Q4 '24 Earnings Presentation

February 6, 2025

CAPITAL
CLEAN ENERGY CARRIERS CORP.

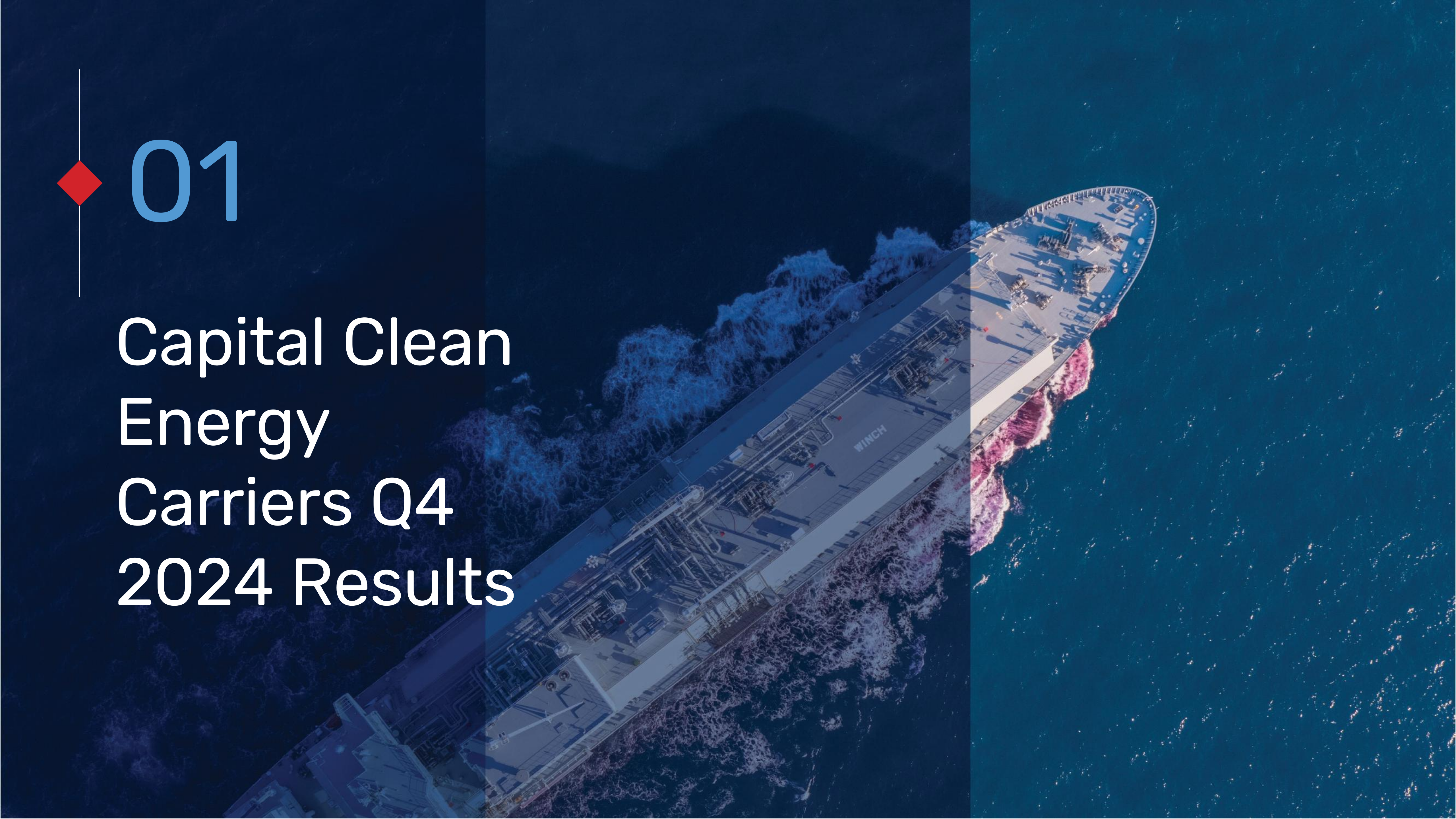
CCEC
NasdaqListed

www.capitalcleanenergycarriers.com

Important Notice

This presentation contains forward-looking statements (as such term is defined in Section 21E of the Securities Exchange Act of 1934, as amended). These statements can be identified by the fact that they do not relate only to historical or current facts. In particular, forward-looking statements include all statements that express forecasts, expectations, plans, outlook, objectives and projections with respect to future matters, including, among other things, the expected financial performance of CCEC's business, the effect of our conversion from a limited partnership to a corporation, CCEC's expectations or objectives regarding future dividends, and market and charter rate expectations. These forward-looking statements involve risks and uncertainties that could cause the stated or forecasted results to be materially different from those anticipated. For a discussion of factors that could materially affect the outcome of forward-looking statements and other risks and uncertainties, see "Risk Factors" in CCEC's annual report on Form 20-F filed with the SEC on April 23 2024 and the risk factors set our in exhibit 99.8 to our report on Form 6-K published on August 26, 2024. Any forward-looking statements made by or on behalf of CCEC speak only as of the date they are made. Unless required by law, CCEC expressly disclaims any obligation to update or revise any of these forward-looking statements, whether because of future events, new information, a change in its views or expectations, to conform them to actual results or otherwise. You are cautioned not to place undue reliance on forward-looking statements.

CCEC
NasdaqListed



01

Capital Clean Energy Carriers Q4 2024 Results

Fourth Quarter 2024 Highlights & Update

CAPITAL
CLEAN ENERGY CARRIERS CORP.

