

MARINE
M O N E Y

Green & Sustainability-linked financing for Shipping:

*Understanding the Requirements,
Benefits and Costs of
Responsible Finance*



DATE: SEPTEMBER, 2021

AUTHOR: CAMPBELL HOUSTON - RESEARCH ANALYST
AT MARINE MONEY.

Green and Sustainability-Linked Finance for Shipping

In recent years, a convergence of three factors has led to the adoption of sustainability-linked debt, equity and lease financing by the shipping industry. The first major milestone came in April 2018 when the International Maritime Organization (IMO) adopted an initial strategy calling for international shipping to reduce its GHG emissions by at least fifty percent by 2050 when compared to 2008 levels. The second milestone occurred in 2019 when the Poseidon Principles were officially launched at Marine Money Week. The Poseidon Principles were initially signed by eleven banks, representing over \$100 million of shipping loans. Since launch, it has grown to 26 signatories and the majority of the industry's bank lending volume. Third was the ongoing and widespread embrace of environmental, social, and governance (ESG) considerations by institutional investors. The result of these was that by 2019, according to one CFO of a publicly listed shipping company, every owner needed to have an ESG story if they wanted to continue to be able to access debt capital markets or syndicated loans.

What Makes a Deal “Green” and How Does it Differ from “Sustainability-Linked?”

A “Green” loan, bond or lease can provide financing for a specified project with environmental benefits. In shipping, such projects have included alternatively fueled newbuildings, ballast water treatment, exhaust gas scrubbers, vessel efficiency improvements, and research and development programs.

Sustainability-linked transactions, on the other hand, allow proceeds to be used for general corporate purposes and are not required to directly generate sustainability benefits. Instead, borrowers commit to progress by selecting Key Performance Indicators (“KPIs”) and setting Sustainability Performance Targets (“SPTs”).

For the shipping industry, a reduction of CO₂ emissions per mile per ton of cargo is a nearly universally recognized environmental goal. This goal is deemed to be achieved when a vessel or fleet established a sustainability score KPI and a SPT that matches the IMO's 2050 decarbonization 2050 trajectory. Simply put, the average fuel consumption of each ship, weighted by capacity and number of days owned, is compared against Average Efficiency Ratios (AER) published by the IMO for all common vessel types. The borrower's goal is to meet or exceed the AER, which improves each year at a fixed rate.

It's to note, however, that “sustainability linked” (as opposed to “green”) includes not only climate or environment but also social and governance factors. Hence, an issuer of a sustainability linked debt in the shipping industry may choose to set targets and KPIs with related to health and safety of seafarer/crew, gender diversity, supply chain management and anti-corruption.

Example 1. Dorian LPG Sustainability-Linked Loan

| SPT | KPI ⁴ | KPI Definition | Baseline Date |
|--|----------------------------|--|---|
| Reduction of CO ₂ Emissions in line with IMO 50% by 2050 trajectory | Fleet Sustainability Score | Dorian LPG to achieve or exceed an annual Fleet Sustainability Score based on Average Efficiency Ratio (AER) Trajectory set for each year (see Appendix 1) | Annual trajectory based on IMO 50% decarbonization by 2050 target |

Source: Sustainalytics. (2020, March). Sustainalytics' Opinion Dorian LPG Sustainability Linked Loan. https://mstar-sustops-cdn-mainwebsite-s3.s3.amazonaws.com/docs/default-source/spos/dorian-lpg-sustainability-linked-loan-opinion.pdf?sfvrsn=6293898c_3.

Green and sustainability-linked deals typically follow a set of framework principles which state how the KPIs and SPTs should be chosen and how the environmental benefits can be verified. For bonds, the International Capital Markets Association (ICMA) publishes the Green Bond Principles and Sustainability-Linked Bond Principles. Additional frameworks include the ASEAN Green Bond Standards, Japanese Green Bond Guidelines, as well as the EU Green Bond standard which is linked to the EU taxonomy. Most shipping green or sustainability-linked loans are made by financial institutions which have signed Poseidon Principles, a maritime specific framework which defines how loans should be treated.

