

# Marinus Link – Financial Risk Management Considerations

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#### Introduction

Chatham Financial Pty Ltd ("Chatham"), has prepared this document for Marinus Link Pty Ltd ("MLPL") to provide an overview of the financial market risks associated with the Marinus Link Project ("the Project"), and detail the guidelines which will be followed to appropriately manage these financial risks, including through the use of financial instruments, where appropriate The hedging executed up until the notice-to-proceed ("NTP"), along with the associated rationale, will be documented in addition to the proposed foreign exchange ("FX") hedging strategy at NTP.

On the basis of market discussions to date, Chatham's recommendation is to hedge FX risk for the period from NTP to project completion, estimated to cost around A million, noting that this remains subject to further due diligence and negotiations with the hedging banks. Hedging the FX risk through the construction period will ensure that MLPL is not exposed to adverse movements in foreign exchange rates. In relation to commodity price risk, this will be allocated to the Cable Contractor from NTP as they will be best placed to manage this risk.

#### **Project Overview**

The Marinus Link Project, which is being developed by MLPL involves the construction of a ~255km undersea High Voltage Direct Current ("HVDC") cable and a ~90km underground HVDC cable, along with converter stations in Tasmania and Victoria, and will deliver low-cost, reliable and clean energy for customers in the National Electricity Market ("NEM").

The project financing will come from equity (from three government shareholders) with the remaining capital funded via The Clean Energy Finance Corporation ("CEFC") with fixed rate debt. The base currency of the Project is Australian Dollars ("AUD").

The Project has signed Engineering, Procurement and Construction ("EPC") contracts with the below contractors:

- 1. Prysmian Group, to manufacture the Submarine and Underground cables. This contract has price adjustment mechanisms linked to various commodities prices (E.g., LME Copper, LME Aluminum, LME Lead, Bunker Fuel), with the contract value risk quantified in EUR and USD.
- 2. Hitachi Group, to design and supply the build of the Tasmania and Victoria converter stations. This contract has supply cost exposures linked to various benchmark indices and exchange rates, such as **USD**, **SEK** and **EUR**.

Chatham have reviewed the contract price adjustment mechanisms in each schedule, with these contracts creating an exposure for the Project to currency and commodity at NTP, expected in August 2025. It is noted that MLPL executed pre-NTP hedging in September 2024, with this hedging to mature at the earlier of issuance of NTP or December 2025.

### 1. Commodity Exposure Summary:

Type Commodity (Metric Tonnes) Local Price per Tonnes <sup>1</sup> Converted to AUD	Туре	Commodity (Metric Tonnes)	Local Price per Tonnes <sup>1</sup>	Converted to AUD
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<sup>&</sup>lt;sup>1</sup> Prevailing price at time of commodity hedge execution on the 24<sup>th</sup> September 2024.

	Copper	9,930 USD	
Prysmian: Submarine and Underground Cable	Aluminium	2,673 USD	
	Lead	2,174 USD	
	Marine Gas Oil	577 EUR	
Total			

### 2. Foreign Exchange Exposure Summary:

Туре	Local Currency	Local Currency Amount <sup>2</sup>	Converted to AUD
Prysmian: Submarine and Underground Cable	EUR		
117. 1. 7	USD		
Hitachi: Tasmania and Victoria  Converter Stations	SEK		
Converter Stations	EUR		
	Total		

### **Hedging Principles**

Hedging is a financial technique that uses derivative products to reduce exposure to the volatility and unpredictability of foreign exchange and commodity markets, by providing a fixed exchange rate or commodity price for a future cash flow.

The use of hedging will provide several benefits to the Project, including:

- 1. Mitigating the risk of adverse foreign exchange and commodity movements that may affect performance and profitability.
- 2. Enhancing planning and forecasting by reducing uncertainty and aligning budget / forecast costs with realised costs.
- 3. Improving cash flow management by ensuring the Project has sufficient funds in the required currencies to meet future obligations.
- 4. Increasing competitiveness and attractiveness by offering more certainty and transparency to stakeholders.

However, hedging can present certain challenges and trade-offs, including:

- 1. Additional costs and fees for hedging instruments, such as margins or premiums. These costs reduce the net benefit of hedging.
- 2. Operational and contractual complexities for executing, monitoring and adjusting hedging instruments.
- 3. Loss of flexibility such as reduced participation in upside rate movements, or a change in the Project's circumstances, i.e. changes in cash flow timing and amount.

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<sup>&</sup>lt;sup>2</sup> Prevailing price at time of foreign exchange hedge execution on the 24<sup>th</sup> September 2024.

- 4. Potential liquidity / cash events such as settlements on short-dated trades, or cash posting on long-dated trades.
- 5. Basis risks where the hedge does not exactly match the underlying project exposure and hence does not move 1:1 with changes.
- 6. Introducing counterparty risk whereby the bank cannot perform its obligations under the hedging contracts, quotes uncompetitive pricing or decides to stop trading with the Project.
- 7. Hedging regulations and reporting requirements. There are no extensive requirements in Australian jurisdictions, however, trading with European and American counterparties introduces more stringent regulations with EMIR and Dodd-Frank considerations.