Financial Performance & Operating Highlights*

- Q4 2024 net income from continuing operations $20.8 million
- Declared dividend $0.15 per share for quarter
- Average remaining charter duration of 7.0 years
- 2025 charter coverage 100%, 74% for 2026 and 47% for 2027
- $2.5 billion in contracted revenues – 86% from LNG/Cs

LNG market – short term challenges but medium & long term growth underpinned

- **Short term** LNG spot market driven by vessel supply dynamics & trading patterns impacting tonne-mile demand. CCEC is insulated from current spot market conditions
- **Medium term** vessel supply side correction expected with the commercial removal of older, smaller and less efficient vessels
- **Long term** vessel demand expected to significantly outpace modern tonnage supply

Sale of five containers to complete in Q1 2025; ATM program

- Five legacy container vessels agreed to be sold for book gain of USD 118.4 million
- Three vessels delivered in Q4 2024 and one in January 2025. We expect the fifth to be delivered within Q1 2025
- ATM program initiated – looking to address share liquidity

* As of December 31, 2024. Assumes the exercise of the first two options (total 4 years per vessel) for the three vessels on charter to BP. BP has already exercised their first option for the LNG/Cs Aristos I and Aristidis I. Excludes revenue of Axios II based on index-linked, one-year TC.

02

Financials

CCEC
NasdaqListed

www.capitalcleanenergycarriers.com

Profit Statement – Highlights

CAPITAL
CLEAN ENERGY CARRIERS CORP.

($ In Thousands)

	For the Three-Month Period Ended December 31, 2024	For the Three-Month Period Ended December 31, 2023
Revenues	**105,118**	**64,190**
Expenses:		
Voyage expenses	2,596	2,334
Vessel operating expenses	15,056	10,043
Vessel operating expenses – related parties	2,623	1,778
General and administrative expenses	4,272	5,735
Vessel depreciation and amortization	24,192	14,478
Impairment of vessel	-	3,201
Operating income, net	**56,379**	**26,621**
Other income / (expense), net:		
Interest expense and finance cost	(36,653)	(25,808)
Other income, net	1,118	292
Total other expense, net	**(35,535)**	**(25,516)**
Net income from continuing operations	**20,844**	**1,105**
Net income from discontinued operations	**81,412**	**11,625**
Net income from operations	**102,256**	**12,730**

Key commentary

1. Solid Operational Quarter
2. Total net income $102.3m including vessel sale gains
3. Dividend per share $0.15 maintained

Balance Sheet – Highlights

CAPITAL
CLEAN ENERGY CARRIERS CORP.

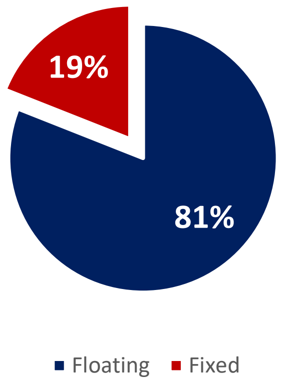
($ In Thousands)

	As at end December 31, 2024	As at end December 31, 2023
Assets		
Current Assets	405,543	225,504
Fixed Assets	3,581,305	2,387,013
Other Non-Current Assets	126,034	527,782
Total Assets	**4,112,882**	**3,140,299**
Liabilities and Shareholders' Equity		
Current Liabilities	225,377	183,930
Long-Term Liabilities	2,544,536	1,781,436
Total Shareholders' Equity	1,342,969	1,174,933
Total Liabilities and Shareholders' Equity	**4,112,882**	**3,140,299**

Key commentary

1 Leverage ratio[1] reduced in Q4 2024 to 49.2% from 52.8% end Q3 2024

2 Seller's credit repaid in full



Of our debt, 81% or $2.1 billion is floating, at an average weighted margin of 1.84%, as of December 31, 2024, and $505.0 million is fixed, at an average weighted cost of 4.41% as of December 31, 2024

A 100bps decrease in interest rates would result in a decrease of about $20.3 million in our interest cost.[2]

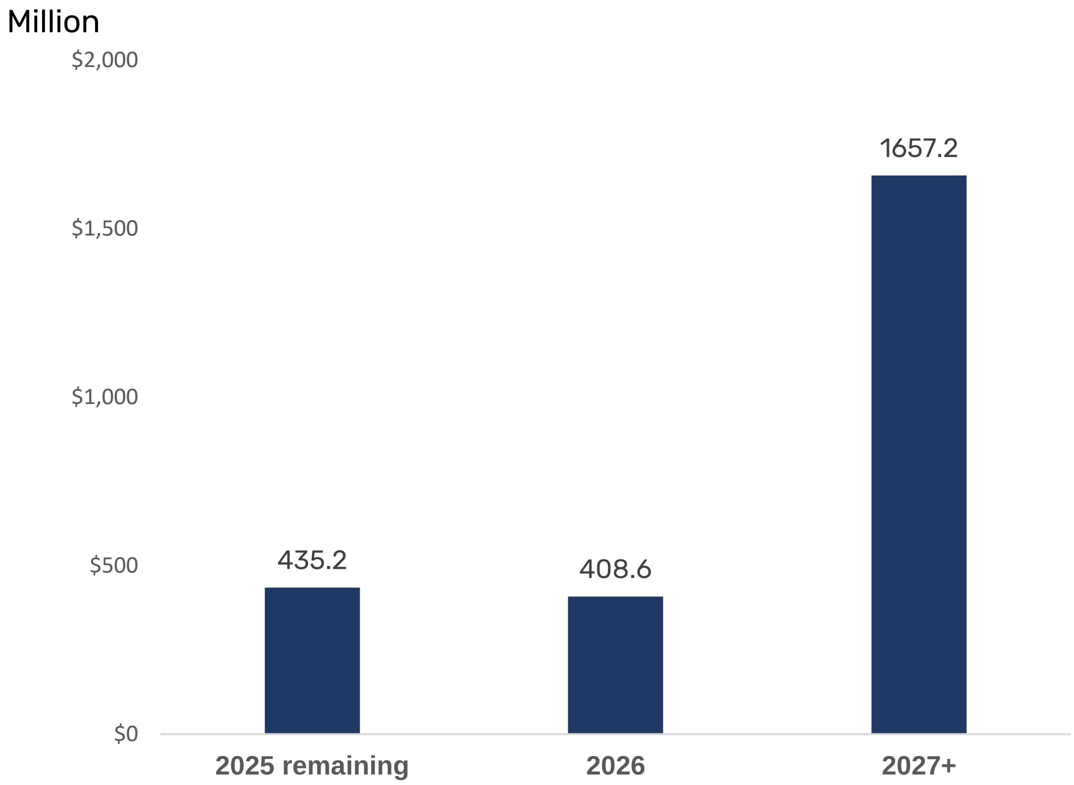
1. As defined in our financing agreements adjusted for the fair market value of our vessels. Market value of vessels being the average of values indicated by two independent appraisers.
2. As of December 31, 2024. Calculated basis the relevant average balances for the next 12 months

