



Supporting the establishment of the Australia–East Asia iron ore green corridor

Brief introduction to green shipping corridors

Green shipping corridors, defined as specific trade routes where the feasibility of zero or near-zero-emission shipping¹ is catalysed by public and private action, provide the opportunity to accelerate shipping's transition to zero or near-zero-emission fuels.² The establishment of green shipping corridors requires participants from the full maritime value chain that are active on the trade route – such as fuel producers, shipowners and operators, cargo owners, ports, and regulatory authorities – to support the necessary investments in, and deployment of, zero or near-zero-emission vessels, fuel production, and bunkering infrastructure.

Context and issue statement: Australia–East Asia iron ore green corridor

Following the identificationⁱ of iron ore shipping routes between Western Australia and East Asia as high-potential candidates for establishing a green shipping corridor powered by zero or near-zero carbon ammonia,³ a task force of 15 industry representatives⁴ from across the value chain has convened under the Getting to Zero Coalition to explore the implementation of the corridor. Over the past year, the group has undertaken several activities to support its development.

A May 2023 feasibility studyⁱⁱ by four task force members⁵ found that the availability of ammonia-powered ships, access to zero or near-zero carbon ammonia, and the availability of bunkering infrastructure could, given a set of conditions,⁶ be in place to enable the corridor's kick off by 2028 and achieve 5% uptake of zero or near-zero carbon ammonia on the route by 2030, in line with the International Maritime Organization (IMO)'s fuel uptake target in its revised greenhouse gas (GHG) strategy.

The wider task force has also produced a shared roadmapⁱⁱⁱ identifying the actions needed to realise these goals. Meanwhile, many of the individual companies have already signalled their willingness

1 Vessels with the potential to achieve zero- or near-zero greenhouse gas emissions when operating on zero or near-zero emission fuels.

2 Fuels with the potential to achieve zero or near-zero greenhouse gas emissions on a lifecycle basis.

3 Near-zero or zero carbon ammonia includes 'green' ammonia produced with electrolytic hydrogen using renewable electricity; and 'blue' ammonia produced from fossil fuels (conventional hydrogen) with applied carbon capture and storage (CCS) with a minimum capture rate of 70% of the carbon dioxide emissions and a minimum storage period of 100 years.

4 BHP, Bureau Veritas, Cargill, ClassNK, Fortescue Future Industries, Intercontinental Energy, K Line, Lloyd's Register, NYK Line, Oldendorff Carriers, Pilbara Ports Authority, Rio Tinto, Star Bulk, Woodside Energy, Yara Clean Ammonia.

5 BHP, Rio Tinto, Oldendorff Carriers, Star Bulk.

6 Confidence in, and acceptance of, ammonia as a safe marine fuel; policy action to help create a viable investment case; continued collaboration and coordinated action through the corridor's value chain.

to act by initiating activities related to the ordering of ammonia-powered vessels and services, production of zero or near-zero carbon ammonia, and development of bunkering infrastructure.^{iv}

The task force believes that developing a zero or near-zero carbon ammonia-powered green shipping corridor on this route could help accelerate the global decarbonisation of shipping, reduce emissions regionally, and generate benefits for Australia that support its national strategic priorities.

A critical barrier to realising this green corridor, however, is the significant cost gap of running a ship on zero or near-zero carbon ammonia versus conventional marine fuel. The global production cost of zero or near-zero carbon ammonia is forecasted to be significantly more expensive than conventional marine fuel through at least 2030,^v and an independent, third-party assessment has been undertaken to further explore the cost gap ranges for this specific corridor.⁷ This cost differential creates a substantial gap in the business case for green shipping corridors and is recognised as the main area where government intervention is likely to be required.

Task force members recognise the important role that industry plays in absorbing some of the costs and are exploring innovative commercial arrangements that can help specify how to balance costs and risks along the value chain. However, as evidenced in several studies,^{vi} the cost gap cannot be bridged by industry levers alone.

The task force believes that national policy support and regional government collaboration are essential to realise this corridor. This paper provides the case for why Australia⁸ would benefit from taking supportive action to help the establishment of a green corridor out of Western Australia. What follows are three different scenarios for how the corridor could be implemented and a menu of policy options for consideration by the Australian government.

What's in it for Australia?

#1 Green shipping corridors as a vehicle for Australia's energy transition

Australia aims to become a global clean hydrogen⁹ leader by 2030 to decarbonise its economy, build a competitive export industry, and contribute to wider regional and global decarbonisation. Although Australia is home to one of the largest hydrogen pipelines in the world, many projects risk not having sufficient offtakers to support large-scale investments due to the current fuel cost gap and lack of demand-side mechanisms. Stimulating large-scale demand today is therefore necessary to ensure that Australia can fulfil its 2030 ambitions.

