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Intercontinental Hayman Island - Resort Food Waste Solution

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Devastated by a tropical cyclone in 2017, InterContinental Hayman Island Resort has been rebuilt and restored to exceed its former glory. In a very successful comeback, the resort is dedicated to improving its sustainability efforts and is working towards becoming more energy efficient.

The efforts of the Hayman Island team aim to showcase high-end, high-tech solutions to provide low carbon luxury to guests. InterContinental Hayman Island Resort General Manager Arpad Romandy, provided the Whitsunday Climate Change Innovation Hub with a tour of their sustainability initiatives.

Wasting resources

A popular resort like Hayman naturally outputs a lot of waste. From food scraps to plastics and packaging waste, building waste and garden waste, all waste needs to be processed and/or shipped to the mainland for processing. This was making waste management an extremely costly exercise with waste bills coming in at a whopping \$30,000. Something had to be done.

Where to start?

Hayman Island has been rethinking waste and has around 10 waste streams on island being sorted and recycled. One great advancement in their waste management in the past couple of years is the addition of commercial composters into the kitchens that can process up to 100kg of waste per day.

The Liquid Food Composters (LFC) are fully enclosed automatic composting machines that dispose of any food waste within 24 hours. Think of these composters as bio-digestors, using bacterial microorganisms to convert organic food waste into liquid. This liquid is then hard plumbed into the sewage treatment plant, reducing the need for sugars in the processing. And the best part – no smell!

The LFC uses air, water, and a rotating arm inside the machine to slowly churn the waste, mixing the old food, new food, and microorganisms to enhance the decomposing function. This process eliminates methane gas outputs, unlike landfills which produce methane and carbon dioxide as organic materials decompose over time.

The team have also discovered a way to use special enzymes in the kitchen drains to treat



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grease skimmed off grease traps around the resort. This initiative has helped to save Hayman \$5,000 per month in maintenance costs. The collected grease is treated with enzymes before the mix can be added into the sewage treatment plant to then use as grey water in the gardens.

We've already seen the benefits of the work done so far to make waste disposal on Hayman Island more eco-friendly. Financially, the resort's waste bill has dropped from \$30k per month to \$21k per month and their efforts significantly reduce the amount of waste sent back to landfills. Using the Watchmywaste tool we can estimate that Hayman Island are avoiding up to 138,000kg of carbon dioxide equivalent emissions* by not sending their food waste to landfill - equivalent to the emissions from powering an average household for 33 years!

The collective efforts of the Whitsunday tourism sector are really showcasing the potential for grassroots action to lead in protecting our Reef from its largest threat, climate change.

**emissions from powering composting machine and emitted from composting process not removed from this figure.*