

How does Singapore achieve its 2030 emissions target?

The environment is on its back, bedridden and vulnerable, all because of us. We now reap what we had sown decades ago during the Industrial Revolution. Major natural calamities, which have claimed millions of lives in the past few years, are the repercussions we have to endure due to the increase in global warming. These temperature increase is caused by the excess greenhouse gases that stay in our atmosphere, which trap radiation emitted by the earth. The amount of greenhouse gases has been proliferating in the 20th century due to overpopulation, incineration and deforestation, and the extent of this has kept increasing over the years. What we have taken no account for in the past has become a severe threat for us today. The only way of reducing the effect of global warming is to reduce the emission of carbon to a very low percent. Many countries are trying to achieve this, with Singapore hot on its heels.

Singapore has a couple of irons in the fire when it come to the topic of greenhouse gas deterrence solutions. The one thing that is delaying our achievement is none other than plastic. With the increase in population over time, Singaporeans have been using more and more plastic. We use over 27 billion plastic bags a year amounting to a waste of about 200 million kilograms of crude oil and natural gas. Out of this, only seven percent of it was recycled last year. More than half of them were dumped in landfills and the rest were incinerated. However, this is a mere fraction of the nation's plastic waste which amounts in about nine hundred thousand tonnes. This is a colossal issue as plastic emits greenhouse gases when burnt and react to chemicals in landfills to produce methane. However, there might be an alternative which reduces the negative effect of plastic entirely.

Hemp is a miracle crop that you might have never heard of. It can be used to make paper and clothes. But, there is also one significant use for this plant, which is plastic. Hemp cellulose can be removed and used to make a range of plastics. Hemp is known to contain around 65 percent cellulose and is environmentally sustainable. The cellulose is mixed with an array of chemicals to make it extremely durable, for the manufacture of bottles and even cars, but still allows it to biodegrade.

By making all plastic hemp plastic, we just open ourselves to a myriad of possibilities that could be extremely beneficial for our nation. Hemp plastic does not rely on oil

based chemicals, so it is not a good fuel of combustion. Because of this, power companies would stop using plastic as fuels for their power stations and would look into better alternatives like natural gas. Secondly, landfills are another area that will be benefitted by hemp plastics. Landfills are a problem as more than 50 percent of the national plastic waste are dumped on it annually and these plastics react to produce methane, moreover they hog precious land. Hemp plastic is biodegradable. This means over time, hemp plastic would deteriorate into the ground leaving no trace of harmful gases and leaving the land occupationally mobile once again. Hemp plastic could be circulated through major plastic manufacturers in Singapore.

Like everything, hemp plastic too has a downside. The reason why no nation is a hemp plastic nation yet is because hemp plastic is relatively new so, Singapore has to invest a sum of money to research on hemp plastic to make it cater to more plastic products like foam. But this research would allow Singapore to spearhead this initiative globally. Another issue is the cost of hemp. Hemp is relatively affordable and can be grown in Singapore itself. However, there is a major space constraint in Singapore, so hemp plastic or hemp must be imported from other countries which might incur more money than its oil produced counterpart. This might be a temporary problem as hemp prices might plummet due to export in Singapore.

Lastly, most plastic from Singapore come from other parts of the world. This is a major problem as the increase in plastic products brought from other parts of the world might dig its claws in this initiative and taint it. The solution of this can be expressed in a simple quote 'Baby steps'. As they saying goes there is no elevator to success, you have to take the stairs, similarly hemp too will need us to strategize. Hemp plastic could be used for every plastic amenities like the frequently used plastic bags. We can keep progressing from there. Many might think that the game might not be worth the candle, but just a little jostle might propel us to our goal.

Abraham Lincoln once said "I walk slowly, but never walk backwards". An old adage it may seem, but it has never been truer, than it is in this era. The world is constantly looking for a step forward in reducing global warming. But, every time we move forward a step, because of some inconsiderate people we move two steps back. It is time for Singapore to lead the world in the path because we have resources and the fact that we are small, makes things easier for us to be at the forefront.