With an estimated demand for 275 kilotons of zero or near-zero carbon ammonia in 2030 and around one million tons by 2035,^{vii} the Australia-East Asia Iron Ore Green Corridor alone could be a substantial early demand for Australian zero or near-zero carbon ammonia, underpinning the offtake and scale-up of Australian national clean hydrogen production, should the right policy support be provided. Looking at the amount of hydrogen that is required by 2030 to enable decarbonisation across Australia's supply chains, and the expected consumption levels by the industrial sector,^{viii} the 275 kilotons of zero or near-zero carbon ammonia in 2030 could make up around 25% of industrial sector demand.

Supporting the early production and uptake of zero or near-zero carbon ammonia along the corridor could also help stimulate the uptake of hydrogen-based fuels on other green corridors in the region

7 A total cost of ownership (TCO) analysis has been undertaken by UMAS on behalf of Global Maritime Forum. The analysis serves as a starting point for exploring the corridor's cost gap ranges and further work will be needed to refine the cost gap.

8 Coordination with other key governments on the route will be explored in forthcoming work.

9 Clean hydrogen definition: Hydrogen produced using renewable energy or fossil fuels with substantial carbon capture and storage (CCS) as defined in [Australia's National Hydrogen Strategy, p.124](#).

creating additional offtake opportunities. Examples include the Australia-Singapore Green & Digital Shipping Corridor^{ix} which plans to be operational by the end of 2025, and the Silk Alliance,^x with zero or near-zero carbon ammonia activities planned by 2028.

Accelerating the Australia-East Asia Iron Ore Green Corridor can therefore help anchor early investments and drive growth in cost-effective clean hydrogen and derivatives projects, as well as unlock a major export opportunity and establish clean hydrogen value chains with East Asian markets. It could also underpin Australia's capacity to produce zero or near-zero carbon ammonia for fertilisers used in food production and technical ammonium nitrate used in some of Australia's largest mines.

#2 Future-proofing the shipping of Australia's most valuable export commodity

Australia is the world's largest iron ore producer and exporter in the world, accounting for 38% of global iron ore production and 55% of global iron ore exports. Iron ore is the country's most valuable export commodity, contributing \$133 billion to the economy in 2021-2022.^{xi} Almost all iron ore exports are shipped out of Western Australia along the proposed green corridor route. As global iron and steel value chains begin their transition to net zero, future-proofing Australia's iron ore trade is critical for the country's ability to remain competitive in the global market. In parallel with the country's efforts to decarbonise iron ore mining and processing, developing a zero or near-zero carbon-ammonia powered shipping route is necessary to help decarbonise the full iron ore value chain.

The green corridor offers Australia a platform to decarbonise its most important trade flow and move ahead of global regulation. With the IMO's revised GHG strategy positioning shipping for a rapid switch to scalable zero-emission fuels in the 2030s, a lack of adequate planning for this energy transition could put the resilience of global supply chains at risk. By enabling early testing and refinement of zero or near-zero emission shipping technologies and facilitating a timely build-out of the zero or near-zero carbon ammonia supply chain, Australia can minimise the chances of disruption and gain a first-mover advantage by clearly positioning its iron ore trade for a net-zero future.

This could help secure Australia's continued attractiveness to key iron ore export markets, mainly China, Japan, and South Korea, which have all set net-zero targets, and enable domestic mining companies committed to net-zero to fulfil their Scope 3 emissions.¹⁰

#3 Strong alignment with Australia's shipping decarbonisation ambitions

Australia is currently developing a Maritime Emissions Reduction National Action Plan (MERNAP)^{xii} and has set out several objectives for government action. The establishment of the Australia-East Asia Iron Ore Green Corridor would support these ambitions by:

- Contributing to Australia's national emissions reduction targets and a lowering of global emissions;
- Sending a strong signal to global trading partners that Australia is developing pathways to decarbonise key value chains;
- Placing the country at the forefront of zero or near-zero emission shipping and strengthening its profile as a maritime nation;
- Providing an opportunity for industry and government to come together and expand on international engagement strategies – in this case, green shipping corridors – to ensure effective collaboration along the energy-port-shipping nexus;

¹⁰ The three largest mining companies, accounting for more than 80% of supply, are all committed to net-zero.

- Positioning Australia’s dependency on shipping (moving 99% of Australian goods) for a zero-carbon future and creating positive spillover effects on domestic shipping decarbonisation developments;
- Providing an opportunity to build on and strengthen existing Clean Energy Partnerships^{xiii} by developing green shipping corridors through regional cooperation; and
- Supporting the fulfilment of Australia’s and other regional partners’ obligations as Clydebank Declaration signatories.^{xiv}

Implementation scenarios

The Australia–East Asia Iron Ore Green Corridor task force has identified three implementation scenarios based on the different fuel production and bunkering options for establishing the corridor. These scenarios are outlined below.