Table 1. International Capital Market Association “Green Bond” Principles

| | |
|--|--|
| Use of Proceeds | The cornerstone of a Green Bond is the utilization of the proceeds of the bond for eligible Green Projects, which should be appropriately described in the legal documentation of the security. All designated eligible Green Projects should provide clear environmental benefits, which will be assessed and, where feasible, quantified by the issuer. |
| Process for Project Evaluation and Selection | The issuer of a Green Bond should clearly communicate to investors: <ul style="list-style-type: none"> • The environmental sustainability objectives of the eligible Green Projects; • The process by which the issuer determines how the projects fit within the eligible Green Projects categories (examples are identified above); and • Complementary information on processes by which the issuer identifies and manages perceived social and environmental risks associated with the relevant project(s). |
| Management of Proceeds | The net proceeds of the Green Bond, or an amount equal to these net proceeds, should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner, and attested to by the issuer in a formal internal process linked to the issuer's lending and investment operations for eligible Green Projects. |

| | |
|-----------|---|
| Reporting | Issuers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until full allocation, and on a timely basis in case of material developments. The annual report should include a list of the projects to which Green Bond proceeds have been allocated, as well as a brief description of the projects, the amounts allocated, and their expected impact. Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, the GBP recommend that information is presented in generic terms or on an aggregated portfolio basis |
|-----------|---|

SOURCE: INTERNATIONAL CAPITAL MARKET ASSOCIATION. (JUNE 2021). JUNE 2021 GREEN BOND PRINCIPLES. [HTTPS://WWW.ICMAGROUP.ORG/ASSETS/DOCUMENTS/SUSTAINABLE-FINANCE/2021-UPDATES/GREEN-BOND-PRINCIPLES-JUNE-2021-140621.PDF](https://www.icmagroup.org/assets/documents/sustainable-finance/2021-updates/green-bond-principles-june-2021-140621.pdf).

Table 2. International Capital Market Association “Sustainability-Linked Bond” Principles

| | |
|--|--|
| Selection of KPIs | <p>The KPIs should be:</p> <ul style="list-style-type: none"> • Relevant, core and material to the issuer’s overall business, and of high strategic significance to the issuer’s current and/ or future operations; • Measurable or quantifiable on a consistent methodological basis; • externally verifiable; and • Able to be benchmarked, i.e. as much as possible using an external reference or definitions to facilitate the assessment of the SPT’s level of ambition. |
| Calibration of Sustainability Performance Targets (SPTs) | The process for calibration of one or more SPT(s) per KPI is key to the structuring of SLBs since it will be the expression of the level of ambition the issuer is ready to commit to, and thus considers realistic. SPTs must be set in good faith and the issuer should disclose strategic inform |
| Bond characteristics | The cornerstone of a SLB is that the bond’s financial and/or structural characteristics can vary depending on whether the selected KPI(s) reach (or not) the predefined SPT(s), i.e. the SLB will need to include a financial and/or structural impact involving trigger event(s). |
| Reporting | Issuers of SLBs should publish, and keep readily available and easily accessible: - up-to-date information on the performance of the selected KPI(s), including baselines where relevant; - a verification assurance report relative to the SPT outlining the performance against the SPTs and the related impact, and timing of such impact, on the bond’s financial and/or structural characteristics; and - any information enabling investors to monitor the level of ambition of the SPTs (e.g., any update in the issuers sustainability strategy or on the related KPI/ESG governance, and more generally any |

| | |
|--------------|---|
| Verification | Issuers should seek independent and external verification (for example limited or reasonable assurance) of their performance level against each SPT for each KPI by a qualified external reviewer with relevant expertise, such as an auditor or an environmental consultant, at least once a year, and in any case for any date/period relevant for assessing the SPT performance leading to a potential adjustment of the SLB financial and/or structural characteristics, until after the last SPT trigger event of the bond has been reached. |
|--------------|---|

