



GOVERNMENT OF BERMUDA

Department of Works and Engineering

GOVERNMENT UPGRADES RECYCLING INITIATIVES

Bermuda's TAG and other recycling programmes get a boost thanks to new thinking. Vanese Flood Gordon, MSc, Education and Enforcement Officer (waste management), explains.

In these challenging times, it's refreshing to provide positive factual information worth sharing. Many residents in tiny Bermuda are doing their part to help fight climate change by participating in Bermuda's TAG (tin, aluminium, glass) and other recycling programmes.

Over the past year, the team at the Material Recovery Facility (MRF), aka the Recycling Centre, has been as busy as bees at its Harrington sound location. Household TAG recyclables, lap-top computers, computer towers, hard-drives, mobile phones, and air-conditioners have been arriving there from households and businesses, being processed for shipment and leaving our shores destined for markets in the USA.



Kavon Robinson, a team member at the Material Recovery Facility

In the USA, these items become commodities that are further processed, going on to de-manufacturers and metal smelters to become new consumer goods, destined once again for consumption in the United States or Bermuda. For example, an aluminium can destined for recycling is collected from a home in Bermuda, taken to the MRF, and sorted and bundled by type through an automated process. Similar materials are compacted into bales, loaded onto a flatbed truck, taken to the docks, and shipped to a USA port. From the port, these materials are driven to the government's recycling contractor who smelts the metals into sheets. These sheets are readily converted right back into new cans.

Allan Douglas, the man who leads the MRF team, has made great strides in improving the recycling process since taking over three years ago. He has worked to improve existing shipping methods for recyclables, leading to greater

retention of revenues garnered for these commodities. By moving away from the constraints of a 20-foot shipping container to packing metal bales directly onto a flat bed, he has eliminated the size constraints of the previous container system.

Douglas is also passionate about glass reuse. With no market for glass in the United States, it is imperative to find novel ways to reuse glass on-island. To this end, Douglas has collaborated with Solomon Wallace, the agronomist responsible for renewing the golf course at St. Regis. Together, by using tonnes of crushed glass, they have created better drainage on tee decks and golf greens on the course, reduced Bermuda's carbon footprint by decreasing the need to use imported materials for this project and saved money for the contractor. Glass has been tested for use in a host of horticultural applications where it has proved safe as a drainage medium. Collaboration between the government and Gorham's is also in the works to re-engineer the football field on St. Johns Road using crushed glass to improve drainage. To help with Bermuda's shortage of roof slate, there is also another avenue for glass reuse in Bermuda, i.e., Slate 2.0. This tested and approved process will use glass processed at the MRF, along with concrete and sand, in a process patented by Mason and Associates. The finished eco-friendly slate product will help to save open spaces in Bermuda by reducing the need for additional quarries, reduce the island's reliance on importation of materials from overseas, and provide a ready market for the MRFs crushed glass product.

To stimulate interest in and participation in Bermuda's TAG recycling programme, Mr. Douglas has also given presentations and tours to schools and other groups. He enthusiastically entertains students by using creative recycling signage and shows-off his own special on-island reuse of glass, i.e., his interactive food garden at the MRF.

When asked why it's important to recycle, Allan says that he understands it's difficult when living on a tiny island in the middle of the Atlantic to see that small changes we make can have a global impact. But, he adds, because we are so isolated, we have more control over what's imported and consumed, meaning we can directly have a greater impact on the planet's future. The future of recycling in Bermuda looks bright thanks to Allan Douglas and his team at the MRF.