

# Sled Island Music Festival Green Event Report 2012

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# **Overview**

Sled Island Music Festival, Cenovus Energy and Green Calgary partnered for the third year to reduce the environmental impact of the festival. Green efforts were ramped up this year as Sled Island and Green Calgary were able to dedicate more time to the project. Driven by the sustainability coordinator, Colin Smith, an array of new projects were taken on, and older projects were given renewed attention. With Colin's help the festival focused on creative, in house solutions to their initiatives such as building their own recycling stations and fixing up 30 bikes for out of town patrons and band members to rent. Other initiatives included increased bike promotion and parking, tap water availability, stricter procurement guidelines for food vendors and alternative energy use.

This report is meant as a tool to benchmark Sled Island's success with its 'Green Island' initiative, and to provide recommendations for continued improvement. The report contains detailed information on the waste and recycling collection as well as comments and recommendations on other environmental aspects of the festival.

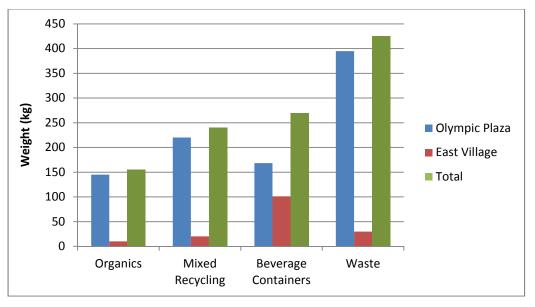
# Waste Diversion Breakdown

The waste and recycling program went very well this year at Sled Island's Olympic Plaza and East Village venues. The stations and set up were a vast improvement from last year. Sled Island was able to provide the ideal recycling and organics collection with no stand-alone garbage cans on-site and appealing and informative signage.

All this lead to a diversion rate of 61%– a good rate for a festival, and a good benchmark to improve upon for next year. This was the first year the diversion rate was calculated as it was the first year weights of the waste were able to be obtained. Beverage container recycling and organics quantities did fall from last year, but this is likely due to the weather at Olympic Plaza. According to Greg Stephenson, at Prime Box Office, the beer gardens at Olympic Plaza had about half the business compared to 2011. Recycling of non beverage container items still increased, likely due to the expansion of the public program beyond paper to mixed recyclables (paper, plastic, glass and metal). Overall the collection was a success.

Materials	East Village	Olympic Plaza	Total
Organics	10 kg	145 kg	155 kg
Mixed			
Recycling	20 kg	220 kg	240 kg
Beverage			
Containers	101 kg	168 kg	269 kg
Waste	30 kg	395 kg	425 kg
Total Waste &			
Recycling	161 kg	928 kg	1089 kg
Total			
Diversion	131 kg	533 kg	664 kg
<b>Recycling Rate</b>	81 %	57 %	61 %

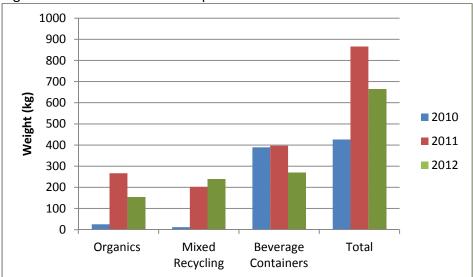
#### Table 1: Waste diversion breakdown 2012



# Figure 1: Waste diversion breakdown 2012

#### Table 1: Waste diversion comparison 2010-2012

Material	2010	2011	2012
Organics	25 kg	267 kg	155 kg
Mixed Recycling	12 kg	202 kg	240 kg
Beverage Containers	389 kg	397 kg	269 kg
Total Diversion	426 kg	866 kg	664 kg
Waste	-	-	425 kg
Total Waste &	-	-	1089 kg
Recycling			



#### Figure 2: Waste Diversion Comparison 2010-2012

# **Comments & Recommendations**

Green Calgary spent time at both the East Village Block Party and Olympic Plaza venue during the festival, assisting with volunteer training and setup and making observations of Sled's Green Island initiatives in order to provide comments and recommendation that will help strengthen the programs in the following years.

# Waste & Recycling

#### **Public Recycling & Compost Collection**

Collection went well overall with improved stations and signage and an increase in acceptable materials compared to the previous year.



