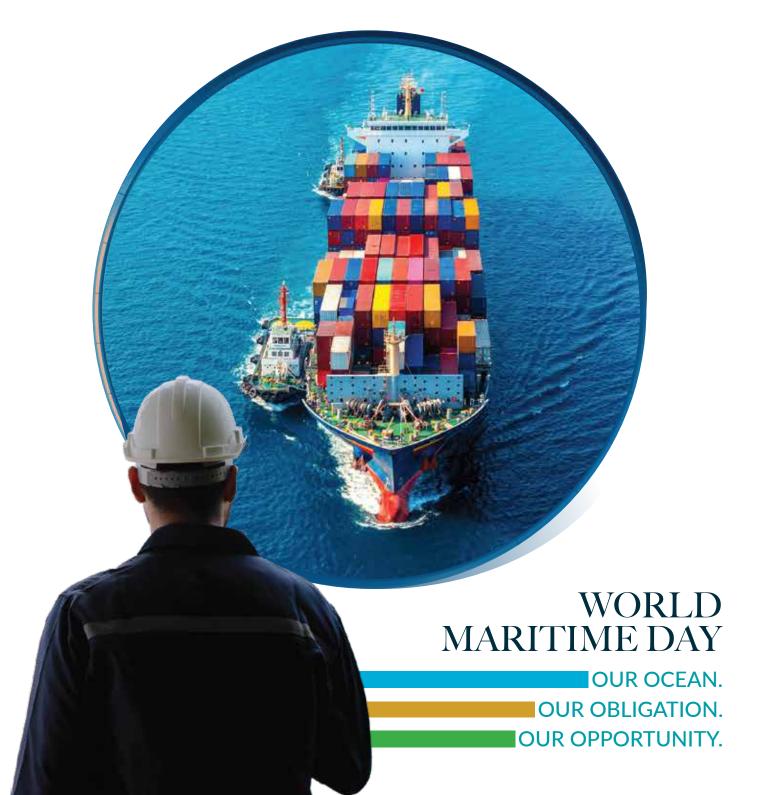


NAUTILUS SHIPPING

FOR THE SEA, FOR THE FUTURE





INTRODUCTION

Every September, the maritime community pauses to celebrate World Maritime Day, a day that reminds us how profoundly the ocean shapes our lives, economies, and collective future.

For those of us who live by it, work on it, or sail across it, World Maritime Day is a reminder that the sea is not only a workplace or a trade route, it's a living system that sustains us. The 2025 theme, "Our Ocean, Our Obligation, Our Opportunity," captures that connection perfectly. It's a call to remember what the ocean gives, what we owe it in return, and what possibilities lie ahead if we care for it wisely.

Why It Matters

The ocean gives more than we often realize. It provides half the oxygen we breathe, regulates the planet's climate, and enables over 80% of world trade. It's also the source of food and livelihoods for billions.

But this balance is fragile. Pollution, rising sea levels, and the accelerating effects of climate change are straining the world's largest ecosystem. Plastic waste continues to clog its waters. Marine biodiversity is under threat. Coastal communities are feeling the impact of storms and changing weather patterns more than ever before.

For the maritime industry, this is more than a moral duty. It is the foundation of continuity. The health of the ocean defines the health of shipping itself.

Our Ocean



The ocean is both the path towards progress and a delicate ecosystem. Every voyage, vessel, and port depends on its vitality. The sea connects people and nations, but it also bears the effects of human activity.

Recognizing this, the International Maritime Organization (IMO) has continually strengthened global regulations to preserve marine health. The MARPOL Convention (1973)

set the benchmark for preventing pollution from ships. Over time, new frameworks, such as the London Convention and Protocol, the Ballast Water Management Convention, and controls on anti-fouling systems, have expanded protection across all dimensions of maritime activity.

This year, IMO has taken further steps to restore ocean balance, including:

- The 2025 Action Plan on Marine Plastic Litter, which aims to reduce waste from ships and fishing vessels
- A new global framework on biofouling management and limiting invasive aquatic species
- The Mediterranean Sea's designation as an Emission Control Area, cutting sulphur emissions by 90%
- The application of the Hong Kong International Convention on safe ship recycling

Our Obligation

Our obligation begins with compliance, but extends far beyond it. The IMO's seven strategic directions provide a blueprint for global maritime sustainability:

- 01 Improving implementation of international standards
- 02 Integrating new and advancing technologies into regulation
- 03 Responding to climate change through decarbonization and energy efficiency
- 04 Engaging in ocean governance and protecting marine ecosystems
- 05 Enhancing facilitation and security of international trade
- 06 Ensuring regulatory effectiveness
- 07 Ensuring organizational effectiveness

These directions align closely with the UN Sustainable Development Goals (SDGs), particularly

SDG 13 (Climate Action), SDG 14 (Life Below Water), SDG 9 (Industry, Innovation and Infrastructure), and SDG 17 (Partnerships for the Goals).

