# Smart energy consumption

Published in: New Straits Times, Friday 26 May 2017
By Dr Shahino Mah Abdullah

Source : https://www.nst.com.my/opinion/columnists/2017/05/242804/smart-energy-consumption

Energy plays an important role in our lives. It comes in several forms that can be utilised to keep people warm during cold weather, provide food, improve transportation and increase productivity. When energy is utilised efficiently, it will bring great comfort to our lives. However, energy consumption has been increasing in recent decades as the world population keeps growing.

According to the United Nations (UN) report, the current world population of 7.4 billion in 2016 is projected to increase by one billion over the next 10 years and reach 9.6 billion by 2050.

Besides population, the standard of living for many people in developing countries is increasing, which in turn results in the growing energy demand.

As a developing country, Malaysia is not immune to the trend as the Energy Commission reported that energy consumption was increasing year by year.

This activity does not only impact the the environment, but incurs great cost to the country that relies heavily on this resource.

It was reported on April 1 that Malaysia's power generation industry spent RM15.1 billion to generate 120,059 gigawatt-hours (GWh) of electricity for 8.45 million customers in Peninsular Malaysia.

To get a clear picture of fossil fuel dependency, the International Energy Agency in its "World Energy Outlook 2007" stated that between now and 2030, the global energy needs were expected to grow, and fossil fuels would remain the dominant source.

In order to reduce fossil fuel dependency, the energy mix is introduced as an alternative measure to face its shortage. In Malaysia, this energy mix strategy has successfully reduced dependency on oil significantly, from 87 per cent in 1980, to less than one per cent today.

However, since the energy mix is only based on other fossil fuels, the dependency on coal and natural gas to generate energy is increased to 87 per cent for both, while only around 10 per cent comes from hydroelectric power. The dependency on fossil fuel can no longer last, forcing us to seek alternative sources.

Recently, the Malaysian government began to consider nuclear energy as part of the national energy mix, since the country's energy consumption keeps increasing, but the main energy source, which is fossil fuels, is running out.

According to the 11th Malaysia Plan (11MP) 2016-2020 under Anchoring Growth on People agenda, it is stated that the use of nuclear power as an alternative energy resource will be explored.

The Malaysian Nuclear Agency added that, “Malaysia would further explore the deployment of nuclear power as an option for electricity generation for post-2020 in Peninsular Malaysia”.

It is almost confirmed that Malaysia will be having a nuclear power plant sooner or later, as stated by Minister in the Prime Minister’s Department, Datuk Seri Nancy Shukri, who said that Malaysia’s nuclear power programme will only be able to kick off after 2030, subject to the approval of the Atomic Energy Regulation Bill.

Currently, the implementation of nuclear energy as part of the energy mix has a few challenges as the government and related agencies need to convince the public about the safety of nuclear power, to identify the source of financing for the nuclear programme, to obtain approval for plant site and acquire public support on locality.

It can be seen that the Federal government is struggling to fulfil the country’s energy demand, which involves complicated processes of building nuclear power facility.

As I see it, the search for alternative energy resources is an endless journey if the energy consumption is “allowed” to increase without implementing “green practices”.

“Green practices” can lead to more environmentally friendly and ecologically responsible decisions and lifestyles, which can help protect the environment and sustain its natural resources for current and future generations.

Therefore, we could do our part responsibly in society by considering “green practice” through “energy efficiency” implementation in order to reduce the rise of energy consumption. Basically, “energy efficiency” is the goal to reduce the amount of energy required to provide products and services.

This is one of the best measures, which we could take as our own initiative, to address the issue of increasing global energy demand.

Among “energy efficiency” practices that we could also consider are: replace inefficient
appliances with more efficient ones; reduce loads to any mechanical appliances that require more operating energy; upgrade building envelopes such as improving insulation and roofing, to having good air ventilation to support the natural cooling system; and, use of energy-saving control systems in most of electrical appliances if and when possible.

At the same time, we can also start by ensuring our next purchases are “energy efficient” products and equipment.

These practices are actually in line with the Islamic teaching to be moderate in the use of the resources, to be assiduous in their use (Q al-Baqarah 2:1-13) and avoid

extravagance from wasting it (Q al-A'raf, 7:85). It will always be our challenge, and not just the government's, to address the issue.

Therefore, self-awareness and — timely initiative through "energy efficiency" implementation is very important to conserve the existing resources for future generation.

---

DR SHAHINO MAH ABDULLAH is a Research Fellow at the International Institute of Advanced Islamic Studies Malaysia. His email is shahino@iais.org.my