

February 2025

Mapping global financial support opportunities for zero-emission and energy-efficient ships

Report on financial support opportunities for ships, prepared for the Danish Maritime Authority as part of the Zero-Emission Shipping Mission

Foreword

The global shipping industry, responsible for approximately 3% of global greenhouse gas emissions, faces immense challenges in its transition to net-zero. Decarbonisation requires not only technological innovation but also significant financial investment, with annual costs estimated to reach up to USD 28 billion for vessel operations alone by 2050.

However, the financial landscape remains fragmented and complex, creating significant barriers for shipowners – particularly smaller players and those in developing regions – in accessing the funding necessary to adopt zero-emission technologies and improve energy efficiency.

This report addresses these challenges by mapping over 70 global financial support opportunities potentially available to shipowners. Our mapping covers a broad scope, including shipowners across all commercial ship types, relevant technologies (both retrofits and new builds), all regions, and a wide range of funding mechanisms, excluding traditional bank loans. From grants and green loans to innovative models like leasing and OPEX-based schemes, we aim to provide shipowners with some key insights on securing financial support.

By offering a global perspective and highlighting specific opportunities, this report aims to bridge the gap between ambition and action, enabling shipowners of all sizes to contribute to the sustainable transformation of the shipping industry.

Disclaimer

This report is based on mapping conducted by Implement Consulting Group. The findings, insights, and recommendations are the result of independent research and analysis and do not necessarily reflect the views of the Danish Maritime Authority.



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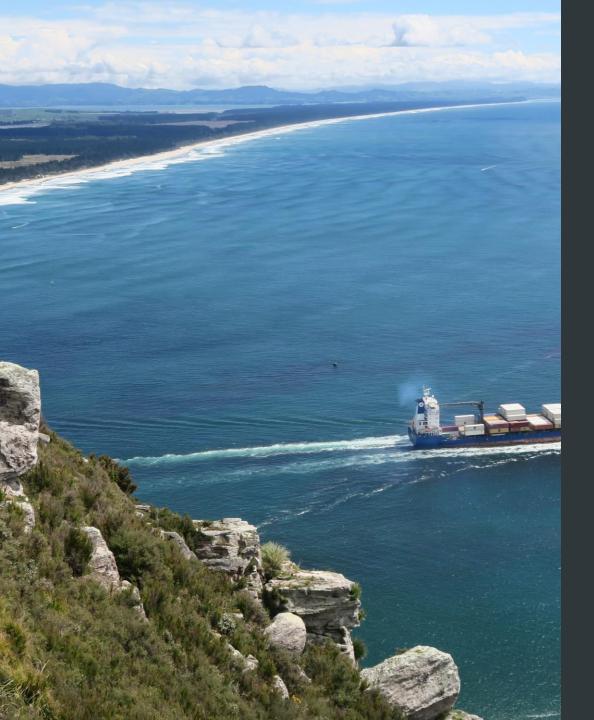
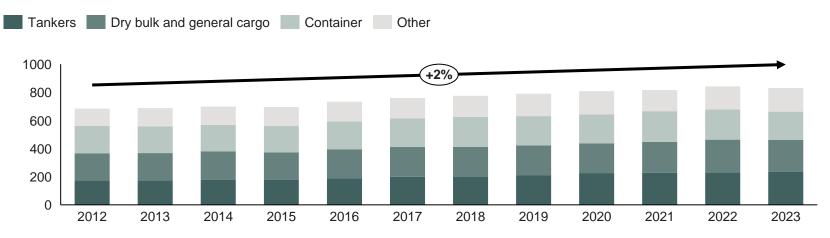


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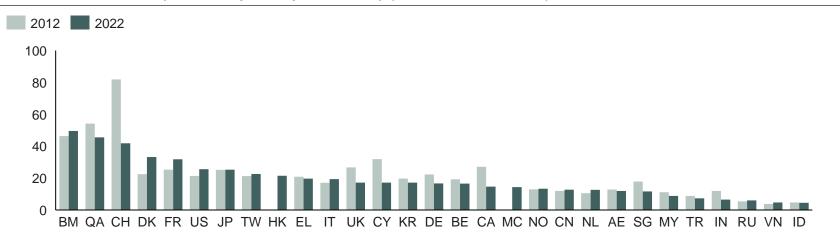
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The shipping industry accounts for approximately 3% of global GHG emissions – making financial support critical for accelerating its transition to net-zero

Global carbon dioxide emissions from shipping, by vessel type (million metric tonnes)



Carbon dioxide emissions per vessel by country of ownership (thousand metric tonnes)



Source: Implement Consulting Group based UNCTAD (2023, 2022, 2012), Review of Maritime Transport and Marine Benchmark (2022), International Shipping Emissions

The shipping industry is a cornerstone of the global economy, facilitating the transportation of goods worldwide. However, it also accounts for approximately 3% of GHG emissions, driving ambitious decarbonisation targets from the International Maritime Organization (IMO) and global governments.

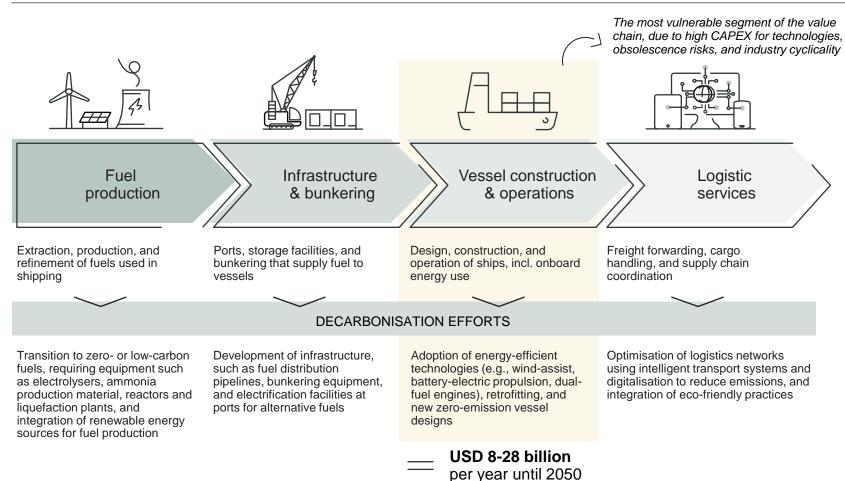
From 2012 to 2023, global CO2 emissions from shipping steadily increased at a compound annual growth rate of around 2%. By 2023, emissions had reached approximately 830 million metric tonnes across various vessel types, driven by the continued growth in global trade and reliance on maritime transport.

When looking at CO2 emissions from shipping by country of vessel ownership relative to fleet size, most countries have experienced stagnation or slight reductions, while a few continue to see emissions rise. This highlights the sector's diverse pace of decarbonisation and its inherent complexities.