For seafarers, these commitments take shape in everyday actions: maintaining clean operations, ensuring waste segregation, and upholding safety procedures that protect both crew and sea.



Our Opportunity

Opportunity lies in innovation. The shift toward net-zero emissions by around 2050 opens new frontiers for technology and collaboration. Cleaner fuels, renewable propulsion systems, and digital navigation tools are transforming how vessels operate.

Emerging initiatives such as the IMO Net-Zero Framework, the GloNoise Project to reduce underwater radiated noise, and advances in green ship design demonstrate that progress and protection can coexist. At the same time, global platforms like the BBNJ Agreement on marine biodiversity and the UN Ocean Conference (June 2025) are uniting governments and industries to manage ocean resources collectively.



GOALS FOR THE FUTURE

The years ahead will define how effectively the maritime sector contributes to global climate and conservation goals. The focus areas include:

- Decarbonizing shipping through scalable alternative fuels and efficient technologies
- **Enhancing digitalization** for smarter fleet operations and lower emissions
- Protecting marine biodiversity through stricter ballast and recycling standards
- Improving seafarer welfare ensuring fair work, mental health support, and continuous training
- Strengthening global partnerships to align with SDG 17 and build resilient maritime economies

Each goal reflects a shared vision: a maritime industry that advances human progress without compromizing the ocean's health.

Fun Facts!

Marine Insurance Predates Modern Banking

Did you know? Lloyd's of London began as a coffeehouse where shipowners and merchants pooled money to cover voyage risks, long before modern banking took shape.



DOING OUR PART

At **Nautilus**, these ideals are more than aspirations; they guide our everyday operations. From fostering a culture of safety to supporting cleaner practices and crew well-being, we believe sustainability begins with awareness and action. Our ocean is both our workplace and our legacy; our obligation is to preserve it; our opportunity is to redefine what responsible shipping means.

We believe every voyage carries responsibility. And every step toward sustainability, however small, contributes to a much larger course correction for our planet.

World Maritime Day 2025 reminds us that the ocean's story is inseparable from our own.

Ocean sustains. Obligation guides. Opportunity inspires.

Together, they define not just where we sail, but how we choose to move forward.

As we look toward the horizon, may we continue to steer with purpose, protect what sustains us, and keep the promise of a cleaner, safer, and more resilient ocean for generations to come.







THE IMPACT OF THE OCEAN

There is a need to understand the importance and impact of the ocean, to comprehend exactly how much of our world depends on it. From the air we breathe to the goods that arrive at our ports each day, the ocean quietly supports every aspect of modern life. It drives the global economy, stabilizes the climate, and sustains livelihoods in ways that are often taken for granted.

The Ocean and Its Reach

Every ship that crosses an ocean carries a link in the global supply chain: food, medicines, electronics, raw materials, or fuel. Without these routes, many countries would face shortages within weeks. Maritime transport keeps industries running and connects producers to markets thousands of miles away.

The ocean absorbs over 90% of excess heat from global warming and supports three billion people through fisheries, tourism, and coastal livelihoods. Mangroves and coral reefs protect shorelines, preventing an estimated US \$65 billion in damage each year. Its influence extends far beyond trade, shaping both environmental stability and human well-being.







The Economic Advantage of Ocean Freight

Ocean freight remains the most efficient and affordable mode of global transport. A comparison by Freightos notes that a shipment costing about \$195 by sea could cost nearly \$1,000 by air, roughly five times more. For high-volume or heavy cargo, the cost gap is even wider.

The difference is not only financial. Ocean shipping has a far smaller carbon footprint than air freight. Studies show that the same amount of cargo transported by sea generates a fraction of the emissions produced by aircraft. As companies and governments work toward sustainability targets, this efficiency makes ocean freight central to reducing global logistics emissions.

How Nations Depend on the Sea

For many regions, particularly small islands and import-reliant nations, the ocean is essential to daily life. Cuba's energy system, for instance, depends almost entirely on fuel imported by sea. A delay in tanker arrivals can affect electricity generation and transport networks. Across the Caribbean, countries such as the Bahamas, Saint Lucia, and Dominica depend on maritime trade for food, medicines, and manufactured goods. When global shipping costs rise or routes are disrupted, the effects reach households quickly.

A recent academic study found that global shipping delays, which lengthened by about 21 days between 2018 and 2024, led to a 7.3% reduction in output and a 1.8% rise in prices. Disruptions in shipping directly translate into slower production and higher costs across industries.





