



*Ocean Carriers*

*Sustainability Initiatives*

**January 2025**

**CIFFA**   
**Forging Alliances**

This report outlines the sustainability efforts of several prominent ocean carriers. Each section highlights the initiatives undertaken by the carriers, their goals, and, where available, their measurable results in reducing environmental impact and advancing sustainable practices. This paper is intended for educational purposes only, and it is up to each company to make its own determination regarding the adoption and implementation of any sustainability practices discussed.

## Contents

- CMA CGM Group - <https://www.cma-cgm.com/sustainability> .....3
- COSCO Shipping Lines - <http://www.coscoshipping.com/english/sustainability> .....4
- Evergreen Marine - <https://www.evergreen-marine.com/sustainability> .....5
- Hapag-Lloyd - <https://www.hapag-lloyd.com/en/sustainability.html> .....6
- Hyundai Merchant Marine (HMM) - <https://www.hmm21.com/eng/sustainability> .....7
- Maersk Line - <https://www.maersk.com/sustainability> .....8
- MSC (Mediterranean Shipping Company) - <https://www.msc.com/sustainability> .....9
- Ocean Network Express (ONE) - <https://www.one-line.com/en/sustainability> ..... 10
- OOCL (Orient Overseas Container Line) - <https://www.oocl.com/eng/aboutoocl/sustainability> ..... 11
- Yang Ming Marine Transport Corporation - <https://www.yangming.com/en-US/sustainability> ..... 12
- ZIM Integrated Shipping Services - <https://www.zim.com/sustainability> ..... 13
- Conclusion .....14

### Key Initiatives:

- **Carbon Neutrality by 2050:** CMA CGM targets carbon neutrality by 2050, with intermediate objectives including reducing CO<sub>2</sub> emissions per transported container by 40% by 2030.
- **Fleet Modernization:** The company is modernizing its fleet with LNG-powered vessels, and exploring future fuels like bioLNG, hydrogen, and ammonia.
- **Digital and Data Solutions:** CMA CGM offers "Green Corridors" and "e-commerce" solutions to reduce carbon footprints in the supply chain. The company also leverages AI to optimize fuel consumption and routing.
- **Eco-Design Ships:** The company has started deploying ships that reduce fuel consumption with optimized hull designs and advanced air lubrication systems.

### Measurement Results:

- **2022:** CMA CGM reduced its CO<sub>2</sub> emissions by 6.5% per container carried.
- **LNG Fleet:** As of 2023, CMA CGM has 20 LNG-powered vessels, which emit 20-25% less CO<sub>2</sub> compared to traditional ships.
- **Partnerships for Carbon Capture:** CMA CGM has partnered with other industry players to explore carbon capture solutions.

### Carbon Offsetting Program: [CMA CGM | CARBON OFFSET](#)

- **CMA CGM** offers a **Carbon Neutral Shipping** program. This initiative allows customers to offset their shipments' carbon footprint by investing in projects that generate measurable reductions in CO<sub>2</sub> emissions.
  - **Projects supported:** CMA CGM partners with projects that focus on carbon sequestration, renewable energy, and energy efficiency. They focus on projects that are certified by recognized bodies such as **Gold Standard** and **VCS**.
  - **Strategic investments:** In addition to offsetting, CMA CGM is exploring alternative fuels (like LNG and biofuels) and working toward technological innovations for reducing emissions.
  - **Sustainability commitment:** As part of their sustainability strategy, CMA CGM is also focusing on achieving net-zero emissions by 2050, aligning with broader climate action goals.
- By choosing CARBON OFFSET, you will receive your personalized offsetting declaration confirming you have offset the carbon emissions of your maritime transport through a portfolio of projects carefully selected by CMA CGM. The Group has purchased Verified (or Certified) Emission Reductions (VERs or CERs), which are then removed from an official registry, such as Verified Carbon Standard.



## COSCO Shipping Lines - <http://www.coscoshipping.com/english/sustainability>

### Key Initiatives:

- **Emission Reduction Strategy:** COSCO aims to achieve a 10% reduction in carbon intensity by 2025 (compared to 2020 levels) and 40% by 2030.
- **Alternative Energy Research:** COSCO is investing in the use of LNG, hydrogen, and biofuels, and exploring zero-emission technologies like wind and solar energy to power vessels.
- **Green Shipbuilding:** The company is also focused on designing eco-friendly vessels with lower fuel consumption and carbon footprints.
- **Digitalization:** The integration of advanced digital systems for route optimization, fleet management, and fuel consumption tracking.