Significant financial support is needed to accelerate the adoption of greener technologies. The broader maritime value chain is complex, as shown on the following page, and decarbonising the industry requires measures that go far beyond upgrading vessels and improving energy efficiency. Nonetheless, these efforts are an essential part of the challenge.

Decarbonising the 'vessel construction and operations' segment of the shipping value chain could cost up to USD 28 billion annually by 2050

Investments in decarbonisation of shipping



Source: Implement Consulting Group based on UNCTAD (2023), Review of Maritime Transport, Marine Benchmark (2023), DNV (2022), Maritime Forecast to 2050, and International Maritime Organization (2018), Energy Efficiency in Shipping

Decarbonising the global shipping fleet by 2050 requires substantial investment, with annual costs estimated to range between USD 8 and 28 billion for vessel construction and operations. Additionally, scaling onshore production, fuel distribution, and bunkering infrastructure to support a 100% carbon-neutral fuel supply by 2050 is expected to require an additional USD 30 to 90 billion per year.

It is challenging to decarboise shipping due to long voyages and limited electrification. Shipowners are turning to alternative fuels such as green ammonia and methanol, energy-efficient systems, and electric propulsion through new builds, retrofits, and upgrades.

However, financing remains difficult, as traditional bank lending has become harder to access due to stricter regulations, high perceived risks, fluctuating fuel prices, and an uncertain business case for zero-emission ships. Alternatives such as leasing, private equity, and export finance offer flexibility but also potentially higher costs and stricter terms, which could disadvantage smaller players and developing economies.

Despite these challenges, operational improvements and existing technologies could reduce emissions by up to 75%. Bridging the financing gap requires innovative funding mechanisms, policy support, and global collaboration.

Despite the growing number of financial support mechanisms, opportunities remain diverse and fragmented, creating additional barriers for shipowners

Potential financial support options available for shipowners and operators

Green loans	Sustainably-linked loans	Export credit agency financing	Green bonds	Private equity and venture capital	Corporate equity
Loans specifically tied to environmental projects, often provided by banks or development finance institutions, can offer lower interest rates or better terms for projects with measurable sustainability outcomes.	Loan terms (e.g. interest rates) are linked to the achievement of predefined sustainability performance targets (e.g., emission reductions). They offer flexibility, as they are not tied to specific green projects but to overall sustainability performance.	Export credit agencies provide funding or guarantees for exports, including those related to green shipping technology and vessels.	Debt securities issued to finance green projects, such as adopting low- emission technologies or retrofitting vessels for energy efficiency.	Involves shipping companies raising capital from private investors or venture capital firms for sustainable projects. Often used for startups or innovative technologies in the shipping sector.	Internal financing through reinvested profits, supported by sustainability-focused budgets within shipping companies.
Grants and subsidies	Carbon credit revenue	Public-private partnerships	Leasing arrangements	Sustainability funds	Multilateral and development bank financing
Direct financial support from national governments, the European Union, or international organisations. Typically aimed at research, innovation, or pilot projects in sustainable shipping.	Funding through the sale of carbon credits or participation in emission trading schemes, like the EU ETS. Revenues from credits can support sustainability upgrades.	Collaboration between government agencies and private companies to co- finance sustainable projects. Reduces the financial burden on private shipping companies while helping achieve government sustainability goals.	Leasing low-carbon vessels or green technology instead of purchasing outright, reducing upfront capital expenditure and shifting risk to lessors.	Dedicated funds or investment pools targeting ESG projects, including shipping decarbonisation or maritime-focused green funds.	Financing from institutions like the European Investment Bank (EIB) or the World Bank, which often have programmes for sustainable transport and decarbonisation initiatives.

Debt financing

Structured financing

Investment-based financing

Equity financing

Grant/non-repayable financing

While the number of financial support mechanisms for the shipping industry continues to grow, their diversity and fragmentation present significant challenges for shipowners. Navigating this complex landscape of grants, green loans, subsidies, and other alternative financing options can be overwhelming, especially for smaller players and those in developing or less-developed regions.

The lack of a unified framework, coupled with unclear eligibility criteria and administratively complex application processes, makes it difficult for shipowners to identify and secure suitable funding opportunities. Initiatives such as the Poseidon Principles, which provide a standardised framework for assessing the climate alignment of ship finance portfolios, and the Zero Emission Shipping Mission, which fosters innovation and collaboration for decarbonisation, represent important steps toward bridging these gaps.

This fragmentation not only delays critical investments in greener technologies and retrofits but also exacerbates existing inequalities, as larger, well-resourced companies are often better equipped to overcome these hurdles.

In the following pages, we present an overview of green financing opportunities available to shipowners across all commercial ship types, based on a comprehensive market scan.

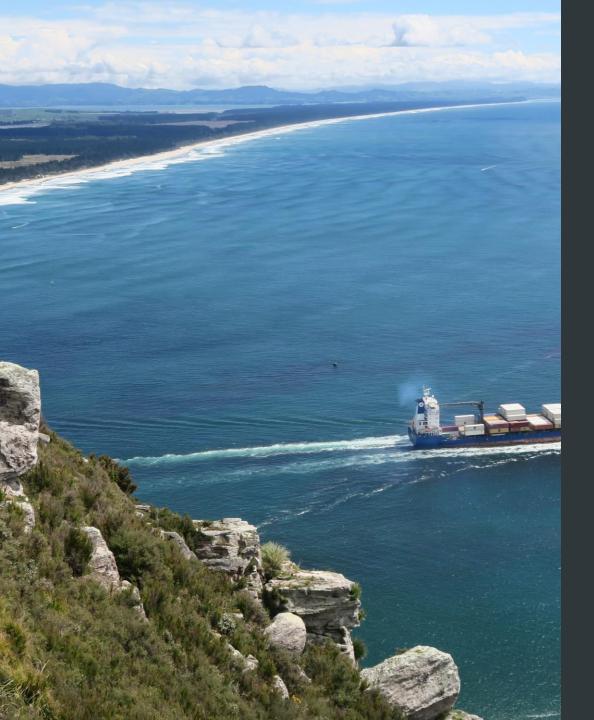


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This document explores a comprehensive inventory of global financial support options and offers actionable insights into the opportunities available for shipowners





Our insights are based on an extensive list of over 70 global financial support opportunities that shipowners - covering all commercial ship types and types of financing/funding - may potentially be eligible for. The comprehensive list of opportunities is maintained in a separate Excel database and provided in a simplified version in the appendix.