Balancing Trade and Environmental Responsibility

While shipping remains the most efficient form of mass transport, it still contributes to emissions and marine impacts that must be managed carefully. The International Maritime Organization (IMO) continues to introduce regulations aimed at lowering sulphur emissions, improving fuel efficiency, and supporting

cleaner technologies. Measures such as the Mediterranean Emission Control Area (ECA) and the IMO's Net-Zero Framework form part of a long-term effort to make shipping compatible with global climate goals.

Preparing for the Future

The future of ocean impact will depend on finding a sustainable balance between trade and environmental protection. According to UNCTAD, global shipping routes are becoming longer and more complex due to geopolitical disruptions and re-routing, increasing average voyage distances by more than 400 miles since 2018. This trend raises costs and emissions but also highlights the need for investment in efficiency and technology.

The ocean influences every sector, from trade and transport to food and energy. It connects regions, supports economies, and moderates the planet's systems. Understanding its impact is central to planning a sustainable future for shipping and for society. Continued investment in responsible maritime operations will ensure that the ocean remains a source of stability for generations to come.



STORIES FROM THE SEA

Four Decades at Sea: What the Ocean Has Taught Me

I am a sailing Master Mariner with a career spanning more than 4 decades at sea. Having started my career in the year 1982 on board the ship TS Rajendra, I have sailed in various capacities including 25 years as Master, on various types of foreign going ships like general cargo, reefers, bulk carriers and container vessels. While sailing I completed my MBA degree in Shipping and Logistics from Lloyds Maritime Academy-London in the year 2011.My 'Business Transformation Project' – A Mariners perspective on Safe Ship Manning.

What are the biggest changes you've seen in the industry since you started your career?

My career can be better viewed by classifying under the following decades:

1982–1992: These were the best years of sailing. We had larger crews and spent longer periods in port, which gave us time to explore. Communication was limited, so our focus stayed completely on work and safety,

Between 1992 and 2002, computers began to emerge, and radio personnel were replaced. Slowly, everything was digitalized, and we had to train ourselves in computers. Management began to take an active role in ships, resulting in a decrease in the number of crew members on vessels. The size of ships had increased from then to now.

From 2002 to 2012, the shift was towards new regulations and compliance. More reporting, and a lot more paperwork. It changed how we worked; compliance with documentation became as important as seamanship itself.

Since 2012, - Micromanagements of vessels from office ashore became the norm and an increase in digitalization was possible with the expansion of internet and satellite communication.



Capt. Balajee Jayaraman

In the coming decade, I foresee that there will be lesser role for management companies to play, and everything will be heading towards autonomous ships. The transition to autonomous ships will be a challenging phase.

What do you think today's seafarers value most from ship managers or crewing agencies?

The modern day 'GenZ' seafarer considers sailing as 'just another stepping stone' to move ashore or 'start up' something else. Most of them are misled into this career by portraying a glamorous picture and are disappointed when they land on board and see the reality. Today's seafarers are tech savvy, and believe in being socially connected all the time. They are well connected among themselves on social media and have all details of the vessel, route etc. before they join the vessel.

The present generation of seafarers want to be treated like their counterparts ashore. They want the following to be provided

- Transparency when joining ship and merit-based recruitment
- Good and free Internet services on board
- Welfare facilities during off time like Gymnasium,
 Games and Sports, Play Station and TV.
- Healthy nutrition as per the promised budget rate
- Clean and free drinking water
- Genuine rest hours as per MLC
- Timely renumerations and reliefs
- Appreciation for their work
- No false promises and mutually reciprocative commitments
- To genuinely prioritize safety of seafarers over commercial interests



If you were to share one proud moment during your career- what would it be?

Today I can proudly say that, for my entire career, I have brought my crew, vessel and cargo safely home without any untoward incident. This I attribute, not to luck, but to the hard work and dedication of my crew, officers and my foresightedness and planning for the unexpected.

What would be your word of advice for today's young seafarers

This industry is good for those who are committed. The renumeration is still good compared to other industries, I want youngsters to complete their exams on time and to continuously upgrade their skills.

Looking back, I would say that life at sea has been good and fruitful for me.

PHOTOS FROM THE SEA

This month brought in a wide range of entries, from sunrise departures to quiet moments on deck. Each photograph offers a glimpse into the rhythm of life at sea and the people who keep it moving.



Fun Facts!

One Agency, One Standard

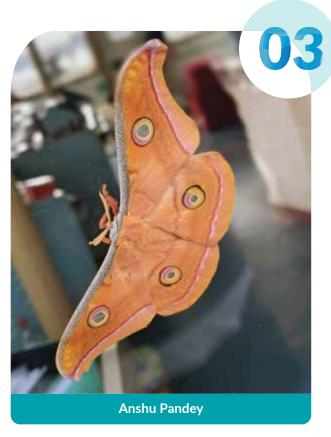
The IMO sets the rules for ship safety, training, and pollution control, so vessels follow nearly identical standards whether in Tokyo, Tunis, or Texas.



