

11 JUL, 2024

Accelerating sustainable energy transition



The Star, Malaysia

Page 1 of 2

NIRINDER SINGH
JOHL**Demystifying sustainability**

AS an energy industry consultant with over three decades of experience in the Malaysian and Asean utility sector, I've witnessed firsthand the myriad challenges and opportunities that come with transitioning to a more sustainable energy future.

While progress has been made, there's still much work to be done to create a balanced and competitive market environment that can drive innovation, protect consumers, and meet our climate goals.

Here are the key areas we need to focus on to accelerate this transition.

Empowering the market through education and fair competition

One of the most critical steps in our energy transition journey is building capacity across the sector.

We must invest in comprehensive training programmes for regulators, utilities, and market participants to enhance their understanding of market dynamics, renewable energy (RE) integration, and advanced grid management techniques.

As Marcus Aurelius wisely noted, "He who knows only his own side of the case knows little of that."

By fostering a shared understanding, we can create a more collaborative and innovative energy ecosystem.

Together with education comes the need for fair competition.

Developing clear and transparent trading rules that apply equally to all market participants, including monopolistic entities, is crucial to prevent anti-competitive practices and ensure a level playing field.

Ideally, state or private monopolies should operate only in the transmission and distribution sector, with a fair rate of return guaranteed through an incentive-based recovery mechanism.

Accelerating sustainable energy transition

As I once heard during a leadership seminar, 'If you want to make everybody happy, sell ice cream.'

Harnessing the power of market-based instruments

To drive down costs and encourage innovation, we must promote the use of market-based instruments such as virtual power purchase agreements and third-party access for RE development.

These tools can foster creativity within the growing renewable energy marketplace, potentially leading to revolutionary new models like "storage as a service."

In developing markets, I would caution against the use of auctions due to high RE development costs and low financial appetite.

Instead, we should encourage the use of unbundled, accountable renewable energy certificates (RECs) to exponentially grow the market.

Utilities should facilitate third-party use of their billing and settlement infrastructure to bundle these unbundled RECs, rather than directly participating in the market themselves.

The implementation of a renewable portfolio standard in some Asean energy markets is a promising development.

By mandating that a certain percentage of electricity sold or generated by utilities must come from renewable sources, we can hold utilities accountable for incorporating clean energy into their mix while working in parallel with potential RE developers to develop a REC market for the environmental attributes in these voluntary carbon markets to ensure these projects are equally well funded by financial institutions.

Fostering regulatory independence and thought leadership

For our energy transition to succeed, we need regulatory bodies that operate independently from government and industry pressures.

These bodies must be empowered to make unbiased decisions that promote market efficiency and protect consumer interests.

Governments should demonstrate thought leadership and political will, as exemplified by the Deputy Prime Minister, and Energy Transition and Water Transformation Minister Datuk Seri Fadillah Yusof and his team.

Regulators should not fear making unpopular decisions, as these are often the hallmark of successful energy transitions.

As I once heard during a leadership seminar, "If you want to make everybody happy, sell ice cream."

Reimagining the role of utilities in the energy transition

Utilities have a crucial role to play in the energy transition, but they must evolve from their traditional monopolistic position to become collaborative entities that support innovation and market development.

This involves investing in grid modernisation, facilitating renewable energy integration, supporting distributed generation, and adopting new technologies.

For example, utilities should invest in smart grid technologies that enhance the reliability, efficiency, and flexibility of the power grid.

They should also develop and implement standards that streamline the process for connecting renewable energy projects to the grid, including simplifying regulatory procedures and reducing bureaucratic barriers.

Moreover, utilities can support the development of microgrids and distributed energy resources, which include rooftop solar, small-scale wind, and home energy storage systems.

These resources enhance grid resilience and empower consumers to generate their own electricity.

Protecting consumers in a changing energy landscape

As we transform our energy systems, we must not lose sight of the importance of consumer protection.

This includes ensuring affordable access to electricity, implementing transparent billing practices, and providing clear and detailed information about energy usage and costs.

We should also develop educational programmes to enhance consumers' understanding of energy usage, conservation, and billing.

Informed consumers are better equipped to make decisions that can reduce their energy costs and environmental impact.

Furthermore, we need to establish robust data privacy and security measures to safeguard consumers' personal and usage information.

This includes regulating how utilities themselves use customer data and ensuring that third-party contractors can also access this information with explicit consumer consent.

Aligning energy policies with sustainable development goals

Finally, we must ensure that our energy policies align with broader sustainable development goals.

This means focusing on reducing carbon emissions, promoting energy efficiency, and ensuring universal access to clean and reliable energy.

Ensuring environmental, social and governance compliance is more crucial than ever,

and stronger regulatory support is required to ensure fair practices.

We need to revisit misclassifications, such as treating waste heat recovery as co-generation instead of an energy efficiency initiative.

The announcement of a potential future carbon tax regime should see collaboration between the ministry and NRE to ensure supportive practices.

A call for collaborative action

The energy transition in Malaysia and Asean presents both challenges and opportunities.

By focusing on these key areas – from capacity building and fair competition to consumer protection and sustainable development – we can create a more competitive, efficient, and fair electricity market that encourages innovation, protects consumers, and supports sustainable development.

However, this transition cannot be achieved by any single entity alone.

It requires collaborative effort from governments, regulators, utilities, private sector participants and consumers.

Each has a crucial role to play in shaping our energy future.

As we move forward, let us remember that the decisions we make today will have far-reaching implications for generations to come.

By working together and embracing innovation, we can build an energy system that is not only cleaner and more efficient but also more equitable and resilient.

The time for action is now – let's seize this opportunity to create a sustainable energy future for Malaysia, Asean and beyond.

Nirinder Singh Johl is the founder and CEO of Asia CarbonX Change Pte. He was formerly the managing director of TNBX, a subsidiary of Tenaga Nasional Bhd. The views expressed here are the writer's own.