

12th April 2024

Rithy Lim
Director, Maritime and Shipping
Department of Infrastructure, Transport, Regional Development, Communications and the Arts
Australian Government
GPO Box 594
CANBERRA ACT 2601

Dear Sir,

Re: MERNAP Issues Paper: Green Shipping Corridors and Partnerships

The Australian Hydrogen Council (AHC) welcomes the opportunity to respond to the latest consultation in the Maritime Emissions Reduction National Action Plan (MERNAP) consultation process, focused on the establishment of the green shipping corridors and partnerships required for the long-term decarbonisation of vessels and shipping trade routes.

The AHC is the peak body for the hydrogen industry, with over 100 members from across the hydrogen value chain. Our members are at the forefront of Australia's hydrogen industry, developing the technology, skills and partnerships necessary to ensure that hydrogen plays a meaningful role in decarbonising Australian industry.

We commend the Australian Government for investing the time and resources into these focused issues papers and are hopeful that these consultations will directly inform not only the National Transport and Infrastructure Net Zero Roadmap and Action Plan, but also other policies across government such as the Sustainable Finance Strategy and the refreshed National Hydrogen Strategy.

Maritime is central to domestic decarbonisation and industry development

AHC agrees that there is an opportunity with green shipping corridors to facilitate regional planning and development, build experience and credibility, support a skilled workforce, promote and share technologies, as well as strengthen national economic diversification and potentially lower the cost of alternative fuels. These partnerships are key to tackling the enormous maritime challenge, especially if Australia is to position itself as a fuel producer and bunkering hub.

These partnerships must be substantial, motivated, mutually beneficial, and spanning across multiple countries to assist in decarbonising wider regions. Plurilateral shipping corridors need to be led by the International Maritime Organisation (IMO) as the leader and regulator in this space, but Australia should advocate for and strengthen ASEAN level coordination for broader regional decarbonisation.

Shipping corridors should, as far as possible, be linked to the local industries and decarbonisation pathways of the included ports. As we have previously advocated,¹ the REZ and industry hubs model of funding and coordination should be extended to cover so-called Hydrogen Economic Zones (or Low

¹ AHC (2023) *A fit-for-purpose refreshed National Hydrogen Strategy: next steps for building Australia's hydrogen industry*, August, <https://h2council.com.au/ahc-publications/>.

Carbon Precincts) in order to facilitate planning across industries and with some degree of central (that is, government led) funding and coordination.

Ports are well-placed to act as an anchor to these precincts, driving demand for low carbon fuels, technologies, vessels, as well as the establishment of the decarbonised supply chain locally, through export channels, and green shipping corridors.

These partnerships are designed to develop local capabilities, embed climate principles into existing industry, and encourage collaboration and investments to keep the ports, routes and trade competitive. Therefore, the importance of green shipping corridors exceeds the maritime industry, impacting the local, regional, national and international economy and workforce.

As the paper rightly notes, the IMO is best placed to develop industry standards and targets. To date, Australia has actively participated in the standards setting as well as in entering the international partnerships and agreements required to increase investor confidence and provide a level of certainty to maritime companies.

The IMO has also called for governments to support and work alongside industry to launch large scale trials and deployment of alternative fuels. The AHC supports this call and would urge all tiers of government to work together to create the investment and value propositions for nominated ports across Australia, including via the provision of dedicated long-term funding and financing options that provide investor certainty. In order for Australian industry and exports to remain competitive in an increasingly carbon constrained trade environment, we need to plan and build for the rapid decarbonisation of shipping routes.

Modelling for prioritisation of investment in ports

The need for whole-of-economy net zero modelling to clarify the complexity, opportunities and approach required to reach net zero is well established, with numerous policy announcements by the Australian Government supporting this need, for example the sector decarbonisation strategies, the funding of a series of industry hubs and the establishment of the Net Zero Economy Agency.

The energy and industry transition will fundamentally change the way that power is generated and consumed. Ideally the Australian Government would have access to (and make publicly available) the data that interrogates port capabilities, workforce needs, off grid energy supply, industry development, as well as models future potential policy steps. In the absence of comprehensive data sets, Australian governments may need to increase investment risk appetite and set the direction for prioritisation of investments.

