



International
Chamber of Shipping
Shaping the Future of Shipping

Leadership Insights

Insights from the global leadership community

Issue no: 53 | September 2026

Decision Makers – Knut Ørbeck-Nilssen

Navigating crisis through transparency and trust p2

News Analysis

Powering the long haul: batteries at sea p5

ICS in action

ICS addresses UN Security Council on maritime security and freedom of navigation

Shipping industry welcomes the proposed inclusion of Indian ship recycling yards on the European List

Cyber Security Workbook for On Board Ship Use, Eighth Edition, e-book is released p8

A portrait of Knut Ørbeck-Nilssen, a middle-aged man with short brown hair, wearing a dark blue suit, white shirt, and a blue patterned tie. He is smiling slightly and looking towards the camera. The background is a teal color with a subtle halftone dot pattern.

Finding opportunity through uncertainty

From geopolitical disruption to technological and regulatory change, Knut Ørbeck-Nilssen, Group President and CEO of DNV, shares how strong leadership can provide direction while keeping shipping focused on the opportunities ahead



Navigating crisis through transparency and trust

Knut Ørbeck-Nilssen, Group President and CEO of DNV, sits down with *ICS Leadership Insights* this month to discuss topics from good leadership in times of uncertainty, to the importance of trust in maritime and progress in the industry's energy transition.

reinforced the importance of being both optimistic and realistic, providing clear direction while being honest about challenges.

I like to think that those experiences shaped a leadership style rooted in technical competence, curiosity, pragmatism, and respect for people. In the end, leadership is about earning trust and enabling others to succeed.

Q You've spent more than three decades in shipping, from surveyor to one of the industry's most recognised leaders. When you look back, what experiences do you think have shaped your leadership style more than anything else?

A Looking back, the experiences that shaped me most were the ones that kept me close to the realities of shipping. Starting as a surveyor gave me a first-hand understanding of the people, operations, and decisions that keep our industry moving.

As my career progressed, working with customers, colleagues, and stakeholders around the world taught me that leadership is less about having all the answers and more about asking the right questions, listening, building trust, and helping people navigate uncertainty.

The periods of greatest change have probably been the most influential. Whether dealing with geopolitical shocks, market downturns, regulatory shifts, or the challenge of decarbonisation, I learned that trust becomes your most important asset. These periods

Q As a leader who has navigated structural industry shifts and major crises, what core, non-negotiable principles do you rely on most when the path ahead isn't clear?

A Over the years, I've learned that uncertainty is something you learn to navigate. Shipping has always been cyclical and constantly evolving, and if you spend enough time in this industry, you experience everything from market downturns and geopolitical disruption to major technological and regulatory shifts.

I rely on a few principles: stay grounded in facts, be honest about what you know and don't know, manage your input sources and listen to people with different perspectives, and keep a long-term view of where you're heading.

I've also learned the importance of pragmatism. You rarely have perfect information, particularly in an industry going through significant change. The key is to consider optionality, make decisions, adapt when needed, and keep moving forward while staying true to your values.

Q You frequently emphasise the importance of trust in maritime operations. Do you believe trust is earned primarily through technical competence, deep industry relationships, or the decisions made when things don't go to plan?

A Trust is built over time, and it comes from a combination of factors. Expert competence is essential. People need confidence that your decisions and advice are grounded in expertise. Strong relationships matter too, because trust grows through consistent delivery and open dialogue.

But if I had to choose, I would say trust is truly tested when things don't go according to plan. Anyone can build confidence when circumstances are favourable. The real measure is how you respond to setbacks, uncertainty, or difficult decisions.

I've found that people don't expect perfection. They expect honesty, accountability, and a willingness to take responsibility. When you demonstrate those qualities, trust tends to grow stronger. In that sense, trust is built through competence and relationships, but it's often earned through actions when the heat is on.

I remain optimistic about the direction of travel. But we also need to be realistic about where we are today and what it will take to reach the destination

Q DNV's latest *Maritime Forecast to 2050* points to massive dual-fuel engine order-books, yet actual low-GHG fuel consumption remains stubbornly low. Are owners spending billions on dual-fuel assets that will be forced to burn conventional fossil fuels for years to come?

A Not necessarily. The strong uptake of dual-fuel vessels reflects the fact that owners are making long-term investment decisions in an environment where the future fuel mix remains uncertain.

The reality is that the availability of low-GHG fuels is not yet available at scale and at a competitive price. That is a challenge, and our latest *Maritime Forecast to 2050* highlights this gap. Investing in dual-fuel capability today gives owners flexibility to transition as fuel availability and affordability improves and regulations tighten. We should view these vessels as transition-ready assets.

The critical next step is accelerating the production, distribution, and bunkering infrastructure needed to make low-GHG fuels available at scale, and at costs that are competitive with conventional fuels.