The opportunity list has been developed through manual desk research as well as automated research, including web crawling and scraping. It includes information on:



Opportunity name and administering body

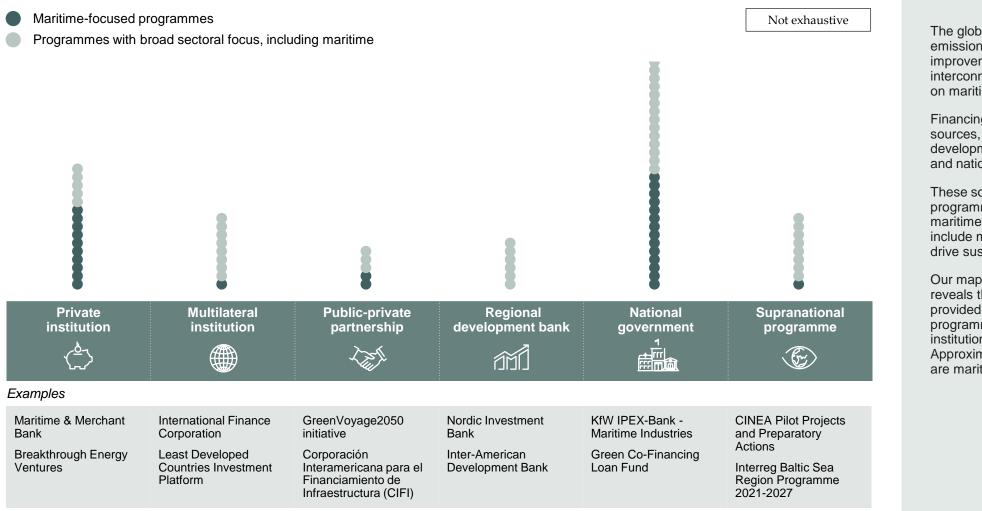
- Type of finance provider
- Financing type
- Geography of affiliation and eligibility
- **Technology focus**
- Other eligibility criteria
- Application period (if time-bound)

URL to opportunity

Ξ

The global decarbonisation drive has spurred financing opportunities from various sources, ranging from more generic initiatives to maritime-specific ones

Global financial support opportunities for green shipping, by source and sector focus



The global financial landscape for supporting zeroemission ships and energy efficiency improvements is broad, diverse, and interconnected, reflecting the growing global focus on maritime decarbonisation.

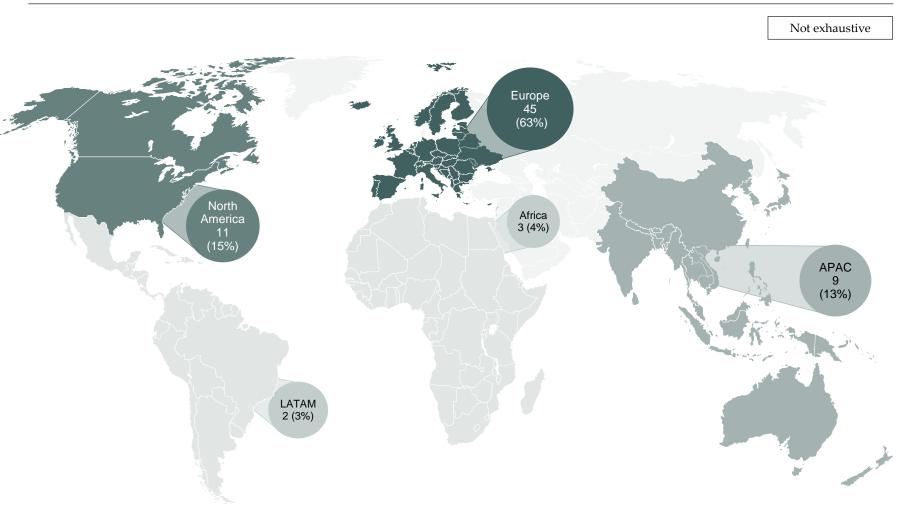
Financing opportunities arise from a wide range of sources, including private institutions, development banks, public-private partnerships, and national or supranational programmes.

These sources encompass both sector-specific programmes, designed specifically for the maritime industry, and broader initiatives that include maritime projects as part of wider efforts to drive sustainability and green transitions.

Our mapping of the global financial landscape reveals that the majority of opportunities are provided by national governments or supranational programmes, and a growing number of private institutions, most notably private equity funds. Approximately 37% of the identified opportunities are maritime-specific.

Financial support is primarily concentrated in regions with strong environmental regulations, such as Europe and North America

Concentration of global financial support opportunities by geography of affiliation



Our mapping highlights the geographical concentration of global financial support opportunities for zero-emission ships and energy efficiency improvements. Europe dominates, accounting for the largest share of programmes (63%), followed by North America (15%) and the Asia-Pacific (APAC) region (13%). The remaining opportunities (<10% combined) are in LATAM and Africa.

This distribution reflects the impact of strong environmental regulations and ambitious decarbonisation targets in regions like Europe and North America. Similarly, financial support is more prevalent in areas with greater economic capacity and mature financial markets, while regions such as Latin America and Africa face challenges like limited access to capital and underdeveloped financial infrastructure.

While regional development banks, such as the African Development Bank and the Development Bank of Latin America and the Caribbean, play a role in financing across emerging economies, their focus tends to be broader, and maritime-specific support remains underdeveloped.

However, as we will explore in the following pages, many global initiatives extend financial support beyond their region of origin, helping bridge gaps in funding availability.

Europe is home to a diverse range of ship financing opportunities, including both broad, cross-sectoral programmes and specialised initiatives

Overview of financial support opportunities in Europe



Europe is home to a diverse range of financial support opportunities for zero-emission ships and energy efficiency improvements, reflecting the region's leadership in maritime decarbonisation. The landscape includes both broad, supranational, cross-sectoral programmes, such as the EU's Connecting Europe Facility and Recovery and Resilience Facility, and specialised initiatives targeting green shipping and maritime infrastructure.

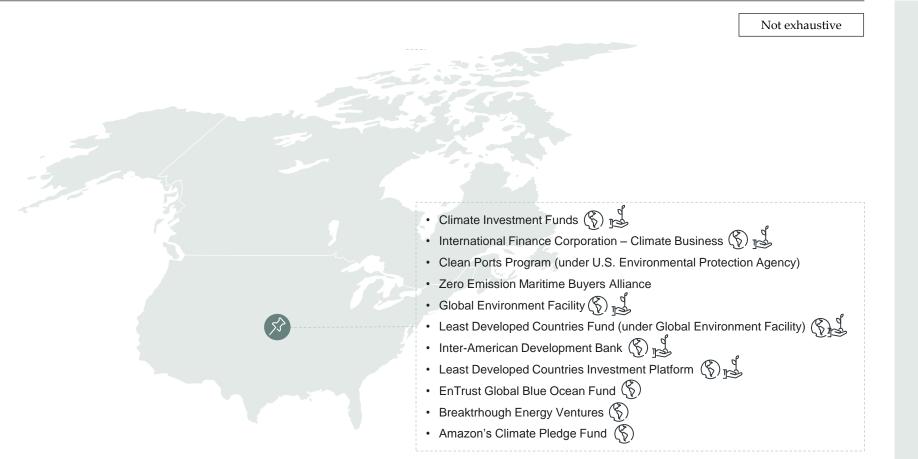
Initiatives like the CIRR Ship Financing Programme and the PROW Capital Green Shipping Fund highlight the growing role of targeted funding mechanisms to accelerate maritime decarbonisation. Several national governments in Europe also offer targeted financing opportunities for the shipping industry.