Diversified Contracted Revenue

CAPITAL
CLEAN ENERGY CARRIERS CORP.

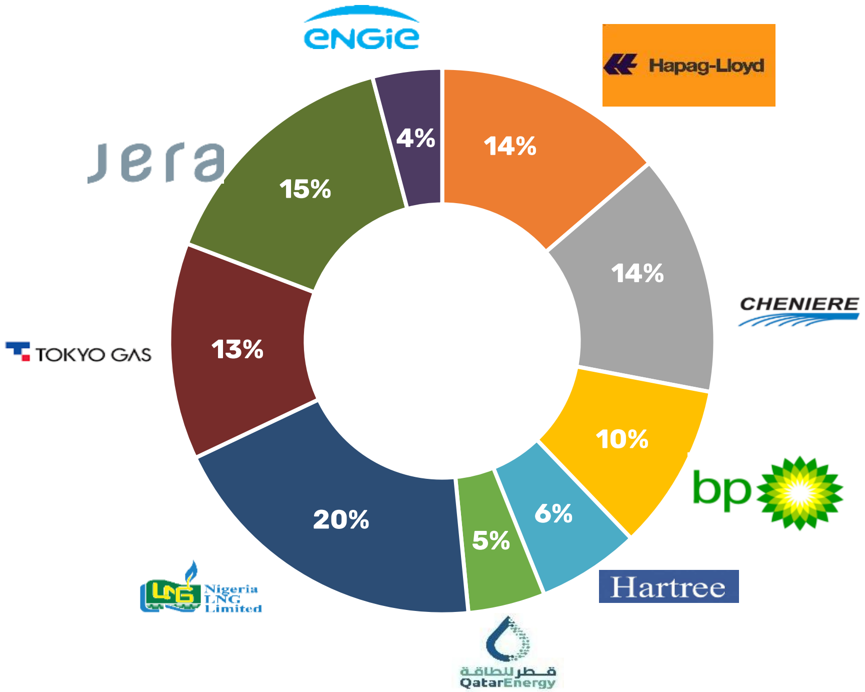
Contracted Revenue*

Contracted Revenue Backlog: $2.5 billion



Contracted Revenue Contribution*

High Quality & Diversified Customer Base



~7.0 years* average remaining charter duration
~86% of contracted revenue, or $2.2 billion, from LNG assets

* As of December 31, 2024. Assumes the exercise of the first two options (total 4 years per vessel) for the three vessels on charter to BP. BP has already exercised their first option for the LNG/Cs Aristos I and Aristidis I. Excludes revenue of Axios II based on index-linked, one-year TC.