Of course, some vessels, such as those in tramp shipping, will continue to rely heavily on conventional fuels. However, these vessels will also gain by improving energy efficiency and thus reducing fuel consumption.

Q Two years ago, you noted the energy transition was gathering rapid momentum, but you recently warned that shipping has "very little chance" of making the IMO's 2030 targets. What went wrong across the industry in the last 24 months?

A I wouldn't say something has gone wrong. In many ways, we've seen significant progress. Shipowners are investing in more efficient vessels, new technologies, and fuel flexibility, despite considerable uncertainty in regulations, and future fuel availability and costs.

The challenge is that the transition depends on more than shipowners' willingness to invest. The availability of low-GHG fuels and the supporting infrastructure have not developed at the pace needed to meet the IMO's 2030 ambitions.

So, this is less a story of lost momentum and more a reminder of the scale of the challenge. The industry has taken important steps forward, but decarbonisation requires coordinated action across the entire value chain, supported by IMO member states establishing sound global regulations that create a level playing field and provide the certainty needed to accelerate investment.

I remain optimistic about the direction of travel. But we also need to be realistic about where we are today and what it will take to reach the destination.

Q How do you respond to critics who argue that battery weight, degradation, and fire safety risks mean batteries will never be viable for long-haul merchant shipping?

A I would be cautious about making definitive statements about any technology. Batteries are already proving their value in several maritime applications, particularly in short-sea shipping, ferries, and hybrid solutions.

For deep-sea shipping, the challenges are well known. Energy density, weight, charging infrastructure, and safety considerations mean batteries alone are unlikely to be the answer for many long-haul vessels in the foreseeable future.

But that doesn't mean batteries don't have an important role to play. The energy transition will not be driven by a single technology or fuel. Different vessel types and trades will require different solutions, and batteries are likely to remain an important part of the mix, particularly when combined with other technologies.

The key is to remain technology-optimistic and focus on finding the solutions that are safe, practical, and capable of delivering meaningful emissions reductions. That has always been the [industry's strength](#).



The ultimate solution for crew work and rest hours compliance



Schedule a demo

- ▶ Trusted by over 1,000 companies, 9,500 vessels, and 89 flag states
- ▶ Recognized by global leaders in shipping and regulatory bodies
- ▶ Benchmark your fleet performance with comprehensive reporting
- ▶ Instant, real-time updates on crew work and rest
- ▶ Ensure compliance with global regulations (STCW, MLC, OCIMF)

OneOcean



International
Chamber of Shipping

www.isfwatchkeeper.com

New

Cyber Security Workbook for On Board Ship Use

Fully revised and updated 8th Edition 2027

Produced by Witherbys, BIMCO and the International Chamber of Shipping (ICS), this practical and easy to understand workbook supports the owner, Master and the ship's crew with cyber security risk management.

It contains comprehensive checklists to support the day-to-day management of onboard cyber security and facilitates collaboration between ships, onshore IT departments and equipment manufacturers.

**Cyber Security Workbook
for On Board Ship Use**
8th Edition 2027



BIMCO



International
Chamber of Shipping



BIMCO



International
Chamber of Shipping
Shaping the Future of Shipping



eBook now available on Witherby Connect at
shop.witherbys.com

WITHERBYS



Images: EC – Audiovisual Service/Thibault Savary

Batteries are already transforming short-sea shipping, but taking electrification across the oceans presents an altogether different challenge. What will it take for batteries to make the leap into deep-sea operations?

The global maritime industry stands at a critical juncture. Responsible for nearly 3% of global greenhouse gas emissions, shipping faces mounting regulatory pressure from the International Maritime Organization (IMO) and regional bodies like the European Union to decarbonise. In response, electrification has emerged as a star player in short-sea shipping, with battery-electric ferries, tugboats and short-haul cargo vessels already operating worldwide.

For routes with frequent access to shore power, predictable schedules and lower energy demands, battery technology is no longer an experiment. But as shipping targets full decarbonisation, can batteries move beyond short-sea operations and play a meaningful role in deep-sea shipping?

Energy density versus transoceanic trade

The fundamental challenge is scale. A large vessel crossing an ocean requires vast amounts of continuous energy for days or weeks without refuelling. Current batteries simply cannot match the energy density of conventional fuels without imposing major weight and space penalties.

As Ship Design Manager for Grimaldi Group, Andrea d'Ambra explains, "Battery energy density remains far too low for primary propulsion on large deep-sea vessels. Providing sufficient energy for even one or two days of navigation would require such a large number of batteries that a significant proportion of the vessel's cargo capacity would be lost. The challenge becomes even greater for voyages lasting several days or weeks."

