



Port of Melbourne - Port of Shanghai

Green Shipping Corridor Partnership

Implementation Plan Outline



Port of Melbourne



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Background and context

In response to the Clydebank Declaration and in order to support the decarbonisation of shipping, the Shanghai Municipal Transportation Commission (SMTC) and the Port of Melbourne jointly launched the Green Shipping Corridor (GSC) initiative with the support of C40 Cities Climate Leadership Group (C40).

The initiative aims to establish a GSC between the Port of Shanghai and the Port of Melbourne under the principles of voluntary participation and openness. With support from C40, the two ports announced their intention to establish a GSC at the North Bund Forum in Shanghai on 19 October 2025.

The two ports have a longstanding relationship dating from the mid-1980s. Since the formal establishment of sister-port relations between the Port of Shanghai and the Port of Melbourne in 2006, the two sides have engaged in extensive, in-depth, and pragmatic cooperation and exchanges under the sister-port framework.

2026 marks the 20th anniversary of their sister-port partnership. China is Melbourne's largest trading partner, accounting for 50% of container imports and 20% of container exports¹. Australia is likewise an important trading partner for Shanghai, with Melbourne serving as a key gateway for bilateral trade. Currently, no shipping line deploys dual-fuel vessels on the route between the two ports. Given this high trade volume, collaboration on decarbonisation offers significant mutual benefit.

¹ [Port of Melbourne Partners with Port of Shanghai with Aim to Advance Green Shipping Corridor](#)

1.1 Current status



Port of Shanghai



**World's largest
container port**



**55 million
TEUs, 2025**

The **Port of Shanghai** is the world's largest container port, with a container throughput of 55.063 million TEUs in 2025, and positioning Shanghai as an international shipping centre. Shanghai International Port Group (SIPG) completed China's first ship-to-ship green methanol bunkering operation in April 2024 (servicing Maersk's "Astrid Mærsk")², and has set a goal to achieve a total green fuel (methanol, biofuels, etc.) bunkering capacity of 1 million tonnes by 2030³. Shanghai is an existing partner in two operational green shipping corridors – with Los Angeles/Long Beach and with Hamburg providing a tested model for the Melbourne corridor to build on.



Port of Melbourne



**Australia's largest
container port**



**3.5 million
TEUs annually**

The **Port of Melbourne** is Australia's largest container and general cargo port, handling over 3 million TEUs annually and contributing \$11 billion to the Australian economy. The Port of Melbourne has committed to net zero by 2030 for its own operations (Scope 1 and 2) and actively measures Scope 3 emissions across the port precinct while engaging with shipping lines, terminal operators, and port contractors on decarbonisation opportunities. The Port of Melbourne is advancing a range of initiatives to support shipping decarbonisation, including a Low Carbon Methanol bunkering feasibility study, a port-wide shore power feasibility study covering 2030–2050, and green shipping partnerships with Shanghai, Tanjung Pelepas and Singapore.

² [Astrid Mærsk arrives in Shanghai for first green methanol bunkering in China, in partnership with SIPG](#)

³ [Shanghai aims to initially establish itself as a dual centre for international shipping and green fuel by 2030](#)

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Visions, aims and areas of cooperation

2.1 Vision

The GSC Partnership aims to work with industry partners across the shipping and fuel supply chain to accelerate decarbonisation on the Melbourne - Shanghai route, advancing cleaner technologies, use of renewable energy sources, and implementation of best practices to minimise the carbon footprint.

2.2 Overarching Aims

The partnership will collaborate with stakeholders across the energy fuel, shipping, logistics, and digital sectors to:

- Complete a baseline and feasibility study and deploy one or more low-carbon fuel container vessels on the Shanghai-Melbourne route by 2035.
- Send a clear demand signal to shipping lines, fuel suppliers and policymakers that the Shanghai-Melbourne trade lane is a priority route for low and zero carbon shipping investment.
- Work closely with shipping lines and energy suppliers to accelerate the adoption, production, transportation and supply of low carbon fuels, leveraging Shanghai's existing methanol bunkering capacity and progressing the feasibility of bunkering in Melbourne, and advancing shore power through feasibility assessment and supporting enabling infrastructure at the Port of Melbourne.
- Advance digitalisation and innovation to support corridor decarbonisation and supply chain efficiency, including exploring port-to-port and ship-to-port data connectivity, voyage optimisation and interoperable digital systems to improve transparency, operational efficiency and emissions performance across the corridor.
- Explore opportunities to improve efficiency, cost control and integrated supply chain capability while establishing a credible and scalable model for cross-border port collaboration that can support and be replicated across other Australia-Asia trade routes.

