WORLD (

BUNKERING

THE OFFICIAL MAGAZINE OF IBIA



Tenerife's natural dome











ear Reader

When I started putting this issue together, I wasn't expecting to be writing about cashew nuts or old car tyres, but that is the way it has turned out. Both, it appears, could be useful if relatively modest sources of 'greener' fuel on the pathway to decarbonisation. All is revealed in our Alternative Fuels and Technologies pages.

In the previous issue of *World Bunkering*, IBIA's representative at IMO, Edmund Hughes reported on the serious issues that the bunker industry has with IMO's Carbon Intensity Indicator (CII).

IBIA has now issued a statement highlighting that the CII, as currently formulated, adversely affects bunker tankers. We carry IBIA's argued case for a review of CII in a special feature this issue and also report on new research that finds that applying the CII to two identical ships can result in very different results, depending on factors including time spent in port and length of voyage.

Meanwhile, Edmund also reports on the large workload delegates must consider at IMO's MEPC82 meeting in late September. His report both stresses the urgency of deciding on regulatory measures that can deliver the IMO's mid-century net-zero emission goals and describes the numerous and complex challenges this entails.

Still on IMO, the lead story in Environmental News offers food for thought. Recent research claims that currently very high temperatures worldwide are largely a result of IMO's sulphur limit regulations that came into force in 2020. That is quite some statement, and it has been challenged, at least to some extent. The reflective role of particulates has long been known and the report notes greenhouse gas emissions have been "partially balanced by the cooling effect of anthropogenic aerosols".

The debate is over how much of a cooling effect shipping emissions create. Of course, a new IMO Emission Control Area (ECA) is about to come into force in the sunny Mediterranean. It will be interesting to see if further research finds a link with any subsequent temperature change in the region or globally.

Staying in the Mediterranean, our interview is with IBIA board member, and CEO of Turkish bunker company Ufuk Erinc who provides an insight into how the sector is coping with geopolitical pressures affecting the regional market.

Crossing the Aegean Sea, we have a strong Greek theme running through the issue. In his message as IBIA Chair, Constantinos Capetanakis notes the success of IBIA's reception at Posidonia and looks forward to our Annual Convention in Athens in November.

We are also carrying a special feature on the Greek bunker sector, its importance and how it is facing the future.

Talking of the future, in our Market Commentary IBIA board member and industry expert Adrian Tolson asks, and attempts to answer, the question: "Where are we going?" In doing so he explores the changing nature of the bunker supply chain – yet more fuel for thought in this issue of World Bunkering.

The industry is changing, and transformation has also been taking place at IBIA, as its Executive Director, Alexander Prokopakis, reports. He stresses: "Our goal is to create a dynamic environment where every member feels valued and heard."

So, is that everything in this issue? Far from it, we have insightful geographical reports on the Indian Ocean region, China and Hong Kong and also Singapore.

And, as always, we have comprehensive coverage of the emergent new fuels – including LNG which once again seems to be the choice of some big players. Nuclear makes an appearance once more while the old car tyres and cashew nut shells I mentioned at the start of this letter seem, suitably processed, destined for the global merchant fleet's bunker tanks.

All in all, I hope this issue gives you plenty to think about ahead of the Annual Convention.

Best wishes

David Hughes Editor





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ear fellow members and friends,

It has been a busy and productive period for IBIA, consistent with our target of being visible, relevant, impactful and far reaching.

First of all, IBIA was present during the landmark of Posidonia in Athens, hosting a highly successful reception at the Official Residence of the South African Embassy, where we were honoured by the presence of approximately 300 guests representing all echelons of the shipping community.

At the same time, preparations are at full speed for our Annual Convention, in Athens between 5 to 7 November, when the range, level and relevance of our speakers, panels and presentations shall be unparalleled.

Supreme remains our regular communication with our members, not least with our Bulletins, but also through our Members' Meetings, such as the extremely well-attended one focusing on the updates to the new ISO 8217:2024 fuel standard. These informative and interactive meetings allow us to not only to stay updated but also to shape future IBIA policy and strategy in order to raise and alleviate concerns and affect policies through clear argumentation.

Our focus on affecting policies was also highlighted through our official proposal to the IMO to amend the CII methodology to accurately, fairly, and appropriately reflect the service of the bunker vessels. The inherent flaws need to be addressed according to each shipping sector's specific characteristics.

Accordingly, we are gearing up for the forthcoming 82nd session of MEPC, set for September, which will mark the commencement of the CII data analysis stage and shall focus on reducing GHG emissions from international shipping. Critical issues are at stake and will be discussed as IMO Member States will decide on mid-term measures, including a goal-based marine fuel standard and a maritime GHG emissions pricing mechanism, as part of the 2023 IMO GHG Strategy.

Changes in regulations and of trading patterns are immense. We not only maintain our members updated but also share this knowledge with our partners and the IMO, as is also manifested through our regular updates, also posted within the IMO website, relating to the Red Sea attacks on commercial shipping and how these have affected bunkering activity, by way of demand and pricing.

Our expansion plans, through targeted and meaningful cooperation, remain in focus and top priority. In that respect I am pleased to say that we joined the Green Shipping Industry Alliance Open Platform in Lingang, China, an initiative aiming to accelerate the supply of green fuels and enhance the green shipping service ecology in the area.

On the same note, new fuels remain at the epicentre of our attention. Our Future Fuels Working Group, which I have the honour to also chair, is working on the drafting of a comprehensive and accessible Frequently Asked Questions list for each of the major fuel options, in order for our members to be provided with the most recent developments and projected scenarios.

All our Working Groups, Technical, MFM, Digitalization, are constantly active in order to provide and receive feedback.

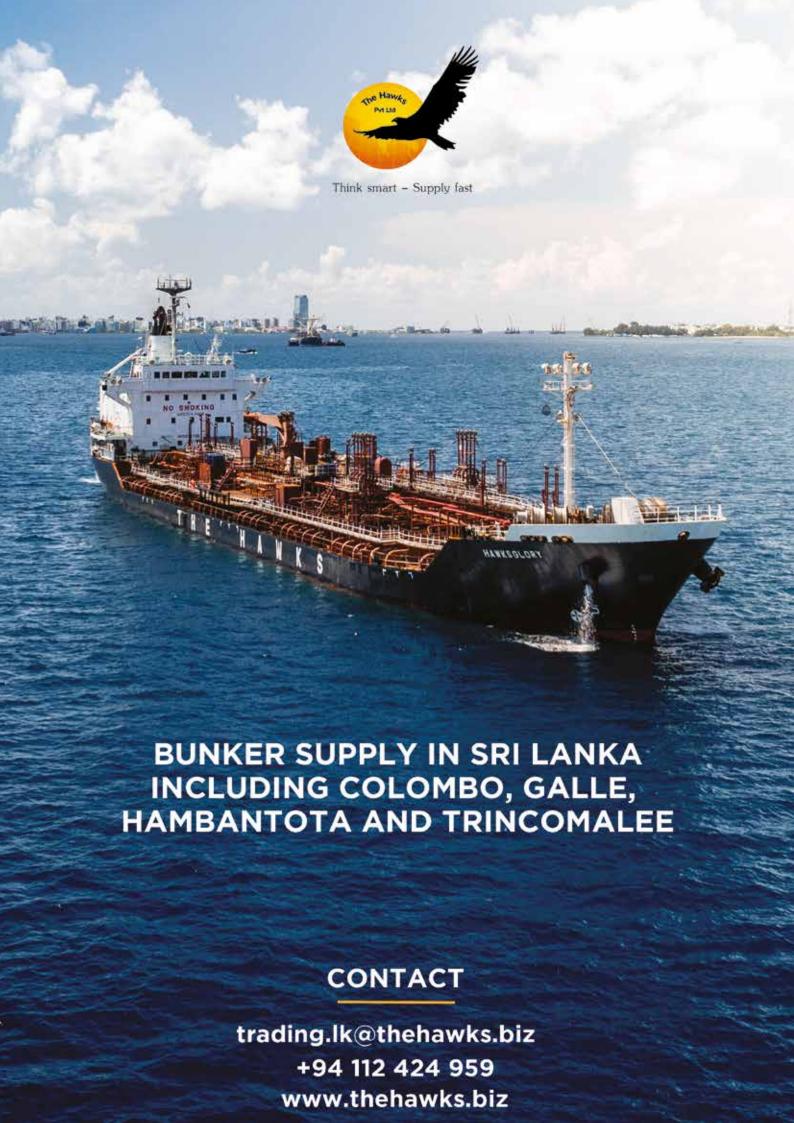
These are not only exciting times but also full of opportunities for cooperation, exchange of knowledge, and increase of impact and status which the marine energy industry deserves. We are determined to increase our relevance, modernize and maintain this status. Within that context, it is vital that our internal governance is aligned with our goals and in that respect, we are finalizing a comprehensive amendment of our Bye Laws, so to reflect both effected structural changes and the operational excellence we wish to achieve. I will be communicating with you all separately with relevant updates.