To create a prudent and efficient hedging strategy, quantitative analysis was conducted to assess the sensitivity of construction costs to changes in various commodity price and currency levels from now until the hedge execution date, expected around the time of issuance of NTP. This will inform MLPL on the size of the FX exposures, and consequently the size of any potential increase (and decrease) in the AUD required between now and NTP. It is noted that commodity price risk will be transferred to the Cable Contractor upon issuance of NTP.

Other key factors to consider include:

- 1. Risk appetite of key Project stakeholders
- 2. Need for cash flow certainty versus the flexibility of changing conditions.
- 3. Hedging product alternatives, their availability, benefits and costs.
- 4. Optimal hedging ratio, timing and duration.
- 5. Determination of a suitable hedging provider(s).
- 6. Market conditions and parameter constraints, such as size and tenor.

These considerations are addressed in the next two sections where relevant.

#### **Exposure Analysis Method**

Chatham have conducted a series of simulations in order to estimate the size of the pre-NTP currency and commodity exposures, and consequently any potential increase in the AUD required between today and NTP under various scenarios.

This exercise utilises weak/strong currency and commodity scenarios that correspond with the plus (+) / minus (-) one and two standard deviation movements from the current forward curve, which correspond respectively with a 68% and 95% confidence level.

For the foreign currency exposure analysis, the standard deviation movements use forward looking volatility (i.e., implied volatility) based on the underlying foreign exchange (and interest rate) market, whereas for the commodity analysis, standard deviation price shocks have been incorporated from historical market volatility over the last 3-5 years.

The CFaR modelling uses **implied volatility to derive standard deviation movements for each currency pair.** Implied volatility is a forward-looking metric derived from option prices: e.g. traded caps and swaptions. Implied volatilities are the standard deviation parameters which make the modeled prices tie to observed market prices. Implied vols can be seen as the market's view of the level of uncertainty over some future period.

Intuitively, when markets anticipate increased uncertainty, option prices tend to rise, and implied volatility increases. Being a forward-looking measure, implied volatility can change immediately in response to news or events (unlike any historical measures, which can take time to reflect changes).

Chatham leveraged FX standard deviation cones: FX Cones represent lognormal scenarios of the spot rate at selected quantiles. A 95th percentile spot rate corresponds to a 1.6 standard deviation shock. The shocked rates at each respective date are then applied to the respective cash flows to calculate the potential "worst-case" quantum in AUD terms. These figures are then compared to the base scenario where FX rates follow the forward curve to calculate the cash flow at risk.

Further, the foreign currency analysis assumes all currency rates (i.e., EUR, SEK and USD) continually appreciate or depreciate between now and an assumed NTP date in Q4 2025 (i.e., no historical Foreign Exchange correlations have been included); this is a slightly conservative approach. Whereas for the commodity analysis, we have accounted for historical commodity correlations.

These currency and commodity forward scenarios are then applied against the respective currency and commodity exposure sizes in each contract to determine the increase in AUD required per currency, between now and an assumed NTP date of August 2025.

A summary of the analysis is outlined below. A positive Cash Flow at Risk ("CFaR") represents the one-and-two downside standard deviation incremental cost over and above the tender offer:

## **Currency CFaR (Hitachi and Prysmian Contract):**

- 1. Up to \$ (-2 std. dev.) ( % of total AUD currency exposure).
- 2. Up to \$ m (-1 std. dev.) ( % of total AUD currency exposure).

### **Hedging Alternatives – Foreign Exchange**

In this section we describe the timing and manner in which the Project can de-risk currency exposures, using low cost and efficient hedging products. A series of five hedging strategies / alternatives will be considered to mitigate the potential increase in AUD required per currency, with implementation to occur at the below timing points:

- 1. Pre-NTP: outright FX forwards were executed as it was assessed to be the most efficient (no upfront premium compared to option and a deal contingent product is significantly greater than the cost of an outright) and effective (~ 1:1 offset with underlying movement as it hedges the spot price movements) product. A summary of products considered is outlined below:
  - a) Remain unhedged all supply costs will be subject to exchange rate movements.
  - b) Execute an outright FX forward this product locks in a known AUD amount required at NTP to fund supply costs, removing future uncertainty related to spot movement at no upfront cost (preferred option)
  - c) Execute an outright FX option this product establishes a known worst-case FX risk whilst permitting the Project to benefit from favourable FX movements, in exchange for a significant upfront premium.
  - d) Execute a deal contingent FX forward ("DCF") this product involves the bank underwriting the dead deal cost of the hedge if NTP does not occur. A premium (in the rate versus (b) above) is paid for the