1. Delivering the corridor using domestically produced zero or near-zero carbon ammonia bunkered in the Pilbara

Scenario: Iron ore carriers from Western Australia to East Asia would bunker Australian-produced zero or near-zero carbon ammonia directly at their ports of origin in the Pilbara.

Scenario-specific benefits:

- The Pilbara region in Western Australia is home to the world’s largest iron ore export ports. The region has already been identified as a potential bunkering location for iron ore bulk carriers^{xv} and a study by two task force members – the Pilbara Ports Authority and Yara Clean Ammonia – suggests that existing export infrastructure could be leveraged to initiate bunkering operations in the near term.^{xvi}
- Western Australia is forecasted to become one of the main exporters of clean hydrogen and derivatives^{xvii} to East Asian markets; the development of clean hydrogen export infrastructure in the region can support the establishment of a zero or near-zero carbon ammonia bunkering hub.
- Establishing a new bunkering hub in the region would allow shippers on the corridor to avoid diversions to Singapore for bunkering, meaning a shorter sailing distance and lower fuel consumption.



- If the government were to support the establishment of a zero or near-zero carbon ammonia bunkering hub in the Pilbara, this could help support objectives set by the state of Western Australia by:
 - > Generating economic value, spurring regional job creation¹¹ and diversifying the state’s economy;
 - > Providing local offtake opportunities for the state’s hydrogen projects while supporting the development of clean hydrogen export infrastructure in line with Western Australia’s ambition to become a leading producer, exporter, and user of renewable hydrogen;^{xviii} and
 - > Future-proofing the state’s ports and maritime industry.

2. Delivering the corridor using domestically produced zero or near-zero carbon ammonia bunkered in Singapore

Scenario: Iron ore carriers from Western Australia to East Asia would sail via the established bunkering hub of Singapore, fuelling with Australian-produced zero or near-zero carbon ammonia.

Scenario-specific benefits:

- This approach supports the government’s ambition to become a clean hydrogen leader while building on its existing Clean Energy Partnership with Singapore.
- It would provide the opportunity for bundling early demand from this corridor with other corridors and first movers planning to bunker hydrogen-based fuels in Singapore.¹²
- If Australia provides competitively-priced zero or near-zero carbon ammonia, it could become the main producer and provider of zero or near-zero carbon ammonia bunker fuels in Singapore and allow iron ore charterers to source affordable, domestically-produced zero or near-zero carbon ammonia and build resilience in a cost-effective way.
- Iron ore charterers can take advantage of the established ecosystem and cost benefits associated with Singapore’s status as the world’s largest bunkering hub.
- Given that Singapore is already progressing on ammonia bunkering safety, regulatory and technology development activities, it is likely to be one of the first zero or near-zero carbon ammonia bunkering hubs, which increases the corridor’s chances of reaching its 5% target by 2030.



¹¹ More than 700,000 workers are expected to be required for building green export industries leading up to 2050; WA’s target is an extra 150,000 jobs by mid-2024 including 30,000 regional jobs.

¹² As of December 2023, Singapore is involved in 6 announced green corridor initiatives based on the Global Maritime Forum’s [2023 Annual Progress Report on Green Shipping Corridors](#).

3. Delivering the corridor using internationally sourced zero or near-zero carbon ammonia bunkered in Singapore

Scenario: Iron ore carriers from Western Australia to East Asia would sail via the established bunkering hub of Singapore for fuelling. Shippers on the corridor would be free to bunker zero or near-zero carbon ammonia from any available source.¹³

Scenario-specific benefits:

- This would allow iron ore companies to source the cheapest possible fuel and could potentially be the most cost-effective way to build resilience.

However, this scenario will only benefit Australian zero or near-zero carbon ammonia production if competitively priced zero or near-zero carbon ammonia is provided by Australia. This scenario also excludes full alignment with the country's MERNAP and the opportunity to build a regional bunkering hub in the Pilbara. Unless Australia provides timely and efficient policy support that can help underpin scenario 1 and 2, the opportunity to impact the success of the corridor and its associated benefits will be limited.



Menu of policy options

The task force has identified a number of policy options for consideration by the Australian government to economically support the development of this corridor:

Supply-side mechanisms

- **Scale up Australia's hydrogen production incentives**
 - > Australia's Hydrogen Headstart Program is dedicated to supporting national hydrogen production projects (including derivatives).^{xix} However, the current A\$2 billion investment is not comparable with other nations with similar ambitions that are moving more aggressively on hydrogen support. This serves as a disincentive to unsuccessful applicants whose projects are likely to see costly delays.
 - > The government could revisit the Hydrogen Headstart Programme's incentive structure to ensure that a higher share of the 67 announced clean hydrogen projects currently 'under development' in Australia^{xx} receive support. The government could also target projects with a wider range of end users to maximise their impact on market creation and investments.
 - > The government could also consider a production tax credit (PTC) to support green hydrogen projects adopting a similar model to the Inflation Reduction Act (IRA) in the US. A PTC would be more widely available to projects and easier to access stimulating the industry sooner.
- **Earmark fuel production subsidies for zero-emission shipping fuels**
 - > Regardless of bunkering location, fuel production subsidies could be earmarked for zero or near-zero emission shipping fuels, including zero or near-zero carbon ammonia, to ensure that shipping is not outcompeted for supply by other sectors (including those with lower long-term market potential).

