SLHTA Saint Lucia Hotel & Tourism Association

Recommendations to the Saint Lucian Hospitality Sector for alternatives to Single Use Plastic

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Saint Lucia Hotel & Tourism Association

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BACKGROUND

Most of us will get along just fine without throwaway plastic in our daily lives. That said there are nevertheless many legitimate applications for single-use plastics such as in medical research, laboratory settings and emergency food and water packaging

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While plastic has many valuable uses, we have become addicted to single-use or disposable plastic with severe environmental consequences. Around the world, one million plastic drinking bottles are purchased every minute, while up to 5 trillion single-use plastic bags are used worldwide every year. In total, half of all plastic produced is designed to be used only once — and then thrown away.

Plastic waste is now so ubiquitous in the natural environment that scientists have even suggested it could serve as a geological indicator of the Anthropocene era. [1]

Plastic has been found at the deepest depths of our oceans and the greatest heights of our mountains, and single-use items have a big contribution to it.

No country on Earth is immune to plastic pollution, from our tropical island to deserts. All of this pollution has happened in less than a century.

Hospitality is one of the world's largest industries with a global economic contribution of over 7.6 trillion U.S. dollars annually. Hospitality has become awash with single use plastic. A trend that started for convenience is now being dramatically rethought as awareness of plastic pollution grows and corporate responsibilities are shifting to a more sustainable business models.

[1] https://www.unenvironment.org/interactive/beat-plastic-pollution/

The need to embrace alternatives to single use plastics is even more relevant when the respective hotel/resort is operating within a territory that does not have established recycling facilities to manage plastic waste.

As a society we are realising the damage that single-use plastic is doing to the environment. That's why a carefully legislated ban on almost all single-use plastics is a good idea. From throwaway food containers, to drinking straws, to coffee cups – we can live without all of it.

Globally we are also seeing a shift in governance and policy. Early last year, the European Union announced a ban on single-use plastic products with readily available alternatives.

The Bangladesh government was the first to impose a ban back in 2002 and "Costa Rica is taking dramatic action against plastic waste with plan to ban all single-use plastics by 2021. This includes straws, bottles, cutlery, cups and bags." [2]

The move away from single-use plastics has also been adopted by organizations such as McDonald's, which will trial plastic-free straws later this year. More regionally the recently announced initiative by Sandals & Beaches to eliminate cocktail and regular straws from their operations across 19 resorts removing 21 million straws annually.

On a national level in Saint Lucia the focus so far has been on phasing out the use of Styrofoam (extruded polystyrene foam) totally by the end of 2019 accompanied by the initiative of Massey Stores incentivises the use of your own bags by charging for film plastic bags (low density Polyethylene) while offering multi-use bags at cost price to all of its customers.

Within the Saint Lucian hospitality sector we also keenly recognize the need to act responsibly and to demonstrate our responsibility to our guests. Changes are happening slowly through the integration and provision of more Eco Eco-friendly products. We can see the trend that hotels have seeking to change either away from a single use plastic usage altogether or minimize use by turning to alternatives.

[2] https://www.earthday.org/plasticban/

"For the purpose of making good alternative choices it's important to know a little bit about which plastic types we use and what they are commonly used for."

The most common Plastic types in our local/regional environment and what they are used for:

PET

(polyethylene terephthalate) PET (also abbreviated PETE)
is a clear, strong, and light-weight plastic that is widely used for packaging foods and beverages, especially convenience-sized soft drinks, juices and water. All drinking water and most soft drinks (sodas) sold in Saint Lucia are in PET containers. An exception to this would be the recently reintroduced glass bottles for Sprite & Coca-Cola.

HDPE

(High-density polyethylene)
is a thermoplastic with a high strength-to-density ratio, HDPE is used in the production of hard plastics, corrosion-resistant piping, and water tanks. Most of the HDPE in Saint Lucia is within our cars and homes with things we interact daily, as milk bottles, freezer bags, and shampoo bottles. HDPE is rarely used for a single use item.

LDPE

(Low-density polyethylene)
is widely used for manufacturing various containers, dispensing bottles, wash bottles, tubing and plastic bags. Its most common use in Saint Lucia is in plastic bags.

