

KEYNOTE ADDRESS BY ENTERPRISE SINGAPORE CHAIRMAN LEE CHUAN TECK AT THE ARGUS BIOFUELS AND FEEDSTOCK ASIA CONFERENCE 2024 ON 23 APRIL 2024

Distinguished guests,

Ladies and gentlemen,

Introduction

- 1. It is my pleasure to join you today at the Argus Biofuels & Feedstocks Asia Conference 2024.
- 2. Geopolitical tensions, including the wars in the Middle East and Ukraine, have introduced volatility and uncertainty in the global energy market. Energy security is now one of the top priorities for many governments around the world. This has provided an added impetus to the energy transition. So, in moving away from fossil fuels, countries are becoming greener and becoming more secure at the same time.
- 3. Biofuels can play an increasingly important role in this transition. The International Energy Agency (IEA) projects that global demand for biofuels is set to grow by 41 billion litres, or 28%, over 2021-2026, with Asia set to overtake Europe in demand for biofuels by 2026. But to fulfil the potential of biofuels, we need to address the key limitations of biofuels today, namely: Feedstock availability, production costs, and regulatory gaps.
- 4. Singapore hopes to play a key role in addressing these limitations, in 3 ways.

I. <u>Supporting Biofuels Supply</u>

- 5. First, we will continue to support the trading, production, and transhipment of biofuels from Singapore. Singapore is in an ideal position to do that. We are close to major sources of biofuel feedstock such as used cooking oils, animal fats, vegetable oils, and wood pellets. We also have a strong infrastructure for refining and transhipping oil, some of which can be re-purposed for biofuels. There are more than 250 agri-commodities and energy companies in Singapore, many of which are foraying into biofuels.
- 6. Let me just cite a few examples.

Enterprise Singapore

- a. **Neste** has expanded its Tuas South refinery, making Singapore home to the world's biggest renewable diesel refinery and largest producer of SAF in terms of capacity.¹
- b. **Vopak** is repurposing its terminal's existing pipeline system in Singapore to enable biofuels blending.²
- c. **GoodFuels** is a pioneer in supplying biofuels for the transport industry. The company established its first non-Europe office in Singapore to expand its business in Asia-Pacific.³

II Investing in R&D

- Second, we are investing in R&D to reduce the cost of biofuels. While prices for biofuels have tapered in recent years, the price to pay for biofuels remains high. Currently, SAF is still 3 to 5 times more expensive than regular jet fuel.⁴
- 8. We are fostering R&D in various ways:
 - a. First, through publicly funded research. For example, A*STAR, Singapore's national research agency, has developed novel energy efficient technologies to produce SAF directly from CO2.
 - b. Second, through collaborations between large biofuels players and local SMEs. For example, we have facilitated a strategic collaboration between Green COP, a local start-up that valorises waste into biofuels and IOI, a Malaysian palm oil major, to transform empty palm fruit bunches into biofuels.
 - c. Third, through cross-border G-to-G channels such as the Go-Green Co-Innovation Programme⁵ with Australia. Under this programme, Enterprise Singapore and the Australian Department of Foreign Affairs and Trade supported a partnership between **Apeiron Bioenergy**, one of the largest used cooking oil collectors in Asia, and **Jet Zero Australia** to source and produce low-carbon intensity feedstocks from waste oils and non-edible crops for SAF production in Australia.⁶

¹ <u>Singapore refinery | Neste</u>; largest producer of SAF in terms of capacity

² Vopak to convert part of Singapore Sebarok terminal for marine biofuels blending, ETEnergyWorld MEA (indiatimes.com)

³ <u>https://goodfuels.com/goodfuels-opens-singapore-office/</u>

⁴ ICAO SAF Feasibility Study for Burkina Faso. Other studies suggested an 8 to 9 times price premium.

⁵ Part of the Singapore-Australia Green Economy Agreement

⁶ Jet Zero Australia and Apeiron Bioenergy Renewable Fuel Partnership and Australia and Singapore Go-Green Grant Funding Award - Jet Zero Australia

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III Promote Biofuel Usage through Regulations

- 9. Finally, Singapore is leveraging our role as a leading aviation hub and the world's largest bunkering hub to promote the use of biofuels.
- 10. The Civil Aviation Authority of Singapore recently launched the Singapore Sustainable Air Hub Blueprint. It outlines our plans to decarbonise Singapore's aviation sector, including requiring flights departing Singapore to use at least one percent of SAF from 2026. Subject to global developments and the wider availability and adoption of SAF, we aim to increase this to three to five percent by 2030.
 - a. Our aviation players are partnering us in this transition. Last year, CAAS, Singapore Airlines, and GenZero concluded a 20-month SAF pilot involving the use of 1,000 tonnes of neat SAF.⁷ The SAF was supplied by Neste, blended with refined jet fuel at ExxonMobil's Singapore facilities, and used to refuel SIA and Scoot flights at Changi Airport. The pilot demonstrated Singapore's operational readiness to supply SAF.
- 11. In the maritime sector, the Maritime Port Authority of Singapore is developing various net-zero pathways, including biofuels. MPA has also worked with Enterprise Singapore, industry partners, and researchers, to develop a provisional national quality standard (of up to B50) for marine biofuels.⁸ This serves to guide bunker suppliers and their customers as they explore the use of biofuels.

Conclusion

- 12. To conclude, climate change is a global challenge. We need to find cheaper clean fuels to maintain our ways of life. Biofuels can play an important part in this energy transition.
- 13. Singapore is committed to work with all of you to develop the potential for biofuels. I am hopeful that conferences like this can spark new ideas and collaborations to further our efforts.
- 14. With that, let me wish all of you a fruitful and successful conference ahead. Thank you.

⁷ "Neat" SAF refers to pure SAF that has yet to be blended with conventional fuels.

⁸ Singapore: MPA develops framework to support biofuels bunker fuel deliveries | Manifold Times