

**KEYNOTE ADDRESS BY ENTERPRISE SINGAPORE  
CHAIRMAN LEE CHUAN TECK AT THE  
ASIA PACIFIC PETROLEUM CONFERENCE 2024  
ON 9 SEPTEMBER 2024**

Distinguished Guests,

Ladies and Gentlemen,

## **Introduction**

1. Good morning. It is my pleasure to be here today at the Asia Pacific Petroleum Conference (APPEC) 2024. A very warm welcome to all our delegates, especially to those who have travelled from afar to join us.
2. This year marks the 40<sup>th</sup> edition of APPEC. Singapore's long history in hosting the conference reflects our standing as a global energy trading hub and our commitment to continue to develop and grow this industry. We want to be the place where industry stakeholders come together to discuss key trends and help shape the future of energy trading in Asia.
3. The key trend affecting the global energy market is of course, the transition to cleaner fuels. The urgency to do so is increasing. In the Paris Accord of 2015, the world committed to keep global temperatures to less than 2 degrees centigrade above pre-industrial levels, while striving for less than 1.5 degrees. To do that, global emissions needs to peak in 2020 and reach net-zero by 2050. Fast forward to 2024, emissions are still rising. The annual emission of 60 gigatons is twice what the Paris Accord aspired to be. We are already experiencing the effects of global warming – extreme weather events, crop failures, rising sea levels and threats to biodiversity.
4. While the urgency to embark on the energy transition has increased, the pace of the transition has unfortunately slowed. This is reflected in the 2024 Energy Transition Index (ETI). The improvement from 2021 to 2024 was nearly four times slower compared to the 2018-2021 period. Furthermore, 83% of countries experienced a decline in at least one key area – sustainability, equity, or security.
5. Perhaps we have underestimated the complexity and cost of getting to net-zero. Countries must make difficult trade-offs between costs and greenness, between economic and security considerations, and between current needs and future obligations. And for a global imperative like climate change, countries must work together – a prospect that is now muddled by geopolitical tensions.

6. In Asia, the complexity of our energy transition is further compounded by two other factors. First, the energy needs of Asia are still growing, fuelled by economic growth and urbanisation. Second, the continent is divided by large bodies of water. This means that while green energy resources are plentiful, transporting the energy from production to consumption is challenging. It also means that Asia requires air and maritime transportation, the emissions of which are difficult to abate.
7. Difficult as it may be, the energy transition is existential for the world. Failure is not an option. So, how do we make this challenge more tractable? In my opinion, rather than just focus on the end destination of net-zero by 2050, it is more helpful for us to break the journey into 3 parts: the immediate, medium, and longer term, and to take concrete steps now for each segment. Singapore is committed to play our part in facilitating each part. Let me elaborate.

## **Immediate Term**

8. In the immediate term, we have to ramp up green energies like solar, wind and hydro, which are closest in cost to fossil-based energy. While the costs of these green energies have fallen substantially, in many places they are still more expensive than fossil fuels. To use Bill Gates' term, there is still a green premium. Thus, green projects need to be proactively facilitated.
9. For our part, Singapore is helping to further this process in two ways. First, we want to mobilise more capital to finance green energy projects. In December last year, the Asian Development Bank, the Global Energy Alliance for People and Planet and the Monetary Authority of Singapore announced plans to provide blended finance to accelerate the energy transition in Asia. In June this year, we hosted the Indo-Pacific Economic Framework for Prosperity (IPEF) Clean Economy Investor Forum, where over 23 billion dollars of sustainable infrastructure projects were presented to potential financiers.
10. Second, we continue to work towards an ASEAN power grid. When fully realised, the grid can help green energy providers sell their power to a larger market, thereby making more projects more viable.
11. While we strive to increase the production of green energy, we should not dismiss the use of liquefied natural gas (LNG) as a transition fuel for power generation and for bunkering. Power from LNG emits one-third less carbon than power from coal. In my view, every reduction in emissions helps and we should encourage this.

## **Medium Term**

12. In the medium term, we have various clean fuels that are not economical today but can be if they are adopted with sufficient scale. These include biofuels, methanol,

ammonia and other hydrogen carriers. Asia has interest in these fuels because they can be transported in ships and can be used for air and sea travel.

13. It is a chicken and egg problem. The fuels are expensive because the demand is too small. The demand is small because they are too expensive. To break this impasse, we have taken steps to kickstart the use of these fuels for commercial deployment.
14. For example, in 2022 the Energy Market Authority (EMA) and the Maritime Port Authority (MPA) launched an expression of interest (EOI) exercise to bring low or zero carbon ammonia into Singapore for power generation and bunkering. We received 26 proposals, and the process has now narrowed the selection to 2. While the exercise was to cater for demand out of Singapore, we also hope to use this to build a supply chain for low carbon ammonia from exporting countries like Australia and India, to importing countries like Japan and Korea.
15. Methanol is another potential fuel for shipping. Methanol cuts carbon dioxide emissions by up to 95%, reduces nitrogen oxide emissions by up to 80%, and completely eliminates sulphur oxide and particulate matter emissions. The MPA has facilitated the first trial for methanol bunkering in Singapore. This was successfully completed in May 2024.
16. For aviation, Singapore will require all flights departing from Changi Airport to use at least 1% of sustainable aviation fuel (SAF) from 2026 and may raise this to 3-5% by 2030. This will give a significant boost to the demand for biofuels.
17. In addition to kickstarting the commercial deployment of clean fuels, we are also helping to develop the ecosystem to support their use. We are working with the International Organization for Standardization (ISO) to develop global standards for the use of these fuels. We are also working with trading firms here to develop the market for the trading, pricing and financing of these fuels.
18. We are a small country. Singapore alone cannot enable these fuels to reach sufficient scale. We need to work with all of you and other like-minded countries on this journey.

## **Longer Term**

19. In the longer term, we hope that new and more viable technologies will emerge. To realise these, more resources need to be committed to research and development today. For this reason, we have been working with various like-minded parties to source, fund and nurture frontier technologies that can fight climate change. These include ambient carbon capture techniques, high-capacity batteries for transport, and new ways to produce and transport clean energy.

20. For example, we signed an agreement with Breakthrough Energy and Temasek to create a Southeast Asia Fellows programme. We aim to look for promising clean technologies from the region and help them commercialise and scale to the level that can help fight climate change.

## **Conclusion**

21. Singapore is a global energy hub. We are also an agriculture and metals trading hub. In addition, we are an air and maritime hub, a financial centre, and a deep and broad centre for research and development. Because the energy transition is so multi-faceted, the presence of all these activities gives us a unique vantage point to observe the transition and shape it. I am sure that many of you here are concerned about the energy transition – for your business and most importantly for our planet. This is a long journey. I invite all of you to work with us on this challenging but very important endeavour.

22. With that, I wish all of you a fruitful conference ahead. Thank you.