While many programmes focus on European companies, several initiatives, such as GreenVoyage2050, offer global access and extend support to the developing world.

However, the diverse and fragmented nature of Europe's financial support landscape can make it challenging for smaller ship companies to navigate and access the available opportunities effectively.

The United States offers major programmes supporting global decarbonisation and developing countries, though few are specifically tailored to shipping

Overview of financial support opportunities in the United States



🖞 Developing country focus 🚯 Global access

The United States offers several major programmes supporting global decarbonisation and developing countries, but relatively few are directly focused on shipping.

Initiatives like Breakthrough Energy Ventures and Amazon's Climate Pledge Fund showcase privatesector leadership in climate finance, while public programmes such as the Clean Ports Program focus on reducing emissions at port infrastructure, offering broader benefits for the maritime sector, including potential partnership opportunities and indirect financing for shipowners.

Many US-based financial mechanisms, such as the Climate Investment Funds and the Global Environment Facility, have a global reach and a strong focus on supporting developing countries.

Overall, while the US plays a critical role in global climate finance, dedicated shipping programmes are fewer, reflecting broader priorities across sectors rather than a specific maritime focus.

The APAC region is seeing a growing number of ship financial support opportunities, particularly in South Korea

Overview of financial support opportunities in APAC

 Eco-Friendly Certified Ship Distribution Support Project Export-Import Bank of Korea – Ship Finance Korea Ocean Business Corporation Green Climate Fund () The second sec	Not exhaustive	Our mapping reveals a strong and growing presence of financial support opportunities for zero-emission ships and energy efficiency in APAC, particularly in South Korea. In fact, the APAC region offers nearly as many opportunities as North America. Key drivers of this growth include government- backed funding programmes, increased financial institution involvement, and expanding public- private partnerships. South Korea, in particular, has introduced multiple loan, subsidy, and guarantee schemes supporting green shipbuilding and retrofits. While regulatory diversity and access to capital remain challenges, APAC is establishing itself as a key region for green shipping finance. Notable initiatives include the Green Climate Fund in South Korea and Singapore's Maritime Green Initiative.
	Australian Renewable Energy Agency – Advancing Renewables Programme	

Developing country focus 🛞 Global access

Overview of financial support opportunities in LATAM and Africa

There are fewer financial support opportunities in LATAM and Africa, highlighting a major gap compared to the rest of the world

Developing country focus (5) Global access

Not exhaustive Development Bank of Latin America and the Caribbean 12 Corporación Interamericana - Green Bond Program 12 para el Financiamiento de Infraestructura African Development Bank - Sustainable 12 **Energy Fund for Africa** African Guarantee Fund IDEAS Managed Fund (part of African Infrastructure Investment Managers)

Financial support for zero-emission shipping and energy efficiency in LATAM and Africa remains limited, particularly when compared to North America, Europe, and the APAC region. The available funding primarily comes from regional development banks, green infrastructure programmes, and guarantee funds, rather than from dedicated maritime decarbonisation initiatives. However, several key funding sources stand out:

- Guarantee mechanisms: The African Guarantee Fund plays a role in de-risking lending for SMEs, which could include smaller shipowners seeking financing for greener fleets.
- Blended finance approaches: Funds such as the IDEAS Managed Fund in Africa and Green Bond Programmes in LATAM support broader green infrastructure that may include shippingrelated projects.

Despite these efforts, direct support for private shipowners remains scarce, and most funding is tied to government-led initiatives. Expanding access to tailored financing mechanisms for shipowners in these regions will be crucial to ensure they are not left behind in the global shift toward green shipping.

Global and regional initiatives are helping bridge gaps in financial support for developing regions

Overview of global financial support opportunities with focus on developing countries

