Good, Bad and Ugly Facts of Plastic Pollution

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Our planet is facing *plastic pollution* crisis of catastrophic proportions, yet many believe plastic pollution is simple littering!

The Good: Cheap, lightweight, and versatile plastics are the dominant materials of our modern economy. They have become essential components of products and packaging. Due to the convenience of disposable water bottles, you are guaranteed to find bottled water almost everywhere you go. Its production is expected to be double over the decades, according to the Center for International Environmental Law.

The Bad: Since the 1950's, approximately 8.3 billion metric tons of plastic have been produced worldwide – yet less than 9% has been recycled. Plastic recycling doesn't work – it's ***greenwashing*** by the plastics industry to make us think it's ok to keep using plastics. Plastic is not biodegradable, it breaks down very slowly, into smaller pieces, called microplastics which scatter across the environment and poison the air we breathe, the water we drink, and the food we grow and eat. One single plastic bottle takes up to 1,000 years to decompose.

Plastic bottles clog our waterways, blow across our landscapes and ultimately enter the ocean. Marine animals mistake them for food, choke and die from the toxins produced in their stomachs by the bottle tops. There are already an estimated 150 million metric tons of plastic in our oceans, with 8 million metric tons added every year. If the current trend continues, there could be more plastic than fish (by weight in the ocean by 2050). Each of us is eating, swallowing or breathing about 2,000 tiny pieces of plastic each week, about one credit card.

The Ugly: Plastic pollution is more than just the ugliness of single-use plastics that wash up on our beaches; it is a human health crisis too! Bisphenol A (BPA) is a widely used chemical for the production of plastics. Plastic slowly leaches this toxic chemical when you refill the bottle or use microwave to heat food. This chemical has been linked to causing reproductive, immunity, as well as neurological problems.

How does Plastic contribute to Global Warming?

Plastics generate heat-trapping GHGs at every stage of their life cycle. During the manufacturing process releases a host of toxic chemicals such as acetone, methyl ethyl ketone, and toluene, into the atmosphere. Greenhouse gases like sulfur oxides and nitrous oxides are also released into the atmosphere during this process. Additionally, when the bottles are being transported to the bottling plants, tons of carbon dioxide are released into the air. Historically, the ocean has sequestered 30 % of carbon dioxide emissions from human-related activities. However,

microplastics reduce the growth of microalgae and the ocean environment's ability to remove carbon dioxide from the atmosphere, as a result Oceans get warmer.

Should BMM convention be concerned about using plastic dinnerware and Plastic water bottles?

We are expecting around 5,000 guests at BMM Convention. Serving meals during the event will require over 50,000 single-use plastic plates, cups, and utensils and plastic water bottles. This means, we are unintentionally polluting our planet beyond our imagination! To align with our "Go Green" theme – using compostable alternatives is the best option to reduce our carbon footprint.

So, we must act now, with boldness and decisiveness, to take on this crisis. This is where BMM's use of compostable materials comes in. They are made up of matter that will completely decompose through moisture, oxygen, and heat. So, as when we enjoy our meals at BMM event, we should recognize that we're all doing our small part. We own the problem not offload it.

Last and most important point is that as global citizens we are fulfilling the United Nation's 4 out of 17 Sustainable Development Goals (SDG) which are developed to achieve peace and prosperity for people and planet.

What are the solutions?

Addressing the global plastics crisis requires seeing and solving it from multiple angles; there is no panacea. We need to address today's reality (billions of tons of plastics already circulate in our economy), while building a waste-free tomorrow. To address plastic waste at every stage of the material's life cycle—from source, to use, to end-of-life and back again—every stakeholder across the value chain must be involved. This requires building a system that reduces the use of fossil fuels, reduce energy to make plastics, harnesses design, innovation and material science.

Finally, as consumers, giving attention to what types of paper and packaging are used in our daily products and petitioning companies to make changes to harmful materials is crucial. "Zero waste" -the conservation of resources through responsible production, consumption, reuse, and recovery of materials without incineration or landfilling – is the best path to reduce emissions.

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