The Global Maritime Forum² recommends research and modelling for the identification and prioritisation of green shipping corridors, including port readiness assessments for operational and infrastructure compatibility, assessment of fuel demand clusters for routes and bunkering suitability, and evaluation of impact and feasibility which considers the policy environment and stakeholder readiness alongside the quantitative benefits. This level of analysis should be considered across Australia's major ports to understand our opportunities and prioritise the ports and regions that should be first movers.

Considering the lack of availability of space at existing Australian ports, the Australian Government may need to nominate the best locations for specific segments of the maritime transition. This will also aid

² Global Maritime Forum (2022) *Green Corridors: Definitions and Approaches*, https://www.globalmaritimeforum.org/content/2022/08/Discussion-paper_Green-Corridors-Definitions-and-Approaches.pdf.

planning for the broader energy transition, as there is currently insufficient space for each port to cater for multiple bunkering fuels alongside large-scale imports of equipment such as wind turbines. Timely analysis and decision making must be undertaken to determine the target ports if we are to meet the ambitious whole of economy decarbonisation targets required under the Paris agreements and national legislation.

In this, it is also integral to support and expand the capabilities of the National Hydrogen Infrastructure Assessment to regularly investigate this evolving ecosystem within and beyond hydrogen, providing robust recommendations and clarify funding pathways.

The need for investment by Australian Governments

Australia will largely be a follower of decisions within the broader, global shipping industry. As mentioned in our earlier submission to the MERNAP process,³ at this stage we would generally advise against mandates that seek to pick fuel ‘winners’ or to determine storage needs while these matters are still being determined by factors outside of Australia’s control. This further reiterates our request for modelling and analysis into our options and also ways that we can be a fast follower and supporter of the international maritime environment.

Australian governments have a role in funding common use infrastructure and port redevelopment, as well as in driving domestic demand for decarbonised fuels – for example, by supporting Australian shipbuilders and shipyards to build waterway vessels for use in Australia and internationally. Australian shipyards have the capacity and capability to build smaller vessels, ferries, barges, small tugs and work boats that could decarbonise port operations and other water ways, as well as supporting the techno-economic business case for port operators. Support of this nature would also stimulate local design and manufacturing, as well as encourage local training opportunities.

Finally, as Australia looks to support bunkering and the production of low carbon fuels, there needs to be consideration for how to address the significant cost gap between traditional and alternative fuels. AHC has made numerous recommendations to the Australian Government on the range of support options that could be considered to provide this funding support, including in our position papers regarding an Australian response to the US Inflation Reduction Act⁴ and to the draft National Hydrogen Strategy.⁵

For insight into the AHC policy response to the National Hydrogen Strategy, please see *Appendix A* which collates the maritime related recommendations. This document presents an overview of a series of hydrogen policies, including the requirements for international partnerships, workforce development and funding frameworks, and specific use cases such as maritime.

Conclusion

AHC and our members are pleased by the significant progress under the MERNAP and we look forward to the integration of the consultation findings into the broader transport sector plan and Net Zero 2050

³ AHC (2023) *Re: MERNAP Issues Paper: Regulation and Standards*, September, <https://h2council.com.au/wp-content/uploads/2023/09/230928-MERNAP-sub-final.pdf>.

⁴ AHC (2023) *Securing Australia’s hydrogen future*, March, <https://h2council.com.au/wp-content/uploads/2023/02/230301-AHC-Policy-Paper-Securing-Australias-hydrogen-future.pdf>.

⁵ AHC (2023) *A fit-for-purpose refreshed National Hydrogen Strategy: next steps for building Australia’s hydrogen industry*, August, <https://h2council.com.au/ahc-publications/>.

Plan. We encourage the Australian Government to be bold in setting and communicating Australia's policy direction and investment proposition.

If you have any queries or wish to discuss any element of this submission in further detail, please contact me at ncerexhe@h2council.com.au.

Yours sincerely,

Natasha Cerexhe
Policy Officer
Australian Hydrogen Council

APPENDIX A: AHC's response to the National Hydrogen Strategy Refresh – Maritime relevant recommendations

Recommendation 6: Prioritise hard-to-abate and scalable domestic demand sources.

