SUSTAINABILITY

# TRANSFORMING ASEAN'S ENERGY SECTOR

THE subject of renewable energy (RE) has attracted worldwide interest. A recent conference in Jakarta on Nov 28 and 29, hosted by thought leader and network solutions provider, Confexhub, touched on what the future holds for such resources.

Many participants came from Southeast Asia. Judging by the papers tabled, especially on RE policies and practices, the future is not without its share of challenges.

The deliberations were dominated by issues related to the use of RE in electricity generation. With the global push for Industry 4.0 and sustainability, many predict access to affordable electricity will feature prominently in the coming years.

The car industry, for example, is witnessing assertions that electric vehicles will be the game-changer.

Most of the big players have made their intentions known of the growing dominance of electric transport in the future. Many believe the only sector which will continue to depend on liquid fuel is the aviation sector.

I presented a paper on a new technology to make aviation fuel from vegetable oil waste, developed by a Fraunhofer research institute based in Oberhausen, Germany.

Since Asean is the world's leading producer of palm oil, I proposed for the project to be implemented by the palm oil industry here. Palm-based biofuel for cars is on the way out as major car companies have announced plans to go 100 per cent electric in the near future.

With the industry being criticised for its lack of environmental awareness in recent years, I hope that implementing such a project would raise the industry's sustainability profile among its key customers, especially in the European Union.

Southeast Asia, with its 630 million population, and a combined gross domestic product of US$2.4 trillion (RM9.8 trillion), is 50 years old this year. The grouping is one of the fastest growing regions in the world.

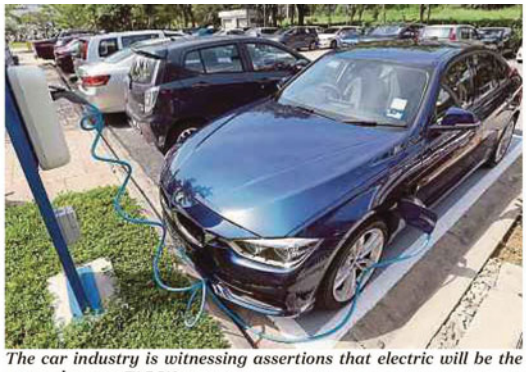
In 2015, it was reported that its economy was the third-largest in Asia and the sixth-largest in the world. It is projected to rise to the fourth position by 2040. It has outperformed global growth in the last eight years. The region has been transformed into a vibrant economic grouping and global trade hub.

At the same time, the region has witnessed a rising demand for energy resources, especially fossil fuels. However, there is concern that an over-reliability on fossil fuels will not guarantee the level of energy security for the region.

Add to that, the issues of affordability and climate stability, one can understand why the region has recently concluded an energy blueprint to cope with the challenges. Every five years, the group formulates its action plan on energy, the Asean Plan of Action for Energy Cooperation 2016-2025.

Phase I (2016-2020) focuses on enhancing energy connectivity and market integration, to achieve energy security, accessibility, affordability and sustainability for all.

A recent report on the Asean Energy Outlook project has highlighted the need for the region to focus on energy security, as energy demand is projected to grow 2.3 times over the long term to 2040.



*The car industry is witnessing assertions that electric will be the game changer.* FILE PIC

The challenge for Asean is not to be over-dependent on fossil fuel. There is no denying that fossils are on a certain course of depletion. Fortunately, the region is blessed with a huge RE potential.

Indonesia, for example, enjoys diversified RE sources, which include solar, wind, ocean, geothermal, biomass and hydro. Though now a net importer of petroleum, the country has vast deposits of coal. It, however, became clear at the conference that Indonesia faces major obstacles to harness such energy sources, especially in regulatory matters.

To meet the challenges, the report proposed that Asean needs to:

**ENHANCE** synergy between RE and energy efficiency (EE). Improving RE and reducing energy intensity (EI) will lead to lower requirements for power capacity and generation;

**DEPLOY** stronger policies for RE and EE. EE policies should include expansion in mass public transportation, harmonisation of labelling rulings, and stipulating minimum energy performance standards;

**CONSIDER** imposing carbon pricing, electricity market reforms and rationalising electricity tariff subsidies; and,

**FOCUS** on deploying RE in the end-use sector, such as modern biomass, biogas, biofuels, and solar thermal applications. Since data is key to policy formulations, improving data availability in member states should be a continuous effort for long-term policies.

Robust policies and investment are needed to transform the energy sector in the region.

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