### Measurement Results:

- **2021-2022:** COSCO reduced carbon emissions by 8.5% per container transported.
- **Fleet Transition:** By 2023, COSCO operated over 20 LNG-powered ships and committed to further expansion by 2030.

### Carbon Offsetting Program: [Environment](#)

- **COSCO SHIPPING Lines** offers the **EcoShipping** service, which allows customers to offset the CO2 emissions associated with their shipments.
  - **Carbon reduction strategy:** COSCO's EcoShipping service focuses on offsetting emissions by funding projects that reduce or capture CO2. These can include renewable energy projects, reforestation, and methane capture.
  - **Commitment to sustainability:** COSCO is actively working on introducing low-carbon technologies into its fleet, as well as looking into cleaner fuels and energy-efficient shipping practices.

## Evergreen Marine - <https://www.evergreen-marine.com/sustainability>

### Key Initiatives:

- **Green Vessel Fleet:** Evergreen has been transitioning to a fleet with higher efficiency, implementing energy-saving technologies like air lubrication and hybrid propulsion systems.
- **Sustainable Fuels:** Evergreen is working on adopting alternative fuels such as LNG, hydrogen, and ammonia in their vessels.
- **Carbon Neutrality by 2050:** The company is committed to achieving carbon neutrality by 2050, with an interim goal to reduce CO<sub>2</sub> emissions by 30% by 2030.
- **Circular Economy Practices:** Evergreen promotes circular economy principles in vessel recycling and waste management.

### Measurement Results:

- **2022:** Evergreen reduced its CO<sub>2</sub> emissions per container by 5% compared to the previous year.
- **Fleet Transition:** By the end of 2024, Evergreen plans to have 40% of its new vessels using alternative fuel solutions.

### Carbon Offsetting Program: [Maritime Biofuel Insets- Greencarrier](#)

- **Evergreen Marine** offers **Carbon Offset Services** as part of its broader sustainability initiatives. The service allows customers to offset the carbon footprint of their ocean freight shipments by supporting carbon reduction projects globally.
  - **Types of projects:** Evergreen supports a variety of carbon offset projects, including forest conservation, reforestation, and renewable energy.
  - **Verification:** The company only uses projects certified by globally recognized standards such as **VCS** and **Gold Standard**.
  - **Additional efforts:** Evergreen is also exploring ways to reduce their own fleet emissions through cleaner technologies and alternative fuels.

## Hapag-Lloyd - <https://www.hapag-lloyd.com/en/sustainability.html>

### Key Initiatives:

- **Sustainability Strategy:** Hapag-Lloyd aims to cut its CO<sub>2</sub> emissions by 25% by 2030 (compared to 2020 levels).
- **Alternative Fuels:** The company has been exploring biofuels, LNG, and is working on future-proof fuel technologies, including ammonia and methanol.
- **Energy Efficiency Programs:** Hapag-Lloyd is implementing energy-saving technologies, such as air lubrication systems and air flow-optimized designs to reduce fuel consumption.
- **Carbon-Neutral Services:** The company provides a carbon-neutral service option through its “Sustainability” offering, where customers can offset emissions.

### Measurement Results:

- **2021:** Hapag-Lloyd achieved a reduction of approximately 8% in CO<sub>2</sub> emissions per container transported compared to 2020.
- **LNG Fleet:** The company has incorporated LNG-fueled ships in its fleet, with a goal to reduce CO<sub>2</sub> emissions by 20% per vessel.

### Carbon Offsetting Program: [Your business, the EU Emission Trading System and container shipping- Hapag-Lloyd](#)

- **Hapag-Lloyd offers a CO<sub>2</sub> Reduction & Offsetting** program, providing customers the opportunity to neutralize the emissions associated with their shipments by contributing to carbon reduction projects. The company supports certified projects that deliver measurable reductions in greenhouse gas emissions.
  - **Verified carbon credits:** Customers can offset their shipments through verified credits that support a range of environmental initiatives, including reforestation and the development of renewable energy sources.
  - **Project types:** Hapag-Lloyd also focuses on **renewable energy, energy efficiency, and forest protection** projects.
  - **Transparency:** Hapag-Lloyd ensures that the projects are independently verified to maintain credibility and transparency.