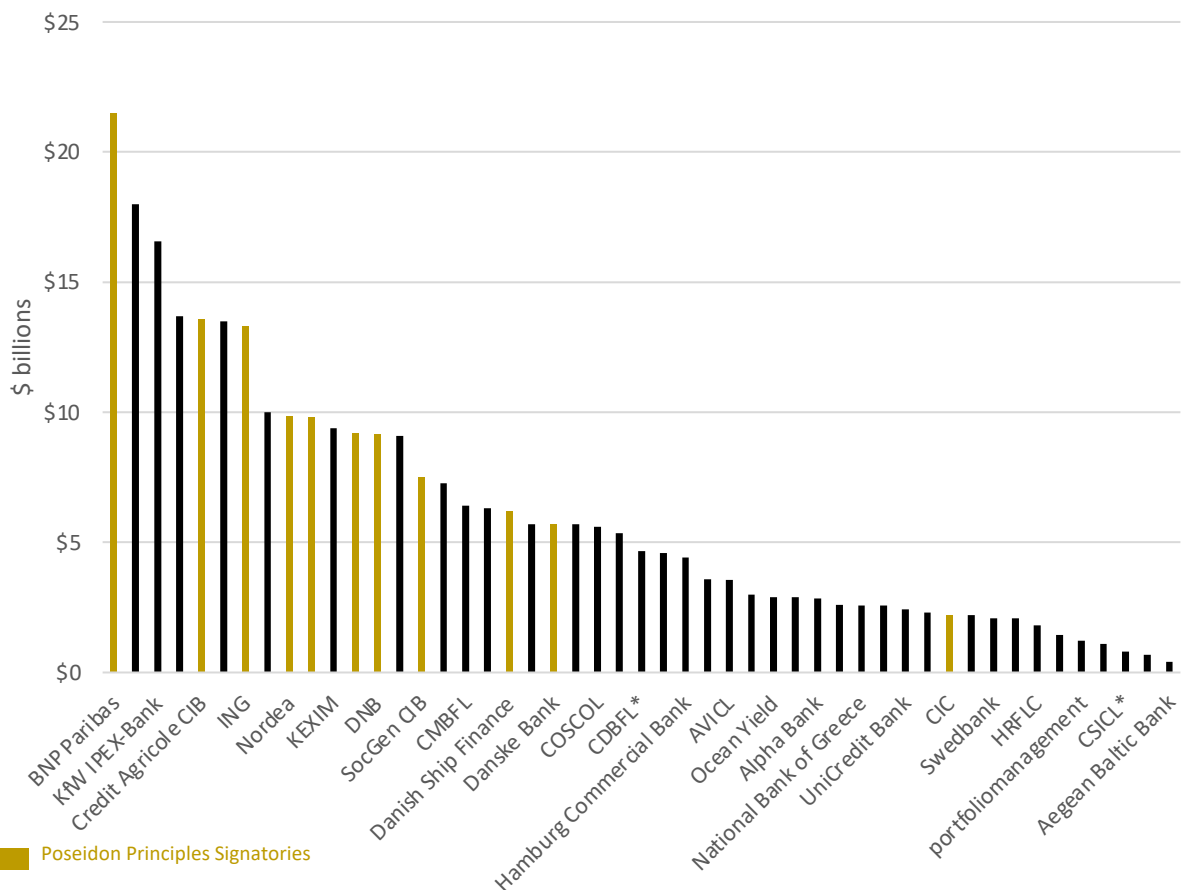
Source: International Capital Market Association. (2020, June). June 2020 Sustainability-Linked Bond Principles. <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Sustainability-Linked-Bond-Principles-June-2020-171120.pdf>.

Table 3. The Poseidon Principles

| | |
|---------------------------------|---|
| Assessment of climate alignment | Signatories will, on an annual basis, measure the carbon intensity and assess climate alignment (carbon intensity relative to established decarbonization pathways) of their shipping portfolio using the methodology established by the Poseidon Principles in line with the Technical Guidance. |
| Accountability | Signatories will exclusively rely on classification societies or other IMO-recognized organizations, and mandatory standards established by the IMO for the provision of information used to assess and report on climate alignment. |
| Enforcement | Standardized covenant clauses will be made contractual in new business activities to ensure access to high-quality data. |
| Transparency | Portfolio climate alignment scores will be published on an annual basis. |

Source: THE POSEIDON PRINCIPLES. (2017, July). Summary of requirements and implications for signatory financial institutions. <https://www.poseidonprinciples.org/wp-content/uploads/2019/07/Poseidon-Principles-2p-summary.pdf>.

2020 Ship Lenders Portfolio League Table



What is a Second-Party Opinion and who Issues it?

A Second Party Opinion (SPO) evaluates the sustainability impact of a green bond and the KPIs and SPTs chosen in a sustainability-linked bond, as well as their plans for reporting and verification, to ensure alignment with the relevant framework principles. Though a borrower is not required to obtain one, over ninety percent of the Sustainability-linked bond issuances by value have received a Second Party Opinion. The SPO ultimately provides investors with reassurance that the commitments made by the borrower provide meaningful environmental benefits. SPOs are offered by specialized firms such as The Governance Group and Sustainalytics, as well as rating agencies and class societies.