PLA

(Polylactic acid)
biodegradable and bioactive thermoplastic aliphatic polyester derived from renewable resources, such as corn starch, cassava roots, chips or starch, or sugarcane. PLA containers are in Saint Lucia but have been slow to grow in use due to the higher cost per container than the PET and PS containers.

PS

(Polystyrene)
is commonly used in a variety of consumer product applications and is also particularly useful for commercial packaging, for example yogurt cups, plastic cutlery and CD and DVD cases. To be banned in Saint Lucia by December of 2019.

The three types of plastics as they relate to recyclability, damage to ecosystems and agricultural risk:

Polymers derived from petrochemical sources - comprise all of the above described plastics with the exception of bio-plastics (PLA.) Worldwide, in developed waste management systems, there is a lot of recycling of PET and other petrochemical based polymers however for most of our region and in Saint Lucia they are very challenging to manage as a waste product as we currently have no viable recycling solutions and simply landfill them. There is no accurate way to measure "lost plastics" (waste plastics that do not reach the landfill) but estimates for Saint Lucia would range between 25-35%.

The single use products in this category are the most prolific in our environment with 95% of all food containers, 100% of all plastic bags and 70% of all food packaging being from polymers from petrochemicals.

Without access to recycling polymers will endure in the environment for thousands of years. Polystyrene breaks down into micro plastics and leaches out into waterways and enters our oceans with negative consequences to marine life and ultimately the food chain.

Oxo-biodegradable plastics – are Biodegradable plastics made from traditional petrochemicals, which are engineered to break down more quickly. Oxo-plastics degrade and biodegrade in the open environment in the same way as nature's wastes. The two main types are oxo-biodegradable and hydro-biodegradable. In both cases degradation begins with a chemical process (oxidation and hydrolysis respectively), followed by a biological process. Both types emit CO2 as they degrade, but hydro-biodegradable can also emit methane therefore their decomposition produces Greenhouse gas emissions.

Oxo-Biodegradable - Plastics that contain additives that causes them to break down under favourable conditions, most often UV radiation or heat. Due to these additives, the plastic fragments over time into plastic particles, and finally micro-plastics, with similar properties to micro-plastics originating from the fragmentation of conventional plastics. Complete degradation into biomass, water and CO2 is yet to be proven, raising concerns that oxo-degradable plastics contribute to the negative impacts of micro-plastics. Oxo-biodegradable plastics are plastics made from conventional polymers (such as PE, PP, and PS), but contain extra ingredients (metal salts) to accelerate their degradation in the natural environment.

Oxo-biodegradable plastics have been found to offer no proven environmental advantage over conventional plastics, while their rapid fragmentation into micro-plastics is cause for concern (UN Environment, 2018a, UNEP, 2015). The European Commission has started review procedures within REACH with the intention of restricting the use of oxo-biodegradable plastics in the EU (European Commission, 2018).

Bio-Plastics – are plastics derived from renewable biomass sources, such as vegetable fats and oils, corn starch, straw, woodchips, food waste, etc.

They have become the considered best single use plastics for food packaging, cutlery & straws and they are recyclable via composting. They often carry "Eco" branding and the words recyclable and compostable on them.

The reality is however that compostable in this sense means industrial composting which happens at far higher temperatures than home composting can achieve. 60-70 degrees C (140 – 158F)

Without a local industrial composting facility being available, if you have switched to Bio-Plastic alternatives unfortunately you have not meet your goal of using a plastic responsibly.

The other major consideration for Bio-Plastics is that their production consumes valued food resources – At this time bio plastic production accounts for 0.3% of global agricultural acreage however as the industry grows there are valid concerns for food security.

ALTERNATIVES

There are alternatives to single use plastics however if you managed to get through the above information you will know they must be considered within the context of our island and our abilities to manage waste. In Saint Lucia we currently have no public recycling, informal recycling and no industrial composting.

If we are to make a switch, alternatives must be chosen based on their suitability to the conditions of use in order to avoid unwanted consequences from what started as a good intention.This guide will hopefully allow you to make the right choice the first time and set you on a pathway to becoming a much more sustainable operation that maintains the expectation of your guests without further harming the environment.