- flexibility of not having to settle a hedge MtM liability if the deal fails to complete. The due diligence process for this trade is very involved and banks generally would want access to Project documents.
- e) Execute a deal contingent FX option ("DCO") Here, similarly to (c) above, the option establishes a worst case risk, with the bank bearing the dead deal cost of having to pay the premium cost should NTP not ultimately occur. The due diligence process for this trade is involved and banks generally would want access to documents which the project may not be comfortable sharing.
- 2. At or near NTP: whilst the Hitachi and Prysmian contracts were signed in August 2024, a decision was made to first de-risk the Project until NTP, and at NTP, the hedging will be updated to match up to date expectations for the milestone payment dates in the Hitachi and Prysmian contracts. This approach not only splits the hedging costs into pre vs post NTP stages, but also affords the Project flexibility to accommodate changes in the Project timeline, and limit transaction costs in the event of a negative NTP decision.
- 3. Post NTP: further revisions of hedging dates may also be required once the building of the Project is underway.

#### Market insights:

- At the time of execution of the pre-NTP hedging, the forward curve until the end of 2025 for USD, EUR and SEK resulted in a slight drag in the amount of foreign currency purchased relative to the spot rate (when selling AUD).
   For USD, this drag was not material (-0.03% p.a.), whilst for EUR and SEK the drag was more substantial at roughly -1.85% and -2.05% p.a. respectively.
- The USD, EUR and SEK markets are very liquid with daily spot volumes averaging USD 40bn, USD 20bn and USD 15bn respectively. Additionally, they can cater for long tenors with up to 10Y for USD and EUR and 5Y for SEK.

### **Hedging Alternatives - Commodities**

For the commodity market risk inherent to Prysmian contracts, Prysmian will execute hedges on behalf of MLPL at NTP, meaning the Project is effectively exposed to commodity risk only until NTP. The hedged price that Prysmian receives from its counterparties is then subsequently used to calculate the contract price adjustment of the pre-NTP hedges that have already been implemented.

## **Summary and Recommendation**

- Over the course of March to June 2024, MLPL worked with Chatham to prepare a pre-NTP financial risk strategy that included a proposal to hedge the project's FX and commodity price exposure.
- The rationale for hedging was based on MLPL having executed EPC contracts that contained fixed foreign
  currency requirements and commodity tonnages, making it important to secure cost certainty in a volatile
  market, especially given the relatively long timeframe to NTP. This approach would provide price certainty for
  MLPL, its shareholders, debt financiers, the AER and customers
- In June 2024, the MLPL Board approved a strategy to hedge the Marinus Link Project's foreign exchange and commodity price exposures inherent in the underlying EPC contracts for both Cable and Converter. This was approved as part of MLPL's overall financial risk management strategy. The hedging will be executed across two distinct time periods, being pre-NTP and post-NTP. The MLPL Board approved the pre-NTP hedging execution and noted post-NTP hedging, with approval for post-NTP hedging to be sought at a later date (closer to NTP in August 2025).

- In conjunction with Chatham, MLPL conducted a market sounding process during July 2024 and reached out to potential hedging banks to provide FX and commodity price hedging.
- MLPL executed hedging documentation and hedged FX and commodity price exposure during September 2024.
- The cost of hedging is composed of the following components:
  - o Forward points: the difference between the spot rate of a currency pair and the future exchange rate, as driven by ever evolving yield differentials between the two countries. This component is unknown up until the point of execution.
  - Market slippages: covers the bank trading desk for a change in bid/ask spreads at the time a market order is executed. This component is locked in as part of the price discovery stage during the market sounding.
  - Credit cost: cost for executing credit intensive hedging products that require a future exchange of cashflow(s). This component is locked in as part of the price discovery stage during the market sounding.
- For pre-NTP, the total cost of hedging was circa A\$ m.
- To assist with MLPL's Revenue Proposal to the Australian Energy Regulator ("AER") in November 2024, Chatham
  estimated the post-NTP, total cost of hedging attributed to market slippages and credit costs, noting that the
  realized amounts were subject to a market sounding letter at that time which will ensure the most competitive
  outcome for the Project.
- Chatham estimated, during the pre-NTP hedging phase, that the post-NTP cost of hedging could amount to be circa A\$ million in total. It is incrementally more expensive to execute in the longer dated forward hedging market, and with an extended weighted average life of hedging being required circa 4Y for EUR, 2.75Y for USD and 2.5Y for SEK Chatham estimates a more material cost to hedging.
- It is noted that the hedging cost assumes a zero mark-to-market scenario at time of extension.
- Based on an indicative and non-binding market sounding process conducted in Q1 2025, where Chatham and MLPL reached out to its existing hedging banks to gauge an understanding of updated hedging costs. The indicative feedback was that the post-NTP hedging costs for FX hedging would be around A\$ million.

**Disclaimer:** This report has been prepared solely for Marinus Link Pty Ltd and does not serve as advice or a recommendation to, and Chatham does not accept liability to, any third parties who review the report.