¹³ Examples of potential production locations include the U.S., India, Chile, Middle East.

- > In the scenario of bunkering in Singapore, this can help Australia kick-start its clean hydrogen production and export, with the green corridor and other first-mover projects bunkering in Singapore acting as early offtakers for Australian production.
- > In the scenario of bunkering in the Pilbara, such an earmark could generate confidence in future demand and catalyse the investments needed to establish the new bunkering hub.

Demand-side mechanisms

Australia currently has no demand-side incentives in place to support the uptake of zero or near-zero emission fuels in end-use sectors such as shipping. Analyses^{xxi} indicate that demand-side incentives, as a complement to supply-side support, are important to the realisation of hydrogen value chains. This should be explored in the context of this corridor to unlock the necessary investments and offtake opportunities.

- **Provide demand-side subsidies to narrow the fuel cost-gap**
 - > A Contracts for Difference (CfD) scheme for zero or near-zero carbon ammonia is one way to implement demand side support and may provide cost efficiency for the government without sacrificing the effective demand stimulus. Such a scheme could potentially be shipping-specific or multi-sector.¹⁴
 - > In a scenario where the fuel may be bunkered outside of Australia, a mechanism for guaranteeing the origin of the fuel would be needed to ensure eligibility for demand-side subsidies (where Australia's Guarantee of Origin (GO) scheme currently under development could be an important verification mechanism).^{xxii}
 - > Another option to be explored is for the Australian government to set up an auction scheme for domestic producers and users of zero or near-zero carbon ammonia to help aggregate demand.
 - > The IMO's 2023 GHG strategy is set to drive the uptake of zero or near-zero-emission fuels, especially in the 2030s. First mover support from national or regional governments will be most relevant for kicking off the corridor. As such, demand-side support could involve a sunset mechanism, phasing out the support as IMO regulations kick in.

Global examples of announced demand-side schemes:

- New Zealand Equitable Transitions Strategy: Regional Hydrogen Transition Consumption Rebate. [Learn more.](#)
- United States' Clean Hydrogen Hubs Strategy and Roadmap (which has allocated USD 1 billion for demand-side support). [Learn more.](#)
- Norway's Enova agency announced demand-side subsidies for the use of hydrogen and ammonia in shipping, which stipulates that vessels must spend a given proportion of their time in Norwegian waters to qualify for support, providing another point of reference for such a scheme. [Learn more.](#)

¹⁴ Learn more about how such a set-up could work in [National and regional policy for green shipping corridors](#). Global Maritime Forum. 2023.

Government collaboration

Australia has an opportunity to build on, and engage, its regional partnerships in the delivery of the corridor. This could be done by:

- **Bilateral policy schemes**

Leverage the existing Clean Energy Partnerships with Japan/South Korea/the economic trade relationship with China to explore how complementary policy action could benefit both ends of the corridor and support its delivery in line with the Clydebank Declaration goals. Examples for consideration:

- > Bilateral support schemes for Australian clean hydrogen-based fuel production and the partner country(ies) decarbonisation of steel value chains.
- > Bilateral support scheme for Australian clean hydrogen-based fuel production and the partner country(ies) clean hydrogen-based imports.
 - >> *The ongoing development of partnerships with Germany's H2Global scheme for green hydrogen^{xxiii} is an example of what could be further built on for this work.*
- > In the case of Singapore bunkering, Australia and Singapore could also build on their existing Clean Energy Partnership and role as Clydebank signatories and design bilateral policy schemes that benefit both countries:
 - >> *Bilateral subsidisation schemes for Australian production of clean hydrogen-based fuels and Singaporean import of these fuels used for bunkering.*
 - >> *A bilateral policy scheme benefiting the development of low-emission maritime technologies and port operations between the two countries was recently established^{xxiv} and is an example of an existing agreement that would also benefit this corridor.*
 - >> *Demand-side incentives could be designed as port-side reduction fees serving participating companies based on the origin of cargo. Such a scheme could be open to multiple sources of shipping demand, including other routes and trades, but should be sufficiently inclusive to cover the Australia-East Asia Iron Ore Green Corridor.*

- **Facilitate knowledge exchange with regional partners**

Knowledge exchange with Clean Energy Partnership countries and iron ore importing countries should be an overall prioritisation to investigate how the corridor can be developed in a way that builds on the partners' strategic priorities and creates benefits for all.