## Hyundai Merchant Marine (HMM) - <https://www.hmm21.com/eng/sustainability>

### Key Initiatives:

- **Green Ship Strategy:** HMM has launched the "Green Ship" initiative, focusing on increasing the number of eco-friendly vessels in its fleet.
- **Alternative Fuels and Energy:** The company is testing LNG, hydrogen, and ammonia as alternative fuels for its ships and is investing in technologies to reduce fuel consumption.
- **Emissions Reduction by 2030:** HMM aims to reduce its carbon emissions by 40% by 2030, relative to 2019 levels, as part of its long-term decarbonization strategy.
- **Digitalization and Efficiency:** HMM is leveraging big data and AI to enhance fuel efficiency, optimize routes, and track emissions across its global fleet.

### Measurement Results:

- **2022:** HMM reduced CO<sub>2</sub> emissions by 5% per container compared to 2021.
- **Fleet Modernization:** By 2025, HMM plans to incorporate 20 LNG-powered vessels into its fleet to meet its decarbonization targets.

### Carbon Offsetting Program: [Carbon Neutrality | Sustainability- Hyundai Worldwide](#)

- **Hyundai Merchant Marine (HMM)** has been increasingly focused on environmental sustainability. They have committed to reducing the carbon footprint of their fleet and offer carbon-neutral shipping services through various carbon offset initiatives.
  - **Carbon offset projects:** HMM's program focuses on funding renewable energy and reforestation projects that meet recognized international standards like **Gold Standard** and **VCS**.
  - **Emission reduction targets:** The company has set goals for decarbonizing its fleet, adopting cleaner technologies, and moving toward green shipping options.
  - **Green partnerships:** HMM partners with several global sustainability organizations to enhance its carbon offset strategy and contribute to global efforts to combat climate change.

## Maersk Line - <https://www.maersk.com/sustainability>

### Key Initiatives:

- **Decarbonization Targets:** Maersk is committed to achieving carbon neutrality by 2050. The company aims to reduce CO<sub>2</sub> emissions per transported container by 60% by 2030 (compared to 2008 levels).
- **Sustainable Shipping Fuel:** Maersk has been testing and incorporating sustainable fuels like biofuels and is exploring new technologies, such as ammonia and hydrogen, for future carbon-neutral ships.
- **Green Fleet Investments:** The company is incorporating dual-fuel ships and ships powered by green methanol. In 2023, Maersk launched its first vessel powered by green methanol.
- **Sustainable Supply Chain Solutions:** Offering carbon-neutral shipping solutions to customers through its "SeaCargo Charter" and carbon calculators.

### Measurement Results:

- **2019-2023:** Maersk has reduced CO<sub>2</sub> emissions by over 30% per ton-kilometer.
- **2022:** The company reported the launch of its first green methanol-powered ship, a major milestone toward its decarbonization target.
- **2025 Goal:** All new vessels ordered by Maersk must be able to run on green fuels.

### Carbon Offsetting Program: [ECO Delivery](#) | [Transportation Services](#) | [Maersk](#)

- Through their **CO<sub>2</sub> Compensation Program**, they offer carbon-neutral shipping services by allowing customers to offset the CO<sub>2</sub> emissions associated with their shipments. Customers can choose to make their shipments carbon-neutral by investing in verified carbon offset projects that comply with international standards such as the **VCS (Verified Carbon Standard)**.
  - **Offset projects:** Maersk supports reforestation, renewable energy, and methane capture projects that have a tangible, verifiable reduction in carbon emissions.
  - **Transparency:** Maersk provides detailed information to customers about the carbon credits purchased and the environmental projects funded.



## MSC (Mediterranean Shipping Company) - <https://www.msc.com/sustainability>

### Key Initiatives:

- **Sustainability Commitment:** MSC has set a target to reduce carbon intensity by 50% by 2050, with a clear focus on alternative fuels, energy efficiency, and carbon-neutral solutions.
- **Biofuels and Carbon Offsetting:** MSC has committed to using biofuels and carbon offsetting schemes for certain shipments. The company has developed partnerships with biofuel producers and aims to scale sustainable fuel usage.
- **Smart Shipping Technologies:** MSC integrates smart technologies to reduce fuel consumption, including big data analysis for optimized route planning.
- **Eco-Friendly New Builds:** MSC has been investing in larger, more efficient vessels that optimize fuel usage through advanced hull designs and air flow reduction systems.

### Measurement Results:

- **2022:** MSC reduced CO<sub>2</sub> emissions by 12% per container compared to 2021.
- **Carbon Offset Program:** MSC's carbon offset program enabled customers to neutralize more than 5 million tons of CO<sub>2</sub> as of 2022.