03

LNG Fleet & Market

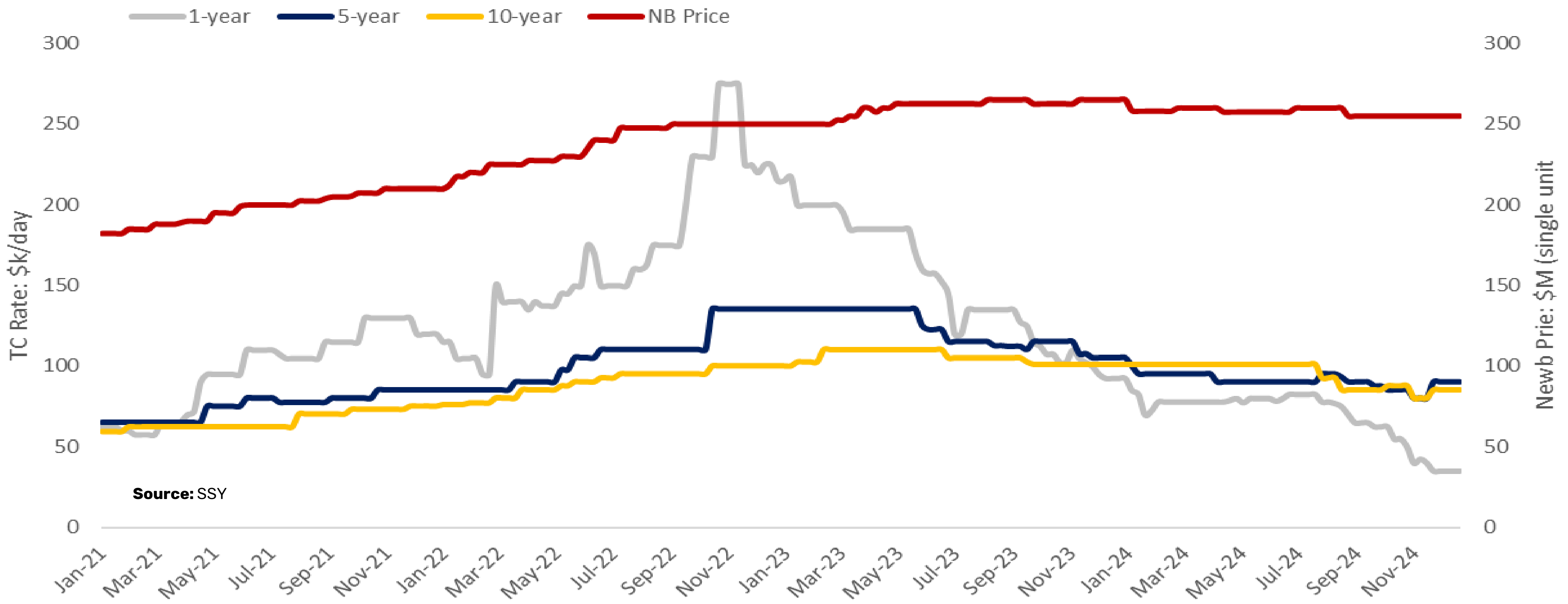
CCEC
NasdaqListed

www.capitalcleanenergycarriers.com

Short-term rates under pressure driven by supply issues not demand

CAPITAL
CLEAN ENERGY CARRIERS CORP.

2- Stroke Term Charter Rate And NB Price



Source: SSY

Key factors driving lower short-term rates

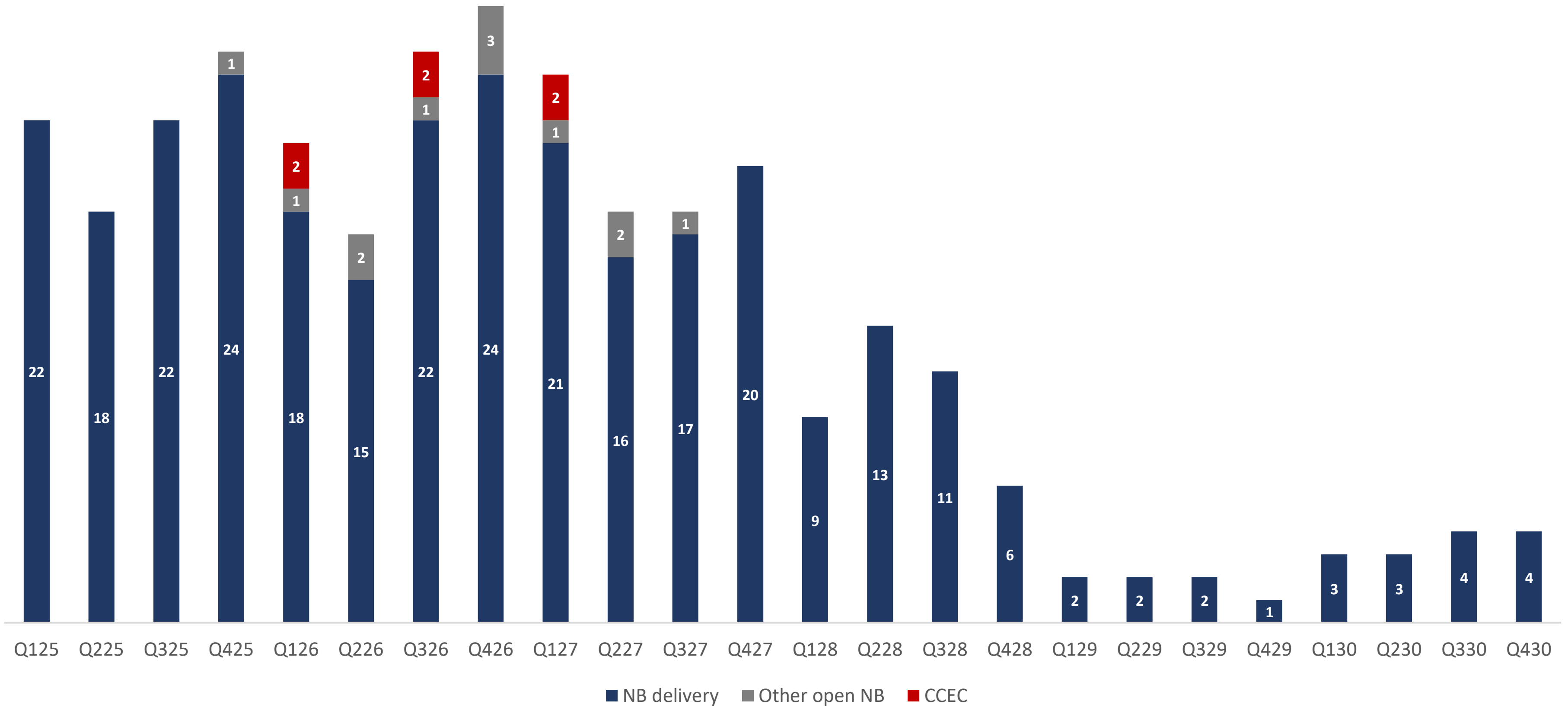
Short term oversupply of vessels

Absence of inter-basin arbitrage opportunities and thus lower tonne-mile demand

Majority of LNG/C Orderbook already committed to long term contracts

CAPITAL
CLEAN ENERGY CARRIERS CORP.