We will focus on four areas for alternatives namely:

- Food containers and cups
- Utensils (cutlery)
- Straws
- Guest Bathroom Amenity containers

Start with a question:

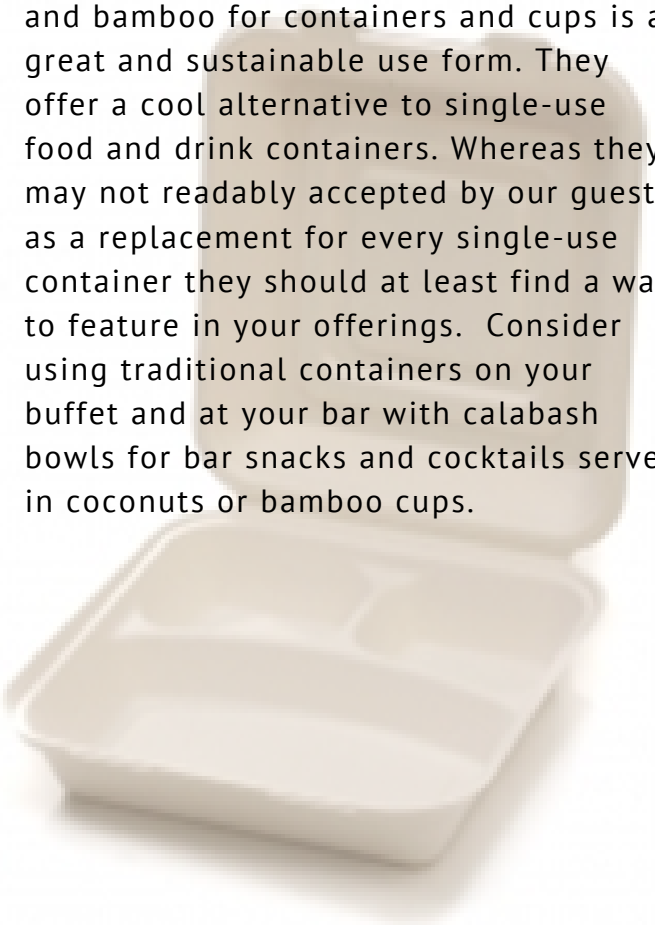
“Do we really need this?"

Before we look at alternatives we must first examine the need for these products in the first place. Your transition should start with the question "do we really need this?" If you cannot operate without these single use items, then commit to choosing the alternative that's appropriate and has the least environmental footprint.

Our industry is providing us with many examples of successful elimination, and when supported with specific messaging to both team-members and guests you can transition away from single use without impact to your operation or your guest's expectations. In fact, trends now show us that our guests do not expect us to be using such products in what they know to be a fragile environment and will applaud rather than be critical of your choice not to use such items.

Food containers

The traditional use of calabash, coconut and bamboo for containers and cups is a great and sustainable use form. They offer a cool alternative to single-use food and drink containers. Whereas they may not readably accepted by our guests as a replacement for every single-use container they should at least find a way to feature in your offerings. Consider using traditional containers on your buffet and at your bar with calabash bowls for bar snacks and cocktails served in coconuts or bamboo cups.

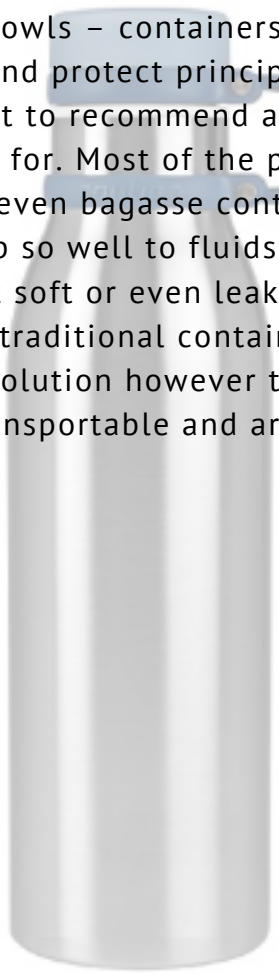


If, however you must have transparent containers then Bio-Plastic would be your only option. Knowing however that we don't have the composting facility type available in Saint Lucia to manage Bio-Plastics, minimize their use and seek alternatives like paper bags with a film window panel etc. I.E. if transparent food packaging truly can't be avoided either limit its use or use packaging that uses much less plastic than a clam shell.