PHOTOS FROM THE SEA

This month brought in a wide range of entries, from sunrise departures to quiet moments on deck. Each photograph offers a glimpse into the rhythm of life at sea and the people who keep it moving.





Thank you to everyone for sharing their beautiful snapshots. If you would like to be featured in the next issue, email your photo and caption to nautilusshippingmarketing@gmail.com

We're very excited to see your submissions!



NEWS & INSIGHTS



1. First WindWings-Equipped Dual-Fuel LNG Tankers Gain Marshall Islands Flag Approval

The world's first dual-fuel LNG tankers fitted with WindWings propulsion have received SOLAS approval under the Marshall Islands flag. The certification marks a significant step toward integrating wind-assisted technology with cleaner fuels, demonstrating how hybrid propulsion can cut emissions while meeting international safety and environmental standards.

2. Royal IHC: India's Growing Role in Global Shipbuilding

Royal IHC's CEO has emphasised that the **Indian shipbuilding industry** is poised to play a larger role in the international market. Through technology transfer and a new partnership with **Swan Defence**, the company aims to strengthen India's capabilities in complex vessel construction and expand its global competitiveness. The collaboration signals renewed confidence in India's potential as a shipbuilding hub.

3. India Among Top Three Global Suppliers of Seafarers

India now ranks among the **top three providers of seafarers worldwide**, with its maritime workforce growing from **1.25 lakh a decade ago to more than 3 lakh today**. The rise reflects both improved training capacity and increasing global demand for Indian officers and ratings.

This expansion reinforces India's strategic importance in global crew supply and highlights the need for continued investment in maritime education and welfare.

Blogs

How Container Shipping Companies Can Reduce Their Environmental Footprint

Container shipping carries over 90% of the world's goods, but its environmental footprint is under growing scrutiny. Read now for our



comprehensive guide to strategies such as fuel-efficient designs, smarter route planning, and retrofits that help container lines lower emissions and operate more sustainably.



The IMO's
Expectations for the
Future of Shipping:
How to Get There

The IMO forecasts that without intervention, shipping emissions could rise 50–250% by 2050.

Read now for our full breakdown of the IMO's revised GHG strategy, its timelines to 2030, 2040, 2050, and the steps industry players must take to meet those expectations.

Scan to read more







SUSTAINABILITY AT SEA: NAVIGATING THE SUPPLY GAP

Shipping has always connected the world. Today, it connects the challenge of global trade to the reality of climate change. The industry moves over 80% of world commerce, but also contributes close to 3% of total greenhouse gas emissions, a figure projected to rise to 5–8% by 2050 without major intervention.

The International Maritime Organization (IMO) has set ambitious goals: cutting emissions by 20–30% by 2030, with full decarbonization targeted by mid-century. Yet as regulatory timelines tighten, the transition from fossil fuels to zero-emission alternatives is facing a major roadblock, the supply of new fuels is not keeping pace with demand.

Supply Constraints: Ambition Meets Reality

Zero-emission fuels like methanol, ammonia, and hydrogen are at the centre of maritime decarbonization strategies. But the supply chain that supports them remains underdeveloped. More than 95% of global zero-emission fuel projects are still in pre-final investment stages, announced, but not yet funded or built.

Manufacturing capacity, fuel production, and bunkering infrastructure lag well behind what future fleets will require. Methanol supplies are already stretched. Without rapid scaling, new dual-fuel vessels risk operating without consistent access to the very fuels that define their purpose.

Early Signals of Progress

Despite the gridlock, progress is visible. Over 200 dual-fuel methanol vessels have been ordered globally, a clear sign of confidence in future fuel flexibility.

Partnerships are beginning to bridge gaps: Maersk, Yokohama Port, and Mitsubishi Gas Chemical are building green methanol bunkering infrastructure in Japan; Singapore's port authority is advancing ammonia-based bunkering projects; and the Zero Emission Maritime Buyers Alliance is pooling corporate demand for zero-emission freight to de-risk production.

These efforts reflect a shift from competition to collaboration, the understanding that no single stakeholder can solve the supply puzzle alone.

Barriers Below the Surface

The challenges to be considered are multifaceted.

- Cost remains the most visible barrier, green fuels are far more expensive than traditional marine fuels, requiring subsidies, carbon pricing, or fuel mandates to narrow the price gap.
- Regulatory uncertainty compounds risk; inconsistent global standards deter investors wary of shifting compliance frameworks.
- Infrastructure represents another bottleneck: ports must retrofit bunkering systems, storage facilities, and safety protocols for volatile fuels such as ammonia and hydrogen.

