

Subject: Consultation on Low Carbon Liquid Fuels

To the Australian Government

Maersk would like to extend its gratitude to the Australian Government for providing the opportunity to comment on this important issue. We recognize the importance of your efforts in guiding Australia toward a sustainable future, and the significance of your work in helping shape our collective response to climate change.

Introduction

For more than a century, the maritime industry has relied on just one type of fuel: oil. However, as the world grapples with a climate emergency that demands urgent collective action, we see the emergence of a patchwork of new greener fuel options. Given that global logistics supply chains are responsible for 11% of all global greenhouse gas (GHG) emissions, these new low carbon fuels are crucial to achieving the decarbonization goals set out by the United Nations (UN) and the International Maritime Organization (IMO). Maersk believes that sustainable fuels hold immense potential, adoption is heavily dependent on advances in fleet technology and the capacity to secure green fuels at a scale and cost that is competitive against fossil fuels. Hence, the great challenge facing the industry today is how to bring to scale low carbon fuel solutions that can deliver sustainable shipping.

Australia's Production Advantage

The rising future demand and current challenges in sustainable fuel supply present significant opportunities for Australia as it has several advantages as a Low Carbon Liquid Fuel (LCLF) producer. Australia is well-placed to become a notable green fuel producer due to the following:

- **Robust Renewable Energy Ecosystem:** Australia's ambition to source 82% of electricity from renewable sources and reduce 43% of emissions by 2030 in tandem with the extensive efforts to develop renewable energy infrastructure forms a promising bedrock to facilitate the development of a strong low carbon liquid fuels production supply-chain.
- **Domestic Feedstock Supply:** Australia has a comparative advantage due its agriculture capability and land availability, which supplies sufficient feedstock to produce a significant amount of sustainable fuel without relying on imports. This access to domestic feedstock for green fuel production would lower productions costs.
- **Untapped Potential for Biogenic CO₂:** Biogenic carbon can be sourced from biofuel plants as well as biogenic waste from landfills, manure management facilities, and feedstock manufacture. It can then be utilized as a carbon-neutral means of producing green fuels like e-methanol. Given its domestic feedstock supply, vast landfills, and ambitions to scale up production of renewable energy, green hydrogen, and LCLFs like biofuels, Australia has the necessary ingredients to create a carbon-neutral production cycle for sustainable fuels by capitalizing on biogenic CO₂.

Importance of Green Fuel Availability

A steady supply of sustainable fuels is critical to reaching the ambitious 2050 decarbonization goals. Sustainable fuels show promise as a viable solution for the transportation sector, particularly for industries like shipping which still rely heavily on liquid fuel. Naturally, as the decarbonization agenda gains saliency with industry players, sustainable fuels will play an increasingly important role.

Demand for green fuels is on the rise as industry stakeholders begin their decarbonization journey. Maersk currently has 25 green methanol-enabled vessels in service or on order, a move swiftly echoed by other shipping companies as there are currently over 260 new methanol-capable vessels on order or being retrofitted across the industry. Beyond green methanol, biofuels are becoming an industry-standard sustainable fuel option due to its compatibility with existing engine technology, allowing Maersk and other ship liners to sustainably operate today with little to no retrofitting. As decarbonization efforts intensify, Maersk intends to ramp up utilization of biofuels in our operations in the coming years. The growing number of Green and Digital Shipping Corridors (GDSC), which are shipping routes that are dedicated to the deployment of zero-emissions vessels, also facilitate the creation of a favourable ecosystem for decarbonization initiatives, the success of which rely exclusively on the availability of sustainable fuels. With nearly 60% of liner capacity on order for delivery before 2030 are designed to run on green fuels, future demand of sustainable fuel within the industry will certainly increase.

Beyond the shipping industry, sustainable fuels are also gaining traction with the rest of the transportation sector, with the demand for green fuels expected to triple over the next 20 years¹. It is thus evident that future demand for sustainable fuels is growing, driven by the decarbonization agenda.

Current Supply Challenges

Unfortunately, current production output is unable to meet future demand. The concerns surrounding the availability of sustainable fuel remains a key inhibitor in the uptake of greener fuels. While Maersk has taken steps to secure the necessary fuel supply to support our growing fleet of green fuel vessels through developing a diverse portfolio of partnerships, we are aware that more needs to be done. Existing infrastructure for sustainable fuel production is simply unable to produce at the scale required to meet demand. To overcome this issue, government intervention is necessary to ensure that the production of green fuels can be brought to a level that matches the expected future demand.

The high costs of producing green fuels poses a considerable challenge to its production output. The production of sustainable fuels cost 3-4 times more than fossil fuels, creating a significant price disparity. This creates a conundrum for producers as high production costs mean that sustainable fuels are more expensive, which would decrease customer willingness to pay, and thusly decreasing current demand. Without current demand and only prospective future demand, producers do not have sufficient incentive and assurance to produce. Hence, policies that address the price gap between sustainable fuels and fossil fuels are crucial to increasing production.

Proposed Action

Maersk encourages the Australian government to implement the 'Contract for Difference' incentive scheme. The new renewable fuel budget proposal 'A Future Made in Australia' is a significant step towards positioning Australia as a global producer of green fuels as its focus on building scaling capabilities in renewable hydrogen, LCLFs and clean energy manufacturing would improve the nation's infrastructure readiness to support the scaling of in green fuel production. But, given the imminent rise in demand for sustainable fuel, more support is needed. The newest of Maersk's methanol-enabled vessels have already been deployed, and another 16 large green fuel vessels are slated to be delivered within the next year. The same is true across the industry as the world's first ammonia-enabled vessel was also deployed this year. The need for sustainable fuels at scale and cost will soon be upon us and it is both imperative and prudent to encourage producers to scale up their low carbon liquid fuel production quickly, prioritizing established operators with existing green fuel production infrastructure for greatest efficiency. Hence, Maersk strongly supports the 'Contract for Difference' incentive scheme as we believe it has the highest probability of incentivising production of large volumes of low carbon fuels as soon as possible.

Additionally, policies which support international regulations and initiatives are crucial to scaling low carbon fuel production. Member States within the IMO have established a global fuel standard and a GHG emissions pricing mechanism, with the technical details to come into place in 2025. In tandem with these initiatives, Maersk and the WSC proposed a Green Balance Mechanism that would help even out the cost differences between green and fossil fuels via a global policy instrument. These strong IMO regulations are essential to addressing the scarcity and high cost of green fuels. Through participating in international discourse on such regulations and aligning domestic policies closely with these schemes, Australia as burgeoning international LCLF producer, has the opportunity to steer the future of sustainable fuel.

Conclusion

To conclude, Maersk strongly urges the Australian government to align closely with international standards and implement a 'Contract for Difference' incentive scheme to encourage expeditious and expansive production of LCLFs. Action taken by international organizations like the IMO are pivotal in ensuring a global policy instrument that can help level the playing field between green and fossil fuels. By supporting the development of these international policies, Australia is faced with a significant opportunity to actively shape the sustainable fuel market and contribute to the global effort to decarbonize shipping by becoming a notable producer of sustainable fuels.

¹ [Sustainable fuels and their role in decarbonizing energy | McKinsey](#)