Image 1: Recycling Stations 2011

Image 2: Recycling Stations 2012

Most bins had a bit of contamination but only one bin of mixed recycling was sent to landfill. Volunteers were fairly good at directing patrons on where to dispose of their waste, but a bit more focused effort and diligence could go a long way. There were still some recyclables and compostables in the landfill bins, more so on the first night at East Village.



Image 3: Landfill bin at East Village



At Olympic Plaza, one of the prominent items in the landfill bins were the TD ice cream cups and spoons.

Image 4: Landfill bin at Olympic Plaza

The organics bins mostly consisted of compostable food ware and napkins. There was not a ton of food waste. Compostable beer cups were collected on the side in PVC tubing. Stacking the cups greatly reduced the amount of room needed to collect and store them.



**Image 5: Organics bin at Olympic Plaza** 

The beer garden had a number of beverage container recycling bins, which were all well used. Green Calgary only observed one that was being used as a waste bin. The plywood tops fashioned by the sustainability coordinator, worked well to keep contamination to a minimum. Most of the bins were in the pergola area and one was placed in the terraced field below the porta-potties. All the terraced, grassy areas within the beer garden would benefit from having a couple more beverage container bins with beer cup collector tubes, especially on a hot day.

Garbage cans that were not coupled with recycling stations were taped off with signage. This is very important in order to attain an accurate recycling rate. Most of the waste bins at Olympic Plaza were covered with cardboard and a laminated sign (Image 8), but the cardboard came apart and fell into the bin during the rain. Next year tape black garbage bags over the bins with the signage taped on top.



**Image 6: Beer Cup Collectors** 



Image 7: Plywood tops for stand alone beverage container recycling in beer garden



Image 8: Closed garbage bin

#### **Recycling Station Placement**

Three recycling stations were set up at East Village - a sufficient amount. One was placed by the food trucks, one beside the entrance of the Simmon's building and the other between the skate park setup and the stage. Sled Island served beer in the Simmon's building, and many bins were placed inside for beverage container and beer cup collection. Placement worked well and if the site plans remain the same, continue with this setup.

This year at Olympic Plaza, six full recycling stations were set up for public use, compared to three last year. The increase was important as all stand-alone garbage bins were taped off, requiring patrons to visit one of the six stations. Five were inside the gate and one was placed just outside the entrance. There was also a recycling station backstage.

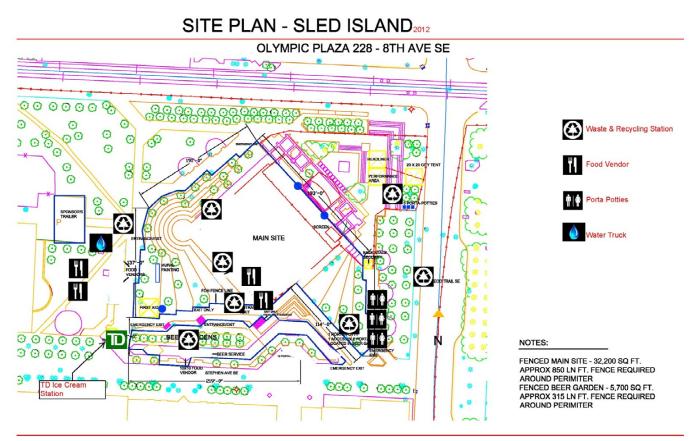


Image 9: Olympic Plaza site map with waste & recycling bin placement

# Vendor Recycling

Food vendors at both outdoor venues were open to and participated in the recycling and compost program. Their participation is important as food vendors can create significant amounts of waste, and the collection of their materials helps to create a more accurate recycling rate for the festival.

Food vendors at East Village were informed of the festival's recycling program during set up. They were asked to use the public recycling stations placed close to the food vendor area. Since there were only three food vendors and all of the space around them was open and frequented by the public, it is best to have them use the public recycling bins. With only three food vendors there is no need for them to have their own bins. Instead provide them with clear bags for mixed recycling that volunteers can pick up at the end of the night and take note as to whether the food vendors are recycling properly.

At Olympic Plaza it was the third year the festival collected recycling and organics from the food vendors. Vendors were informed of the program well before the festival by Tooth Blackner and a memo sent out by Green Calgary. They were also reminded by Green Calgary during set up. Vendors were given clear bags for their mixed recycling and asked to use the public bins for organics. In the past vendors have been given their own bins, which allow them to be better monitored. However, the food vendors were split both inside and outside the gate with no central area for collection between them. Their bins were instead redirected to add an extra public recycling station.

