OUR PLASTIC EARTH- HOW PRACTICAL BEAUTY CAN SAVE THE WORLD.

EXECUTIVE SUMMARY

We have successfully produced more plastic than we can handle, and our ecosystem is paying for it. Plastic pollution is a pressing issue that needs to be addressed swiftly. Although some effort is being made to respond to the situation, we must take more deliberate steps before our world becomes wholly drowned in plastic. Mass recycling plastic waste is currently the fastest and most effective solution to the plastic pandemic.

This whitepaper delves into the why and how of plastic waste and expounds on its multifaceted consequences as we describe how beautiful things can drive a global clean-up through large-scale plastic recycling.

PLASTIC IS EVERYWHERE

Plastic has become a component of our ecosystem. Synthetic materials have become intertwined with every aspect of our lives - from medicine, food, and electronics, to the beauty and cosmetics industry. Plastics are a big part of our lives today. Since the '70s, plastic production has grown faster than any other material, and its demand keeps increasing. However, these handy and lightweight polymers are a nuisance to our planet today, and we should all be concerned.

PLASTIC IS NOT ONE THING

Generally, plastics are synthetic polymers that can be shaped with heat or pressure and then hardened to retain the given shape. A polymer is a substance made from numerous repeating

units called monomers, often repeating units of carbon and hydrogen. Not all polymers are plastic; tar and latex are examples of naturally occurring polymers.

Different types of plastics exist, and typical examples include polyethylene (used in plastic bags), polyvinyl chloride (used in drain pipes), polyethylene terephthalate -PET- (for beverage bottles), and Teflon.

Plastics are a concern because they are non-biodegradable; hence, they accumulate in the environment.

WE ARE SURROUNDED BY SO MANY PLASTIC WASTES

The non-biodegradable nature of plastics makes them durable, a significant advantage driving the plastic industry's boom. However, this same apparent advantage is why plastics are problematic to our biosphere. Plastic materials linger in the environment long after they have been disposed of. According to experts at National Geographic, it takes at least 400 years for plastic to disintegrate completely.

The durability of plastic would not be a significant concern if we had a few of it in our environment, but this is far from our current reality. The amount of plastic we produce and consume has become overwhelming for the planet. Statistics show that half of all manufactured plastics have been made within the last two decades. According to the United Nations Environment Programme, one million plastic bottles are purchased every minute, and about five trillion plastic bags are used worldwide annually. So far, up to 7 billion tonnes of plastic waste have been generated, with an estimated 400 million tonnes produced yearly. All the plastic that has been made is enough to cover the country of Argentina ankle-deep!

Between 5m and 13m tonnes of plastic leak into the world's oceans yearly to be ingested by sea birds, fish, and other organisms. By 2050 the ocean will contain more plastic by weight than fish, according to research by the globally renowned Ellen MacArthur Foundation.

HOW DID WE GET HERE?

Brief History.

The current situation was not the intent from the beginning of plastic production. Interestingly, plastic was made to protect the environment rather than destroy it.

Before the invention of synthetic polymers, manufacturing industries depended on natural resources. The commonest material was paper, but it lacked strength and durability. Many trees had to be felled to get it in mass- the wastage of natural resources to get such a short-lived material inspired the search for an alternative.

Plastic was first introduced in the 19th century, but it wasn't until World War II that it started being produced in mass as part of war strategies. Polyethene (PE) was created in England in 1933 and was used to make Britain's airplanes lighter and faster than the Germans. The need for superior materials drove research efforts, and many other types of plastics were introduced during this time. However, during the post-war era of the '50s, plastic manufacturers expanded their customer base outside the military to remain in business. This market diversification began the widespread plastic revolution that has grown into the multibillion-dollar industry we see today.

WHY MAKE SO MUCH PLASTIC?

Both manufacturers and consumers influence the amount of plastic produced. Plastic is appealing to consumers- it is light and comes in various shapes, sizes, and colors; the demand for plastic is high. Manufacturers find plastic very convenient to produce because it requires less energy than

other materials and can easily be gotten from petroleum byproducts. With the demand and ease of supply, plastic is consistently churned out in mass.

THE EFFECTS ON OUR PLANET

From our trash bins, waste management may discard plastic in landfills; burn it; drive it far away to be dumped on uninhabited land, along coastal shores, or thrown into water bodies. These measures only attempt to remove macro-plastics from the immediate living environment. Still, plastic out of sight is not plastic out of the earth. No matter where plastic is discarded, it affects our planet- land, air, water, plants, animals, and man.

Air

When plastic is burned, it releases toxic chemicals into the atmosphere and pollutes the air. Micro-plastics also get carried in the air we breathe.

Land

When dumped in landfills, it breaks down over time into micro-plastics which seep into the underlying water table and gets into our drinking water.

Dumped plastics form litter that occupies usable land, making it uninhabitable for man and animals. This leads to displacement and migration. Land animals and birds may get entrapped by heaped-up plastics, or they may mistake plastic for food and ingest toxins.

Plants

Plastics slowly release toxins into the soil and reduce its nutrient content, affecting our plants.

Water

Plastics are light, so they can easily be carried by the wind, and other climatic elements, into rivers and other water bodies. Once at sea, plastics can entrap aquatic animals. These animals may also feed on small plastics to their detriment. The plastics may accumulate in their guts, causing fullness, reduced appetite, and eventual starvation. The tiny synthetic polymers may also pierce the GIT during transit and cause fatal bleeding and death.

Micro-plastics are ingested by plankton which our fish and crabs eat before landing on our plates. A study by Plymouth University reported that plastic was found in a third of UK-caught fish, including cod, haddock, mackerel, and shellfish. The European Food Safety Authority has also raised increasing concern for human health and food safety "given the potential for micro-plastic pollution in edible tissues of commercial fish."