Torsten Büssow, Director, Electrical & Power Systems Business, Wärtsilä Marine, puts the challenge into stark numerical terms. A vessel operating with a 10-megawatt (MW) propulsion load for four weeks would require close to 7,000 megawatt-hours (MWh) of energy, translating, with today's technology, into tens of thousands of tonnes of batteries.

While improvements in energy density, integration and power electronics can reduce their footprint, Büssow says weight and space will remain important considerations. Even emerging technologies are unlikely to transform the equation overnight.

Matching batteries to the voyage

The question, therefore, may not be whether batteries can replace fuel entirely, but where they deliver the greatest value.

Büssow draws a clear distinction between vessel profiles. On short routes, typically below three hours and often under 1.5 hours, batteries are already proven as primary propulsion, particularly for ferries able to recharge at either end.

The next frontier is medium-range trades of around eight to 10 hours, including smaller container feeders, bulk carriers and RoRo vessels. Projects are beginning to enter the market, although funding can still be needed to offset higher upfront capital costs.

Deep-sea shipping is different. For ocean-going voyages, Büssow says batteries currently create most value as part of hybrid systems rather than as standalone propulsion.

That position is shared by d'Ambra: "their most realistic role in deep-sea shipping will remain as part of an integrated energy system. Batteries can work alongside engines powered by fossil, bio-based, or alternative fuels, supporting blackout prevention, peak shaving, load optimisation, and potentially zero-emission operation during specific and limited phases."

In these configurations, batteries can absorb energy during periods of low demand and release it during peaks, allowing engines to operate more efficiently. They can provide spinning reserve and emergency power while supporting zero-emission operation in ports.

The economics also increasingly matter as low-carbon fuels enter the market at a premium. By reducing fuel consumption, engine running hours and maintenance requirements, hybridisation can help owners improve efficiency today while preparing for tightening emissions requirements.

Building the infrastructure

Even dramatic improvements in batteries themselves would only solve part of the problem.

"Even if battery energy density were to improve dramatically, the industry would still face a major infrastructure challenge. Very large battery installations would have to be recharged during port calls without extending the time required for commercial operations. This would require extremely powerful shore-side charging facilities and adequate electrical-grid capacity at ports," says d'Ambra.



Progress is already being made. Büssow points to the EU programme to equip major ports with the standardised IEC (International Electrotechnical Commission) 80005 high-voltage shore power, enabling ships both to switch off engines in port and charge larger battery installations. Meanwhile, the Maritime and Port Authority of Singapore (MPA) [has also begun developing](#) charging infrastructure specifically for harbour craft, launching its first public marine charging point at Marine South Pier.

For vessels spending several hours alongside, existing shore-power standards could provide much of the required framework. Faster-turnaround operations such as ferries require more specialised solutions, with the Megawatt Charging System emerging as one potential standard for smaller high-power installations.

The grid itself is another consideration. Ports will increasingly need to combine smart energy management, local energy storage, renewable generation and load balancing to accommodate large charging loads without destabilising regional electricity networks.

Safety at scale

Larger battery installations also place greater emphasis on thermal management, fire protection and onboard procedures.

Büssow says regulation has progressed alongside the technology, with safety requirements increasingly differentiated by battery chemistry. Battery rooms using lithium iron phosphate (LFP) chemistry, for example, can now accommodate installations of up to 25 MWh.

"The development of standards and regulations is progressing alongside advances in battery technology, helping to ensure that larger battery installations can be deployed safely," he says.

Crew capability will evolve alongside the technology. Increasing automation means the challenge is not simply maintaining battery systems, but ensuring crews understand and trust increasingly integrated control systems so vessels can realise their full efficiency benefits.

A hybrid path forward

Fully battery-powered ships crossing oceans remain a distant prospect. But that does not make batteries peripheral to deep-sea decarbonisation.

Instead, the emerging picture is one of an integrated energy system in which batteries complement low-carbon fuels, shore power, wind-assisted propulsion and efficiency technologies.

As Büssow explains, "Looking ahead, decarbonisation will not rely on a single technology. The most practical pathway is an integrated energy mix combining batteries, low-carbon fuels, shore power, further propulsion efficiency measures, and advanced energy management, with each technology contributing where it creates the greatest value."

For deep-sea shipping, therefore, the battery revolution may look very different from the one already underway in ferries and short-sea vessels. The immediate opportunity is not to replace every engine with a battery bank, but to use batteries where they can make the entire ship cleaner, smarter and [more efficient](#).



A place to
MEET

Space to
CONNECT

Room to
EXPLORE

The Maritime Hub offers state-of-the-art meeting rooms in the heart of the City of London. Unique spaces to meet, engage and collaborate – tailored to your requirements.