Only 18 out of 317 (5.6%) of LNG/C deliveries are open – CCEC has 6 of these slots

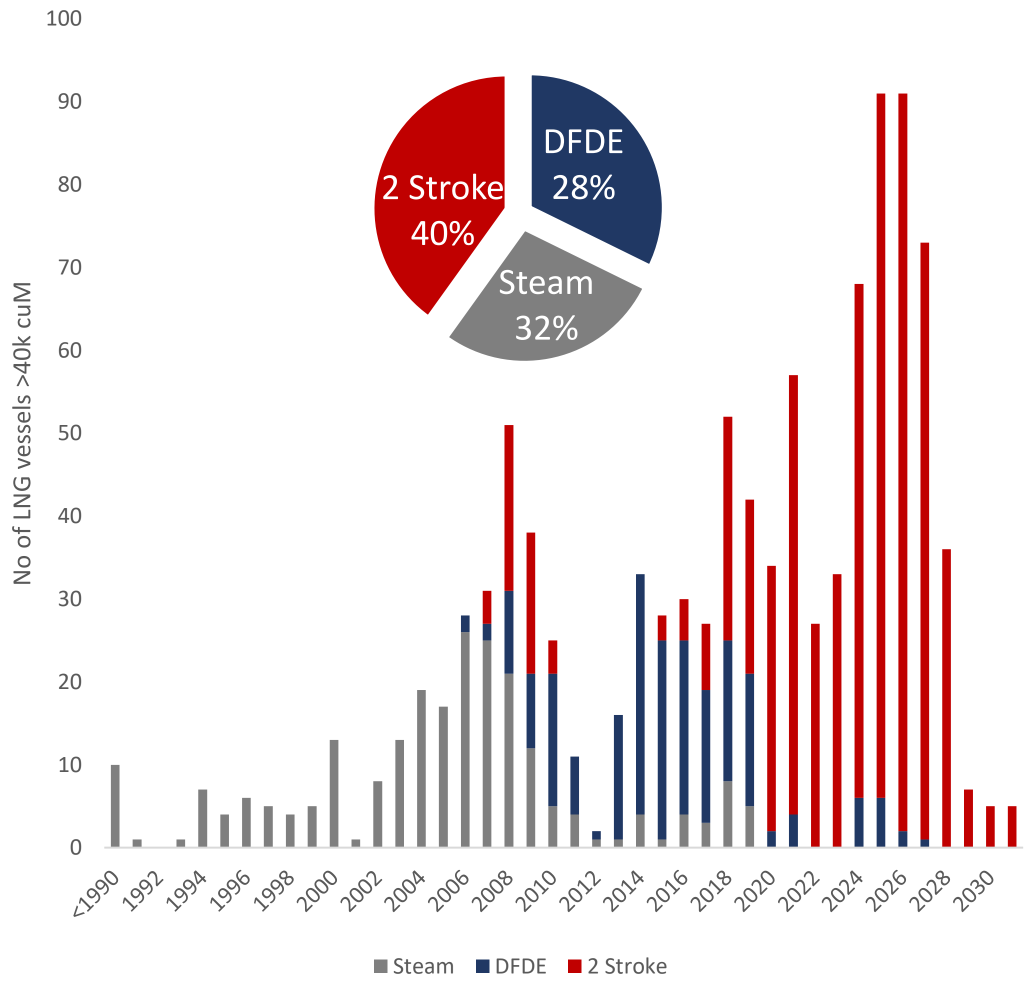


Source: Affinity

LNG Global Fleet – low spot rates should start to drive structural change

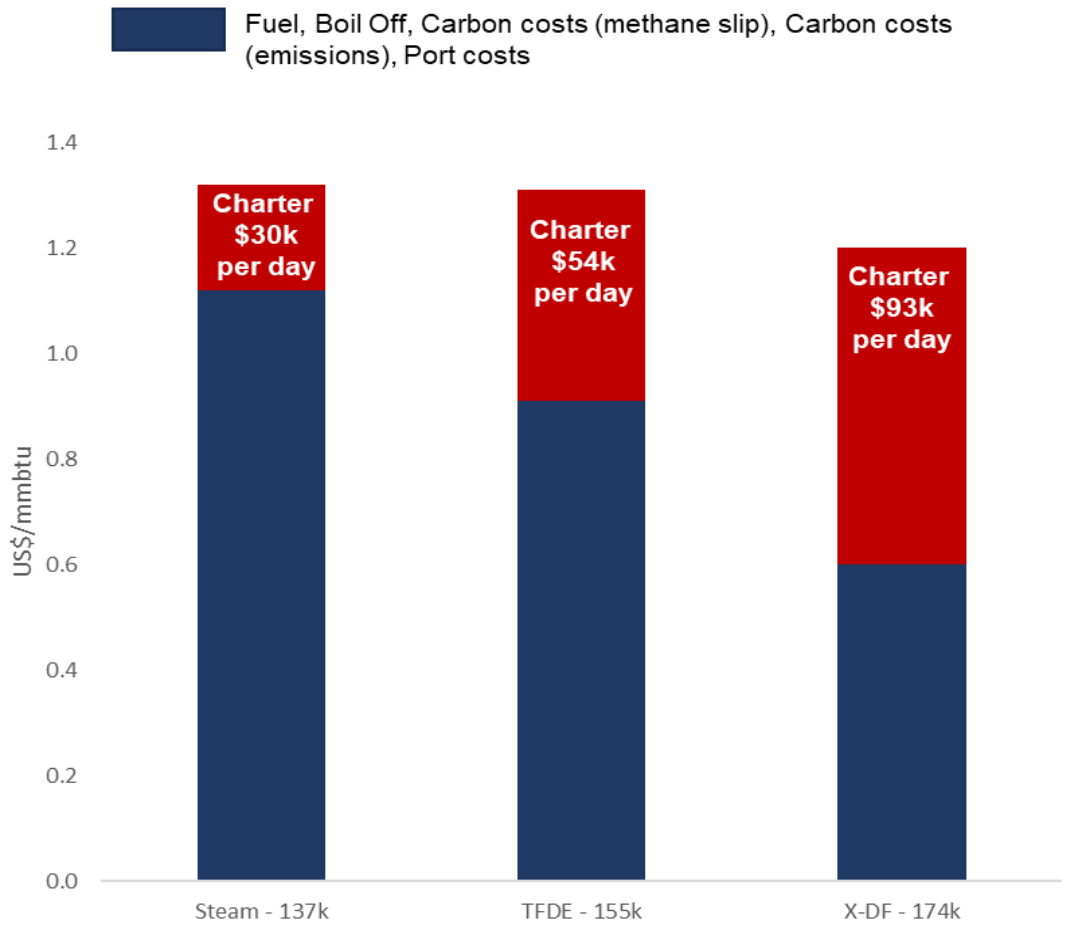
CAPITAL
CLEAN ENERGY CARRIERS CORP.