Add to this financing and demand uncertainty, without aggregated demand from shippers, cargo owners, and ports, investors struggle to justify long-term commitments.



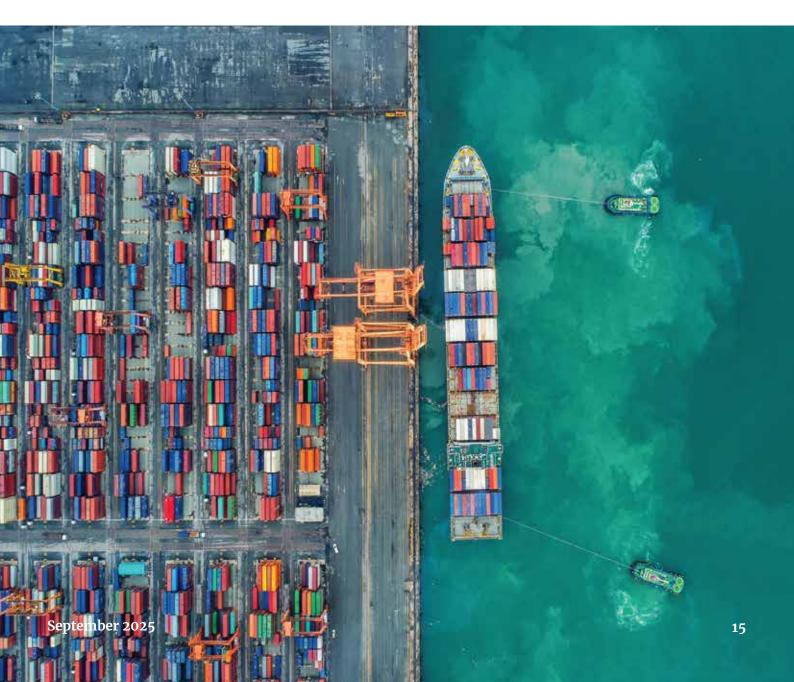
Ports and the Blue Economy

Beyond fuel, ports themselves are redefining sustainability through the blue economy, integrating innovation with ecosystem care.

Initiatives such as the Port of San Diego's Blue Economy Incubator show how infrastructure can serve both commerce and conservation. By supporting startups focused on eco-engineering, aquaculture, and nature-inclusive design, ports are proving that environmental responsibility can strengthen, not slow, economic growth.

The journey toward zero emissions will depend as much on coordination as on technology. Policies, financing, and innovation must advance together to avoid a fragmented transition.

At **Nautilus**, we see sustainability as shared stewardship, a responsibility that begins with operational discipline and extends to collaboration across the industry. The sea has carried our progress for centuries. Ensuring it remains navigable and alive for the centuries ahead is not just our target, it is our obligation.





NEAR MISS INCIDENT

Incident Report: Unsafe Position During Mooring Operations

Vessel Location: Jaigarh Port (Forward Station)

During berthing operations at Jaigarh Port, the Chief Officer observed an Ordinary Seaman (OS) standing within the snap-back zone while mooring operations were in progress at the forward station. At the time, all mooring ropes were under high tension due to vessel surging, creating a potential risk of a rope parting — an event that could have caused serious injury or loss of life.

The Chief Officer immediately called out and instructed the OS to move clear of the snap-back zone. The crew promptly responded, cleared the area, and the mooring operation was completed safely without injury or damage.



Ravi Technical Super Intendent

Immediate Action Taken

- The Chief Officer immediately instructed the crew to vacate the snap-back zone
- The mooring operation was safely completed without further incident
- Following berthing, all crew members were briefed on the importance of observing safety precautions and remaining alert to the hazards associated with snap-back zones



Root Cause / Contributing Factorst

- Lack of situational awareness by the crew member regarding snap-back zone hazards
- Possible complacency during routine mooring operations

Preventive Measures / Recommendations

- Reinforce snap-back zone awareness through regular onboard training and toolbox meetings
- Conduct pre-mooring briefings to emphasise safe positioning during operations
- Maintain visual markings and safety signage at mooring stations to remind crew of restricted areas





NAVIGATING THE NEW TIDE OF MARITIME COMPLIANCE



Regulation has always been a part of shipping. But today, maritime compliance extends beyond safety drills and checklists; it now defines how vessels operate, how they impact the planet, and how shipowners earn the trust of global partners.

For the industry, compliance is more than a legal anchor. It is the foundation of responsible trade, resilience, and reputation.

