

Going 'green' makes financial sense

By Gregory Kong · 12 October 2015



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Environmentally-friendly initiatives are not always looked upon favourably by Malaysians (and indeed, the rest of the world). This is hardly surprising, given the relatively cheap costs of fuel, energy and water here, as compared to many other First World nations. Globally speaking, governments face an uphill battle in convincing their people that such initiatives are necessary, since they can often be quite costly with little-to-no immediate noticeable impact.

From a wider perspective, the 'green' agenda is beginning to unravel. There is growing scepticism that man-made global warming is detrimental to the world as a whole. The Intergovernmental Panel on Climate Change has been shown to outright lie about the numbers used in their reports that call on the world to reduce carbon emissions. Carbon trading schemes have failed from Europe to Australia.

Most recently, Volkswagen has been caught red-handed in using software to fake their true emission numbers during lab tests of their diesel-powered vehicles (with some suspecting that other car manufacturers could possibly be doing something similar), proving that meeting emissions standards is harder – or more expensive – than VW is willing to endure.

But forget about the quagmire of politics and sordid stories about scientists and manufacturers. There are solid, legitimate (and usually financial) reasons for using more eco-friendly products and taking the environment into consideration, whether as a consumer or as a business. 'Green' technologies are often engineered to not only be more resource-efficient, but also to last longer (as the cost of replacing the equipment/product also has to be factored in) than their counterparts.



This can be seen in LED lights, for instance. LEDs come in various shapes and forms that fit into existing light sockets, from the traditional 'bayonet' and 'screw' (incandescent bulb) sockets, to the GU10 and MR16 (halogen downlight) sockets, and even the T8 (fluorescent tube) sockets. However, 6W LED light gives off comparable lighting to a 60W incandescent bulb, a 14W compact fluorescent

bulb, and a 50W halogen bulb – and last up to 50,000 hours each. Although more expensive upfront, over the long run, LEDs have the potential to save significant amounts of money, energy and clean-up costs (as they are mercury-free).

Other electrical and electronic devices show the same trend. Inverter technology, as used by washing machines, refrigerators, air conditioners and even water heaters, can save up to 50% off running costs while also running silent. And some electrical appliances can save more than electricity. Dyson's hand dryers, for example, also save trees from being cut down, because they are so effective – and so efficient – that toilets with them installed can do away entirely with paper towel dispensers.

"Over 200 engineers have worked on these hand dryers to produce airstreams that travel in excess of 690kph," Esther Goh of Visionary Solutions (Dyson's sole authorised distributor in Malaysia) enthused. "As a result, they can dry hands in around 10 seconds without having to heat the air up. This reduces running costs by 69% compared to other hand dryers that also use heaters, and a staggering 97% less than paper towels."

Dyson is far from the only manufacturer touting its eco-friendliness – Australian manufacturer JetOz, UK manufacturer Cannon Hygiene, American manufacturer Excel Dryers and even Japan's Mitsubishi are claiming similar dry times, energy efficiency and other green credentials.

These and other resource-efficient products are part and parcel of new 'sustainable' developments spearheaded by environmentally-conscious property developers. Indeed, while progress is seemingly slow, it is steady, and with the advocacy work done by associations such as the Malaysia Green Building Confederation and increasing acceptance of the Green Building Index (whose certifying organisation also verifies the MyHijau Mark), ensuring that resource consumption – especially that of energy – remains sustainable will eventually be accepted as standard industry best practices.

Resource consumption is only half of the equation, though, and the Malaysian government recognises it. There are myriad advantages to on-site electricity production using renewable resources, ranging from reducing electrical draw from the grid (and hence power bills) to having a secondary/backup power source in case of a blackout. The government's implementation of the Feed-in Tariff (FIT) system in 2011, via the Sustainable Energy Development Authority of Malaysia, has given yet another financial advantage to both individuals and companies willing to operate a renewable-energy electricity generator.



Cypark Resources is one of the companies that has seen significant benefits from this FIT system. Maslinda bt. Mohiddin, Senior Design Engineer at Cypark, explained that the company started out in the area of environmentally-safe landfill closure, and the creation of solar parks on former landfills was a natural progression. "Instead of having the closed landfill sites remain as just open land – since no development can be done on such land – we decided to place solar photovoltaic (PV) panels on the landfills instead."

In addition to solar energy, Cypark harvests biogas and biomass from its closed landfills and uses them in electricity production, as showcased in its Pajam Renewable Energy Park EPP. It has also embarked on its showcased in its Pajam Renewable Energy Park EPP. It has also embarked on its showcased in its Pajam Renewable Energy Park EPP. It has also embarked on its showcased in its Pajam Renewable Energy Park EPP. It has also embarked on its showcased in its Pajam Renewable Energy Park EPP.

"At present, we're using the latest in conventional greenhouse farming methods, but in the future, once the concept has proven itself, we may look into hydroponics or aeroponics as well," Maslinda explained.

Meanwhile, solar PV panels and other renewable energy sources are a good fit for use in recharging (hybrid) electric vehicles (EVs), as the ongoing environmental impact of such vehicles can then be minimised or eliminated completely. However, as Malaysian Green Technology Corporation's (GreenTech's) social consultant Andrew pointed out, the successful rollout of EVs is somewhat of a Catch-22 situation.

"There are probably 40 charging stations in Peninsular Malaysia right now; it's like 60 years ago for as far as EV support infrastructure goes. And any ROI from putting in the charging stations will likely only be realised over the long term. But without the infrastructure, people are less willing to buy the EVs," he elaborated.

GreenTech signed an MoU with The New Motion to bring in the charging units, as well as its technical expertise, during IGEM2015 earlier last month as part of its ChargeEV initiative. "Under ChargeEV, we're giving away 300 charging stations for free throughout Peninsular Malaysia, and maintain them for the first 2 years, also for free. They can be deployed in urban areas – parking lots, for example. So while you park your car in KLCC, for instance, the electricity is borne by the parking concessionaire – you only pay for your parking fee."

The company hopes that this initiative will be able to kick-start the building of the necessary infrastructure, planning to deploy 25,000 charging stations by 2020.