Three distinct technologies within LNG/C fleet



Source: Clarksons

Steam turbines under structural pressure



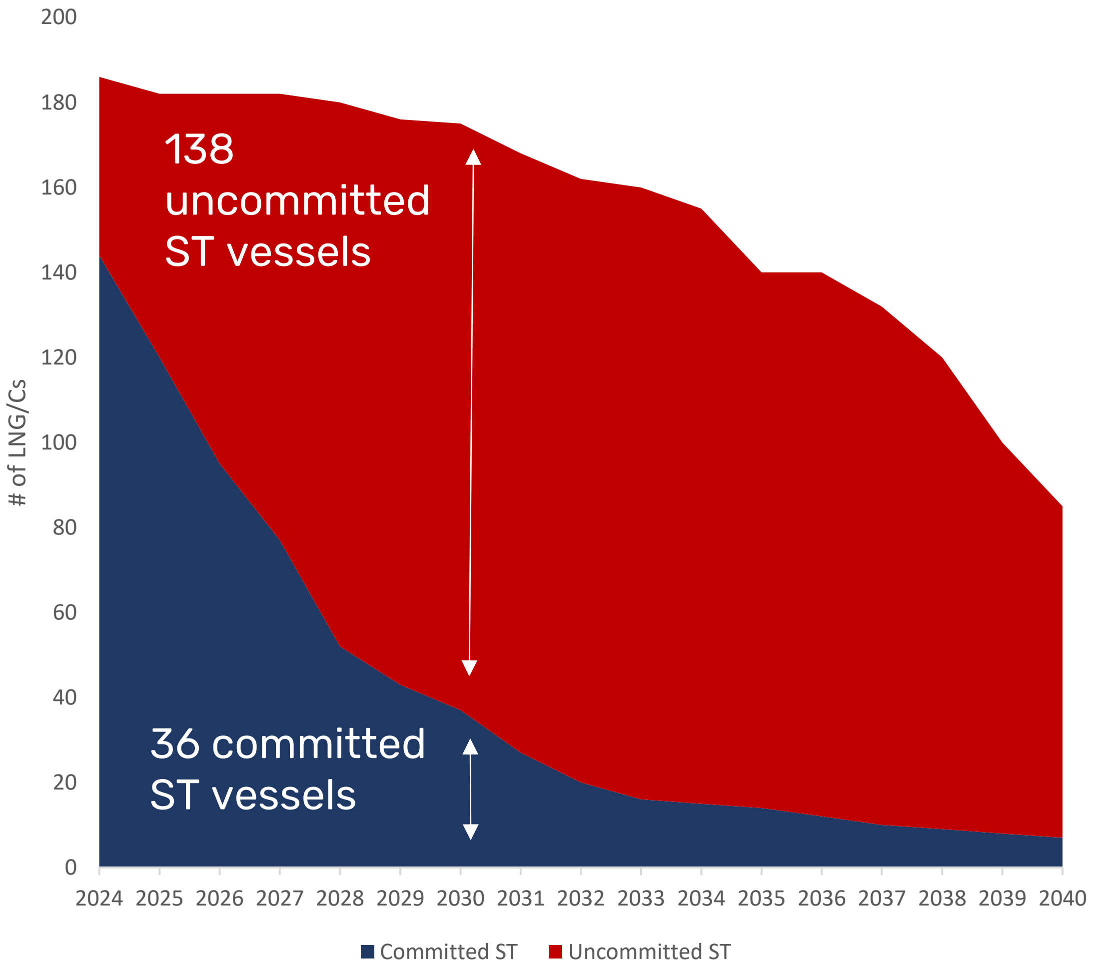
Source: Poten

Key assumptions	Voyage distance - 4929 nm	EUA price - $78 per ton
Boil off - $15 mmbtu	Vessel speed - 19 knots	Port costs - $500,000

LNG Global Fleet – Likely to see (more) supply-side response from older vessels

CAPITAL CLEAN ENERGY CARRIERS CORP.

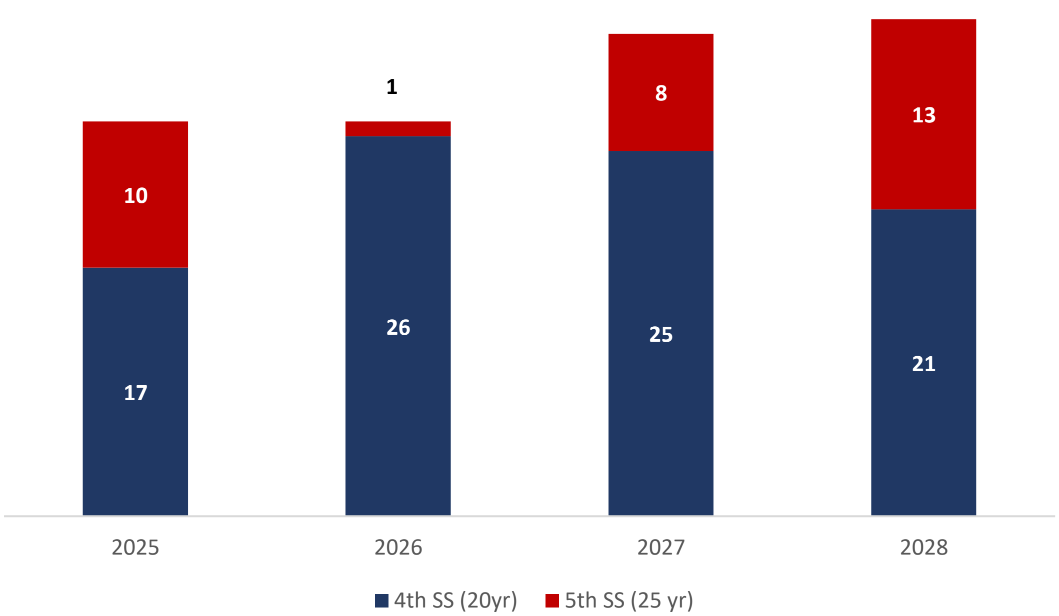
Steady redelivery of steam LNG vessels to come