Our work, projects, and aspirations are ceaseless, and the cooperation amongst our Board of Directors, our Regional Boards, and our tireless Secretariat is exemplary. Above all, the core value is and always will be you, our members, and your active support, which we highly value. This is a constant aim, which is our, and my, duty to maintain.

Constantinos Capetanakis IBIA Chair



World Bunkering Q3 2024 7



ENHANCING MEMBER ENGAGEMENT AND BENEFITS:

A YEAR OF TRANSFORMATION AT IBIA

IBIA's Executive Director Alexander Prokopakis shares insights on IBIA's recent initiatives, emphasising member feedback, successes at Posidonia, and the upcoming IBIA Annual Convention

n my role as Executive Director, I am delighted to share the significant strides we have made over the past year to enhance our member engagement and improve our service offerings. Your feedback has been invaluable, and I want to assure you that we are taking it seriously. We are committed to developing our member benefits and offerings to better serve your needs and strengthen our industry.

One of the most critical aspects of our work has been listening to our members. We have engaged in numerous interviews and discussions to understand your needs and expectations. Your insights have been instrumental in shaping our future strategies and priorities. We are moving away from the perception of being an 'old boys club' and are dedicated to fostering an inclusive and forward-thinking association. Our goal is to create a dynamic environment where every member feels valued and heard.

We are proud to report the success of our presence at Posidonia, one of the world's most prestigious shipping weeks. Our Cocktail Reception was a resounding success, providing an excellent platform for networking and discussing industry trends. It was heartening to see so many of our members actively participating and engaging with us. Additionally, we were honoured to be hosted by many of our members at their events, further strengthening our community bonds.

As we look to the future, we eagerly anticipate the upcoming IBIA Annual Convention. This premier event, scheduled to take place in Athens from 5-7 November, promises to be a pivotal gathering for our industry. We have an exciting line-up of speakers and panels that will cover a range of important topics, including regulatory updates and decarbonisation policies. We look forward to seeing many of you there and continuing our discussions on how we can collectively advance our industry.

In response to your feedback, we have initiated several significant changes. We have implemented new HR software to streamline our operations and improve our internal processes. We are also exploring updates to our Customer Relationship Management (CRM) system to enhance our communication with members. These technological upgrades are part of our broader strategy to provide better service and ensure that our members are always well-informed and supported.

You may have noticed changes in our communications, particularly with the launch of our IBIA Bulletin, which is published every second week. This Bulletin is a combined effort from the Secretariat to succinctly communicate our activities and news. We are working with a communications strategist to refine our messaging and ensure it aligns with our new market strategies. Our aim is to keep you updated on the latest developments, industry trends, and IBIA activities in a timely and engaging manner. Your feedback on these changes is welcome, as it helps us continually improve.

As I near my one-year mark with IBIA, I am reflecting on the incredible journey we have undertaken together. The time spent with our members has been enlightening and inspiring. Your passion and dedication to the bunker and maritime fuel industry have motivated us to work harder and deliver more value. I am grateful for your support and trust as we navigate this path of transformation.

In conclusion, I want to extend my heartfelt thanks to each of you for your ongoing support and engagement. The progress we have made is a testament to our collective effort and commitment to excellence. As we move forward, we will continue to prioritise your feedback and work tirelessly to enhance our member benefits and services.

I look forward to seeing many of you at the IBIA Annual Convention and continuing our journey towards a brighter future for our industry.

Sincerely

Alexander Prokopakis IBIA Executive Director alexander.prokopakis@ibia.net





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CELEBRATING SUCCESSAND LOOKING AHEAD

Continuing to strengthen industry connections through successful events and exciting plans for the future

Reflecting on our recent successes and looking forward to our upcoming events, I am filled with gratitude for the unwavering support of our members and sponsors. It is this collective commitment that makes our gatherings not only possible but impactful for the entire bunker and marine fuel industry.

Firstly, I want to extend a heartfelt thank you to all who contributed to the success of the recent Posidonia event. A special mention must go to our sponsors, whose generosity and commitment were instrumental in bringing the event to life. I would also like to express my deepest appreciation to the Ambassador of South Africa, who graciously offered her residence as the venue for our gathering. This beautiful setting provided a perfect backdrop for meaningful discussions and networking among industry leaders and professionals. It was an event marked by collaboration, innovation, and the strengthening of relationships within our community.

As we move forward, our focus shifts to the preparation and planning of the upcoming IBIA Annual Convention in Athens. This significant three-day event will be held at the Athens Marriott Hotel, kicking off on Tuesday, 5 November, with a day of training followed by a welcoming cocktail evening. The conference will continue with a full schedule of insightful sessions, a networking dinner, and will conclude with a closing lunch on 6 and 7 November.

The Convention will cover a range of critical topics that are shaping the future of our industry. These include discussions on the latest advancements in marine fuels, the impact of regulations, an assessment

by leading industry shipping associations, and the evolving landscape of maritime trade. Our aim is to provide a platform where members can gain valuable insights, share knowledge, and discuss strategies to navigate the challenges and opportunities ahead.

In addition to the Convention, I am excited to announce that planning is already underway for the IBIA Annual Dinner 2025, which will be held in London at the end of February. The IBIA Annual Dinner is a wellestablished fixture in the bunker industry's calendar. It is renowned for bringing together like-minded individuals, fostering new connections, and strengthening existing relationships. This event offers an unmatched platform to network and create memorable experiences. Over the past three years, tickets have sold out before the end of the year, so I encourage you to book your tickets as soon as they become available to ensure you don't miss out.

At all our events, your participation is key. Whether as speakers, sponsors, or attendees, it is your involvement that drives the success of these gatherings. We are working together for the betterment of our industry, and we cannot do this without the active engagement of our members and industry partners. The incredible support we have received in the past has been overwhelming, and I look forward to seeing this continue in our future endeavours.

Please feel free to reach out to me directly with any queries or questions regarding our current and upcoming events. Your feedback and suggestions are always welcome as we strive to create events that meet your needs and expectations.

Thank you for your continued support, and I look forward to seeing you at our upcoming events.

For more information on IBIA's events, please visit our website or refer to the IBIA Bulletin, which is distributed bi-weekly to our members and industry professionals.

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Tahra Sergeant Regional Manager (Africa) & Global Head, Events tahra.sergeant@ibia.net





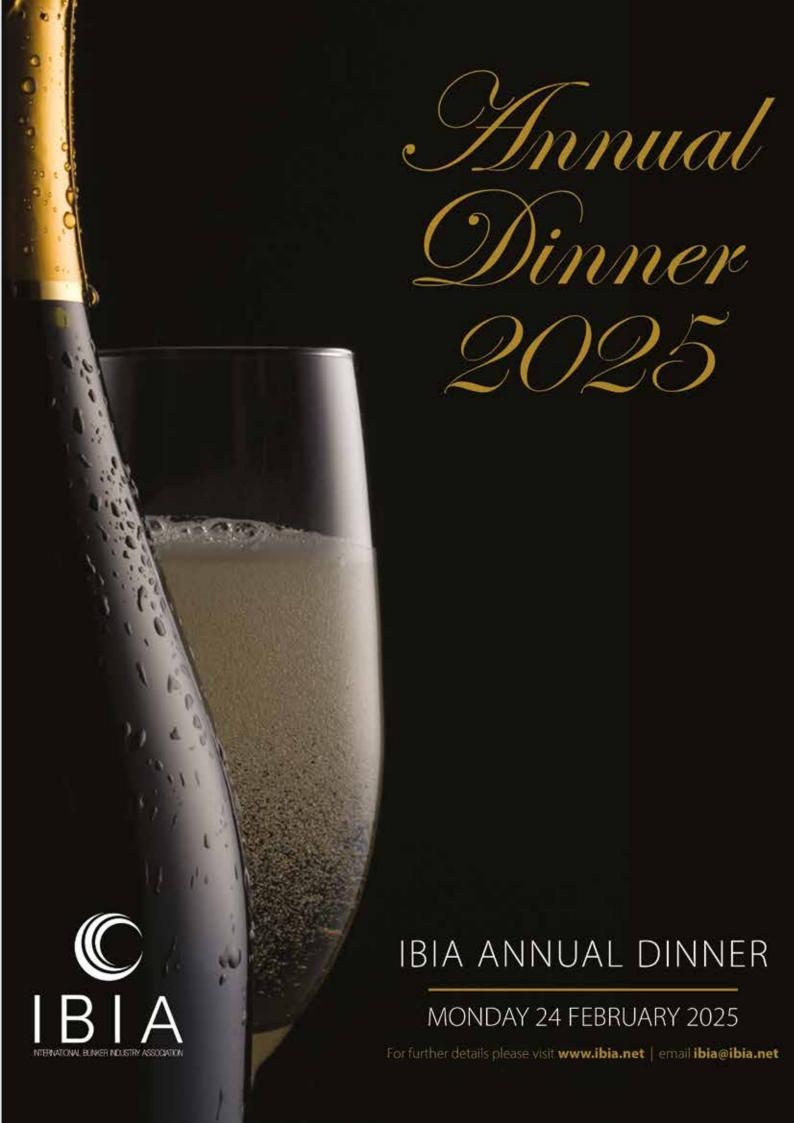












IBIA Code of Conduct

Abiding by this Code of Conduct shows that members support our common goal: to promote the widespread adoption of a common set of ethical values within our industry. We believe that when the entire industry acts with the highest ethical standards that this will be to the benefit of us all.