Table 4. Maritime Second Party Opinion Providers

| Firm | Selected Shipping Clients |
|----------------------|---|
| DNV | NYK Line, Hapag-Lloyd, Fred Olsen Windcarrier |
| The Governance Group | SFL |
| Sustainalytics | Hafnia, Seaspam |
| Cicero | Cadeler, Teekay Shuttle Tankers |
| Vigeo Eiris | MOL |

Source: Marine Money. (August, 2021). Deals Database. <https://www.marinemoney.com/deal-database-all>

Will a Green or Sustainability-Linked Deal Lower my Cost of Capital?

While a green loan or bond may provide improved pricing or terms compared to a non-green deal from inception, sustainability-linked transactions set conditions based on progress towards the set SPTs. If SPTs are achieved, a loan or bond may receive a reduction in interest rate or redemption price, or other structural changes favorable to the borrower. Conversely, some deals are structured to increase borrowing costs if SPTs are not met. Few transactions have disclosed the full terms of the pricing mechanism, but those made public were in the range of 25 to 50 basis points.

Green financing will soon not be an option for shipowners to choose, but rather a requirement for raising capital in any meaningful form. None of these changes are occurring in a vacuum, rather they are driven by individuals and institutions committed to seeing the shipping industry address climate change. Marine Money is proud to support the banks, owners, and institutions who embrace them.

Sustainability-Linked “Guts of the Deal”

Guts Of the Deal

| | | |
|-------------------|--|--|
| Issuer | NYK Line | NYK Line |
| Amount | ¥10 billion | ¥10 billion |
| Notes Offered | Unsecured Corporate Bonds No. 43 (Transition Bond) | Unsecured Corporate Bonds No. 44 (Transition Bond) |
| Coupon | 0.26% | 0.38% |
| Issue Price | 100.00% | 100.00% |
| Maturity Date | 29-Jul-2026 | 28-Jul-2028 |
| Amortization | Bullet Redemption | Bullet Redemption |
| Security | Unsecured | Unsecured |
| Use of Proceeds | New and existing projects including offshore-wind support vessels, ammonia-fueled vessels, hydrogen fuel-cell vessels, LNG-fueled vessels, LNG-bunkering vessels, LPG-fueled vessels, improvement of efficiency and optimization in vessel operation | New and existing projects including offshore-wind support vessels, ammonia-fueled vessels, hydrogen fuel-cell vessels, LNG-fueled vessels, LNG-bunkering vessels, LPG-fueled vessels, improvement of efficiency and optimization in vessel operation |
| Credit Rating | A- (Japan Credit Rating Agency) | A- (Japan Credit Rating Agency) |
| Structuring Agent | Mitsubishi UFJ Morgan Stanley Securities | Mitsubishi UFJ Morgan Stanley Securities |
| Lead Managers | Mitsubishi UFJ Morgan Stanley Securities, Nomura Securities, Goldman Sachs Japan, Mizuho Securities | Mitsubishi UFJ Morgan Stanley Securities, Nomura Securities, SMBC Nikko Securities |
| Governing Law | Japan | Japan |
| Incorporation | Japan | Japan |

Source: Marine Money (August, 2021). NYK Issues First Transition Bonds in Japan. <https://www.marinemoney.com/articles/nyk-issues-first-transition-bonds-in-japan>

Guts Of the Deal

| | |
|---|--|
| Issuer | SFL Corporation |
| Initial Issue Amount | \$150,000,000 |
| Maximum Issue Amount | \$200,000,000 |
| Notes Offered | Senior Unsecured Sustainability-Linked Bonds |
| Coupon | 7.25% |
| Maturity Date | 12-May-2026 |
| Price | 100.00% |
| Optional Redemption | Make whole first 4.75 years thereafter callable at 100.5% of par |
| Sustainability Performance Target (“SPT”) | Aggregate binding commitments of an amount at least equal to the bond size for new vessels powered by alternative fuel sources that contribute to significant reductions of CO ₂ by maturity |
| Amortization | Repayable in full at par (100%) at maturity if the SPT has been met otherwise at 100.50% |
| Target Observation Date | One month prior to maturity |
| Sustainability Reporting | Sustainability-Linked Bond Report published annually describing the Group’s performance in relation to the SPT. |
| Guarantees | None |
| Ranking | Parri passu among themselves and will rank at least parri passu with all other senior unsecured obligations of the issuer other than obligations which are mandatorily preferred by law. |
| Security | Unsecured |
| Undertakings | Standard including authorizations, compliance with laws, continuation of business, corporate status, mergers/de-mergers, disposal of business, subsidiary distribution and related party transactions in line with terms of existing bond transactions |
| Financial Covenants | Free Cash ≥ \$25MM, Positive Working Capital, Equity Ratio ≥ 20% |
| Dividends | Liquidity ≥ \$100 million |
| Change of Control/De-listing | Put @ 101% |
| Use of Proceeds | Refinancing of existing bonds and general corporate purposes |
| Joint Bookrunners | DNB Markets, Arctic Securities, Pareto Securities |
| Co-Manager | SMBC Nikko |
| Sustainability Structuring Advisor | DNB Markets |
| Governing Law | Norwegian |
| Incorporation | Bermuda |
| Listing | Oslo Bors |
| Trustee | Nordic Trustee |