Humans

We eat micro-plastics through fish. We also inhale micro-plastics and other toxins released from burning plastics. Plastics affect our health. The litter destroys our beaches or gets into our drainage and causes floods. Plastics wastes affect our general well-being.

POSSIBLE SOLUTIONS TO THE PLASTIC WASTE

Reduce production?

This seems like the logical thing to do since reducing plastic production will reduce the generation of waste in the first place. But it is not such a straightforward step to take for many reasons. For the consumer, plastics are convenient. With the globally adopted on-the-go culture, people want

their soda in PET bottles instead of glass, for example. The demand for plastic is very high, and companies will continue producing it to profit.

Moreover, with the falling price of oil, which provides the raw material for plastic, it is even cheaper for companies to make plastic now than ever before. The World Economic Forum projects that the rate of plastic production is expected to quadruple by 2050. Reducing plastic production would require strict policies and many stakeholders' cooperation, which may take considerable time to achieve.

Incinerate?

Burning is an easy way to eliminate plastic, but it is not safe. Burning plastic produces toxins like dioxins and furans, which can adversely affect the liver, skin, immunity, and every human body system. Burning plastic will also compound the existing challenge of air pollution and climatic change.

Bio-based and biodegradable plastic?

These inventions are a recent response to plastic pollution. Bio-plastics are made from plants or microbes rather than fossil fuels. They can be completed degraded within months or converted into compost to nourish the soil. Although bio-plastics have been gaining popularity in some regions of the world, European Bio-plastics report that they still constitute less than 1% of plastics produced annually.

Bio-plastics are still a work in progress. Trials have shown that many of these bio-plastics still break down into micro-plastics when exposed to the sun and natural elements and are only genuinely biodegradable under special industrial conditions. Bio-plastic disposal needs to be strictly monitored beyond what is realistic. Before we can enjoy the intended benefits of bio-plastics, there is still much work to be done.

Recycle?

Recycling is the act of converting waste into reusable substances. Around 50% of all plastics are thrown away after a single use, significantly contributing to plastic pollution. Recycling is an effective way to reduce plastic wastage and curtail the need for virgin plastic.
Recycling is feasible now, and its effect on plastic waste is immediate.

REUSE, RECYCLE

History

Plastic recycling started in the 1970s as a response to the environmental concerns caused by the increasing plastic waste. However, this practice still lags behind today. Of the 7 billion tonnes of plastic waste produced so far, only 600 million tonnes have been recycled. In comparison, 4.9 billion tonnes have been sent to landfills or left in the natural environment.

Challenge so far

The impact of plastic recycling is currently underwhelming because it is majorly done on a small scale globally. In Europe, only 30 percent of plastic is recycled, and just 9 percent is recycled in the U.S. In developing countries, the rate of recycling is almost zero.

The low demand for recycled plastic has been a major contributing factor to the low rate of plastic recycling. Recycling is done on a small scale, and many packaging industries and consumers feel a sustained apathy towards recycled plastic.

Solution

The solution is embedded in making recycled plastic fashionable, especially for end consumers. Once this happens, industries will naturally follow the trend to meet the demand. With the increasing awareness of plastic pollution, people are more interested in recycled plastic.

According to Grand View Research's 2022-2030 forecast, the global recycled plastics market is expected to grow at a compound annual growth rate (CAGR) of 4.8%.
Investment should be geared toward large-scale plastic recycling to meet the growing demand for recycled plastics. The end product should be appealing and valuable to consumers.

When recycled plastics become trendy, the increased demand will drive competition. More plastic recycling plants of different sizes will spring up, the recycling rate will increase, and plastic wastes will decrease.

THE KUTEE KITTY STRATEGY.

We at Kutee Kitty have a strategy to popularize plastic recycling and drive the biggest recycling movement of the decade through non-fungible tokens (NFTs).

The NFT way

Recycling is the way to go, and large scale is the way to do it. Our unique strategy to achieve large-scale plastic recycling is embedded in technology. Technology has fashioned our world into a global village, and one of the biggest and growing marketplaces in this village is the world of NFTs. NFTs have become increasingly popular in the last two years and we are ready to take

advantage of this trend to save our planet. We plan to involve the whole of humanity in saving the planet through physical asset NFTs – assets that will be delivered to the physical location of the buyer.

Methodology

We will recycle abandoned plastic in the ocean and on the earth to produce beautiful and valuable physical asset NFTs. We have a collection of 10,000+ kutee kitties, and our combination of over 100 different traits makes each kutee kitty unique. Every item in our collection is beautiful, valuable and rare, making them desirable to people from every culture all over the world.

Funds generated from each kutee kitty will be re-invested into the venture and used to fund contractors to remove more plastic wastes from the earth and ocean. All waste plastic will be sent to our growing network of recycling plants, from where the kutee kitties can be delivered to surrounding buyers.

The more kutee kitties are bought, the more popular and trendier the collection will become. The trendier it becomes, the more people will want to own them. As more people own our NFTs, more money will go into the plastic clean-up and recycling drive. Furthermore, competition will cause other enterprises to start gathering plastic waste to recycle also. Our strategy is self-sustaining and has many positive and attainable ripple effects.

Our vision is to make plastic recycling so large scale that it becomes a lifestyle. Our mission is to leverage on NFT technology to make recycled plastic fashionable all over the world.

As our motto says, we know that *The Beauty will save the World.*

Visit us at www.kuteekittynft.drr.ac to learn more.

Connect with us on our business and social media pages;

Open Sea: https://opensea.io/collection/kutee-kitty

Twitter: https://twitter.com/KuteeKitty_nft?s=09

Instagram: https://www.instagram.com/Kutee.Kitty_nft

Discord: https://discord.gg/gvr37ZfhJp