Fair Business

- We conduct our business in a fair and transparent manner
- We will always act in the best interest of each business partner and are honest with the stakeholders involved in our business
- We only engage in business using compliant products, and deliver the quality and quantity agreed with our business partners
- · We always act in good faith

Best Practice

- · We always act in accordance with applicable legislation, including sanctions
- · We always meet contractual obligations in a timely manner
- We always do our best to avoid disputes and seek resolution promptly if disputes occur
- · We comply with all applicable competition and anti-corruption laws
- We respect confidential information and do not unlawfully use any intellectual property

Social responsibility

- · We seek to minimise our environmental impact and the risk of environmental damage
- · We will always ensure employees' health, safety and security
- We offer equal opportunities, prohibit unlawful discrimination and respect human rights
- We offer the same opportunities for professional development to all our employees

Transparency

- Our accounts and records are kept accurately and reflect the true state of the company and its operations
- · During audits or investigations, we fully cooperate with the authorities
- We will not receive or give any gift or entertainment of disproportionate value
- We are fully committed to preventing both money laundering and terrorist financing

This Code of Conduct is endorsed by the International Bunker Industry Association (IBIA). IBIA encourages members to abide by this Code of Conduct and to endorse it.



IBIA EVENTS PROGRAMME 2024 / 2025

ONLINE BUNKER TRAINING	COURSE	
MODULE 1 TO PURCHASE	Bunker Market Regulations and Enforcement	Online at www.ibia.net
MODULE 2 TO PURCHASE	Understanding ISO 8217 and ISO 4259	Online at www.ibia.net
MODULE 3 TO PURCHASE	Best practice for suppliers with VLSFO	Online at www.ibia.net
MODULE 4 TO PURCHASE	Best practices for users with VLSFO	Online at www.ibia.net
MODULE 5 TO PURCHASE	Adapting to a changing market	Online at www.ibia.net
MODULE 6 TO PURCHASE	Compatibility and stability – Issues with VLSFO fuels and the measurement of Stability	Online at www.ibia.net
MODULE 7 TO PURCHASE	Sales terms and conditions – The purpose, structure and application of Sales terms	Online at www.ibia.net
MODULE 8 TO PURCHASE	Quantity measurement – The principles of quantity measurement including Mass Flow Metering	Online at www.ibia.net
MODULE 9 TO PURCHASE	Sampling – The basics of sampling, sampling methods and sample handling	Online at www.ibia.net
MODULE 10 TO PURCHASE	Fuel quality – Impact on storage, treatment and use in the engine	Online at www.ibia.net
MODULE 11 TO PURCHASE	Alternative Fuels	Online at www.ibia.net
MODULE 12 TO PURCHASE	Bio Fuels	Online at www.ibia.net
MODULE 13 TO PURCHASE	Exhaust Emissions	Online at www.ibia.net
MODULE 14 TO PURCHASE	Introduction to LNG Bunkers	Online at www.ibia.net
COURSE TO PURCHASE	The IBIA Basic Bunkering Course	Online at www.ibia.net
SEPTEMBER		
25 - 26	2 Days Advanced Bunkering Course (SS600:2022 & SS648:2019)	Singapore, Asia
OCTOBER		
11	IBIA SIBCON Golf Day	Singapore, Asia
14	IBIA Training Course: Biofuels	London, United Kingdom
23 - 24	2 Days Basic Bunkering Course SS600:2022 & SS648:2019	Singapore, Asia
NOVEMBER		
4		
	IBIA Training Course: ISO 8217:2024 7th Edition	Athens, Greece
5	IBIA Training Course: ISO 8217:2024 7th Edition IBIA Training Course: Future Fuels	Athens, Greece Athens, Greece
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	IBIA Training Course: Future Fuels	Athens, Greece
5 - 7	IBIA Training Course: Future Fuels IBIA Annual Convention 2024	Athens, Greece Athens, Greece
5 - 7 19	IBIA Training Course: Future Fuels IBIA Annual Convention 2024 IBIA Basic Bunker Course	Athens, Greece Athens, Greece Lagos, Nigeria
5 - 7 19 20 - 21	IBIA Training Course: Future Fuels IBIA Annual Convention 2024 IBIA Basic Bunker Course	Athens, Greece Athens, Greece Lagos, Nigeria
5 - 7 19 20 - 21 DECEMBER	IBIA Training Course: Future Fuels IBIA Annual Convention 2024 IBIA Basic Bunker Course 2 Days Advanced Bunkering Course (SS600:2022 & SS648:2019)	Athens, Greece Athens, Greece Lagos, Nigeria Singapore, Asia
5 - 7 19 20 - 21 DECEMBER 11 - 12	IBIA Training Course: Future Fuels IBIA Annual Convention 2024 IBIA Basic Bunker Course 2 Days Advanced Bunkering Course (SS600:2022 & SS648:2019)	Athens, Greece Athens, Greece Lagos, Nigeria Singapore, Asia
5 - 7 19 20 - 21 DECEMBER 11 - 12 FEBRUARY 2025	IBIA Training Course: Future Fuels IBIA Annual Convention 2024 IBIA Basic Bunker Course 2 Days Advanced Bunkering Course (SS600:2022 & SS648:2019) 2 Days Basic Bunkering Course SS600:2022 & SS648:2019	Athens, Greece Athens, Greece Lagos, Nigeria Singapore, Asia Singapore, Asia

BUNKER INDUSTRY EVENTS 2024

SEPTEMBER				
10	16th Annual Capital Link Shipping & Marine Services Forum	London, United Kingdom		
11 - 12	7th Edition of Oil Spill India (OSI 2024)	New Delhi, India		
11 - 13	Argus Sustainable Marine Fuels Conference	Houston, United States of America		
18	4th SAFETY4SEA London	London, United Kingdom		
OCTOBER				
3	15th SAFETY4SEA Athens	Athens, Greece		
8 - 10	SIBCON	Singapore, Asia		
15 - 17	Argus Biofuels Europe Conference & Exhibition	London, United Kingdom		
23	4th SAFETY4SEA Singapore	Singapore, Asia		
NOVEMBER				
19 - 21	The Nigeria International Bunker Industry Conference 2024 (NIBIC 2024)	Lagos, Nigeria		
20	1st SAFETY4SEA Dubai Forum	Dubai, United Arab Emirates		

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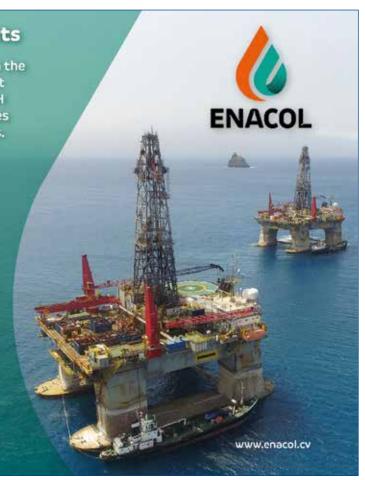
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NAVIGATING THE EVER-EVOLVING LANDSCAPE

Adapting to changing dynamics and supporting growth in the Bunker Industry

s we navigate the ever-evolving landscape of the bunker industry, it is crucial to acknowledge the significant changes impacting our region and beyond. The recent developments in global bunker demand, driven by external factors, alongside our active involvement in key industry events, underscore IBIA's commitment to supporting our members and stakeholders.

The ongoing attacks on commercial shipping in the Red Sea have had a profound impact on the global bunker industry. The increased distances travelled, and higher speeds necessitated by these security concerns have added an estimated 800,000 to 1,000,000 metric tons per month to global bunker demand. This surge has presented a dual challenge: increasing overall supply volumes and adjusting the locations of bunker supply to align with shifting demand patterns. As a result, we've observed a notable increase in bunkering activity across ports on the African coastline, offshore Africa, and nearby islands. You can read more about this is available on the IBIA website under news item Change in Bunkering Activity -Red Sea Attacks on Commercial Shipping.

IBIA remains actively involved in supporting the growth and development of the industry in Africa. One such example is our support for the recent WISTA Africa Conference, held in Cape Town from July 22 to 24. This event was a resounding success, bringing together industry

professionals, thought leaders, and policymakers from across the continent. The conference, themed "Empowering Women in Maritime: Navigating the Future," featured an impressive lineup of speakers, including Ambassador Nancy Karigithu, Kenya's Special Envoy for Blue Economy and Maritime Affairs, Lulama Mtembu, COO of SAMSA, and Elpi Petraki, President of WISTA International. It was an honour to serve as Programme Director, and I am proud that IBIA played a key role in raising the flag for women in maritime.

