## Secondary School Competition - Taking the right steps.

Singapore, as a small country island, has a carbon dioxide emission of 10.3 metric tonnes per capita as of 2014, almost as much as Russia, the biggest country in the world, at 11.9 metric tonnes per capita! Obviously Singapore has to change and the government has set a target that by 2030, they will reduce the carbon dioxide emissions. I personally feel that there are a lot of ways that Singapore can reduce its carbon emissions.

One way is to improve on its existing laws to make it even harder to get a car and to actually maintain it too. This process, which currently just requires the needed amount of money, should include questions about why he or she really needs the car. The owner should also be asked to sign a form that states that he or she should always carry at least half the total capacity of the car. This way, the carbon dioxide emissions per capita will be lowered and thus decreases the carbon footprint. To prepare for the increased amounts of traffic flow to public transport, the government should make the transport system more reliable as this would increase the trust between the passengers and the public transport system, so that the people who are new to the transport system would not go back to using their cars. They should make it easier to understand the system so that the new users would not be confused.

Another way is to ban driving once every week, as what Mexico has been doing to save the environment. Adopting this system would allow for the car owner to be forced to use public transport and maybe, he or she might eventually get comfortable and take public transport everyday. The system also allows for those who try to cheat the system to be caught and fined due to number codes which allow for traffic police to catch cheaters. For example, on Tuesday, vehicle plate numbers ending in 7 and 8 will remain parked. Those ending with 3 and 4 will do so on Wednesdays, those ending with 1 and 2 on Thursdays, 9 and 0 on Fridays and those with 5 and 6 on Mondays.

The other way Singapore could reduce its carbon footprint is to reduce the amount of electricity it uses or to find renewable sources of energy. In addition to the additional tariffs and taxes to deter people from using too much electricity, the government

should invest in research for a device which can automatically switch off different appliances at different times of the day. The appliance ratings should have more higher tiers which have stricter standards and if a company is able to meet the requirements, Singapore will buy more so that it can be discounted for the buyers. The government should also make the tier standards that all residents must follow that increases every few years. This would allow for enough time for everyone to change out the appliances and if financial aid is needed, should be given. All houses that do not already have an LED light bulb should get a free LED light bulb so that they can trial how much more better the efficiency of an LED light bulb is, and hopefully buy more for the house.

Singapore should invest in research for cheaper ways to produce solar panels and should lead the way for clean energy as a rapidly developing nation. This way, Singapore can install these cheaper solar panels and normal residents can also harvest solar energy. The residents can help maintain these solar panels and if there is excess energy, the can feed it back into the powergrid. The government should also reward these residents with bill coupons so they can use it next time. In addition to rooftop solar panels in HDB flats, they can install small and short wind turbines that can convert small amounts of renewable wind energy into electricity as the rooftops of these HDB flats are usually windy.

Singapore can and should try to decrease the amount of imports from far away places it makes as these will increase the carbon footprint due to the shipment transportation's large amounts of carbon emissions. Singapore should make local produce or open up small farms in surrounding countries that have lots of land, for example our neighbouring country, Malaysia. We can built climate control greenhouses like how we did for the tourist attraction, Gardens by the Bay's cloud forest and flower dome. These climate control greenhouses can produce plants like strawberries or different temperate country grown plants. In addition, Singapore can call these plants their own or even create hybrids and name it as its own type of plant. They should make a special industrial only causeway bridge to carry these goods without any need for a traffic jam such as in Woodlands or in Tuas checkpoint.

These are the right steps I feel that the government should do to be able to achieve the 2030 target to reduce Singapore's carbon footprint. With this, Singapore could even achieve its target way before 2030 and could even aim higher for the future generations to come who should be able to live this world as well as the adults of this century lived, carefree about the environment, of course with it being healthy and beautiful as it was before.