Source: Source: Marine Money (May, 2021). SFL is Back. <https://www.marinemoney.com/articles/sfl-is-back>

Guts Of the Deal

| | |
|---|--|
| Issuer | Seaspan Corporation |
| Parent | Atlas Corp. |
| Issue Amount | \$300,000,000 |
| Notes Offered | Senior Unsecured Sustainability-Linked Bonds |
| Coupon | 6.50% |
| Maturity Date | 29-Apr-2026 |
| Price | 100.00% |
| Optional Redemption | Make whole first 4 years thereafter callable at 101.30% after 4 years and 100.65% after 4.5 years |
| Sustainability Performance Target ("SPT") | At least \$200 million of aggregate binding commitments for eco-friendly vessel acquisitions/retrofits by the end of year five |
| Amortization | Repayable in full at par (100%) at maturity or at 100.50% if the SPT has not been met |
| Target Observation Date | One month prior to maturity |
| Sustainability Reporting | Sustainability-Linked Bond Report published annually describing the Group's KPI performance in relation to the SPT. |
| Guarantees | None |
| Ranking | Parri passu among themselves and will rank at least parri passu with all other senior unsecured obligations of the issuer (save for such claims which are preferred by bankruptcy, insolvency, liquidation or other similar laws of general application) |
| Security | Unsecured |
| Undertakings | Standard including authorizations, compliance with laws, continuation of business, corporate status, mergers/de-mergers, disposals, related party transactions, insurances, subordination of shareholder loans, intra-group transactions, transactions with shareholders, directors and affiliated companies, litigations, financial indebtedness, negative pledge, financial indebtedness and financial support restrictions. |
| Financial Covenants | Liquidity \geq \$40 million, Gearing $<$ 75%, Net Worth \geq \$450 million |
| Dividends | Liquidity \geq \$100 million |
| Change of Control | Put @ 101% |
| Use of Proceeds | General corporate purposes, which may include repayment of debt |
| Joint Bookrunners | DNB Markets, Fearnley Securities |
| Co-Managers | BNP Paribas, Credit Agricole |
| Sustainability Structuring Advisor | DNB Markets |
| Governing Law | Norwegian |
| Incorporation | Marshall Islands |
| Listing | Oslo Bors |
| Trustee | Nordic Trustee |

Source: Marine Money (April, 2021). Doubling Down. <https://www.marinemoney.com/articles/doubling-down>

Guts Of the Deal

| | |
|---------------------|---|
| Issuer | Bonheur ASA |
| Amount | NOK 700,000,000 |
| Borrowing Limit | NOK 1,000,000,000 |
| Notes Offered | Senior Unsecured Green Bonds |
| Coupon | 3-month NIBOR + 2.90%. |
| Issue Price | 100.00% |
| Maturity Date | 13-Jul-2026 |
| Amortization | Repaid in full at maturity at 100% of par |
| Optional Redemption | Make-whole only |
| Ranking | Parri passu with all other senior obligations other than those mandatorily preferred by law |
| Security | None |
| Undertakings | Mergers/De-mergers, continuation of business, disposal of business, cross-default, reporting, listing, negative pledge |
| Financial Covenants | Minimum Free Liquid Assets \geq NOK 500M. Minimum Book Equity \geq NOK 2.28bn. Minimum Book Equity Ratio \geq 35% |
| Change of Control | Put at 101% |
| Use of Proceeds | Green projects as further defined by the Green Finance Framework, including inter alia by way of refinancing existing intercompany debt originally incurred to finance such green projects. |
| Joint Lead Managers | DNB Markets, Pareto Securities |
| Governing Law | Norwegian |
| Incorporation | Norway |
| Listing | Application for listing on Oslo Bors |
| Trustee | Nordic Trustee |