Enabling policies for establishing a bunkering hub in the Pilbara region

The following recommendations for establishing a bunkering hub in the Pilbara region should be considered by the Federal and Western Australian government:

- Help maximise existing port infrastructure and invest in the necessary build-out to help create a bunkering ecosystem in the Pilbara.
- Coordinate a Pilbara bunkering ecosystem programme, investing in safety, competency, regulatory, and technological developments by liaising with industry (including ammonia bunkering standards tailored to Australian ports).
- Invest in the training and upskilling of workers on the handling of ammonia.
- Accelerate permitting and approval processes for port infrastructure and the safe use of zero or near-zero carbon ammonia.

Taskforce members in support of this paper

- > Bureau Veritas
- > Fortescue
- > Intercontinental Energy
- > Lloyd's Register
- > NYK Line
- > Oldendorff Carriers
- > Pilbara Ports Authority
- > Rio Tinto
- > Star Bulk Carriers
- > Woodside Energy
- > Yara Clean Ammonia

Appendices

Appendix A

Roadmap to 2030: Australia–East Asia iron ore green corridor

ROADMAP TO 2030

Australia–East Asia iron ore green corridor

Background

The Australia–East Asia iron ore green corridor taskforce¹ has developed a roadmap that identifies action areas and milestones likely to be critical for the corridor to kick-off by 2028 and achieve the uptake target of 5% scalable zero emission fuels (SZEf) by 2030.

The 2028 kick-off and 2030 target is based on the findings in the corridor's [Feasibility study](#), concluding that these targets are indeed reachable, given that a set of conditions are met, most of which are included in this roadmap.

The roadmap's skeleton is inspired by the [Next Wave report's](#) "A roadmap for decarbonisation", p.36, and has been adjusted to include **action areas** and **milestones** within the following three pillars: fuel pathway; mobilising demand; and policy and regulatory environment.

The action areas and milestones are marked with different colors and figures indicating their type and status.

¹ Led by the Global Maritime Forum with participation from BHP, Bureau Veritas, Cargill, ClassNK, Fortescue Future Industries, Intercontinental Energy, K Line, Lloyd's Register, NYK Line, Oldendorff Carriers, Pilbara Ports Authority, Rio Tinto, Star Bulk, Woodside Energy, Yara Clean Ammonia.



● Ongoing action relevant to Corridor

An ongoing action relevant to the development of this corridor, not undertaken by the taskforce as a joint entity. Completed actions are marked in green.

⊗ Gap identified by taskforce

An action identified by the taskforce as a priority for industry stakeholders to help the corridor unfold. These actions are currently not actioned by the taskforce but might be in future work.

● Gap actioned by taskforce

An action identified by the taskforce as a priority for industry stakeholders to help the corridor unfold. These actions are currently being actioned by the taskforce.

🚩 Milestone

An important industry development or event bringing this corridor one step closer to reality. Achieved milestones are marked in green.