# **Recommendations**

- Keep up the great effort! Continue to measure your waste and recycling output in the future to track the festival's progress.
- Stress the importance for volunteers to continually monitor the bins and assist patrons with disposal.
- Continue with 3 (or up to 4) recycling stations at East Village for the public. At Olympic Plaza continue with 6 recycling stations for the public (one outside the entrance, the rest inside the gates) and one backstage.
- Depending on how many vendors are located outside the gate (if 3 or more) in 2013, consider providing them with their own recycling station (organics, mixed recycling, landfill). For the vendor station, volunteers and wood sign posts are not necessary; however detailed signage should be secured to the lid of the bin. Have Green Calgary or volunteers spot check the bins periodically to ensure they are being properly used.
- At Olympic Plaza, add at least one more beverage container recycling bin with a beer cup collector to each terraced grass area (by the merchandise tent and below the porta-potties) within the beer gardens. It is a good idea to also earmark some pails to be placed under the beer cup collectors to catch extra liquid leftover in the cups.
- Always have one or two extra recycling bins for each material type on hand in case extra bins or stations are needed on site.
- When closing off stand-alone garbage cans that are open at the top, tape a black garbage bag over top and then secure the signage on top.

# <u>Don't forget</u>

- Ask your waste and recycling hauler if they can provide the needed collection bags or if those will have to be procured well before the festival. Compostable liners of that size are hard to find.
- Print extra beverage container recycling signage and laminate in case of rain.

# **Green Procurement**

# Supplies & Merchandise

Sled Island increased use of eco-friendly alternatives when procuring supplies for the event. This year and in the past, the guides and posters have been printed on recycled content paper (100% recycled content for the guides). The guide is also printed with vegetable based inks. In addition, this year eco-friendly volunteer t-shirts were purchased. These t-shirts were made from recycled clothing fiber and were manufactured in North America (www.recoverbrands.com).

# **Compostable Food Ware**

In order to reduce the amount of waste sent to landfill, vendors were encouraged at East Village and required at Olympic Plaza to use certified compostable food ware. Volunteers directed patrons to dispose of this food ware in the organics bin, and it was then sent to a compost facility.

Vendors at the Olympic Plaza venue were informed well before the festival of the compostable food ware requirements by Tooth Blackner. All vendors at this location participated. There was, however, a TD promotional booth giving away ice cream that was not informed and did not participate in the program.

Requiring all food vendors to use compostable food ware is an important step in the waste diversion process. It results in more material being diverted away from landfill and makes it easier for volunteers to direct patrons on what bins to use.

# **Recommendations**

- Create a green procurement policy. The Recycling Council of Alberta has a <u>Green Procurement</u> <u>Policy template</u> available online.
- Review all materials purchased by the festival and consider switching to eco-friendly options, even those used year round in the office. This includes recycled content paper, green cleaning products, organic coffee and tea and promotional material.
- When procuring food for volunteers, partner with a business that can provide sustainable food choices, such as Community Natural Foods or Planet Organic.
- On all printed material include printed on --% recycled content paper, or the FSC logo if either is used.
- As part of the food vendor contract include environmental considerations, such as the mandatory use of certified compostable food ware and participation in the recycling program.
- If having promotional giveaways such as TD's ice cream truck, inform them of the compostable food ware requirements to ensure that all disposables given out at Sled Island are compostable.
- Remember to provide compostable food ware for volunteers as well. The coffee cups provided for volunteers at East Village were not compostable.

# Water

Sled Island's outdoor venues were water bottle free this year. Access to tap water at Olympic Plaza was provided by Alberta Water Services, through a grant from Cenovus Energy. This was a strong environmental step for the festival and led to an equivalent savings of 757 bottles of water. East Village did not have a water buggy available, but water fountains are available on site.

Although the vendors were not allowed to sell bottled water to patrons, the festival provided bottled water to both volunteers and artists. Expand this initiative to all aspects of festival procurement.

# **Recommendations**

- Do not give out disposable water bottles to volunteers. Ask volunteers to bring their own reusable water bottle to their shift.
- Provide tap water to artists, either in reusable water bottles or compostable cups.
- Procure a water buggy for the East Village or have signage directing patrons to the water fountains.