Source: Marine Money (July, 2021). Staying Green. <https://www.marinemoney.com/articles/staying-green>

Table 5. Selected Shipping Green and Sustainability-Linked Loans

| Shipping & Offshore Sustainability-Linked Loans (mUSD) | | | |
|---|-------------------------|-----------------------------------|--|
| Amount (Million US Dollars) | Transaction Type | Company | Financial Institutions |
| \$85 | Bank Loan | Precious Shipping | International Finance Corporation, Export-Import Bank of Thailand, Thanachart Bank |
| \$91 | Bank Loan | Diana Shipping Inc. | ABN AMRO Bank N.V. |
| \$135 | Bank Loan | OHT ASA | DNB Bank, Sparebank 1 SR-Bank, The Norwegian Export Credit Guarantee Agency (GEIK), Eksportkreditt Norge |
| \$95.3 | Bank Loan | Euronav NV | KBC Bank, ABN AMRO, Belfius Bank, ING, Societe Generale, BNP Paribas, Skandinaviska Enskilda Banken (SEB), Gigarant |
| \$374 | Bank Loan | Hafnia Limited | ABN AMRO, DBS Bank, ING, IYO Bank, Oversea-Chinese Banking Corporation Limited, Skandinaviska Enskilda Banken (SEB), Societe Generale, Standard Chartered Bank, United Overseas Bank, Sustainalytics |
| \$54.14 | Bank Loan | Kawasaki Kisen Kaisha | Mizuho Bank, Sumitomo Mitsui Trust Bank (SMTB), Japan Credit Rating Agency |
| \$417 | Bank Loan | Hapag-Lloyd AG | BNP Paribas, KfW IPEX-Bank GmbH, Korea Trade Insurance Corporation (KSURE) |
| \$50 | Bank Loan | NYK Line | Shiga Bank |
| \$1300 | Bank Loan | Mediterranean Shipping Company | ABN AMRO |
| \$200 | Bank Loan | Seaspan Corporation | Societe Generale, BNP Paribas, Sustainalytics |
| \$150 | Bank Loan | TORM A/S | Danish Ship Finance A/S |
| \$60 | Bank Loan | Klaveness Combination Carriers AS | Nordea Bank AB, Credit Agricole |
| \$35 | Bank Loan | Oman Shipping | Standard Chartered Bank |
| \$155 | Bank Loan | Dorian LPG Ltd. | Crédit Agricole CIB, Skandinaviska Enskilda Banken (SEB), ABN AMRO, ING, Citibank, Sustainalytics |
| \$300 | Bank Loan | International Seaways Inc. | Nordea Bank, ABN AMRO, Credit Agricole CIB, DNB Capital, Skandinaviska Enskilda Banken (SEB) |

Table 5. Selected Shipping Green and Sustainability-Linked Loans (CONT.)

Shipping & Offshore Sustainability-Linked Loans (mUSD)

| Amount (Million US Dollars) | Transaction Type | Company | Financial Institutions |
|---------------------------------------|-------------------------|----------------------------|---|
| \$40 | Bank Loan | International Seaways Inc. | Nordea Bank, ABN AMRO, Credit Agricole CIB, DNB Capital, Skandinaviska Enskilda Banken (SEB) |
| \$50000 | Bank Loan | NYK Line | MUFG Bank Ltd., Norinchuckin, Mizuho Bank, Sumitomo Mitsui Banking Corporation ("SMBC") |
| \$81.33 | Bank Loan | NYK Line | MUFG Bank Ltd., Aichi Prefectural Federation of Agricultural Cooperatives, Shinkin Central Bank, Nishi-Nippon City Bank, Ltd., Hiroshima Bank, Musashino Bank, Yamaguchi Bank, Japan Credit Rating Agency |
| \$110 | Bank Loan | Spliethoff | ING, European Investment Bank, Green Shipping Guarantee Program |
| \$18.04 | Bank Loan | NYK Line | Taiyo Life Insurance Company, Japan Credit Rating Agency |

Visit www.marinemoney.com/deal for additional information.