The ICS **MARITIME HUB**

reservations@ics-shipping.org

+44 20 7090 1460

www.ics-shipping.org/maritimehub



ICS in Action

A round-up of ICS news and activities over the last month

ICS addresses UN Security Council on maritime security and freedom of navigation

Secretary General of the ICS, Thomas A. Kazakos, addressed the United Nations Security Council on the critical importance of protecting maritime security, freedom of navigation, and the established international legal framework governing the world's oceans.

The International Chamber of Shipping was invited to brief an [Arria-Formula meeting](#) of the UN Security Council, convened by the Kingdom of Bahrain and chaired by Bahrain's Minister of Foreign Affairs, Dr Abdulatif Al Zayani. The meeting brought UN representatives and invited guests together to discuss the deteriorating maritime security environment amid heightened geopolitical tensions, with particular focus on the security situation in the Persian Gulf.

Representing the international shipping industry, Thomas Kazakos outlined the profound consequences that insecurity at sea has for seafarers, ships, global trade, and the wider international economy. Thomas stressed that commercial vessels and their crews must not become collateral to wider political or military disputes, and the established international rules governing navigation must be respected.

The meeting also provided an opportunity to highlight the human cost of the deteriorating security environment. *"Seafarers are transporting food, energy, medicines, raw materials and essential goods to communities around the world. They are civilians. They are not parties to geopolitical conflicts, and their welfare is of the utmost importance."*

In closing his address, Thomas Kazakos called for a return to freedom of navigation, reaffirmed the stance that international straits must not become toll roads, and that merchant ships and seafarers must not be [held to ransom](#).

You can watch the recording of the meeting [here](#).

Shipping industry welcomes the proposed inclusion of Indian ship recycling yards on the European List

BIMCO, European Shipowners | ECSA, the International Chamber of Shipping (ICS), INTERCARGO, INTERTANKO, and World Shipping Council (WSC) welcome the European Commission's proposal to add two Indian ship recycling facilities to the updated European List of Ship Recycling Facilities.

The shipping industry has advocated for the inclusion of compliant non-OECD yards since the entry into force of the EU Ship Recycling Regulation (EU SRR). Beyond its practical significance for shipowners, the proposal sends a strong political signal: non-OECD yards that meet the EU SRR's safety and environmental requirements can and should be recognised.

To read the full statement, please [click here](#).

Cyber Security Workbook for On Board Ship Use, Eighth Edition, e-book is released

Cyber attacks continue to rank among maritime leaders' most significant risks to the industry according to the [2025-2026 ICS Maritime Barometer Report](#). As the sector becomes increasingly digital and artificial intelligence (AI)-enabled tools grow in popularity, the exposure to cyber risk also escalates.

Cyber risk management should be an inherent part of safety and security and should be considered at all levels of the company, including senior management ashore and onboard personnel. The Cyber Security Workbook for On Board Ship Use, Eighth Edition has been produced by Witherbys, BIMCO and the International Chamber of Shipping (ICS), with a full revision to provide up-to-date guidance and serve as a trusted companion to seafarers and shore-based colleagues alike, helping them understand the threat of cyber attacks and safeguard maritime trade.

To order the e-book, please [visit here](#).

ICS is the principal international trade association for merchant shipowners and operators, representing all sectors and trades and over 80% of the world merchant fleet.

For more ICS contacts:
www.ics-shipping.org/contact-us/

Contact us

International Chamber of Shipping

7th Floor, Walsingham House,
35 Seething Lane, London
EC3N 4AH

+44 (0) 20 7090 1460

info@ics-shipping.org

www.ics-shipping.org

Editorial

Intent Communications

Namrata Nadkarni

+44 (0) 7598 025 513

namrata@intentcommunications.co.uk

Robert Platt

robert@intentcommunications.co.uk

Samantha Gray

admin@intentcommunications.co.uk

Phil Page

phil@intentcommunications.co.uk

Design and layout

Phil McAllister

phil@philmcallisterdesign.com

+44 (0) 1273 737481

Press and Communications

Katerina Dimitropoulos

+44 (0) 7497 363434

Sales

Richard Emsley

richard.emsley@ics-shipping.org

+44 (0) 7730 289459

Disclaimer: Whilst every effort has been made to ensure the quality and accuracy of the information contained in this newsletter at the time of going to press, the International Chamber of Shipping, its affiliates and any person, firm, corporation or organisation who or which has been in any way concerned with the furnishing of the information assume no responsibility as to the accuracy or completeness of and, to the extent permitted by law, shall not be liable for any errors or omissions or any loss, damage or expense incurred by reliance on information or any statement contained in this newsletter.

Any views or opinions expressed do not necessarily represent the views or opinions of ICS, its affiliates or any person, firm, corporation or organisation who or which has been in any way concerned with the furnishing of the information in this newsletter.