Looking ahead, IBIA Africa is pleased to support the inaugural Nigeria International Bunker Industry Conference 2024 (NIBIC 2024), scheduled for November. This high-level three-day conference, organised in partnership with the Nigerian Chamber of Shipping, aims to engage local and international stakeholders in the oil and gas and maritime sectors. It is poised to herald a new era in Nigeria's bunker ecosystem, covering a range of subjects of particular interest to those working or interested in bunkering in Nigeria and Africa at large. Additionally, IBIA will be running a one-day Basic Bunker Course preceding the conference to provide foundational knowledge and insights for participants.

Lastly, I would like to bid a fond farewell to John B. Tagoe from GOIL, who has served tirelessly on the IBIA Africa Regional Board. John's support has been instrumental in the success of last year's IBIA Africa Conference, and his contributions to the board have been invaluable. We thank him for his dedication and wish him all the best in his future endeavours.

As always, I encourage our members to stay engaged and take an active role in our region. Please feel free to reach out to me directly with any queries or questions regarding our current and future activities.

Tahra Sergeant Regional Manager (Africa) & Global Head, Events tahra.sergeant@ibia.net

















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UNLOCKING THE FUTURE OF BUNKERING

Introducing IBIA's New Training Courses

S the Global Head of Marketing & Development, it gives me great pleasure to announce the launch of a series of training courses designed to elevate the standards and knowledge within the bunkering industry.

IBIA has always been at the forefront of industry education, and our new suite of courses reflects our commitment to empowering professionals with the skills and insights they need to thrive in an evolving landscape. This year, we are thrilled to introduce both physical and online training opportunities that cater to the diverse needs of the global bunkering community.

Among our new offerings are the IBIA Training Courses: 'Biofuels', designed to equip participants with the latest knowledge on biofuel regulations, best practices, and market trends (15/10/24 London, UK). The IBIA Training Course: ISO 8217:2024 7th Edition, which delves into the intricacies of ISO standards crucial for bunkering operations. It covers the reason for standards, the development of the ISO 8217 and discusses the changes in the new 7th edition. It will also detail the primary test methods and the significant Annexes (4/11/24 Athens, Greece). Last but not least for this year, the IBIA Training Course 'Future Fuels', which prepares industry professionals for the transition to alternative and sustainable energy sources. This course will cover the current situation and likely development of the main factors in understanding future fuels (5/11/24 Athens, Greece).

In addition, we are pleased to share that IBIA will continue offering the IBIA 2-Day Basic Bunkering Course (SS600:2022 & SS648:2019) throughout the year. These MPA-approved courses provide intensive training in one of the world's most dynamic bunkering hubs, Singapore. Be sure to check our website for the upcoming course dates.

For those seeking flexible learning options, the IBIA Online Training Courses offer a convenient way to gain essential knowledge. The IBIA Basic Bunkering is designed to provide foundational knowledge that is vital for both newcomers and seasoned professionals in the industry. Also, IBIA runs a series of online training courses to inform the members of our industry and help them to understand international regulations, guidance on how best practice and application of International standards can improve their ability to source, supply and use the fuels required now and in the medium term.

Stay tuned for our upcoming courses, which will be held in various countries across the globe, tailored to address the full spectrum of needs within the bunker industry.

IBIA is here to continue educating and elevating the standards of our industry. We are looking forward to meeting you and introducing you to the most advanced aspects of IBIA's educational offerings.

If you wish to register or learn more about our training courses, please visit www.IBIA. net or feel free to reach out to me directly.

Together, let's drive the future of bunkering forward.

Sincerely,

Sofia Konstantopoulou Global Head, Marketing & Development sofia.konstantopoulou@ibia.net



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ISO 8217:2024 Training Course

4 November, Athens



www.ibia.net

IBIA ANNUAL CONVENTION ATHENS 5-7 NOVEMBER 2024

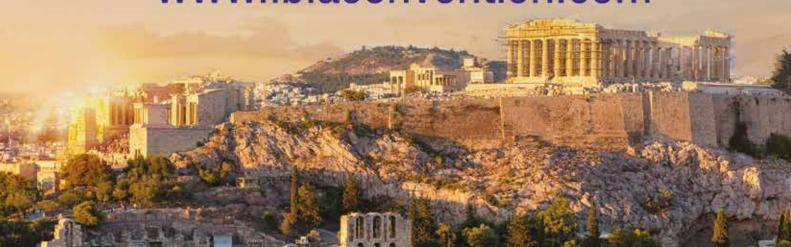


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The IBIA Basic Bunkering Course



Module 1
Introduction

Module 2
Basic commercial

Module 3
Basic Technical

Module 4
Basic Operations

Module 5
Real life

The IBIA Basic Bunkering Course is a programme of training modules designed to introduce new entrants or staff with limited knowledge of the bunker industry to the most important aspects of the bunker industry.

It consists of 5 modules each lasting just over 1 hour presented by IBIA Board member, Nigel Draffin, the renowned bunker industry expert, Author of 12 books on Bunkering.

The course materials have been peer reviewed by members of the relevant IBIA Working Groups.

The Online training course is recorded video content, it is not live. The duration of each module is up to 60 minutes.. The modules can be attended as stand-alone modules, however students will gain the best value by taking all five modules in the order suggested. On completion of the course, students will receive the 'IBIA Certificate of Attendance'.

Nigel Draffin



Consultant and IBIA Board Member





8 - 10 October 2024 Resorts World Sentosa, Singapore



ADVANCING IN ASIA

A Promising Time for Green Shipping Initiatives and Strengthening Collaboration

ollowing a particularly busy and productive Singapore Maritime Week in April 2024, I am pleased to share with our members some significant progress in Asia since then which underscores our commitment to fostering collaboration towards green energy and sustainable and safe bunkering practices.

Maritime Silk Road Port Cooperation Forum, June 2024

In June 2024, I had the privilege to be part of the panel at the Maritime Silk Road Port Cooperation Forum, focusing on the development of a green marine fuel bunkering centre. This forum brought together key stakeholders from across the maritime sector to discuss strategies critical for supporting the transition to lowemission marine fuels, thereby reducing the environmental impact of shipping activities.

Signing of Lingang Special Area Green Shipping Industry Open Platform at the DSH International Shipping Innovation Conference, July 2024

One of our recent achievements is the signing of the Lingang Special Area Green Shipping Industry Open Platform in July. This strategic initiative marks a pivotal step in fostering innovation and collaboration within the green shipping sector. The Lingang Special Area is poised to become a hub for green shipping technologies, bringing together industry leaders, researchers, and policymakers to drive advancements in sustainable maritime practices.

I once again had the honour of speaking at the DSH Conference. The conference served as a crucial forum for discussing the alignment and promotion of international standards for green energy in shipping. Emphasising the importance of unified standards, I highlighted how international collaboration can drive the industry towards a greener future. The discussions underlined the necessity of adopting globally recognised standards to ensure consistency, efficiency, and sustainability in maritime operations.

Looking Forward: Fostering Cooperation and Advancing Initiatives

Looking ahead, our focus remains on fostering cooperation and advancing initiatives that support the growth of green shipping in Asia. We are committed to working closely with industry stakeholders, government bodies, and international organisations to create a sustainable maritime ecosystem. By leveraging our collective expertise and resources, we can drive meaningful change and set new benchmarks for environmental stewardship in the maritime industry.

Supporting the Next Generation: IBIA SIBCON Scholarship Golf

In line with our dedication to nurturing future talents, I invite you to support the IBIA SIBCON Scholarship Golf event on 11 October 2024. All proceeds from this event will be directed to the scholarship fund, which aims to support and develop the next generation of maritime professionals.

Your participation and contributions will play a crucial role in empowering young talent and ensuring a bright and sustainable future for the maritime industry.

Together, we can make a significant impact on the global shipping landscape, steering it towards a greener and more sustainable future. Your continued support and collaboration are invaluable as we navigate this transformative journey.

Siti Noraini Zaini Regional Manager, IBIA Asia Siti@ibia.net www.ibia.net



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WHERE ARE WE GOING?

IBIA Board Member Adrian Tolson explores the changing nature of the bunker supply chain

hat a very challenging world we live in nowadays. For sure it has been worse, but many in today's bunker supply chain have little or no knowledge or perspective on the 20th Century's catastrophic World Wars or the misery and fear of the Cold War. For most of us, these events were a very long time ago and right now we live in a world painfully divided by economic, political and religious rivalries both between nations and even more worryingly, within nations that have spawned wars, poverty, sanctions, tariffs and a worship of ignorance and populism.

Overlay all this with the existential planetary threat of climate change and a sudden global pandemic, both of which created a desperate need for national and international regulation that no one wants but we all need. It's hard to put in perspective our small but vital industry against these events, but we do know that their impact is changing the bunker supply chain.

Cliched comments about the resilience of the shipping industry and the adaptability of bunker supply chain might apply for an event such as IMO 2020 or MedECA 2025 but it's not so sure we can have the same optimistic expectations with today's growing set of challenges. This time it's a little more complicated, a little more challenging and we are starting to see the shape, both good and bad, of what's to come.