Source: Poten

Dry Dock schedule facing Spec Survey 4 & 5 2025-28

121 LNG/Cs require special survey as they turn 20 or 25 years old between 2025-28



Vessels need DD every 5 yrs; DD cost rise as ships age

75% of Steam fleet globally requires DD in next 4 years

Source: Clarksons, Capital Gas, Broker reports

Strong Liquefaction and Trade Growth

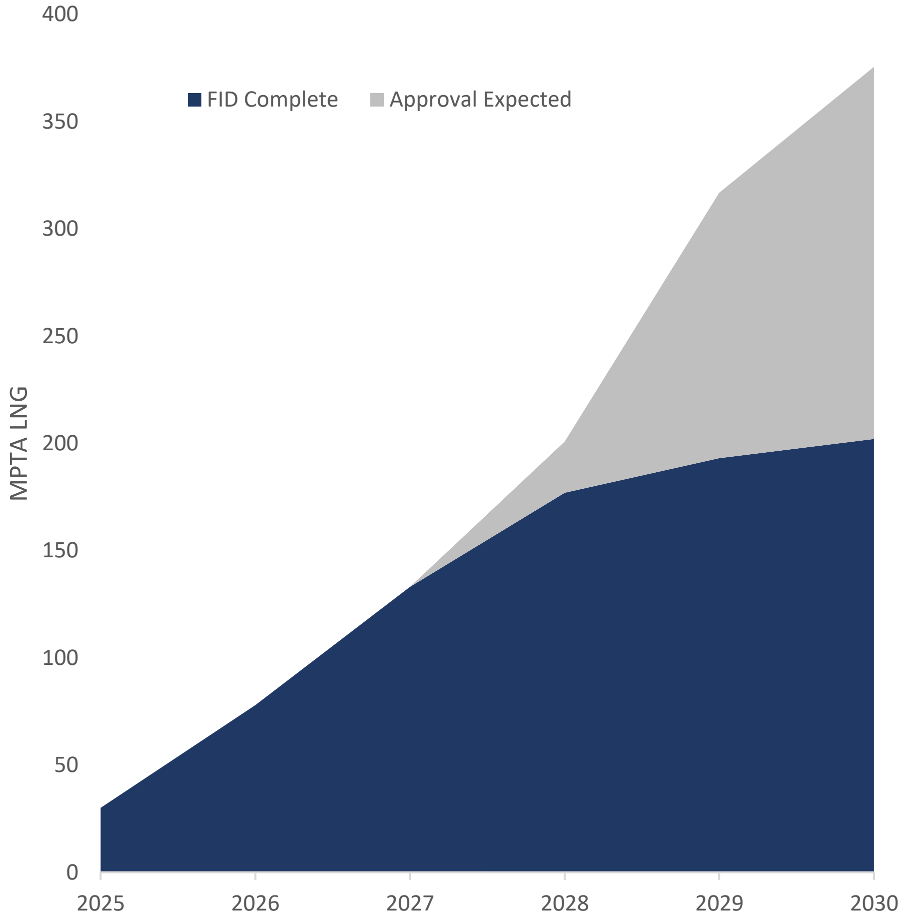
CAPITAL CLEAN ENERGY CARRIERS CORP.

70% Increase in Global Liquefaction Capacity expected by 2030 (Projects Under Construction only)

Significant amount of new liquefaction project capacity under construction or under development

- In 2024, 22 mtpa of new liquefaction nameplate capacity was scheduled to start, but of this scheduled capacity only 8 mtpa of liquefaction capacity was added.
- North American exports are expected to grow by 15% in 2025 (and account for 66% of net global volume trade growth) as projects in the US, Canada and Mexico start up
- Next major phase of export capacity expansion from 2H-25: Plaquemines LNG (13.3mtpa) and Canada LNG (14mtpa)
- US: around 90 mtpa of LNG capacity under construction while projects still face delays as any legislation changes will require several months to be overturned
- There is a significant amount of new liquefaction project capacity under construction or under development. There is approximately 370 million tons of nameplate capacity under development that could potentially come online by 2030