The Expanding Framework

International conventions and regional rules together form a layered structure of obligations for shipowners, operators, and crews. The International Maritime Organization (IMO) sets the global baseline through conventions like SOLAS for safety, MARPOL for pollution prevention, STCW for crew competence, and the ISM Code for management systems.

Complementing these are the ILO's Maritime Labour Convention (MLC, 2006), EU and U.S. regional frameworks such as FuelEU Maritime and VIDA, and port-state regimes that ensure uniform enforcement. Each adds depth to the global compliance ecosystem, collectively safeguarding life, livelihoods, and the environment.





Compliance Summary Table

Category	Key Regulations / Conventions	Primary Purpose	Regional / Additional Requirements
Safety Compliance	SOLAS, ISM Code, STCW	Ensures vessel and crew safety through design, construction, and operational standards.	USCG safety inspections, national flag audits.
Crew Welfare	MLC 2006, Jones Act	Safeguards seafarers' working conditions, rest hours, medical rights, and compensation.	U.S. labour protection and injury compensation laws.
Emissions & Air Quality	MARPOL Annex VI, EEDI, CII, EU ETS	Reduces sulphur, nitrogen, and greenhouse gas emissions; promotes cleaner fuels and energy efficiency.	CARB limits in California; EU carbon allowance trading; Med SOx ECA (2025).
Energy Efficiency	SEEMP, EEXI	Mandates ship-specific energy efficiency management and performance indicators.	USCG-certified energy systems; IMO DCS data reporting.
Environmental Protection	MARPOL Annexes I–V, Ballast Water Management Convention, Anti-Fouling Systems (AFS), Hong Kong Convention	Prevents pollution from oil, garbage, ballast water, coatings, and ship recycling activities.	Clean Water Act (U.S.); EU Ship Recycling Regulation.
Regional Compliance	VIDA (U.S.), FuelEU Maritime (EU), CARB (California)	Addresses local discharge, fuel, and emission rules beyond IMO scope.	VIDA vessel-incidental discharges; FuelEU GHG-intensity limits; CARB low-NOx zones.



Environmental & Emissions Compliance

Environmental oversight is now at the heart of global regulation. The Mediterranean Sea Emission Control Area (SOx ECA), effective May 2025, limits sulphur content in fuel oil to 0.1 %, aligning the region with the Baltic and North Seas. New ECAs in the Norwegian Sea and Canadian Arctic will follow, introducing Tier III NOx and SOx restrictions by 2026–27.

Meanwhile, the EU ETS expansion and FuelEU Maritime have created an economic layer of accountability. Ships over 5,000 GT calling at EU ports must now report verified emissions data, purchase allowances (EUAs), and meet GHG-intensity limits. Operators can "pool" compliant and non-compliant vessels, "bank" surplus credits, or face rising penalties, mechanisms that make emissions a measurable financial metric.

MARPOL Annex VI, together with the EEDI, CII, and SEEMP, pushes the industry toward efficiency-linked compliance, where performance is constantly monitored and improved rather than declared once and forgotten.



Managing Risk Through Compliance

Non-compliance can immobilize fleets, through detentions, penalties, or loss of charter eligibility. To prevent that, shipowners are embedding compliance into broader risk-management systems.

Key strategies include:



Due Diligence

Vetting vendors, yards, and fuel suppliers for compliance performance.



Technology & Automation

Using IoT, AI, and blockchain for live emissions tracking and digital documentation.



Training & Education

Keeping seafarers updated on regulatory revisions and audit procedures.



Transparent Reporting

Ensuring real-time alignment between ship logs, class records, and regulatory filings.



In practice, these measures transform compliance from a burden into a competitive advantage, reducing insurance premiums, avoiding downtime, and demonstrating reliability to partners.



Building a Culture of Compliance

Ultimately, compliance depends on culture. Regulations can mandate actions, but only awareness and accountability can sustain them. Every log entry, every maintenance check, every audit reflects a collective commitment to safety and stewardship.

At Nautilus, compliance is woven into daily operations, through continuous training, transparent documentation, and proactive coordination with authorities and classification societies. We see it not as a box to tick, but as a responsibility to uphold.

Because in the shifting tide of maritime regulation, staying compliant is not only about following the course, it's about leading responsibly within it.

Fun Facts!

Three Names That Shape Every Voyage

SOLAS for safety, MARPOL for pollution prevention, and STCW for crew training, three global codes that define how ships operate every day.

The Titanic's Lasting Legacy

SOLAS was first adopted in 1914 after the Titanic tragedy, laying down the very rules for lifeboats, watertight design, and onboard drills that ships still follow today.

From Oil Spills to Air Emissions

MARPOL started as a treaty against oil spills; now it covers six annexes that regulate everything from chemicals and sewage to garbage and exhaust gases.