First a reminder of the increasingly complicated bunker supply chain or bunker value chain made to look simple in the illustration below produced by the diligent efforts of IBIA's Digitisation working group.

The pressure to decarbonise shipping is obviously generating many, but not all, of the changes in today's supply chain. We no longer solely look at refiners as the producers of energy for ship propulsion, recognising different production methods necessary to produce biofuels, methanol, ammonia and the liquefaction of methane gas into LNG. Each of these energy sources will in turn require unique transportation methods, unique storage and unique delivery methods, all of which will demand that suppliers, traders and buyers of these fuels develop new skills and expertise. On top of this complexity is overlaid the further complexity of sanctions, compliance, digitalisation, regulation and certification.

In recent years we have already seen both planned and realised changes at the production and refining level of marine fuel, although naturally with billions of dollars of investment's involved these are slow to develop. In the shorter term we see the supply chain involving both new energy and existing fossil fuel producers looking to deliver lower carbon or lower GHG fuels. But only very few of these are focused on the marine fuel market with most of them emphasising land based and aviation energy transition with bunkering likely

picking up mostly the "leftovers" from their primary targets.

A significant portion of the shorter-term focus in our industry has been on LNG, which has encouraged a resurgence of major oil and gas companies in the bunkering sector. We also see new producers both small and large on the biofuel side with HVO(RD) production and Biodiesel (FAME). These companies are a precursor to the anticipated longer term new arrivals from the world of Hydrogen production and its "green" carrier fuels of Methanol and Ammonia. Initially, with some exceptions, most of the new arrivals seem relatively reluctant to engage with the bunker supply chain. So far, they show a preference to try and team up with supply chain experts, such as smaller suppliers, bunker traders and bunker brokers who are more excited in dealing with smaller volumes, delivery logistics and shipowner credit that are the industry's bread and butter.

New entrants will seek out a "bunker whisperer" to act as a supply chain guide, but it is wrong to underestimate the massive challenges to the existing supply chain of introducing, developing, producing and selling alternative marine fuels that require exceptionally long-term contractual relationships along with considerable regulatory oversight. All this comes together with a radical change in the traditional supplier-to-buyer relationship dynamic which is only just beginning.



Driving this is the clear fact that the power of the shipowner or buyer in the supply chain is increasing. During the last century, the power of suppliers (often major oil companies) in the bunker supply chain was pre-eminent, making it easier to impose the suppliers will on the buy side. But this has now shifted, major bunker buyers increasingly realise they can dictate terms and conditions and sometimes even supplier margins. This is especially evident now as newer suppliers need the cooperation and commitment of the bigger buyers to justify significant investments in alternative fuels and their infrastructure. This can be seen as a growing number of buyers create collective purchasing platforms or alliances which insert themselves into the supply chain, squeezing the role of the traditional bunker trader and broker intermediaries

These buyer platforms were originally developed to procure fossil fuels and in the last few years have rapidly increased in number. Even though the structure of each of these entities is not identical they do have similar ways of operating in that they fully embrace both transaction transparency and digitisation and have promoted themselves as an important way to develop knowledge, address regulatory challenges and potentially source large scale volumes of fossil and alternative fuels at cheaper prices. So far there is often more talk than action, with fossil fuel purchasing still dominating, but the scale of these entities makes them attractive counterparties to new entrants to the bunker supply chain.

Disruption at the intermediary centre of the supply chain can also be seen as an impact of geopolitics and sanctions. No one can ignore the fact that we have seen a very significant rise in bunker trading entities often engaged in bunker trades with buyers who don't meet the compliance standards of the majority of the bunker industry. Some of these newcomers are dealing with dark fleet operators, and some are not, but one thing is not in doubt that competition in bunker trading is intense. And for those that are not willing to engage in these types of trades their need to sustain volumes will often cut deeply into margins.

The current market for bunker traders is not an easy one.

Many are investing in expertise to address the challenges of energy transition and what this means for both their customers, the buyers and the sellers of marine fuel. Helping the supply chain and creating a space as a market maker in a new world of alternative fuels may win some praise but the financial benefits of this role are less than certain. Making money from alternative fuels is so far elusive and is often deeply subsidised by traditional fossil fuel sales in a market with challenging margins.

What about the physical supply side of bunker industry energy transition? A strong background in the mentality of trading traditional fossil fuels chain does not make for an easy transition into this new world. In every sense, and at almost every level, the supplier's role in the supply chain needs to be relearned. Clearly storage and delivery logistics are wildly different, fuel specifications are almost a non-issue, hedging strategies for fuels that have yet to be commoditised are challenging and commercial transactions that might commit a supplier for years rather than a seven to ten days, worrying! At least the buyers (for now) are the same but with all these changes the costs of adapting to a likely complex supply chain of multiple alternative fuels is well beyond the balance sheet of many of today's suppliers.

The largest of today's suppliers (independents and majors) are making efforts to adapt to change but most of the small to medium sized suppliers faced with a complex and expensive adjustment are not. Instead, many seem willing to let the gradual demise of fossil fuels signal their own demise. The new modern digitalised, transparent and "blockchained" alternative fuel supply chain cannot provide the dysfunctional opportunities that the old analogue and opaque supply chain provided, an era is coming to an end and it's time to embrace it or move on.

Those small to medium-sized suppliers will not be replaced by similar sized entities but instead we will see new suppliers on a much larger scale with a very different set of motivations to their predecessors. If the smaller suppliers survive it will only likely be as logistics providers for larger companies adapting their existing skill sets to new fuels and new pressures.

Not all larger independent suppliers can expect to survive this transition. Over the years, growth in this sector has demanded a hybrid model of back-to-back trading and physical supply built around a customerfocused finance and service model. This can work in coming years but it's likely that the customer interaction rather than the diminishing value of traditional fossil fuel sourcing and supply will become the key element in preserving these suppliers. And of course, whether these larger independent suppliers can adapt financially to operating with multi-year contract commitments is another question.

So, the supply chain changes its nature, becoming increasingly complex and effectively developing multiple unique supply chains for each product within the overall marine energy value chain.

Shorter term we already see the impacts of a disrupted world and energy transition with preparation being made by the buy side of the industry to adapt to and control this new supply chain and we feel the damage being done to intermediaries by sanctions dodging owners and traders. The supply chain will welcome newcomers and cast out old members. We also see a significant regulatory push that removes the opacity of bunker transactions pulling us, perhaps reluctantly, into a developing transparent blockchain. Longer term predictions for dramatic change are real but in truth no one knows how it will all evolve and what will be left of us all once we get to 2050!



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Since 1978, Mercy Ships has empowered global change through floating hospital ships by delivering free, life-saving surgeries to under-served communities. In 2024, Mercy Ships is honored to partner with IBIA to bring hope and healing to those without access to safe, affordable surgery in Madagascar.

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Fuel Our Mission: With the support of the bunkering community in providing fuel, you are ensuring Mercy Ships will be able to provide more than 1,150 free life-saving surgeries on board the Africa Mercy in 2024!

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Bunker Supplier, Service

Calcarea

Jess Adkins Americas

Broker, Charterer, Trader, Supplier, Agent, Bunker Supplier, Bunker Trader, Service, Storage

General for Shipping Agencies, Marine Services and Investment Group S.A.E

Fouad Talaat Africa

Trader, Service

Geoserve Energy Transport DMCC

Aman Talwar Middle East

Bunker Trader, Broker, Charterer, Trader, Supplier

Ibunker Refined Oil Product Trading

Saad Ashraf Middle East

Bunker Trader, Broker, Trader

MainGreen Energy A Ltd

Christoforos Faros Europe Bunker Trader, Broker

Scandi Trading Ltd

Alexandros Panagiotopoulos Europe

Supplier, Ship Owner, Charterer, Supplier (Physical)

Yara Clean Ammonia Norge AS

Fridtjof Muri Clausen Europe

CORPORATE B

Broker, Charterer, Trader, Supplier, Agent, Bunker Supplier, Bunker Trader, Service Storage

General Group UK LTD

Fouad Talaat Europe

INDIVIDUAL

Bunker Supplier, Supplier

Zhaopeng Cheng

Shanghai Biobased Asia

Bunker Trader, Ship Manager

Martha Ebhohimhen

Ehimartho International Limited Africa Other (Emissions), Trader

Emilio Fontana

Grey Epoch Europe Europe

Ship Owner, Charterer

Christian Kloock

Fednav International Ltd. Europe

Bunker Broker

Irene Notias

Prime's Bunkersplus Services Europe

Supplier (Physical), Ship Owner, Trader

Erhan Seyhan

AS Yakit Petrol Sanayi Ve Ticaret AS Europe

Bunker Supplier, Trader

Gaute Vorren

MHService AS Europe







Join IBIA today

to play an integral part in the sustainable future of the bunker industry

By joining IBIA you will become part of a global network of bunker industry experts who collectively form one of the world's leading authority on bunkers. Not only will you have access to a wealth of information and insight (we publish newsletters and industry updates on current issues) which offer pragmatic advice for managing the industry's challenges; members also have the potential to shape and influence both international and local legislation. This happens through IBIA's Working Groups which are responsible for developing industry guidance, participation in IMO correspondence groups, solving long-term industry issues, and addressing both commercial and technical aspects.

