

An aerial photograph of a tropical resort. On the left, there is a large swimming pool with a curved edge, surrounded by palm trees and a building. A sandy beach runs along the right side of the pool, with many lounge chairs and umbrellas. The ocean is visible on the far right, with a clear turquoise color near the shore and darker blue further out. The text is overlaid on the center of the image.

Addressing pollution from single- use plastic products: A Life Cycle Approach

Key messages for tourism businesses

Pablo Montes Iannini, Private Sector Engagement Specialist,
United Nations Environment Programme

Objectives of the material

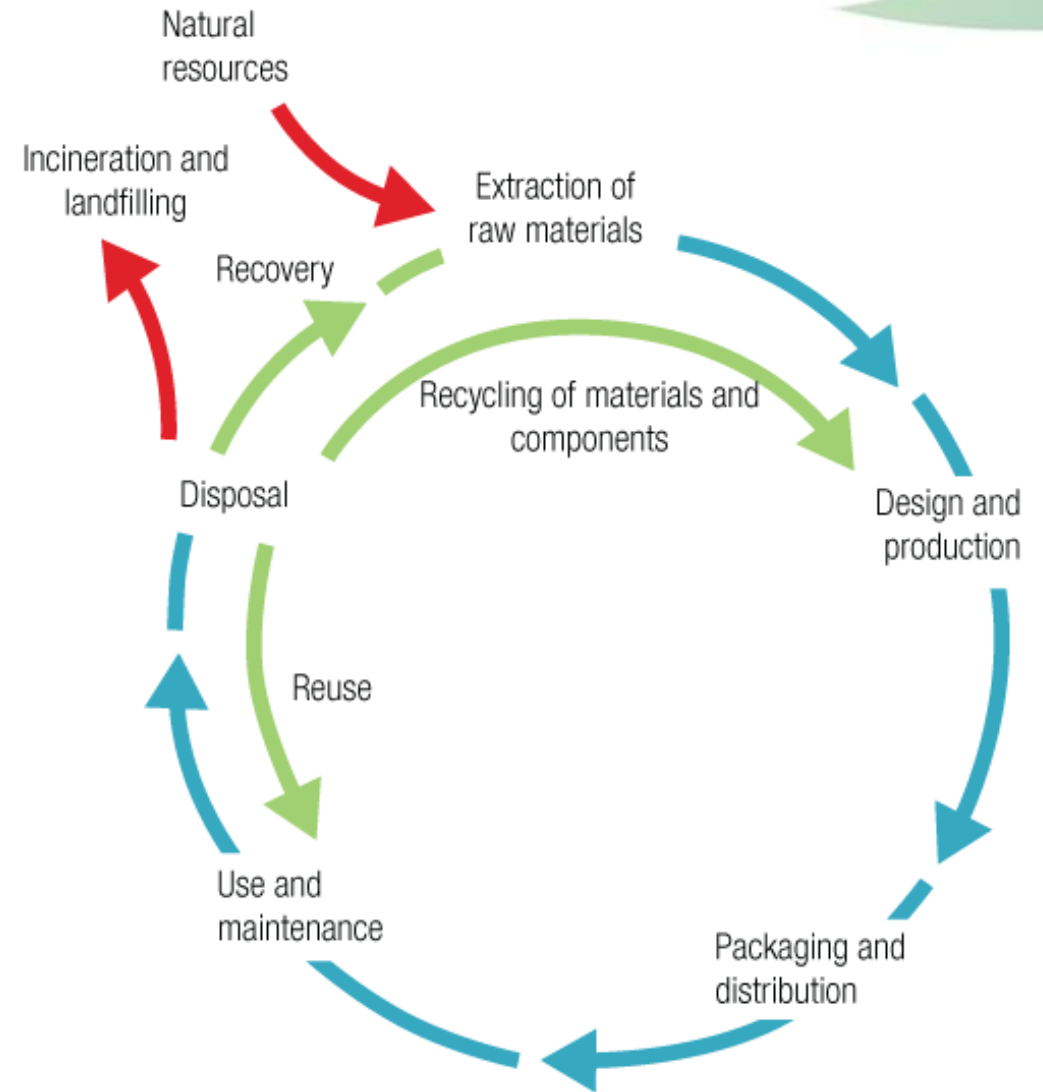
- **Provide evidence-based guidance for decision-making** for tourism business actors to address pollution from single-use plastic products
- **“Translate” scientific report findings** into accessible and informative key messages and recommendations
- **Focus on** single-use plastic bags, bottles, take-away food packaging, cups, tableware



Global Tourism
Plastics Initiative

Life Cycle Thinking (LCT) and Life Cycle Assessments (LCA)

- Go beyond focus on production site and manufacturing processes to include **impacts of a product over its entire life cycle**
- LCAs analyse **impacts in various "environmental categories"** for the different stages of the life cycle
- **Limitations** of quantitative analysis across certain environmental and social categories



Principles for action

Towards the **elimination of plastic pollution** and the **reduction of environmental impacts** related to the use of *single-use plastic products and their alternatives by tourism businesses*



1. Reduce the use of single-use products regardless of the material (e.g., glass, paper, plastic, etc.).



2. Promote reusable products and systems in your tourism business – the most sustainable product is the multi-use product.



