

LOCH HART MUSIC FESTIVAL

Resource Recovery Report 2019

B-Alternative

B-Alternative Resource Recovery

Overview

ABOUT B-ALTERNATIVE

B-Alternative is an environmental solutions group helping businesses and individuals transition to lower impact operation and living. B-Alternative work within 4 core pillars: Event and business resource recovery, corporate environmental consultancy, school resource recovery programs, and providing reusable, sustainable alternatives to single use items.

With the intention to use festivals as a platform to inspire change in the awareness around conscious living and the reduction of 'waste', we believe that education and inspiration goes hand in hand to create change on a larger scale.

AIM

Our aim for Loch Hart (LH) Music Festival was 90% diversion from landfill. We utilise several models to help achieve this goal:

- Implement a reusable crockery/cutlery model to avoid disposal of single use packaging
- Compost all food scraps and cardboard
- Recycle aluminum cans
- Take away all uncontaminated plastics, melt them down and turn them into furniture for the event to purchase back
- Carry out campground education Encouraging patrons to 'leave no trace' and take all their possessions with them

Results

Table 1. Weights (kg) of resources/waste sent to their specific handling streams post Loch Hart Festival 2019.

Resource/Waste	Weight (kg)
Compost	76
Aluminum cans	100
Cardboard	48
Plastics	38.4
Landfill	12

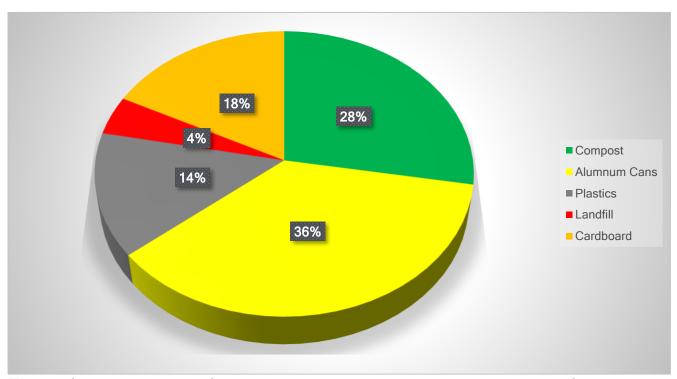


Figure 1. Percentages of various resources/waste sent to their specific handling streams, post Loch Hart Festival 2019.

Discussion

Upon conclusion of Loch Hart Music Festival, a 96% diversion from landfill was achieved. We believe this couldn't have been achieved without the implementation of the reusable crockery/cutlery system, a highly motivated and progressive LH management team, and such a supportive crowd



Image 1. Birds eye view of Loch Hart Music Festival site 2019.

Unlike 2018's event, no skips were required for Loch Hart 2019. Cardboard was taken away by B-Alternative and used for gardening purposes at B-Alternative's earth ship.

All uncontaminated plastic was melted down and turned into a building product which was purchased back by Loch Hart, showcasing a closed loop with single use plastics brought on site.

All food scraps were composted on site.

Aluminium cans were recycled at a Melbourne scrap metal recycling facility. Glass and landfill were taken to a local transfer station.



Image 2. Breakdown of all resources/waste produced and taken away from Loch Hart Music Festival 2019.



Image 3. Size of the landfill skip (18m3) from Loch Hart Festival 2018.

Although comparing landfill results in cubic meters (m3) between 2018/2019 isn't as accurate as comparing by weight, there were no weights recorded for landfill in 2018. In 2018, 18m3 of landfill waste was produced. In 2019, 0.480m3 was sent to landfill, showcasing a 97% reduction of landfill by volume. To draw another comparison, another 73x240L bins of landfill would have had to been produced to equal the same amount as 2018.

To highlight how impressive this result is, there was a higher attendance this year with ~900 patrons, compared to 2018 where ~530 attended.

CAMPGROUNDS

After all patrons were cleared out at the end of the event, the campgrounds were the cleanest B-Alternative have ever seen at a 2-night camping festival. The

majority of patrons took all their landfill home with them, reflecting the very small amount of landfill dealt with on site. All patrons were an absolute pleasure to deal with and were very responsive to the environmental initiatives in place. 99% of all rubbish was removed from the campgrounds when all patrons cleared out.

CARBON OFFSET

By transitioning to 100% reusable crockery and cutlery from single use packaging, Loch Hart Festival have created a significant reduction in their carbon footprint. Additionally, by composting food scraps instead of sending them to landfill, a further reduction in the events carbon footprint has been achieved.

By composting food instead of throwing it in landfill, a different chemical process takes place which is beneficial for the environment.

When food and other things such as paper/cardboard (like compostable packaging), break down in landfill, they undergo a process in the absence of oxygen that releases methane into the atmosphere.

However, when food breaks down in the presence of oxygen in a composting system, no methane is released. Therefore, by composting, we are stopping one of the most potent GHG's from entering the atmosphere, that would contribute to global warming.

If the 76kg of food scraps from Loch Hart had of been sent to landfill, ~214.7kg of carbon dioxide equivalent would have been produced, which is the same as driving a small vehicle 1180km.

By going completely reusable, the breakdown of single use packaging in landfill was also avoided. This has a much higher impact in terms of carbon footprint compared to food waste, so avoiding single use packaging all together has significantly reduce the events environmental impact. It is now well known within the scientific community that PLA or plant-based packaging creates a higher carbon footprint than plastic packaging in its manufacturing phase. Materials have to be transported much further and more often, to create this plant-based packaging, thus increasing carbon footprint in transportation. Although it has a lower footprint when processing after use compared to plastic, overall, it's not much of a better alternative. This is why the decision for Loch Hart to go

completely reusable was exceptional and has had a huge positive environmental impact.

Additionally, the event managed to avoid the carbon footprint created by waste management truck transport.

These figures demonstrate how a simple decision to go reusable can have a huge positive environmental impact.

Statistics are based off the average of a large array of scientific findings and are calculated with 30% uncertainty, meaning the true value could lie 15% higher or lower than the value shown.

Conclusion

Overall, an outstanding resource recovery result was achieved by Loch Hart Festival. This event has achieved one of the best results in terms of resource recovery the B-Alternative team have ever seen. The patrons and campgrounds were by far the most responsive and cleanest, consecutively, the BA team have witnessed. We want to congratulate Jayden Bath and the Loch Hart management team for their progressive thinking and hard work. All staff were a pleasure to deal with, and the B-Alternative team are excited to aim for a zero-waste event for 2020.