INDIVIDUAL £350

- IBIA Board Member eligibility
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- · Access to all IBIA Members Meetings
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- Representation at IMO (International Maritime Organisation)
- Access to IBIA's member networking platform
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- IBIA membership certificate

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ALL THE BENEFITS OF INDIVIDUAL+

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- Eligible to book up to 4 tables at the prestigious IBIA Annual Dinner
- Eligible to add further offices for a reduced fee of £600 per office
- Use of the IBIA Members' logo on your website and stationery

CORPORATE ADDITIONAL MEMBERS GET ALL THE BENEFITS OF THE CORPORATE MEMBERSHIP WITH THE EXCEPTION OF THE RIGHT TO VOTE FOR BOARD MEMBER ELECTIONS.

You can add as many additional offices as you pay for. Affiliation with the primary Corporate member must be authorised. Special cases can be negotiated individually with the IBIA membership management team.



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- . 15% discount for 3 years membership, (Paid in one instalment) -
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REGULATORY ROUND-UP

Edmund Hughes, IBIA's representative at IMO, reports on developments

he time for a decision on regulatory measures that will be key to delivering the IMO's mid-century net-zero emission goal for shipping is getting nearer but arguably there are many questions still needing to be answered. The 82nd session of the Marine Environment Protection Committee (MEPC 82) is the next milestone meeting for discussions on the reduction of GHG emissions from international shipping. The meeting takes place at the end of September and will be preceded by a week-long meeting of the working group for GHG issues where much of the key discussion will take place.

Unlike recent meetings the time is coming when the Member States, if they are to stick to the timeline they agreed to last June when they unanimously adopted the 2023 IMO GHG Strategy, have to decide on the regulations to deliver the reduction targets, the so called mid-term measures, that comprise "a technical element, namely a goal-based marine fuel standard regulating the phased reduction of the marine fuel's GHG intensity, and an economic element, on the basis of a maritime GHG emissions pricing mechanism".

There is a growing urgency for these measures to be adopted not only to expedite the political agreement made by governments, but it is becoming clearer that without the certainty of mandatory regulatory requirements it is difficult for the wider shipping industry and those that supply it with alternative fuels and/or technologies to develop the business cases to support the energy transition (revolution?) required. Without a business case there is no clear pathway for a return on investment and as such the finance flows needed to meet the cost, estimated to be trillions of dollars, just will not flow.

At the same time, there remains significant matters to be resolved, deliberated and reconciled if the international community is to be able to come to a consensus view on those regulatory measures. I have covered in previous articles some of the policy issues that need to be settled, and in many instances, these are significant matters outstanding.

Whilst several proposals have been made for the measure(s) and indeed, those have been subject to a Comprehensive Impact Assessment to appraise whether the impacts on States from the measures are potentially "disproportionality negative" (again there is no agreed definition of that term and will be for individual States to determine), it remains the case that there are significant differences in how the measures are designed and implemented to achieve the goal of net-zero, by or around, 2050. For example, some of the features, and differences, of the measures presented to date include:

- use of an absolute fuel standard for GHG intensity (as already used for the global 0.50% sulphur limit and 0.10% ECA limit) rather than an annual attained GHG intensity based on data collected and verified for the GHG intensity of fuel consumed by the ship over the 'calendar year'.
- how to account for Well-to-Wake (WTW) emissions in the design of both the technical and economic elements of the measures especially as the Life-cycle of marine fuels (LCA) Guidelines need further development.
- 3. whether a levy or fee of fuel oil consumed (the term "levy" is considered a synonym for tax by



some governments and so politically unacceptable hence preference for the term "fee") should be used to raise funds or that funds are solely raised from the selling and purchase of "carbon credits" noting that the quanta of the price could be set or variable depending on the approach used and subsequent level of funds raised for disbursement.

- 4. if a levy/fee is to be applied what should be the quanta noting that the higher quanta may raise significant revenues but could also result in the largest economic impacts on the carriage of some commodities and so the economies of some countries.
- 5. what any funds raised through the measures should be used for?
 Retained in-sector to reward/rebate those using "eligible" zero/near-zero GHG fuels and so incentivise their uptake and reduce the cost gap between alternative and conventional fuels and/or used to support a "just transition" for developing countries.
- whether a flexible/pooled compliance mechanism should be permitted for complying with the GHG intensity fuel standard, how should such a mechanism be managed – under IMO or by industry similar to insurance pooling under P&I Clubs.
- whether if an absolute fuel standard is used then whether the use of Fuel Oil Non-Availability Reporting (FONAR) would be permitted to ensure berths are not blocked when compliant fuel is not available.
- 8. clarifying who is ultimately responsible for paying the "carbon price".
- 9. ensuring the avoidance of "double charging" both in measures adopted by the IMO and other existing regional or national measures, and that emissions or fuel consumption that form the basis of such should be accounted for only once.
- fuel/technology neutrality and the role of onboard carbon capture and storage (OCCS); and
- 11. whether the measures could apply to smaller ships, that is, 400 gross tonnage and above.

MEPC 81 last March invited interested Member States and international organisations to work together intersessionally with a view to preparing a consolidated proposal for the basket of mid-term measures for consideration at MEPC 82. This led to an informal discussion held in Bonn in June attended by both governments and observers. However, the approach taken in this discussion was very much akin to that taken during negotiations for climate change agreements. That is for governments to propose text and then for the negotiations to focus on what text should remain and what should be deleted and is about achieving an outcome that each State can accommodate.

Industry observers are wary of such an approach being taken for the preparation of international shipping regulations as those regulations result in mandatory requirements being placed on ships and not States, an important but critical distinction. Indeed, this circumspection comes from having to deal with the fallout from the implementation of the Carbon Intensity Indicator (CII) which despite its "soft" regulatory enforcement is leading to problems in the market and has led to an avalanche of proposals to amend the regime – including one from IBIA for a short voyage (duration) correction factor to be included in the methodology – as part of the ongoing IMO review due to be completed by 2026.

Parallel to the work on the mandatory GHG emission reduction requirements, which have significantly wider implications due to the potential impact on nation States, are the technical requirements for ships to be designed and operated to use alternative fuels and/or technologies – technical assurance being the basis of ship insurance. This work, for example, the preparation of "Interim Guidelines" for the use of hydrogen and ammonia, is ongoing under the auspices of IMO's Maritime Safety Committee (MSC) and those guidelines, are scheduled to be finalised later this year. At the same time MSC has a standing agenda item titled "Regulatory Framework for Ships Using New Technologies and Alternative Fuels" which is designed to have a broad scope to identify gaps and ensure risks are appropriately addressed

in the regulations whether they be related to "hardware" (technical) or "software" (people and systems). IBIA is contributing to this workstream, along with others developing the LCA Guidelines further and the regulatory framework for non-CO₂ emissions and OCCS through correspondence groups. This is the "meat and drink" of IMO's work and is why there is a specialist technical agency of the United Nations dealing with shipping.

The GHG reduction measures for international shipping (to be decided) need to contain important regulatory provisions. These need to be prepared in accordance with current international shipping conventions so as to ensure the uniform and effective implementation of the measures. This is critical as a failure to do so could lead to unintended consequences and the introduction of distortions into the market which would undermine the purpose of the IMO, to "encourage the removal of discriminatory action and unnecessary restrictions by Governments affecting shipping engaged in international trade so as to promote the availability of shipping services to the commerce of the world without discrimination".

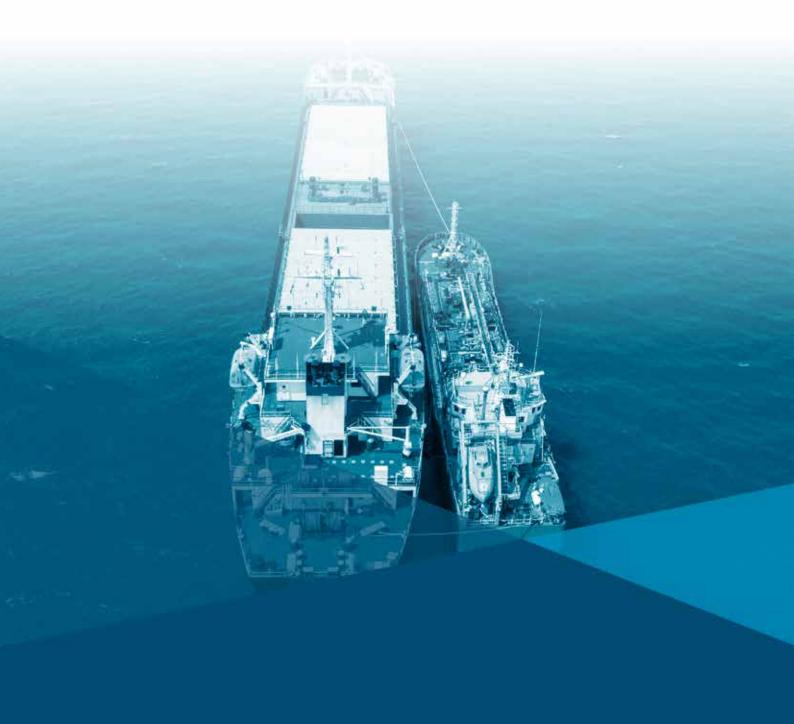
IMO is frequently criticised for being slow but the alternative to a global regulatory framework for shipping is a disaggregated and fragmented framework of national and regional rules with impacts possibly being significantly greater than the measures IMO is currently negotiating. That outcome would be disastrous for shipping but worse for global commerce and trade.

