combined forces of Alaska Waste and the Fairbanks Rescue Mission made possible the successful collection and processing of the recyclables during the Games.	AWG 2014	Archives
	Having a sustainability manager	-Green Committee had a manager responsible for sustainability	AWG 2004	Archives
	Having a sustainability consultant	-Since the recruitment of the Zero Waste Coordinator a collaborative needs assessment for all of the venues was completed in collaboration with the sustainability consultant and EOM.	AWG 2020	Archives
	Having an experienced Coordinator	-Recent recruitment of experienced coordinator, to manage and champion a Zero Waste program across all venues will bring a more robust program to AWG2020 waste management.	AWG 2020	Archives

		-Green Committee had volunteers responsible for sustainability	AWG 2004	Archives
	Having green volunteers	<p>-During the Games at athlete housing and sports venues, Environmental volunteers - also known as the “Green Team” - collected 7,000 pounds of recyclables.</p> <p>-The Green Team had hundreds of passionate volunteers who willingly and literally “got dirty” to get the job done.</p> <p>-Volunteer groups also pitched in for the recycling effort, including Adult Learning Programs of Alaska (ALPA) and North Pole High School Junior Reserve Officers Training Corps (JROTC).</p>	AWG 2014	Archives
		-Volunteer servers facilitated an overall reduction in waste	AWG 2018	Archives
		<p>-Having the Zero Waste Volunteers and training them</p> <p>-In addition, there has been progress with volunteer management. A breakdown of venue events and their time with an emphasis on waste generation activities and any volunteers needed.</p>	AWG 2020	Archives