GreenVoyage2050 Project	Green Climate Fund (GFC)	Global Environmental Facility (GEF)	International Finance Corporation (IFC)	Developing regions like LATAM, Africa, and parts of APAC are crucial to global shipping but face
An IMO-led initiative supporting developing countries in decarbonising their maritime sectors. Funding: Technical assistance (financial mechanisms under development)	A global fund financing climate mitigation and adaptation projects in developing countries, covering the maritime industry. Funding: Grants, loans, equity, and guarantees	Provides funding for projects addressing environmental challenges, including maritime emissions. Funding: Grants and co-financing	Funds private-sector climate projects, including sustainable maritime initiatives, in emerging markets. Funding: Loans, equity, advisory services	 financial barriers to decarbonisation. High upfron costs, limited direct funding for shipowners, and underdeveloped clean fuel infrastructure hinder progress. Global financial mechanisms are bridging these gaps: International development funds: GCF and GEF provide grants and concessional loans fo maritime projects.
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LDC Investment Platform (LDCIP)	Least Developed Countries Fund (LDCF)	Inter-American Development Bank	Climate Investment Funds (CIF)	 Private-sector engagement: IFC and CIF offer risk-mitigation tools and blended finance to attract investment.
A platform offering financial support for climate-smart investments in least developed countries. Funding: Grants, loans, and blended finance	Focuses on climate adaptation projects in least developed countries, including transport and infrastructure. Funding: Grants	Provides financing for sustainable development projects in Latin America and the Caribbean. Funding: Loans, grants, and technical assistance	Supports clean energy transitions in developing countries, including projects in sustainable transport. Funding: Low-interest loans, grants, risk- mitigation tools, and technical assistance	 IMO-led initiatives: GreenVoyage2050 supports technical assistance, policy guidance and future financing models. These efforts help catalyse capital for developing regions, enabling participation in the global energy transition. However, scaling direct support for private shipowners remains a key challenge in ensuring an inclusive and sustainable future for shipping.
	 Project An IMO-led initiative supporting developing countries in decarbonising their maritime sectors. Funding: Technical assistance (financial mechanisms under development) Image: Image: Im	 Project An IMO-led initiative supporting developing countries in decarbonising their maritime sectors. Funding: Technical assistance (financial mechanisms under development) Image: Image: Image:	 Project An IMO-led initiative supporting developing countries in decarbonising their maritime sectors. Funding: Technical assistance (financial mechanisms under developing countries, covering the maritime industry. Funding: Technical assistance (financial mechanisms under development) Comparison Comparison<td>Project(GFC)Facility (GEF)Corporation (IFC)An IMO-led initiative supporting developing countries in decarbonising their maritime sectors.A global fund financing climate mitigation and adaptation projects in developing countries, covering the maritime industry.A global fund financing climate mitigation and adaptation projects in developing countries, covering the maritime industry.Facility (GEF)Funds private-sector climate projects, including maritime emissions.Funding: Technical assistance (financial mechanisms under development)A global fund financing, covering the maritime industry.Funding: Grants, loans, equity, and guaranteesFunding: Grants and co-financingFunding: Loans, equity, advisory servicesLDC Investment Platform (LDCIP)Least Developed Countries Fund (LDCF)Inter-American Development BankClimate Investment Funding for sustainable development projects in Latin America and the Caribbean.Supports clean energy transitions in developing countries, including transport and infrastructure.Supports clean energy transition assistanceFunding: Grants, loans, and blended financeFunding: GrantsFunding: Loans, grants, and technical assistanceSupports clean energy transitions in developing countries, including transport and infrastructure.Funding: Loans, grants, and technical assistanceSupports clean energy transitions in developing countries, including transport.Funding: Grants, loans, and blended financeFunding: GrantsFunding: Loans, grants, and technical assistanceSupports clean energy transitons in d</td>	Project(GFC)Facility (GEF)Corporation (IFC)An IMO-led initiative supporting developing countries in decarbonising their maritime sectors.A global fund financing climate mitigation and adaptation projects in developing countries, covering the maritime industry.A global fund financing climate mitigation and adaptation projects in developing countries, covering the maritime industry.Facility (GEF)Funds private-sector climate projects, including maritime emissions.Funding: Technical assistance (financial mechanisms under development)A global fund financing, covering the maritime industry.Funding: Grants, loans, equity, and guaranteesFunding: Grants and co-financingFunding: Loans, equity, advisory servicesLDC Investment Platform (LDCIP)Least Developed Countries Fund (LDCF)Inter-American Development BankClimate Investment Funding for sustainable development projects in Latin America and the Caribbean.Supports clean energy transitions in developing countries, including transport and infrastructure.Supports clean energy transition assistanceFunding: Grants, loans, and blended financeFunding: GrantsFunding: Loans, grants, and technical assistanceSupports clean energy transitions in developing countries, including transport and infrastructure.Funding: Loans, grants, and technical assistanceSupports clean energy transitions in developing countries, including transport.Funding: Grants, loans, and blended financeFunding: GrantsFunding: Loans, grants, and technical assistanceSupports clean energy transitons in d

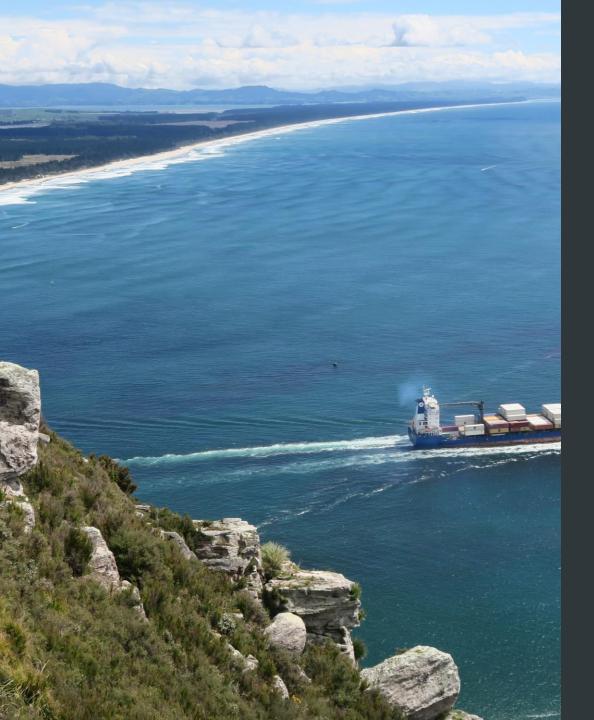


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Larger financing programmes are often hard to access; more targeted efforts are needed for private shipowners in developing regions

Overview of application process and eligibility for Climate Investment Funds

Example

THE CIF INDUSTRY DECARBONIZATION PROGRAM

The CIF Industry Decarbonization Program supports the transition to low-carbon industrial processes in emerging and developing economies. It focuses on scaling up innovative technologies and clean energy solutions to reduce emissions from hard-to-abate sectors, including shipping, cement, and steel. The programme provides concessional financing and technical assistance to accelerate industrial decarbonisation while promoting sustainable economic growth.

Funding type: Low-interest loans, grants, risk-mitigation tools, and technical assistance

However, the application requirements constitute a barrier...

- Detailed expression of interest: The programme requires detailed Expressions of Interest (EoI) that demonstrate a country's commitment to executing investment plans. Preparing such comprehensive proposals demands significant technical expertise and resources and is unlikely to be initiated by smaller shipowners.
- **Government endorsements**: A cover letter from the national government's Ministry of Finance or a designated line ministry is mandatory for the application. Obtaining such endorsements can be challenging for smaller, private companies, adding bureaucratic hurdles that may deter participation.
- Focus on large-scale projects: The programme targets substantial investment plans, with potential allocations ranging from USD 125 to 250 million. This scale may not align with the needs or capacities of individual shipowners seeking funding for specific decarbonisation projects.
- **Preference for public-private partnerships**: The programme encourages collaboration between governments, multilateral development banks, and the private sector. Private shipowners operating independently might find it difficult to integrate into such partnerships without existing relationships.



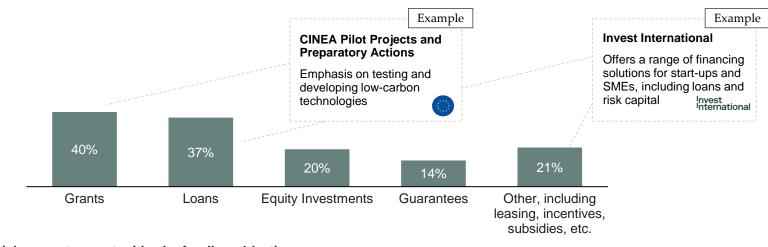
While global initiatives, such as the **Climate Investment Funds (CIF)**, provide critical support for decarbonisation, they are often **difficult to access** for private shipowners in developing regions. These programmes are typically designed with broad, high-level goals, prioritising partnerships with governments, large institutions, or multilateral banks, which leaves smaller private stakeholders at a disadvantage. Private shipowners are often not priority applicants for large initiatives that cover multiple sectors.