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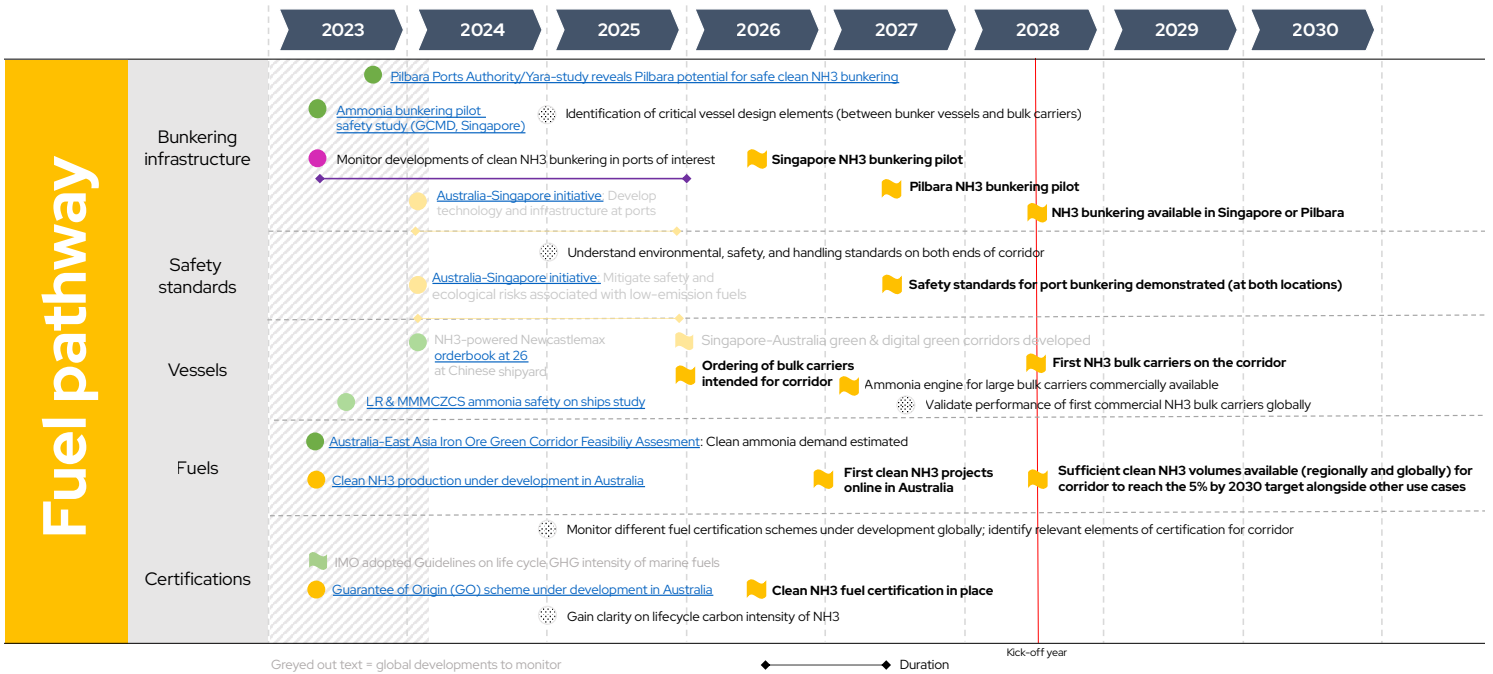
This roadmap does not claim to provide a definite or exhaustive list of action areas or milestones required for the corridor to unfold. Instead, it serves as an overview of some of the key action areas and milestones relevant to the corridor's establishment that have been identified in discussions with taskforce members and by the project lead, the Global Maritime Forum, when monitoring the regional and global maritime decarbonisation landscape.

The goal is to have the roadmap continuously updated as new developments relevant to the corridor appear, as well as when, and if, additional, action areas for the taskforce, or other industry members, are identified.

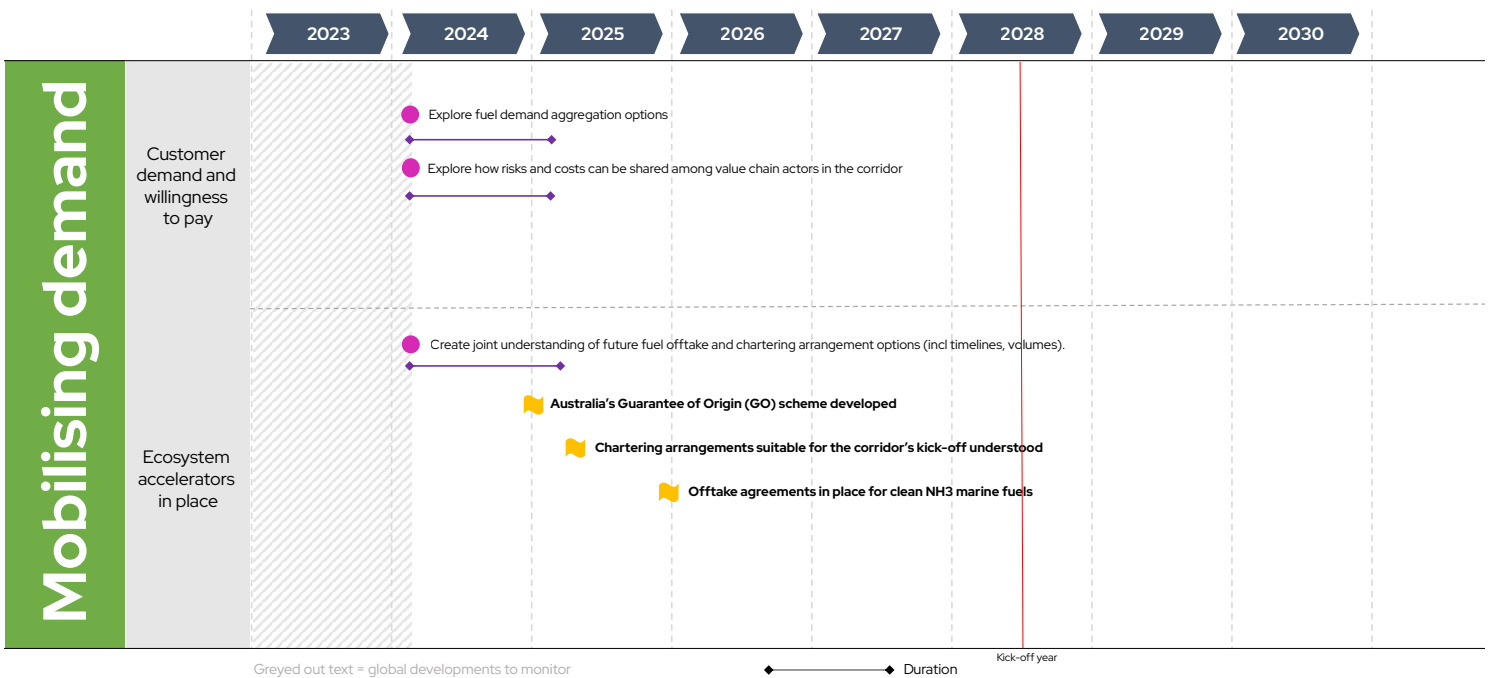
The taskforce members do not assume responsibility for, or commit to, the action areas or milestones outlined in the roadmap. Instead, the purpose of the roadmap is to provide insight into the environment surrounding the corridor's development and to guide the identification of potential action areas for the taskforce to consider collectively as it spearheads the corridor's development.