### Carbon Offsetting Program: [Carbon Neutral Programme | MSC](#)

- **MSC (Mediterranean Shipping Company)** introduced its **Carbon Neutral Programme** as part of its goal to reduce the environmental footprint of ocean freight. MSC works to mitigate emissions by providing customers the option to offset the CO<sub>2</sub> produced by their shipments through a variety of high-quality carbon offset projects.
  - **Carbon offset projects:** MSC invests in certified projects such as reforestation, energy efficiency, and renewable energy initiatives that meet recognized standards like **Gold Standard** and **VCS**.
  - **Scope of emission reduction:** The company focuses on offsetting direct emissions from vessels, along with the broader environmental impacts throughout its supply chain.
  - **Future goals:** MSC also has long-term sustainability targets, including adopting green technologies to reduce their overall fleet emissions.

## Ocean Network Express (ONE) - <https://www.one-line.com/en/sustainability>

### Key Initiatives:

- **Carbon Neutrality by 2050:** ONE has committed to achieving carbon neutrality by 2050, in line with global shipping industry targets.
- **Green Fleet Development:** ONE is investing in fuel-efficient vessels and exploring alternative fuels such as LNG, ammonia, and hydrogen to reduce its carbon footprint.
- **Operational Efficiency:** The company has implemented advanced data analytics to optimize shipping routes and improve fuel efficiency.
- **Sustainable Practices for Customers:** ONE offers services like carbon-neutral shipping options and carbon offset programs for customers.

### Measurement Results:

- **2023:** ONE reduced CO<sub>2</sub> emissions by approximately 10% per container transported compared to the previous year.
- **Fleet Transition:** ONE is progressively adding ships that use LNG and other eco-friendly fuels, aiming for significant fleet-wide sustainability improvements by 2030.

### Carbon Offsetting Program: [Ocean Network Express Launches Green Shipping Solution – ONE LEAF+ | ONE Thailand](#)

- ONE has introduced the **Carbon Neutral Program**, which allows their customers to offset the emissions from their ocean freight. As a major player in global shipping, ONE offers a comprehensive carbon neutral solution to help customers reduce their environmental impact.
  - **Offset mechanism:** ONE offsets emissions by purchasing carbon credits from verified projects that focus on reducing emissions in sectors such as renewable energy, energy efficiency, and forest protection.
  - **Sustainability initiatives:** ONE is also making investments in new technologies to reduce its overall emissions. This includes initiatives to decarbonize their fleet and improve operational efficiency.

## OOCL (Orient Overseas Container Line) - <https://www.oocl.com/eng/aboutoocl/sustainability>

### Key Initiatives:

- **Sustainability Vision:** OOCL has a goal of reducing its carbon emissions intensity by 25% by 2030, compared to 2008 levels.
- **Alternative Fuels:** OOCL is exploring the use of LNG and other alternative fuels as part of its long-term environmental strategy.
- **Energy Efficiency:** The company has been focused on improving vessel energy efficiency through hull design innovations, energy-saving devices, and digitalization to optimize operations.
- **Carbon-Neutral Services:** OOCL offers carbon-neutral shipping options and emphasizes sustainability in its operations, from vessel design to logistics solutions.

### Measurement Results:

- **2022:** OOCL achieved a reduction of 9% in CO<sub>2</sub> emissions per TEU compared to the previous year.
- **Fleet Transition:** OOCL has committed to using sustainable fuels across its new vessel orders, aiming for a greener fleet by 2030.

### Carbon Offsetting Program: [OOCL- Emissions Reduction](#)

- OOCL has developed a **Carbon Offset Program** aimed at helping its customers offset the carbon emissions associated with their shipments.
  - **Offsetting emissions:** OOCL offers the ability to offset carbon emissions from ocean freight by investing in certified projects, which typically focus on renewable energy, energy efficiency, and reforestation.
  - **Sustainability and transparency:** OOCL has integrated environmental considerations into its operational framework, ensuring transparency in how the carbon offsets are managed and implemented. They provide regular reports on the offset projects.
  - **Future goals:** OOCL has also been exploring the implementation of LNG-powered vessels and other green technologies to reduce emissions from their fleet.