To ensure an equitable transition to zero-emission shipping, targeted financing mechanisms are urgently needed to support private shipowners in developing regions. These efforts should focus on:

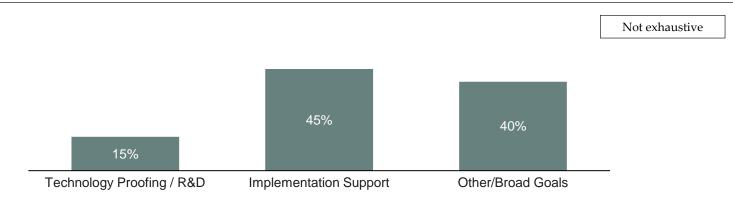
- Simplified application processes: Reducing administrative and bureaucratic hurdles involved in larger programmes, considering the resource constraints of small and medium-sized businesses.
- **Direct access to funding:** Creating pathways for private shipowners to secure financing without reliance on government endorsements.
- **Risk mitigation:** Offering guarantees or blended finance solutions to encourage investment in developing regions.

Financial support exists in various forms, and opportunities are often matched with specific objectives or needs that are not always clearly defined

Share of financial support opportunities by type of funding (includes double-counting)



Share of financial support opportunities by funding objective



Our mapping shows that global financial support opportunities for zero emission and energy efficient ships come in several forms, with grants and loans being the most prominent.

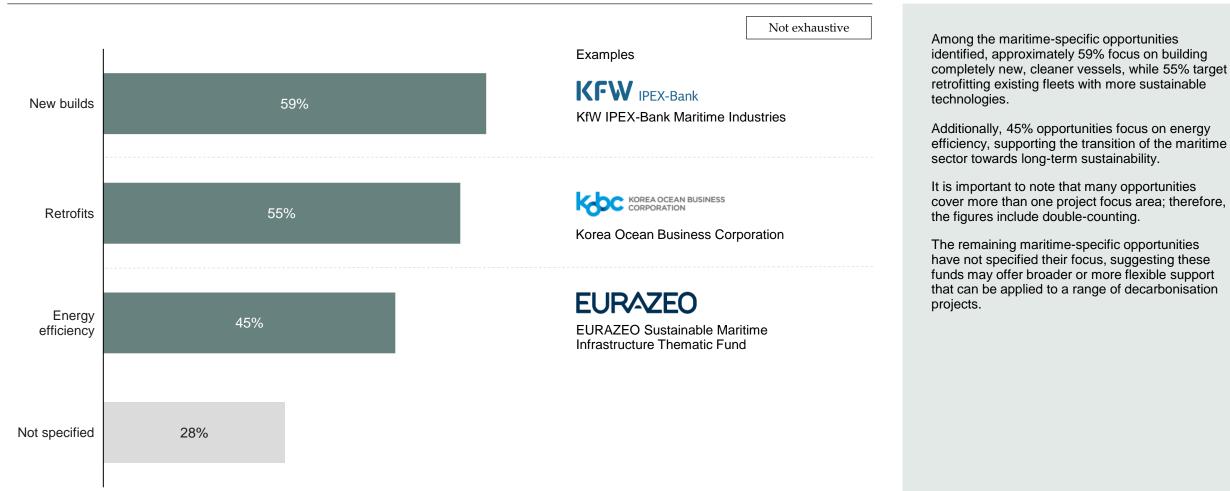
It is important to note that many opportunities include more than one type of financing mechanism, meaning that grants often focus on driving research and innovation, while loans typically enable shipowners to finance fleet upgrades or the adoption of proven low-carbon technologies. Guarantees, equity investments, and hybrid solutions, like combined grants and loans, play a smaller but complementary role, helping to de-risk investments or support emerging business models.

Financial support spans the entire technology journey, from technology proofing to support early-stage testing, to implementation support that enables the roll-out of proven technologies, as well as other broader or unspecified goals.

For shipowners, the choice depends on their goals – whether they want to test innovative concepts, finance proven solutions, or address specific investment barriers, as well as on overall accessibility and eligibility.

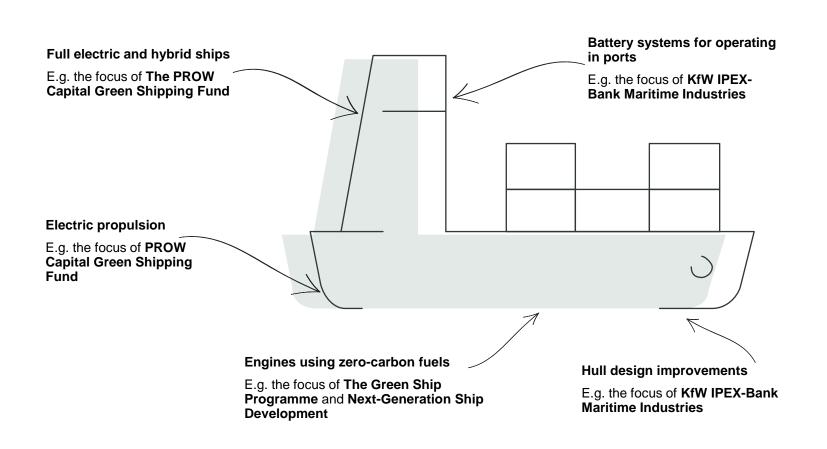
The vast majority of maritime-specific financial support available to shipowners seems to target CAPEX-related investments, covering a wide range of technologies

Maritime-focused CAPEX investments by technology focus (incl. double-counting)



Most maritime-specific financial support available to shipowners targets CAPEXrelated investments and covers a wide range of technologies

CAPEX solutions funded by the maritime specific financial support opportunities



Maritime-specific financial support schemes facilitate a wide range of green maritime solutions, including engines capable of using new lowemission fuels, electric and hybrid propulsion systems, design enhancements, optimisation measures, and climate-proofing initiatives.

By providing funding for these green technologies, such schemes help bridge the gap between earlystage R&D and full-scale implementation, accelerating the transition towards reduced emissions and a cleaner environmental footprint for the maritime sector. Although not specifically within the scope of this study, the financial support in many cases extends beyond vessels to encompass, for example, improvements in port infrastructure.

Though OPEX-related opportunities are limited, several broader initiatives are being developed to support shipowners during the operational phases

Examples of OPEX-based opportunities for zero-emission shipping and/or energy efficiency improvements

Example

The Zero Emission Shipping Fund Pilot

International Chamber of Shipping

The **Zero Emission Shipping Fund (ZESF)** is a pilot project from the International Chamber of Shipping. The purpose of the project is to showcase a system that can incentivise the adoption of zero or near-zero GHG fuels by implementing a contribution and reward system. This mechanism is designed to offset the higher costs associated with green fuels.