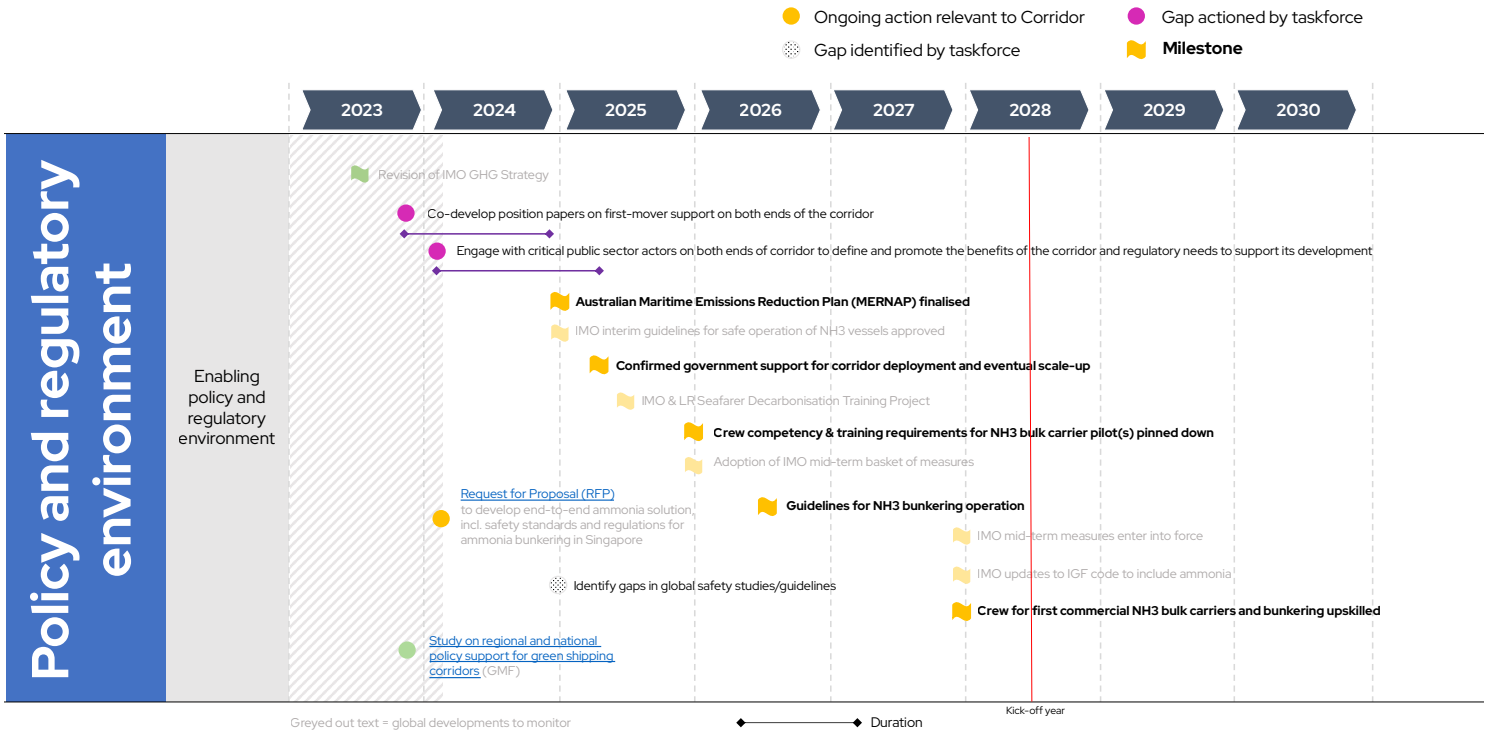


- Ongoing action relevant to Corridor
- Gap acted by taskforce
- Gap identified by taskforce
- 🚩 Milestone



- Ongoing action relevant to Corridor
- Gap acted by taskforce
- Gap identified by taskforce
- 🚩 Milestone





The Roadmap was last updated on February March 7, 2024.