2.2 Areas of cooperation, content and phased tasks

The partners will collaborate across the priority areas. Tasks are organised by phase:

Short-term (2026-2030), **Medium-term** (2031-2035) and **Long-term** (2036 onwards).

 Low-carbon fuel vessels		
CONTENT	PHASED TASKS	KEY PARTICIPANTS
Increase the deployment of vessels using low and zero carbon fuels, with an initial focus on low carbon biofuels/methanol dual-fuel vessels, leveraging existing feasibility studies and bunkering capabilities at both ports.	Short-term: Conduct baseline research on vessel types, current and potential future vessel mix, shore power receiving facilities, and fuel structure on the Shanghai-Melbourne route. Medium-term: Pilot demonstration, in conjunction with shipping companies, strive to deploy at least one low-carbon fuel container vessel on the route.	• Port of Melbourne • SMTC • Shipping lines

 Terminal operations decarbonisation		
CONTENT	PHASED TASKS	KEY PARTICIPANTS
Reduce port-side emissions through: shore power; electrification of cargo handling equipment; electrification and low carbon fuels for port service vessels; increased use of renewable energy, enhancing cargo handling and vessel turnaround efficiency.	Short-term: Assess current shore power and clean energy supply status at both ports. Medium-term: Advance the development of shore power capability at the Port of Melbourne, and determine the feasibility and timelines for major container berths in the long-term.	• Port of Melbourne • SMTC • SIPG

Integrated fuel supply chain		
CONTENT Work with energy providers, including HAMR Energy, ABEL Energy and Shenergy to develop an efficient and scalable supply chain covering fuel production, transportation, storage, and bunkering.	PHASED TASKS Short-term: Draw on experience from green corridors such as Los Angeles-Long Beach-Shanghai, and determine the definition of low-carbon fuels and establishing a certification mechanism. Medium-term: Advance the development of green fuel local production and refuelling facilities in Melbourne, enabling both ports to provide green fuel bunkering or trade for corridor vessels.	KEY PARTICIPANTS • Port of Melbourne • SMTC • HAMR Energy • ABEL Energy • Shenergy

End-to-end supply chain decarbonisation		
CONTENT Partner with one to two major importers to explore full supply chain decarbonisation from origin to destination, including road and rail connectivity.	PHASED TASKS Long-term: Reduce landside freight emissions via mode shift to rail, high productivity electric road freight, and network efficiency.	KEY PARTICIPANTS • Port of Melbourne • SMTC





Digitalisation

CONTENT

Advance digitalisation to enhance efficiency and optimisation through data sharing, connectivity and interoperable systems.

PHASED TASKS

Short-term: Assess existing digital capabilities and identify opportunities for improved port-to-port data connectivity.

Medium- and long-term: Support improved data sharing and collaboration between Shanghai and Melbourne to enable more efficient and coordinated corridor operations.

KEY PARTICIPANTS

- Port of Melbourne
- SMTC
- SIPG



Knowledge sharing and capacity building

CONTENT

Facilitate technical exchange, training, and dissemination of best practices, including safe handling of low carbon fuels.

PHASED TASKS

Short-term: Establish regular cadence joint virtual meetings and annual in-person meeting.

Medium-term: Develop joint guidance materials on safe handling across the production, storage, transport, and bunkering of low carbon methanol and other emerging fuels, drawing on Port of Melbourne's LCM feasibility study and SIPG's methanol bunkering experience.

Long-term: Establish an enduring framework between Shanghai and Melbourne to support ongoing technical exchange, joint learning and capacity building for green shipping corridor development.