Edmund Hughes edmund.hughes@ibia.net









SHIP MANSTERING MANUAL

THE BIMCO & IBIA SHIPMASTER'S

BUNKERING MANUAL 2022

The Shipmaster's Bunkering Manual 2022 is the first practical industry guide for both owners and suppliers, seeking to create a common understanding of best practices when bunkering to facilitate a smoother process and safe bunkering globally

The manual is a unique result of cooperation between IBIA and BIMCO to create insight and practical understanding of bunkering across the shipping sectors.

Bunkering operations are routine, critical and high-risk operations which require accurate planning from both the owner and supplier to ensure a safe and successful operation. The publication consists of background information as well as checklists and key notes for the entire process for shipowners, masters and crew on how to prepare, execute and follow up on bunkering, including what to do when it goes wrong.

Totalling 4 chapters and phases of the bunkering process, the manual covers the following topics:



Chapter 1: Background insight on fuel types and key regulation

Everything you need know from fuel oil types, safety, and environmental regulations to ISO standards and contractual issues related to bunkering.



Chapter 3: Bunkering procedures

Bunker sampling is one of the most important aspects of bunkering. This chapter covers preparations, practical issues and what to do if something goes wrong. Details of the role each stakeholder ashore and on board undertakes during the process including actions required before, during and after the bunkering.

The book is available to buy from Witherbys on this link: https://shop.witherbys.com/shipmaster-s-bunkering-manual-2022/

IBIA members receive a 20% discount on all publications.

Please enter "IBIA" in the "Coupon/Gift Certificate" box to receive your 20% IBIA member discount.



Chapter 2: Origin and supply chain of marinebunkers

An overview of bunker blends before the ship arrives for bunkering followed by a detailed description of the ship's preparation and planning prior to bunkering. Advice is also given on how to handle a situation if compliant fuel is unavailable in a specific port. Paperwork including the bunker delivery note and certificates of quality are described and recommendations are given that aim to help to use them correctly.



Chapter 4: Calculation of bunker quantity and after completion procedures

Details on how to create a solid background for calculating the bunker quantity and determine if the ordered bunker stem has been delivered. For ships carrying equipment to undertake onboard testing of marine fuels, testing procedures are referred to and detailed description of how to interpret test results provided. Keeping an accurate and up to date oil record book is, together with the bunker delivery note, important as records for internal and external use for example during port state control.

ONLINE BUNKER TRAINING COURSE



Module 1:

Bunker Market Regulations and Enforcement

Module 2:

Understanding ISO 8217 and ISO 4259

Module 3:

Best practice for suppliers with VLSFO

Module 4:

Best practices for users with VLSFO

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Adapting to a changing market

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Module 7:

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Module 8:

Quantity Measurement

Module 9:

Sampling

Module 10:

Fuel quality

Module 11:

Alternative Fuels

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Biofuels

Module 13:

Exhaust Emissions

Module 14:

Introduction to LNG Bunkers



IBIA runs a series of online training courses

to inform the members of our industry and help them to understand international regulations, guidance on how best practice and application of International standards can improve their ability to source, supply and use the fuels required now and in the medium term.

The training modules are aimed at all bunker industry stakeholders who are keen on gaining solid general knowledge of marine fuel. It will be of value to sellers, bunker deliverers, surveyors and ship operators. The course is delivered in clear, understandable language. Delegates will be able to ask questions and seek clarification on any topics covered.

The renowned bunker industry expert Nigel Draffin, Author of 12 books on Bunkering and IBIA's Treasurer, will run the online Bunker Training courses.

On completion of a module, students will receive the 'IBIA Certificate of Attendance'.

Nigel Draffin



Consultant and IBIA Board Member



PASSIONATE ABOUT SEAFARING

David Hughes asks IBIA Board member, Ufuk Erinc, how he became the CEO of Turkish supplier Unerco and why he cares so much about the industry and its future

DH: You started your maritime career by going to sea and working your way up to a master of various types of vessels. Had you always wanted to go to sea?

UE: I graduated from Istanbul Technical University - Maritime Faculty in 1994. During my childhood I spent at least 3-4 months a year at the sea, even if not all the time, and this made me even more passionate about seafaring.

I actually started my career in the maritime industry and then I was determined to move into trading. Thus, I worked on bulk carriers, chemical tankers, ro-ro and container ships to get to know all types of vessels.

The aim was to see what goes on in all types of ships and operations and to evaluate the field part of maritime operations from a more macro perspective.

DH: In 1999, as an experienced mariner, you came ashore and became a manager within the bunkering sector. What attracted you to the bunker industry?

UE: While continuing my maritime career, I received an offer to join the container line operations department of what would become the largest shipping company in Turkey, where I spent 23 years of my life. I evaluated the offer and started an adventure that led to the position of Operations Manager and then General Manager.

At that time, I thought that fuel purchasing should be more professional, and I planned how to make it more understandable, how to measure efficiency and how to get more out of all alternatives with changing conditions and economic data.

As time went by, I noticed that there were some gaps in the market and that more shipowners could buy fuel, especially from Istanbul market, and as a result, a bunkering company was born that has reached one million tonnes per year.

DH: After 20 years in management within the bunker industry you set up your own company. What spurred you to do that?

UE: My analytical nature and my wish for excitement meant I wanted to do much more. I felt that 2020 would not only be a change for the maritime industry, but that it would be the beginning of a possible global change. Although my aim was to take the structure I was in to other places, the entrepreneurial spirit in me began to tell me that I had to overcome the obstacles myself, as a different player. As a result, Unerco was established and started operations in the second half of 2019.

DH: When you formed the company the geopolitical situation was quite different to the current one. How did you view the prospects for the Turkish bunker market back in 2019?

UE: The only thing we could not foresee, like everyone else, was the pandemic. However, I would like to say that we were very well prepared in 2019 for the 2020 change in Turkish bunker suppliers. Entering this major global change in readiness has brought us great benefits for Istanbul, which is already the most reliable bunkering port in the world.





We provided the highest quality service to all our customers by supplying a product that even our biggest supplier at the time, the Turkish refinery, would not produce without interruption.

We informed the industry, organised the IBIA conference in Istanbul and, as a result, we had a very successful transition period.

Consequently, the ongoing pandemic, the war in Ukraine and all sorts of events affecting the Turkish market could not destroy us.

As you can see below, we are in a region where not even a year goes by without something happening.

However, we must not forget that every crisis in the industry is an opportunity to learn and become better. Of course, there should be no wars, but what chance do we have to prevent this anyway? In this case, it is better to learn to dance in the rain rather than waiting for the storm to pass.

DH: What was your strategy for Unerco then?

UE: We wanted Unerco to be an innovative player with fast decisionmaking.

We wanted to provide a quality service rather than a lot of tonnage, and to provide weekly reports and information to our customers and all those who do business with us.

We wanted to create an easily identifiable brand, and we wanted it to be built on a foundation that would last for centuries. Most importantly, I wanted to support such a brand, the Quality Reliable Istanbul Fuel Market. If we can achieve that and make Istanbul a bunkering location whose quality and character is appreciated and preferred by everyone, it will be even more meaningful.

DH: Since 2019 the world has changed a lot, and in particular the Russia-Ukraine war has massively impacted shipping in the Black Sea. How has this affected the Turkish industry in general and your also your company?

Considering the population of the Black Sea countries, it is the trade gateway of countries where half a billion people live. Also, trading between the Far East countries and the Black Sea countries is very important in terms of volume and will continue to be important.

Along with the 2020 global sulphur cap, Russia's HSFO exports declined and had begun to shift to supplies in its own ports. The Russian-Ukrainian war had a major impact on large grain exports, sunflower oil exports from Ukraine, oil product trade from Russia and the reduction of ships passing through the Strait.

However, the increase in freight rates after the pandemic meant that ships lost less time and did not compromise on quality, and we achieved a good trading environment in the Turkish market despite the drop in tonnage.

Inevitably, the inability of Russian bunker companies to continue their trade meant that we emerged as the best alternative in the region despite our falling tonnage.

DH: The global bunker industry is also changing fundamentally due to environmental legislation and now, the increased commitment to net zero? Is the Turkish industry ready for alternative fuels?