Key features:

- Shipowners contribute fees based on their vessels' GHG emissions, creating a dedicated fund to support industry-wide decarbonisation efforts.
- Vessels using zero or near-zero GHG fuels earn financial rewards proportional to the CO₂e emissions avoided, helping to offset the higher costs of greener fuels.
- The fund addresses the **price disparity** between conventional fuels and zero-emission alternatives, making green solutions financially viable for shipowners.



PAYS Scheme for Energy Efficiency Retrofits

Global Centre for Maritime Decarbonisation, Singapore

The pilot Pay-as-you-save (PAYS) Scheme by the Global Centre for Maritime Decarbonisation is a financing model designed to accelerate energy efficiency retrofits in the maritime industry without requiring upfront capital investment from shipowners or operators. Instead, the cost of retrofits is recovered over time through savings generated from reduced fuel consumption.

Key features:

- Shipowners can implement energy-efficient technologies without **initial expenditure**.
- Retrofitting costs are **repaid using fuel savings** generated by energy efficiency improvements.
- Funding is provided by third-party investors or lenders, enabling shipowners to adopt technologies more quickly.
- The programme supports the adoption of a wide range of energy-efficient measures, such as hull optimisation, energy-saving devices, and hybrid systems.

MARITIME DECARBONISATION

Approximately one-quarter of the maritime-specific financial opportunities identified in our mapping support projects focused on the adoption and use of low-emission fuels like green hydrogen, LNG, bio-LNG, bio-methanol, bio-ethanol, and eco-diesel.

Incentives to offset the higher operational expenditures (OPEX) associated with lowemission fuels are critical to reducing GHG emissions in shipping. Initiatives such as the Zero Emission Shipping Fund proposal and the PAYS Scheme for Energy Efficiency Retrofits pilot play a key role by addressing OPEX-related challenges, facilitating the adoption of green technologies, and accelerating progress towards carbon neutrality in the maritime industry.

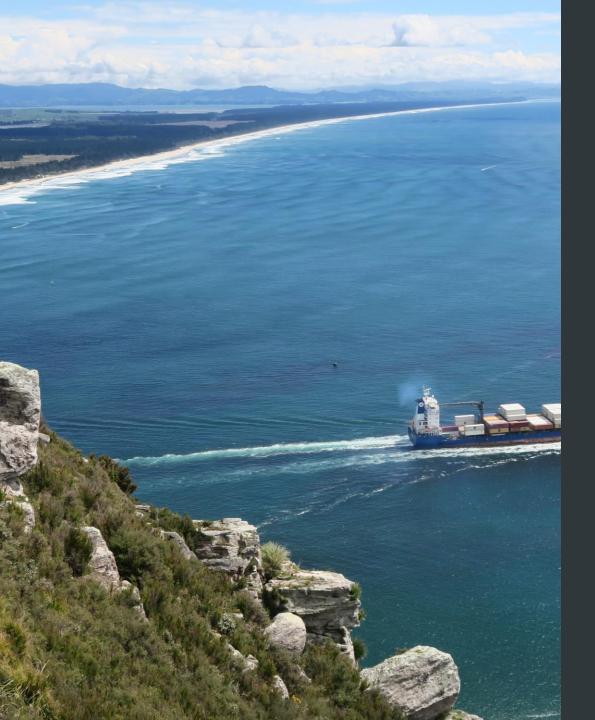


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A comprehensive look at the pool of existing financing opportunities enables us to provide recommendations on where shipowners should prioritise their focus

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MONITOR EMERGING PILOT PROGRAMMES

The PAYS Scheme for Energy Efficiency Retrofits and the Zero Emission Shipping Fund are innovative pilots that demonstrate promising models for future funding. Though not yet widely accessible, shipowners should keep an eye on their development, as they could become game-changers in maritime financing. Likewise, **GreenVoyage2050**, currently scaling up to provide financial mechanisms, could potentially become a highly relevant opportunity for developing countries.

LEVERAGE GLOBAL INITIATIVES

While regional opportunities in Africa and Latin America remain limited, global initiatives like the **Climate Investment Funds** and the **Global Environment Facility** provide grants and concessional loans to support energy-efficient retrofits and clean fuel adoption in developing regions. These programmes are particularly relevant for smaller shipowners facing financial and infrastructural challenges.

CONSIDER PRIVATE EQUITY OPPORTUNITIES

The scale and focus of private equity have changed. Private equity funds, such as the **EURAZEO Sustainable Maritime Infrastructure Fund** and **Breakthrough Energy Ventures**, are somewhat new entrants and are also worth exploring for innovative or high-impact projects. Shipowners should approach these funds with clear environmental metrics and a strong business case.

BLEND FINANCING MECHANISMS FOR FLEXIBILITY

Shipowners should combine grants, concessional loans, and leasing mechanisms to reduce upfront costs and financial risks. Leasing options, such as those offered by the **EURAZEO Sustainable Maritime Infrastructure Fund**, allow access to green technologies without requiring full ownership. Pairing these with public grants or concessional loans ensures affordable financing while supporting decarbonisation projects.

UNDERSTAND AND PREPARE FOR ELIGIBILITY REQUIREMENTS

Shipowners should carefully review programme eligibility criteria, such as vessel type, emissions targets, and project scope. Investing in proper documentation and seeking technical or legal support can improve application success, especially for programmes like **KfW IPEX-Bank** and the **Green Climate Fund**, which require clear environmental impact metrics.

COLLABORATE THROUGH STRATEGIC PARTNERSHIPS

Smaller shipowners can improve their funding eligibility by partnering with technology providers, governments, or larger operators. Public-private partnerships can help enhance credibility and simplify applications. In Africa, the **African Guarantee Fund** works with local financial institutions to provide partial guarantees, helping SMEs secure financing for sustainable maritime projects while reducing risks for lenders.