KEY PARTICIPANTS

- All partners

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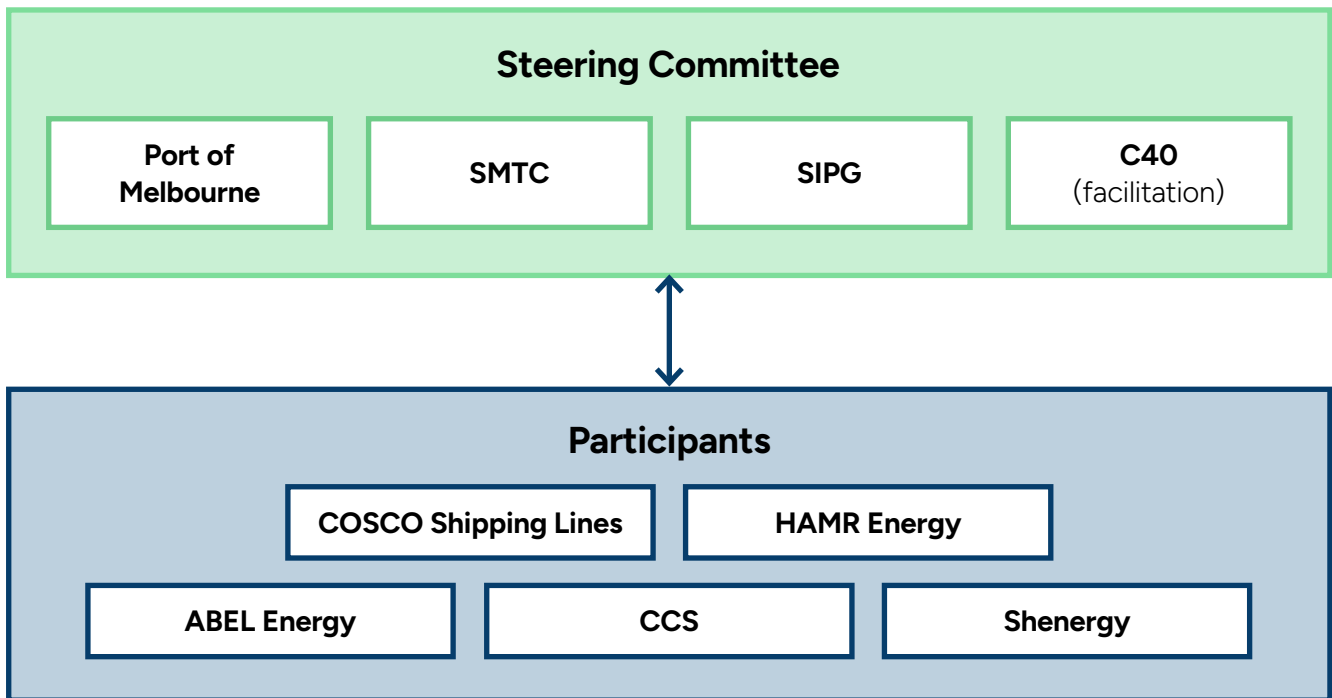
Working structure and partnership engagement

3.1 Working structure and roles

The working structure defines roles and responsibilities for developing and implementing the corridor. This is subject to change as the corridor progresses.

Category	Role	Entity
Steering Committee	- Lead strategic decision-making and programme management via the Steering Committee. - C40 provides support on the development and implementation of the GSC through convening, facilitation, coordination, and communication activities.	- Port of Melbourne - SMTC - SIPG - C40
Participants	All the partners make corresponding contributions to specific activities, deliverables, and resources.	- COSCO Shipping Lines - HAMR Energy - ABEL Energy - China Classification Society (CCS) - Shenergy





3.2 Meetings and decision-making

Steering Committee Meetings

The Steering Committee is responsible for management of the corridor and strategic decision-making.

Responsibilities:

- Develop partnership material e.g., Implementation Plan
- Approve the GSC's annual work plan
- Make strategic decisions affecting the vision, aims, or actions of the corridor
- Approve new Participants and Supporters
- Sign off on internal and external communications regarding corridor activities
- Review progress reports and approve annual reporting

Decision-making process:

- Strategic decisions require unanimous approval from the Steering Committee
- Decisions may be made at meetings, workshops, or by email
- Records of decisions will be kept and communicated to all Participants and Supporters

Full Partnership Meetings

All **Participants** are convened regularly to share progress, identify cross-workstream synergies, and engage with potential new partners.

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