# <u>Don't forget</u>

- Print signage for the water buggy.

# **Alternative Transportation**

Bike culture is a big part of Sled Island Music Festival. Festival goers are encouraged to bike from venue to venue and adopt safe biking practices. This year Sled was able to greater accommodate the popularity of bikes at the festival by providing increased bike parking. Completely full bike racks were a common site at the festival.

Sled Island partnered with Bike Bike, the Good Life Bicycle Shop, Alberta Bike Swap, Prohab Helmet Society and Cyclepalooza during the festival to help promote cycling during the festival and enhance bike culture in Calgary.

#### **Recommendations**

- Continue to increase access for festival goers to bicycle parking. Although there was a significant amount of bike parking, the racks were overflowing at some venues.
- Consider incorporating bike valet parking at some venues to positively reinforce the use of bikes.
- Sled Island is in a very good position to promote bike culture in Calgary. Consider other methods of bike culture promotion year round such as advocating for increased bicycle lanes and continuing to work with cycling advocacy organizations.

# Alternative Energy Use

The electricity use of the entire festival was offset by Bullfrog Power, a renewable energy provider. At the Area, the green showcase venue, there was a bike powered stage.

For the past three years the artist travel emissions have been calculated. However, they have not yet been offset.

The artist travel emissions data was collected by Sled Island Music Festival and analysed by one of Sled Island's Green Island volunteer coordinators. For the methodology and assumptions used when calculating emissions, please see Appendix A, page 10.

#### Total Artist Travel Emissions: 253,863 kg CO<sub>2</sub>e

#### **Recommendations**

Consider offsetting the artist travel emissions for the festival. When offsetting it is best to use a reputable source for carbon offsets such as Less Emissions. For further guidance on reputable carbon offsetting companies refer to <u>Purchasing Carbon Offsets: A Guide for Canadian</u> <u>Consumers, Businesses and Organizations</u>.

# Appendix A: Methodology & Assumptions for Artist Travel Emissions

2012 Sled Island artist travel emissions were calculated to be **253,863 kg CO<sub>2</sub>e<sup>1</sup>**. Artist travel emissions were calculated based on their mode of transportation to the festival, the associated emission factor and the distance travelled by the artists.

Equation 1: Travel Emission Calculation

$$Total \ kg \ CO_2 e = \sum \#Artists \times Distance_{Fly,Drive} \times 2 \times Emission \ Factor_{Fly,Drive}$$

#### Mode of transportation:

Sled Island artists either flew or drove into Calgary to perform at the festival. Greenhouse gas (GHG) emissions associated with flying or driving differs significantly, so depending on what the artists reported affected the emission factor used in the calculation. Some artists drove in and flew out or flew in and drove out; however for purposes of a conservative estimate, flying was assumed for both directions. **Emission Factor**:

The emission factor for flying was calculated to be 0.131 kg CO<sub>2</sub>e/km, which was based on an average between short, medium and long haul flights.<sup>2</sup> The emission factor for driving was calculated to be 0.278 kg CO<sub>2</sub>e/km, which was based on an average vehicle fuel efficiency of 9 km per liter of gasoline consumed.<sup>3</sup>

#### Distance travelled:

Distance travelled was calculated based on the assumption that artists flew or drove from their hometown to Calgary, and calculated using Wolfram Alpha (<u>http://www.wolframalpha.com/</u>). This is a conservative estimate because many artists were on tour and did not travel to/from the festival from/to their hometown.

#### Offsetting emissions:

Assuming a carbon value of \$10 per t CO<sub>2</sub>e it would cost approximately **\$2,540** to offset the Sled Island artist travel emissions.

<sup>&</sup>lt;sup>1</sup> Please refer to the Excel Spreadsheet *Sled\_Emissions\_2012.XLS f*or more detail/transparency on how the carbon emissions were calculated.

<sup>&</sup>lt;sup>2</sup> Oxford University Center for the Environment. 2009. *Calculating the Carbon Dioxide Emissions of Flights*. <u>http://www.eci.ox.ac.uk/research/energy/downloads/jardine09-carboninflights.pdf</u>

<sup>&</sup>lt;sup>3</sup> British Columbia Sustainable Energy Association. 2012. *Calculate Your Carbon Footprint.* <u>http://www.bcsea.org/solutions/citizens-and-homeowners/calculate-your-carbon-footprint</u>