3. Use tourist and staff-targeted strategies and communications to ensure products are continuously reused.

A stainless-steel cup used around **140 times (about 5 weeks, 4 times a day)**, outperforms a single-use plastic cup across all **environmental categories**, regardless of whether it is washed by hand or dishwasher.

Principles for action

Towards the **elimination of plastic pollution** and the **reduction of environmental impacts** related to the use of *single-use plastic products and their alternatives by tourism businesses*



4. Aim to decrease the environmental footprint of production (through reuse, demanding products with high recycled content, and partnering with suppliers engaging in sustainable production methods)



5. Engage with suppliers and relevant actors in the value chain to procure products that are designed to be fit for purpose, durable, and functional.



6. Ensure that resource-efficient washing technologies are in place.



7. Establish good waste separation systems in your tourism business to ensure products receive proper end-of-life treatment.

Principles for action

Towards the **elimination of plastic pollution** and **the reduction of environmental impacts** related to the use of *single-use plastic products and their alternatives by tourism businesses*



8. Know your context when making decisions related to single-use plastic products (Cultural norms, production methods, waste management technology infrastructure available, tourist behaviors, regulatory framework).

Identifying the most appropriate options for each operational context



Eco- or cost-conscious Consumer



Indifferent Consumer



Considerations of geographical and technological context



EFFICIENT WASHING during use-phase (energy efficient dishwasher or hand wash in cold water)



CUPS REUSED many times



UNLIKELY TO LITTER / likely to recycle or compost



INEFFICIENT WASHING during use-phase (Hand wash in hot water)



INSUFFICIENT REUSE of cups (Little consumer awareness)



LIKELY TO LITTER / unlikely to recycle

NO FORMAL WASTE MANAGEMENT & POOR RECYCLING SUPPORT
unsanitary landfill, open dumps, open burning, no policy support for recycling and/or composting

FORMAL WASTE MANAGEMENT BUT POOR RECYCLING SUPPORT
sanitary landfill, incineration with energy recovery, but no or low policy support for recycling and/or composting

FORMAL WASTE MANAGEMENT & RECYCLING INFRASTRUCTURE
sanitary landfill and/or incineration with energy recovery

	EFFICIENT WASHING during use-phase (energy efficient dishwasher or hand wash in cold water)	CUPS REUSED many times	UNLIKELY TO LITTER / likely to recycle or compost	INEFFICIENT WASHING during use-phase (Hand wash in hot water)	INSUFFICIENT REUSE of cups (Little consumer awareness)	LIKELY TO LITTER / unlikely to recycle
NO FORMAL WASTE MANAGEMENT & POOR RECYCLING SUPPORT	Reusable regardless of energy mix	Reusable Ceramic; glass; stainless steel; bamboo	Reusable Ceramic; glass; stainless steel; bamboo	Reusable in case of renewable energy mix	Single-use Wax-, PE- or bioplastic-lined paper	Reusable Ceramic; glass; stainless steel; bamboo
FORMAL WASTE MANAGEMENT BUT POOR RECYCLING SUPPORT	No clear preference in case of carbon intensive energy mix	Reusable Ceramic; glass; stainless steel; bamboo; PP	No clear preference between reusable and single-use (EPS) If incineration with energy recovery and importantly if single-use are being collected and managed.	Single-use in case of carbon intensive energy mix	Single-use EPS; wax-, PE- or bioplastic-lined paper	Reusable Ceramic; glass; stainless steel; bamboo
	Reusable in case of renewable energy mix		Single-use PE- or bioplastic-lined paper; rPET	No clear preference in case of renewable energy mix		
FORMAL WASTE MANAGEMENT & RECYCLING INFRASTRUCTURE	Single-use in case of carbon Intensive energy mix	Reusable especially recyclable materials such as PP, glass, and stainless steel	Single-use PE- or bioplastic-lined paper; rPET	Single-use regardless of energy mix	Single-use PE- or bioplastic-lined paper; rPET	Reusable PP; ceramic; glass; stainless steel; bamboo
	Reusable in case of renewable energy mix		Reusable especially recyclable materials such as PP, glass and stainless steel			

Reusable cups preferred

Single-use cups preferred

No clear preference for reusable or single-use cups



Thank you

Final draft version available for download here

<https://www.oneplanetnetwork.org/sustainable-tourism/life-cycle-approach-key-messages-tourism-businesses>