Equal Rules in Every Port

"No more favourable treatment" means that even ships from non-party flags face the same inspections when they enter a member state's port, keeping the playing field level.



EXPERT SPEAKS

Finding the Balance Between Responsibility and Opportunity at Sea

A Career Shaped by Two Decades of Technical Excellence

With 20 years of industry experience ashore, right from Tech Superintendent to Technical Director, I have been involved with the technical management of various types of vessels – Bulk Carriers, Tankers (VLCC, VLGC, Product Carriers), and Containers. I specialise in the day-to-day technical operations of vessels and in maintaining the fleet under strict compliance with statutory regulations, meeting charterers' requirements, and ensuring trouble-free port calls for any PSC or Flag inspections. I have managed a wide range of owners' assets, handling the challenges that come with keeping ships performing to their best possible capabilities.





Parthiban
Technical Director

How do you see the balance between obligation (responsibility) and opportunity (innovation/growth) in the shipping industry?

As the lifeblood of global trade, shipping has both the obligation and the opportunity to steer the world toward a sustainable future. Obligation and opportunity go hand in hand. When I take the obligation to deliver under legal, industrial, or commercial constraints, there also exist opportunities to explore new areas where we can innovate or adapt to the challenges being introduced in the industry.

For example, we adopt new regulations as early customers and reap the benefits by offering our assets to commercial operators, maintaining an edge over others. But we need to foresee these opportunities at the right time to benefit from them.



From a technical perspective, what practical steps can shipping companies take to minimize their environmental footprint?

To minimize the environmental footprint, vessel operators need to adopt the latest technologies offered by engine makers – lean, clean designs.

Owners should be encouraged to switch to alternative fuels to reduce carbon emissions from well to wake. Ships should adopt new designs, retrofit newer propellers, and upgrade existing fuel-burning components with improved designs. Voyage optimization plans, waste-heat recovery systems (such as thermal harnessing from engines and boilers), and operating vessels only at required speeds are essential. Engaging with industry experts to discuss and implement such measures will contribute to a greener future.

How can seafarers be empowered to play a more active role in ocean stewardship?

Seafarers are the eyes, hands, and conscience of the maritime industry. We need to empower them with knowledge, training, and technology to enable their active participation.

Well-structured training modules should share the latest industry requirements and how to comply with them, without creating a financial burden. Regular training, updates on innovations, and sharing the pros and cons of alternative methods are key. With digital technology, frequent on- and offshore interactions, opportunities for seafarers to share their views, and involving them in decisions will make them stronger contributors. Incentives, recognition, and public appreciation of innovative ideas will go a long way in encouraging seafarers to take ownership of these goals.

Where do you see the greatest opportunities for the maritime sector to lead the global transition to greener operations?

As the main transporter of global trade, the maritime industry can lead the world in reducing carbon emissions. By adopting the latest technologies to minimize fuel consumption, optimizing resources through weather routing and voyage planning, and analysing performance data to reduce wastage, we can significantly improve efficiency.

Active involvement of asset owners with research and expert teams – for example, fleet owners funding and collaborating on new hull or propeller designs to reduce drag and improve thrust, or incorporating solar and wind energy into vessel design – will be critical. The responsibility does not rest solely with large fleet owners; smaller owners can form consortiums to participate collectively.

Opportunities are plenty - we only need to involve ourselves and participate actively.

What message would you like to give to seafarers, ship owners, and industry partners on this World Maritime Day?

Let's show the world that we belong to an industry that touches every household on this planet – from food and consumables to cars, electronics, and fuel. We are also among the most active contributors to a greener world, reducing pollutants in air and sea by adopting the latest technologies, monitoring systems, and data-driven optimisation. Together, with our dedicated seafarers and colleagues ashore, we can continue moving global trade responsibly while protecting the environment for future generations.



OUR OPPORTUNITY





HOW SEAFARERS CAN USE AI EVERY DAY

Active involvement of asset owners with research and expert teams – for example, fleet owners funding and collaborating on new hull or propeller designs to reduce drag and improve thrust, or incorporating solar and wind energy into vessel design – will be critical. The responsibility does not rest solely with large fleet owners; smaller owners can form consortiums to participate collectively.

Career Assistance

Al resume builders, job-matching platforms, and LinkedIn optimization tools can help when looking for the next contract.



Example:

A Chief Officer finishing his contract wants to move to a bigger shipping company but isn't sure how to present his experience. Using an AI resume builder, he quickly drafts a professional CV and even gets LinkedIn suggestions that highlight his tanker experience. Within weeks, recruiters reach out with opportunities he wouldn't have found otherwise.