Appendix B

Examples of task force members' individual industry activities related to the development of zero or near-zero emission shipping:

There is strong momentum among industry players globally to collaborate and initiative activities that can help enable shipping's decarbonisation. Below are a few publicly available examples of activities that industry members of the Australia-East Asia Iron Ore Green Corridor task force are undertaking outside the work of this corridor to enable the development of zero or near-zero emission shipping in the region.

Fortescue is evaluating the option to convert their eight Very Large Ore Carriers (VLOCs) to run on green ammonia.

Fortescue has also completed the development of a green ammonia-capable dual-fuel ship, the Green Pioneer, which sailed from its base in Singapore to Dubai for COP28 in December 2023 as a symbol of the technology solutions and regulatory changes needed to decarbonise shipping. [Learn more here](#). Together with leading maritime engineers and innovators, Fortescue has developed the systems, processes and technology needed to safely run on the Green Pioneer as a green ammonia dual-fuel ship. [Learn more here](#).

The Australia Renewable Energy Hub (AREH) project involving taskforce member **Intercontinental Energy**. [Learn more here](#).

Yara's clean ammonia plant in the Pilbara. [Learn more here](#). The plan has been provided pre-certification from the Zero Carbon Certification Scheme by Hydrogen Australia (a division of Smart Energy Council), where the Western Australian government is a founding partner of the scheme. **Bureau Veritas** undertook the technical assessment for the pre-certification. [Learn more here](#).

Yara Clean Ammonia and **Pilbara Ports Authority** on clean ammonia bunkering potential, particularly for iron ore carriers, in the Pilbara. [Learn more here](#).

NYK Line's clean ammonia tugboat conversion project. [Learn more here](#).

Endnotes

- i [The Next Wave: Green Corridors](#). Getting to Zero Coalition. 2021.
- ii [Feasibility study. Australia-East Asia Iron Ore Green Corridor](#). Global Maritime Forum & Energy Transitions Commission. 2023.
- iii See Appendix A.
- iv See Appendix B.
- v [Readiness and availability of low- and zero-carbon ship technology and marine fuels](#). DNV & Ricardo. 2023.
- vi [NoGAPS2: Commercialising early ammonia-powered vessels](#). Global Maritime Forum. 2023; [The Next Wave: Green Corridors](#). Getting to Zero Coalition. 2021.
- vii [Feasibility study. Australia-East Asia Iron Ore Green Corridor](#). Global Maritime Forum & Energy Transitions Commission. 2023.
- viii [Pathway to industrial decarbonisation](#). Australian Industry Energy Transitions Initiative. 2023.
- ix [Spearheading green and digital shipping cooperation between Australia and Singapore](#). Australian Government. 2023.
- x [The Silk Alliance](#). Lloyd's Register.
- xi [Rocks that Shape Australia](#). Geoscience Australia. Australian Government. 2023.
- xii [Australia's Maritime Emissions Reduction National Action Plan](#). Department of Infrastructure, Transport, Regional Development, Communications, and the Arts. Australian Government. 2023.
- xiii [Australia's international clean energy partnerships](#). Department of Climate Change, Energy, the Environment and Water. Australian Government. 2023.
- xiv [COP26: Clydebank signatories for green shipping corridors](#). UK Government. 2023.
- xv [Feasibility study. Australia-East Asia Iron Ore Green Corridor](#). Global Maritime Forum & Energy Transitions Commission. 2023.
- xvi [Study reveals Pilbara potential for ammonia as a clean shipping fuel](#). Yara. 2023.
- xvii Verschuur et al. (2024). [Optimal fuel supply of green ammonia to decarbonise global shipping](#). Environmental Research: Infrastructure and Sustainability, vol. 4., no.1.
- xviii [Western Australian Renewable Hydrogen Strategy and Roadmap](#). Government of Western Australia.
- xix [Hydrogen Headstart Programme](#). Department of Climate Change, Energy, the Environment and Water. Australian Government.
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- xxi [Global Hydrogen Review 2023](#). IEA; [National and regional policy for green shipping corridors](#). Global Maritime Forum. 2023.
- xxii [Guarantee of Origin Scheme](#). Department of Climate, Energy, the Environment and Water. Australian Government.
- xxiii [Australia poised to jointly fund a €400m H2Global green hydrogen subsidy auction with German government](#). Hydrogen Insight. 2024.
- xxiv [Australia-Singapore Initiative on Low-Emissions Technologies for Maritime and Port Operations \(ASLET\)](#). CSIRO.