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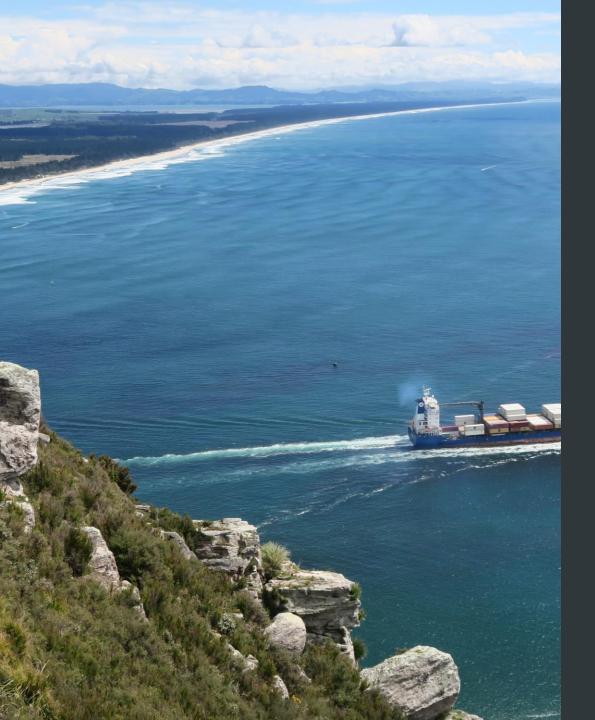


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List of financial support opportunities in Europe, by funding type and sector focus (1/2)

Opportunity name	Funding type	Sector focus
PROW Capital - Green Shipping Fund	Sustainability-linked loans	Maritime-specific
GreenVoyage2050 Project	Technical assistance (financial mechanism under way)	Maritime-specific
EIFO Loan Financing and Equity investment	Loans, credit guarantees	Broader
European Bank for Reconstruction and Development (EBRD)	Loans, equity investments, guarantees	Broader
Nordic Investment Bank loans	Sustainability-linked loans	Broader
Connecting Europe Facility (CEF) - Transport	Grants	Broader
LIFE Programme	Grants	Broader
Danish Ship Finance	Mortgage loans	Maritime-specific
EIC Accelerator	Grants, equity investments	Broader
KfW IPEX-Bank Maritime Industries	Export loans, investment loans, down payment, and post delivery financing	Maritime-specific
Dutch National Growth Fund	Grants, incentives	Broader
Invest International Financing for Start-ups and SMEs	Loans, equity investments	Broader
Bulgarian Development Bank Instrument for Accelerated Disbursement	Loans, guarantees	Broader
EURAZEO Sustainable Maritime Infrastructure Thematic Fund	Green leasing	Maritime-specific
CIRR Ship Financing Programme	Interest make-up scheme	Maritime-specific
Green Co-Financing Loan Fund	Co-financing loans	Broader
Interreg Baltic Sea Region Programme 2021-2027	Subsidies, grants	Broader
Interreg Italy-France Maritime 2021-2027	Grants	Maritime-specific
Just Transition Fund	Grants, loans	Broader

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List of financial support opportunities in Europe, by funding type and sector focus (2/2)

Opportunity name	Funding type	Sector focus
InvestEU	Guarantees	Broader
Maritime & Merchant Bank	First priority loans	Maritime-specific
NRB's Expansion Guarantees	Guaranteed loan (Working capital and investment loan)	Broader
CINEA Pilot Projects and Preparatory Actions (PPPAs)	Grants	Broader
PMV Corporate Loans Platform (CLP)	Long-term senior loans	Broader
Polish Development Bank Investment Loan (backed by InvestEU)	Investment loan with the InvestEU guarantee	Broader
Recovery and Resilience Facility (RRF)	Grants, loans	Broader
SEK Green Loans	Green loans	Broader
NoX Fondet - NoX reducing measures	Grants	Broader
Business Finland Innovation aid for shipbuilding	Grants	Maritime-specific
Shipbuilding Credit Guarantee Scheme	Credit guarantees	Maritime-specific
The Energy and Environment Partnership Trust Fund (EEP Africa)	Early-stage grants and repayable grants	Broader
InfraCo Africa	Equity	Broader
Meridiam	Equity	Broader
The Danish Maritime Fund	Grants, loans	Maritime-specific
Marine Equity	Equity	Maritime-specific
Marine Capital	Equity	Broader
Enova Climate and Energy Fund	Grants	Broader
UK Shipping Office for Reducing Emissions (UK SHORE)	Grants, subsidies	Maritime-specific
NIB Climate Change Mitigation Loans	Loans	Broader
Maritime Masterplan	Subsidies, grants	Maritime-specific
Innovativer Schiffbau	Grants	Maritime-specific
Maritimes Forschungsprogramm	Grants	Maritime-specific

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List of financial support opportunities in North America by funding type and sector focus

Opportunity name	Funding type	Sector focus
Global Environment Facility (GEF)	Grants	Broader
Climate Investment Funds (CIF)	Grants, technical assistance, concessional loans	Broader
Amazon's Climate Pledge Fund	Equity investments	Broader
Breakthrough Energy Ventures (BEV)	Venture capital	Broader
Zero Emission Maritime Buyers Alliance (ZEMBA)	Grants, investments, demand aggregation	Maritime-specific
International Finance Corporation (IFC) - climate business	Loans, equity investments	Broader
Clean Ports Program	Grants	Maritime-specific
Inter-American Development Bank	Loans, equity investments	Broader
Least Developed Countries Investment Platform (LDCIP)	Loans, guarantees	Broader
Least Developed Countries Fund (LDCF)	Grants	Broader
Entrust Global's Blue Ocean Fund	Equity, loans, sale, and leaseback	Maritime-specific

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List of financial support opportunities in APAC by funding type and sector focus

Opportunity name	Funding type	Sector focus
Green Climate Fund (GCF)	Grants, loans, and equity investments	Broader
Asian Development Bank (ADB) – Clean Technology Fund	Concessional loans, grants	Broader
Next-Generation Ship Development	Grants, subsidies	Maritime-specific
Australian Renewable Energy Agency (ARENA) - Advancing Renewables Programme	Grants	Broader
Eco-Friendly Certified Ship Distribution Support Project	Subsidies	Maritime-specific
Export-Import Bank of Korea – Ship Finance	Loans, guarantees	Maritime-specific
Korea Ocean Business Corporation	Loans, guarantees	Maritime-specific
The Japanese Shipowners' Association – Special Depreciation Programme for Ships	Tax incentives	Maritime-specific
Maritime Singapore Green Initiative - Green Ship Programme and Green Energy and Technology Programme	Incentives, grants	Maritime-specific
Green Climate Fund (GCF)	Grants, loans, and equity investments	Broader

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List of financial support opportunities in Africa and LATAM by funding type and sector focus

LATAM

Opportunity name	Funding type	Sector focus
African Development Bank (AfDB) – Sustainable Energy Fund for Africa (SEFA)	Loans, grants, and equity investments	Broader
Development Bank of Latin America and the Caribbean (CAF) – Green Bond Program	Bonds	Broader

Africa

Opportunity name	Funding type	Sector focus
IDEAS Managed Fund (part of African Infrastructure Investment Managers, AIIM)	Equity	Broader
Corporación Interamericana para el Financiamiento de Infraestructura, S.A. (Cifi)	Loans	Broader
The African Guarantee Fund	Guarantees	Broader



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