To replace the Styrofoam type containers the recommendation is to switch to pressed paper or even better sugarcane bagasse containers. Both are already available from local distributors but currently at 3-4 times the cost (EC$1.00 for Bergasse or paper V's EC$0.30 cents for Styrofoam). They manage liquids fairly well, break down well in the a landfill or as compost

Cups & bowls

Cups and bowls – containers intended to transport and protect principally fluids - are difficult to recommend a good alternative for. Most of the pressed paper and even bagasse containers do not hold up so well to fluids and would tend to get soft or even leak. We stress again that traditional containers may be used as a solution however they are not reliably transportable and are not easy to reuse.



What a number of properties are doing is to issue each guest with a classy stainless steel bottle that would be property branded and thereafter become a souvenir of their stay in addition to being a long lasting reusable drink or fluids container.

Resorts going this way have also installed “hydration stations” throughout their facilities for guests to use as needed for water replenishment. Alternative such as paper cones could eventually be used as single use items, if the paper is recycled in Saint Lucia.

For serving drinks at the bar, glasses and porcelain cups are recommended. In case they are next to a pool, and breakable items are not adapted, you could switch to reusable plastics cups.

If your need is for a truly portable container that seals and holds fluids safe for consumption over a long period of time, then your only real choice at this time is to continue the use of PET plastics or if available Bio-Plastic containers. Again the best advice here is to find a way to limit or minimize their use and where possible use reusable containers in place of single use.

Utensils (cutlery)

As mentioned previously, first of all consider the need for single use cutlery, and the possibility of using regular stainless cutlery.

There are three main material choices being currently offered as alternatives to Plastic cutlery: Bio-Plastics, wood and bamboo. In the absence of other choices wood or bamboo would be the recommendation for St. Lucia as we have no industrial composting facilities to manage Bio-plastics.

That said we believe that edible cutlery is the way to go forward as there appears to have fewer down sides.

Edible cutlery requires much less energy to produce than plastic, they are made from a local food source but not removed from the food chain, they are tasty and nutritious, and their production is local and supports employment for production and sale.

- Edible cutlery production is a gap and a business waiting to happen in St. Lucia.

Straws

The best straw choice is no straw at all. If you are unsure whether straws are needed or not then you should ask your guests if they need a straw. You should also message your doing so with information on your straw policy displayed where straws are typically used. Guests genuinely buy-into this and will for the most part fully support your initiative.

Reusable straws typically made from glass & stainless steel are becoming more fashionable however glass straws don't travel well, stainless straws conduct heat and can scald in addition to being hard and raising fears of chipping teeth, silicone straws are likely the best as they don't transmit hot or cold, can be folded, cut to length and burn into biodegradable ash at disposal - all reusable straws require a cleaning brush and need looking after well.

In a hospitality setting it is unlikely that providing reusable straws to guests would work well and so the recommendation would be paper straws that are wax coated. A recommendation that returns us back to the original solution created by Marvin Stone in 1888.

Note: A paper straw - via its energy needs for production and its release of methane on decomposition – is a greater contributor of Greenhouse gas emissions than a plastic straw.

- Paper straws are currently available in Saint Lucia from hospitality suppliers.
- No straws at all is the most recommended option.

Guest Amenity Product Containers

We have traditionally tied to the ubiquitous guest bathroom amenities. The bottles, the ear buds the shower caps, etc… Most of which is unnecessary and post-use litters the environment with lots of mini polyethylene containers and other unwanted plastic.

The supply chain is starting to close the gap in this respect and the use of more bulk product and dispensers rather than portion sized bottles is becoming more common.

Whereas this product-presentation was not until recently available with high end amenities. Due to changing market trends and customer acceptance even brands like Molton Brown, Organic to Green & Voya have released bulk product and dispensers.
The containers are for the most part still plastic but they are now "many use" plastic and therefore an appropriate choice when the goal is minimizing unmanageable waste in Saint Lucia.

OPPORTUNITIES

1) Via association & collaboration we can all lower cost and the impacts of investing in unsuitable products via bulk purchasing St. Lucia appropriate products. – Food containers and utensils should not need to be printed/branded and uniformity of a waste product makes it easier for recycling.

2) To achieve levelization of the cost of alternatives support from government to remove duties from imported alternatives and or raw materials for on island production is essential.

3) Entrepreneurial investment needed to establish local manufacturing of alternatives I.E. bagasse containers and edible cutlery.