How to use it:

- Open ChatGPT or any AI resume builder.
- Type: "Write a short job application email for a Chief Officer with 12 years' tanker experience."
- Ask: "Optimise my LinkedIn summary to highlight leadership and safety management at sea."
- Review, edit, and upload.

Personal Finance

Al-based finance apps can help seafarers plan savings, track remittances, and manage expenses while away from home.



Example:

An AB working on a bulk carrier wants to send part of his salary home and save the rest. Instead of manually tracking expenses in a notebook, he uses an Al finance app that reminds him of remittance dates, shows how much he can save monthly, and even gives insights on spending habits. This helps him meet his goal of buying land back home.

How to use it:

- Download a trusted Al-based finance app.
- Set monthly saving targets and payment reminders.
- Review the app's "spending insights" to track where most of your money goes.



Learning & Career Growth

Al learning tools (Duolingo, ChatGPT-style tutors) can help seafarers improve English, technical skills, or prepare for exams like STCW upgrades.



Example:

A 3rd Engineer preparing for his STCW refresher struggles with technical English terms. Onboard, during his free time, he uses an Al tutor app that quizzes him on marine engineering concepts in simple English. By exam time, he's more confident and passes without last-minute stress.

A Cadet aiming to clear his Certificate of Competency exam uses an AI "virtual mentor." He uploads past questions and gets practice tests with instant feedback. The mentor points out weak areas, helping him focus his study hours wisely, instead of cramming blindly.

How to use it:

- Use a learning app or ChatGPT to test knowledge.
- Try prompts like: "Explain the working principle of a centrifugal purifier in simple words," or "Create a 10-question quiz for marine engineering basics."
- Review answers and repeat until confident.

Smarter Email Writing

Al assistants can help seafarers draft professional emails quickly, whether it's reporting an incident, requesting spare parts, or sending daily updates. This is especially helpful for those who aren't confident in English writing.



Example:

A 2nd Officer needs to send an urgent email to the technical superintendent about a malfunctioning radar. He types the rough details into an Al assistant, which turns it into a clear, professional email with the right structure. The superintendent gets all the details at once, saving back-and-forth clarification and speeding up repairs.

How to use it:

- Open ChatGPT or another writing assistant.
- Type: "Write a professional email to a technical superintendent about radar malfunction due to power fluctuation."
- Review, correct details, and send.

The Takeaway

Al doesn't replace human skill, it enhances it. From finding the next job to managing earnings, improving skills, and communicating clearly, these tools can make a real difference in how seafarers live and work. What once took hours can now take minutes, giving more time for what truly matters.

Note: As AI is still a developing tool, it can provide wrong answers. It is always important to check answers to make sure that they are right.



NAAVIK MANTHAN 2025 CHARTING THE COURSE FOR INDIA'S MARITIME FUTURE

During berthing operations at Jaigarh Port, the Chief Officer observed an Ordinary Seaman (OS) standing within the snap-back zone while mooring operations were in progress at the forward station. At the time, all mooring ropes were under high tension due to vessel surging, creating a potential risk of a rope parting — an event that could have caused serious injury or loss of life.

Held at the Courtyard by Marriott, Mumbai, the conference explored how digitalization, coastal connectivity, and decarbonization can reshape maritime operations. Speakers highlighted that technology, when applied with empathy, can enhance efficiency, safety, and seafarer well-being.

A key focus was on coastal shipping and AI in shopping, its potential to reduce logistics costs, create employment, and strengthen India's role in the global blue economy. The event reaffirmed that the maritime sector's future depends not only on ships and systems, but on collaboration and shared purpose.















Key Takeaways

- **Technology with Purpose:** Efficiency should enhance, not replace, human expertize
- Sustainability First: Collaboration is vital to achieving decarbonization goals
- Coastal Growth: Inland and coastal routes are key to India's logistics future
- People at the Helm: Seafarer welfare and upskilling remain core priorities
- Shared Progress: Partnerships between industry, government, and academia drive lasting change

NAUTILUS' VISION FOR THE FUTURE

At Nautilus, our focus remains on shaping a future that balances innovation, responsibility, and care for those at sea. The year ahead is about steady progress, collaboration, and impact, and there are three main goals we are working towards.



Market Leadership: Become the No. 1 coastal cargo transporter by tonnage and be recognized globally as the preferred name for managing the finest ships.



Global Expansion: Strengthen presence in Kolkata, Singapore, Sri Lanka, and Greece through new offices, joint ventures with global shipping companies, and participation in international maritime panels.



People & Culture: Establish the **Nautilus Training Institute** and build a reputation as an **employer of choice** within the maritime sector.

Each of these goals strengthens our commitment to a maritime industry that is efficient, sustainable, and human at its core, one that continues to move forward with purpose and integrity.

UNTIL NEXT MONTH KEEP SAILING FORWARD



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