LNG production growth >350MTPA by 2030



170 MTPA = 255LNG/C Required*

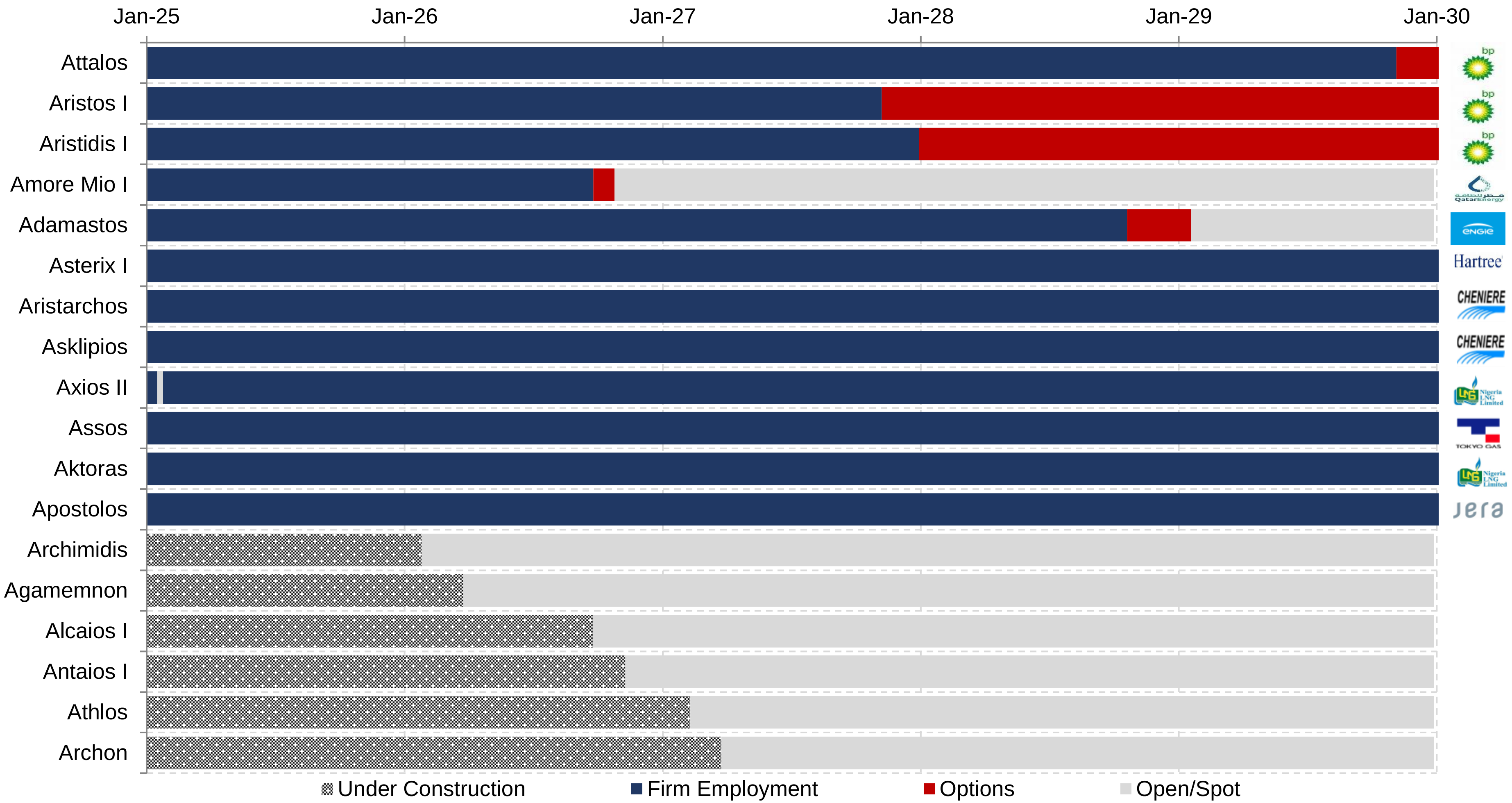
200MTPA = 300 LNG/C Required*

Source: Poten

Charter Profile* - LNG Fleet

CAPITAL
CLEAN ENERGY CARRIERS CORP.

Contracted backlog of 68 years at an average daily rate of $88,407, or ~$2.2bn of revenue
Backlog could increase to 103 years with all options exercised



Firm	With Options
2029	2034
2027	2032
2028	2033
2026	-
2028	-
2030	2032
2031	2035
2031	2035
2032	2035
2034	-
2031	2034
2034	2037
-	-
-	-
-	-
-	-
-	-
-	-

*Estimates as of December 31, 2024, including six LNG/Cs expected to be delivered between the first quarter of 2026 and the first quarter of 2027. Assumes the exercise of the first two options (total 4 years per vessel) for the three vessels on charter to BP.

05

Conclusion & Summary

CCEC
NasdaqListed

www.capitalcleanenergycarriers.com

Very Modern Fleet going forward

CCEC
NasdaqListed

CAPITAL
CLEAN ENERGY CARRIERS CORP.

		On the water						New Deliveries					
LNG carriers All dual fuel 174k cbm		2020	2021	2021	2021	2021	2021	2026	2026	2026	2026	2027	2027
		2023	2023	2024	2024	2024	2024						
Mid Sized Gas carriers	Capable of transporting LPG, NH3							2026	2026	2027	2027	2027	2027
LCO2 carriers	Multi gas carriers capable of transporting Liquid CO2, NH3, LPG							2026	2026	2026	2026		

Containers

2022	2023	2023	13,300 TEU 3x long term charter

Looking at divestment opportunities

Min Expiration	Max Expiration
2032	2038
2033	2039
2033	2039

Capital Clean Energy Carriers – Largest Gas carrier fleet by 2027

CAPITAL CLEAN ENERGY CARRIERS CORP.

✓ Expected to become largest & youngest fleet[1] of energy transition vessels

1.1 Years
Avg. Fleet Age[2]

31 Vessels
Fleet Size[2]

✓ Significant blue chip charter coverage = cashflow stability

bp, CHENIERE, ENGIE, Hartree, Hapag-Lloyd, Nigeria LNG Limited, TOKYO GAS, JERA, قطر للطاقة QatarEnergy

✓ Considerable go-forward growth via unique, high specification newbuilding fleet

6x LNG Carriers
6x Medium Gas Carriers
4x Liquid CO2 Carriers

✓ Growth largely financed via debt & container monetization

$118.4 million
Expected book gain from sale of five container vessels by Q1 2025

3 Vessels
Potential to monetize remaining container vessels

1. Among U.S.-listed shipping companies
2. As of December 31, 2024, including six LNG/Cs expected to be delivered between the first quarter of 2026 and the first quarter of 2027 and ten LPG carriers expected to be delivered between the first quarter of 2026 and the third quarter of 2027. Excluding the one container vessel that we have agreed to sell and expected to be delivered within the first quarter of 2025.

Thank you for your attention

CCEC
NasdaqListed

www.capitalcleanenergycarriers.com