The Australian Government should prioritise growing demand for hydrogen in the applications that are more likely to require clean hydrogen to decarbonise, and more likely to achieve large scale. Ideally these should demonstrate an ability to open the market to other applications, through knowledge/technology sharing, geographic proximity, and/or cost reduction. Current evidence supports these industries as being:

- Chemicals, particularly ammonia and methanol
- Low emissions metals, particularly iron and alumina
- Heavy road transport
- High temperature process heating
- Marine and aviation, where hydrogen is a feedstock for future fuel
- Seasonal storage for the electricity market

Recommendation 12: Develop joint support packages between Australia and its trading partners to support trade in hydrogen and hydrogen derivatives.

The Australian Government should develop bespoke joint support packages between Australia and its trading partners that underwrite trade and support necessary infrastructure.

These should also cover multilateral agreements to incentivise investment and collaboration, for example, between Australia as a producing country, Singapore as a key intermediary for shipping and the nations of North Asia as key customers for hydrogen, its derivatives and also products produced using hydrogen.

Recommendation 15: Create Hydrogen Economic Zones to support regional hydrogen initiatives and connect the relevant supply, demand, infrastructure and workforce.

The Net Zero Economy Agency should oversee the development of Hydrogen Economic Zones that link hydrogen production targets to locations via hydrogen economic zones that incorporate REZs and ports, as well as likely requirements for hydrogen storage, CCS, refuelling, pipelines, and workforce.

This work should adopt work already undertaken by the jurisdictions.

Recommendation 24: Develop a national assessment of port capability to meet the revised NHS objectives and targets.

DCCEEW should engage with port corporations and peak bodies to analyse and report back on port capability for future exports, in line with the objectives and targets set by the revised NHS and connected with Hydrogen Economic Zones.

This should lead to an understanding of how ports can collaborate without triggering unforeseen regulatory hurdles and future government support for common use infrastructure.

Recommendation 25: Select and support ports with existing industry connections to be demonstration ports.

Australian governments should work with ports to identify appropriate demonstration sites for hydrogen development. To mirror international developments this could include ports that have existing industrial connections.

Recommendation 26: Commit to a funding envelope for ports.

The Australian Government should undertake to support port redevelopments to 2045. The national assessment will clarify what is required, but this is expected to be around A\$20-\$30 billion.

Recommendation 49: Attract private investment for hard-to-abate industrial processes.

Noting the need for funding to align with analyses addressed in Recommendations 3-5 and any targets set, the Australian Government should:

- Fund a hydrogen readiness programme of at least A\$1 billion for capital expenditure on industrial processes that cannot readily be electrified, including (and not exclusively) for the production of steel, ammonia, methanol, and alumina/aluminium.
- Continue to use ARENA (and CEFC where possible) to underwrite demand through a revenue support mechanism (such as contract for difference) intended to incentivise domestic production of critical chemicals and metals, including (and not exclusively) for the production of steel, ammonia, methanol, and alumina/aluminium. Funding should be aligned with funding from state/territory governments.

Funding should be prioritised for projects that protect or create local jobs and have a detailed plan for skilling and re-skilling. Applicants should be required to share non-commercially sensitive information to support industry knowledge development – this could be assisted by engaging with industry associations to support delivery.

To mitigate and reduce the costs associated with project development (such as transmission costs), the Australian and state governments could collaborate to further incentivise co-location of chemical production within Hydrogen Economic Zones, and within proximity to other industrial infrastructure such as ports.

Recommendation 51: Develop a national assessment of shipping routes and refuelling requirements.

The Australian Government should engage with shipping companies operating in Australia and peak bodies to analyse and report back on:

- Current shipping routes.
- Shipping companies' views on fuels in which they are investing, the relative energy densities of options, and requirements to refuel (that is, the maximum journey length without bunkering requirements).
- Bunkering in Australia, to understand if products (including fuels) are to be transported from southern Australia, what the impact is on key matters such as the total journey length and requirement to refuel.
- Opportunities for demonstration projects at suitable ports.