## Yang Ming Marine Transport Corporation - <https://www.yangming.com/en-US/sustainability>

### Key Initiatives:

- **Carbon Reduction Goals:** Yang Ming has set a goal to reduce CO<sub>2</sub> emissions per unit of cargo by 20% by 2030.
- **Energy-Efficient Ships:** The company has focused on building energy-efficient vessels, incorporating fuel-saving technologies such as air lubrication systems and hull modifications to improve fuel consumption.
- **Sustainable Shipping Fuels:** Yang Ming is testing alternative fuels, including LNG, and is exploring the use of biofuels and other low-carbon energy sources for its vessels.
- **Carbon Offsetting:** Yang Ming offers carbon offset programs for its customers, allowing them to neutralize the emissions associated with their cargo shipments.

### Measurement Results:

- **2022:** Yang Ming reported a 6% reduction in CO<sub>2</sub> emissions per TEU (Twenty-foot Equivalent Unit) compared to the previous year.
- **Future Plans:** The company is committed to investing in LNG-powered ships as part of its efforts to meet long-term sustainability goals.

### Carbon Offsetting Program: [Reduce Carbon Emissions-陽明海運股份有限公司 | ESG企業永續網](#)

- **Yang Ming Marine Transport Corp.** offers a **Carbon Neutral Shipping** program that allows its customers to offset the emissions generated by their shipments. Yang Ming emphasizes its commitment to environmental stewardship and aims to achieve long-term sustainability in shipping.
  - **Carbon offset projects:** Yang Ming's carbon neutral program supports projects that reduce or capture carbon emissions, including reforestation, renewable energy, and energy efficiency projects.
  - **Green initiatives:** In addition to their carbon offset offerings, Yang Ming has adopted technologies aimed at improving fuel efficiency and reducing greenhouse gas emissions from its fleet.
  - **Sustainability goals:** The company is actively working on reducing its overall emissions and transitioning to more environmentally friendly operations.

## ZIM Integrated Shipping Services - <https://www.zim.com/sustainability>

### Key Initiatives: [ESG & Sustainability | ZIM](#)

- **Carbon Neutrality by 2050:** ZIM has committed to reaching carbon neutrality by 2050, with intermediate goals to reduce carbon intensity by 20% by 2030.
- **Green Ship Investments:** ZIM has been focusing on incorporating energy-efficient vessels into its fleet, as well as retrofitting existing ships with energy-saving technologies such as air lubrication and fuel optimization systems.
- **Alternative Fuels:** The company is investigating the use of LNG and other clean fuels, including hydrogen, as part of its broader decarbonization strategy.
- **Sustainability Partnerships:** ZIM has entered into partnerships with environmental organizations to develop green logistics solutions and offer carbon offset programs for customers.

### Measurement Results:

- **2022:** ZIM reduced its CO<sub>2</sub> emissions by 8% per container transported.
- **Fleet Expansion:** The company is progressively integrating LNG-powered vessels into its fleet, aiming to have a substantial number of green vessels by 2027.

### Carbon Offsetting Program:

- **ZIM Integrated Shipping Services** offers a **Carbon Offset Program** to support its sustainability objectives. The program allows ZIM customers to offset the emissions generated by their shipments by purchasing carbon credits tied to verified environmental projects.
  - **Carbon offset options:** ZIM collaborates with various certified environmental projects that focus on renewable energy, reforestation, and energy efficiency. These projects are independently verified by standards like **VCS** and **Gold Standard**.
  - **Green shipping practices:** In addition to carbon offsetting, ZIM is working to optimize its fleet and operations to minimize its carbon emissions, including exploring the use of alternative fuels and more fuel-efficient vessels.
  - **Sustainability commitment:** ZIM's broader sustainability initiatives include reducing air pollution, optimizing logistics, and advancing the adoption of green technologies within the industry.



## Conclusion

This comprehensive overview of the sustainability initiatives across major ocean carriers highlights a strong collective commitment to reducing the environmental impact of shipping. Each carrier has tailored its sustainability efforts based on its operational priorities, available technology, and customer demands. Their strategies typically focus on reducing carbon emissions through fleet modernization, alternative fuels, improved energy efficiency, and carbon offset programs.

The efforts of these companies demonstrate progress in making the shipping industry more sustainable, although achieving the necessary global reductions in emissions will require continued collaboration and investment in innovative technologies.

## Disclaimer

The information provided herein is intended solely for educational and informational purposes related to the sustainability initiatives of ocean carriers. While every effort has been made to ensure the accuracy and reliability of the data and references cited, the CIFFA Corp Sustainability Committee does not assume responsibility for any errors, omissions, or inaccuracies. This paper does not endorse any specific company, product, or practice and should not be considered as professional advice.