

Breathe Easier in Bangkok - Part III

Published: 2 Feb 2014

Newspaper Section: Spectrum

Over the last couple weeks we have been examining the legislative and public policy changes that have been implemented from the early nineties through to today that have together resulted in the improvement in Bangkok's air quality. However, more still needs to be done to bring Bangkok's air quality up to par with the rest of Thailand and to reach the standards being set by cities like Tokyo and Singapore.

This week we will look at some of the innovative ways in which Singapore has addressed its traffic and air quality issues, including by setting a limit on the vehicles that can be registered (Vehicle Quotas), expensive and tiered vehicle registration and taxation costs, and an electronic road pricing (ERP) scheme. We will compare it to the current landscape in Thailand, while postulating if some of the methods being instituted in Singapore might be applicable here in Bangkok.

Singapore's policy is to restrict the number of cars on the road (allowing for a small amount of annual growth), to make car ownership expensive, to favour the use of new cars, and to provide an excellent public transportation system as an alternative to driving. Cars are subject to a 20% excise tax when first imported. They are then subject to a nominal registration fee and a one time but sizeable additional registration fee, applied at a progressive rate of 110 - 130% of the open market value (OMV) of the car; to complement the stick is the carrot: if a car is deregistered before it is ten years of age, some of the additional registration fee will be rebated so as to encourage upgrades to new cars.

To limit the number of cars in Singapore, the owner of a vehicle is required to have a Certificate of Entitlement (COE). COEs are valid for 10 years, after which the car must be exported or scrapped, or a new COE (for a 5 or 10 year duration) must be purchased. A finite number of COEs are available, and they are purchased through open market bidding. Prices are higher for cars with larger sized engines, and typically run from \$\$70,000 – \$\$100,000. If you are idling in traffic on Sathorn this morning while reading this article, you are surrounded by evidence that there are no limits imposed on the number of cars in Thailand, and old and inexpensive cars abound. However, a plan has been proposed by the Metropolitan Police to ban cars on the streets of Bangkok that are older than 10 years.

In both Singapore and Thailand, a road tax is levied on every registered vehicle based on the engine capacity, with more powerful engines being assessed a higher tax. A major difference between Thailand and Singapore concerns the taxes levied on used or older model vehicles. Thailand provides a tiered discount based on the age of your vehicle (owners of very old vehicles pay minimum tax) which incentivizes people to keep their vehicles longer. However, the policy in Singapore is the exact opposite. An additional surcharge for older vehicles is placed on top of the already relatively expensive road tax in order to discourage people from driving older vehicles that tend to cause more air pollution than their newer counterparts. Additionally, Singapore only permits vehicles that are less than 3 years old to be imported (and even those are subject to an S\$10,000 import surcharge). In Thailand, the import duties for used cars decrease as the age of the car increases, and there is no limit on the age of imported cars.

Singapore also has a number of rebates for low emission vehicles to incentivize their purchase; as opposed to simply incentivizing the purchase of cars in general like the recent first-car buyer program in Thailand. Singapore's Green Vehicle Rebate Scheme provides a tax rebate of up to 40% of the vehicle's open market value for factory-built vehicles that are wholly or dual-use CNG or electric. This rebate also applies to electric and dual-use electric vehicles that are imported. Singapore has also recently introduced a carbon-emissions based vehicle scheme for new and imported vehicles where cars with low carbon emissions will receive a rebate when registering their vehicle for the first time whereas cars with high carbon emissions will be penalized with a surcharge attached to their already expensive registration fees.

Another aspect of Singapore's method of dealing with traffic and therefore air pollution from vehicles is to implement an electronic road pricing scheme that charges a toll for those vehicles using roads that are more likely to become heavily congested during peak rush hours. For example, anyone wanting to enter a special designated zone in the city center pays the highest fare during the morning and evening rush hours whereas the fares for these areas go down during off peak hours.

A pricing mechanism such as this could be used in Bangkok's most heavily trafficked areas; which also happen to be those same intersections and areas currently under occupation by the recent protests. Each vehicle that wants to enter the specialized zones would require an electronic sticker on their car, similar to an EZ-Pass that automatically charges them every time they enter the zone on a varying scale according to the time of day in which they enter. Although a variable time-based pricing scheme does currently exist in limited capacity on some of Bangkok's toll-ways, the city could go a long way to solving its traffic problems by instituting some sort of traffic control mechanism through fares for entry on to certain roads. Our course, for this to work viable public transportation alternatives must be available.

Addressing traffic and therefore air quality issues in Bangkok requires a long-term view and the investment into infrastructure that brought us the BTS and MRT at the turn of the century. As more cars drive from the lots and onto the streets, Bangkok needs to gain control over traffic congestion in order to continue its progression towards a cleaner, more lung-friendly city.

Angus Mitchell (angus.mitchell@dfdl.com)

Matthew Christensen (matthew.c@dfdl.com)

Ponpun Krataykhwan (Ponpun@dfdl.com)



Source: http://www.bangkokpost.com/news/investigation/392758/breathing-easier-in-bangkok---part-iii