

PROJECT OVERVIEW:

EcoTopia is established to address the challenges of plastic pollution, urban waste management, unemployment, deforestation and climate change. Every year, about 8 million tons of plastic waste escapes into the oceans from coastal nations. That's the equivalent of setting five garbage bags full of trash on every foot of coastline around the world. This plastic kills millions of creatures yearly, from birds to fish to other marine organisms. In fact, over 700 million species are harmed by plastic. To add to the problem, once plastic enters the oceans, it's impossible to retrieve it. This is why our solution aims to provide a possible use of recycled plastic waste to prevent it from entering into any waterways in the first place.

Timber production itself is harmful to the environment, just like plastic. The need for timber drives most of the cutting down of trees and deforestation in the world today which threatens biodiversity and causes soil erosion, both of which represent hazardous environmental dangers.

By recycling plastic waste into timber, not only will Ecotopia recycle plastic before it turns into a toxic mass waste, but it will also reduce the need for timber and reduce deforestation. Furthermore, the plastic waste collected from local businesses and homes will be paid a small amount of money to give more incentive to consumers not to throw away their plastic consumption.

Plastic lumber is manufactured through the melting of waste plastics into molds using an industrial technique called injection and compression molding. Glass fibers and other additives can be added to increase the strength of the lumber to be used in more resilient building structures, Moreover, the resulting plastic lumber is 100% recyclable, more durable than timber, and can be used for farming fences, as support beams for houses, garages, and more applications.