UE: In general, maritime and related sectors like ours are the first places where change starts. In the hopes of that it is not too late, I think the net-zero target is important.

Moving from a conventional engine and fuel system to the alternative fuels, currently being discussed, is a bit out of our comfort zone. It will take time and energy for the new generation of ships' machinery to be compatible with these systems, for the ship's crew to have additional qualifications to use these fuels on board, for bunker companies like us and the rule makers who determine our playing field to adjust their regulations to those changes, and for costs to increase.

Turkey has a fast adapting structure both as a supplier and as a shipowner. Bearing in mind that the government institutions are always supportive and listen to us, I would like to say that we will make a big breakthrough in one of the alternative fuels suitable for this region and ships, rather than offering all alternative fuels at the same time.

DH: You successfully stood for election to the IBIA Board this year. Why do you think having a voice there is important?

UE: IBIA is going through a big change. First of all, it is moving from a supplier-based structure to a more comprehensive structure.

However, for the few months that I have been in this period, we have been working on the necessity for the new structure to be managed on the right foundations and professionally.

We are preparing a modelling that will cover the whole world and increasing the number of information, training and social environments that will include all parties, and at the same time, according to the references they receive from their members. In this important change, we prepare advice and information about market realities for institutions such as IMO.

As a consequence, being a member of this association already pushes you one step forward and allows you to be equipped. Moreover, being on this board is a great experience in terms of mediating more voices, contributing to the implementation of the right strategies and helping to make the right decisions.

When you think about it, you are supplying a product with a single standard to the same buyers in different countries, at different prices and with changing dynamics. If we can understand each other and meet on common values, I think this will be zero headache for the buyers.

That's why IBIA is working for the parties to understand each other better. It tries to explain the questions and problems of the parties involved in the fuel trade to the rule makers. In a way, it provides guidance and counselling.

DH: One policy that IBIA has been supporting strongly is the use of mass flow meters to measure bunker deliveries. The Turkish bunker has resisted this, believing that existing controls, especially the supervision of Turkish Customs, ensure correct volumes are delivered. Do you accept this position is increasingly out of step with the rest of the global industry.

UE: After all, MFM is a control mechanism and can be used where the state leaves the control mechanism to the companies. The system used in Turkey does not allow even one error in a thousand. Bunker supplies in Turkey are constantly monitored by the EPDK and Customs, and the maritime part of the work is carried out according to a roadmap drawn up by the Ministry of Transport.

The system starts with the determination of the exact volume of the cargo through the mass flow meter to the tanks under customs control, then the characteristics of the cargo are determined in the accredited customs laboratories and the tonnage is determined as a result, under the supervision of the customs officer and independent survey organisation for each delivery, the amount of the customs declaration opened according to the amount of product sold is loaded onto the barge by deducting the amount in the tank, which is also remotely monitored online by the customs administration.

The barge then delivers this fuel to the ship whose declaration is specifically opened under the supervision of the customs officer; when the delivery is completed, not only the BDR but also the customs declaration is signed by the captain of the ship receiving the fuel and the declaration is closed.

In this way, there is no difference in grams between the amount that goes in and out of the tank and the amount that is delivered to the ship.

While there is a system that works with such a system under the guarantee of the state, it is out of the question for us to establish another system in Turkey while there is a system that works with 3-5 errors per thousand.

I would even like to point out that the ISCC certificate and similar certificates that we have received today for handling biofuels are obtained for the purpose of registering sustainability and reliability.

The fact that we only explained the Turkish bunker system when we obtained this certificate has shown that we already control all these processes.

In the Turkish customs system, both the history of the cargo and its origin can be monitored and cannot be changed. I would like to point out that the structure I have described is a guaranteed method for the organisations that finance bunker companies, because this system controls all illegal transactions, from sanctions to the production of additional invoices and BDRs. No control of individuals can be stronger than the control of state institutions. Here, the authority has both a preventive and a supervisory role. My opinion, not as a member of IBIA, but as an experienced professional, is that doing this work under the control of companies with strong capital, based on international licences, and under the control of states that have signed common practices, will prevent all kinds of bad intentions.

There is a saying in Turkey that there is no need for the discovery of America, America has already been discovered.

DH: What do you think are the most urgent issues that IBIA and the bunker industry needs to address.

UE: IBIA is currently planning its own change and commissioning research to take on a more inclusive role.

For the position it wants to be, it first has to learn how it is seen.

Founded years ago, to bring suppliers together, IBIA has become a multi-faceted, inclusive association with members including suppliers, traders, fuel buyers, regulators, surveyors and major port authorities.

Particularly at this time of change, it is an important association, thanks to its expert Board and Executive Committee members, advising international organisations such as the IMO, forming strategic partnerships with important organisations such as BIMCO, and supporting and announcing many events around the world.

The priority at the moment is to be part of the change with its own proper structure and to explain the change properly to its members. Many shipowners and suppliers cannot see 3-5 years ahead.

Considering that fuel costs are still a large part of freight costs, I recommend that everyone involved in maritime affairs should become a member of IBIA. It will give them a great education, the opportunity to get involved in the issues and make their voices heard.

DH: Are there any other issues you would like to comment on?

UE: Much more valuable and expensive products have started to enter our lives, which require much more attention in their handling.

It will take time to train seafarers, modernise bunkering vessels, establish rules and create additional financial resources.

During this time, investors will need support to see the way forward and to renew the ageing merchant fleet in a timely manner. To avoid confusion, organisations like IBIA are always on their side, and thanks to us it is possible for the parties to reach each other.



IN WITH THE NEW

Upgraded port infrastructure is coming online in India, which should be a boost for bunkerers, as John Rickards writes

India's long-delayed transshipment port at Vizhinjam in southern Kerala finally welcomed its first commercial container vessel call from Maersk this July. Operator Adani Ports Group said, "the strategic port is positioned to emerge as a critical player in the international trade corridors" and its first operations ahead of expected full phase one completion and opening by the end of the year were "a milestone event marking India's entry into global transshipment... positioning Vizhinjam as a critical player in the international trade routes."

Currently, 25% of India's container traffic is transshipped en route to the destination, but the country hasn't had a dedicated transshipment port, and three quarters of the country's transshipped cargo is being handled by hub ports elsewhere.

Karan Adani, managing director of Adani Ports and SEZ said: "[The first container ship to visit the port] is a messenger that will tell the world that India's first transshipment terminal and the largest deepwater port has begun commercial operations." It's also India's first "automated" port with state-of-the-art infrastructure and facilities capable of handling large ships, with modern container handling equipment and "world-class" automation and IT systems.

"No other port in India - including our own highly advanced Mundra Port - has these technologies," Adani said. "What we have already installed here is South Asia's most advanced container handling technology. And once we complete the automation and the Vessel Traffic Management System, Vizhinjam will be in a class of its own as one of the most technologically sophisticated transshipment ports in the world."

With much of India's bunker market centred on vessels calling for cargo rather than bunkers-only, an uptick in vessel traffic calling directly and increased internal trade as transshipped cargo is delivered to other ports is only going to boost bunker sales in the country, while having a newer port with modernised facilities will also make it easier to adapt to new fuels.

The Adani Group itself is one of India's main bunkerers, and its chairman Gautam

Adani went on record at the turn of this year in firm favour of India producing green hydrogen fuel – unsurprisingly, given an arm of the group is already building a million-tonne-per-year green hydrogen plant in Gujarat due for startup in 2027 whose planned final form, producing triple that, could cost up to US\$50bn - but also urging India to skip transitional fuels to go right to the end goal.

In an essay for the World Economic Forum, he said: "For India, the equitable solution is not to replace one fossil fuel with another but to leapfrog to renewables and green hydrogen. The decrease in solar costs can be replicated with green hydrogen. This shift will help India achieve energy security and improve air quality in its cities. It will also contribute to food security by eliminating the uncertainties of imported ammonia prices, a crucial component in fertilisers. Most importantly, it will offer the world a chance to avert the adverse impacts of climate change."

The overall sense of new development and potential for change in the bunker sector does seem to be reflected in sentiment on the ground.





Visakhapatnam-based supplier Green Fuels International spoke to *World Bunkering* and seemed optimistic about the company's own prospects and also the national market's future as a whole.

"With rapid growth in infrastructure, including new ports developments, and the improved efficiency of existing ports along India's coastline, the forecast for the Indian bunker industry is quite buoyant," a spokesperson told *World Bunkering*. "Green Fuels, one of India's leading bunker fuel suppliers, is mobilising its resources to take a major slice of the growth market."

Currently, trade patterns across the Indian Ocean have been heavily affected by Houthi attacks in the Red Sea, and while India's bunker market is dominated by cargo calls rather than bunker calls for ships on the main east-west trades, those shifts have still had an effect - but not a huge one.

"India being a growth country, global challenges get mitigated by its growth potential," Green Fuels explained.
"With increased port connectivity and infrastructure, there is increased traffic of vessels calling at Indian ports. New ports are going to be future high growth opportunities for the bunker fuel industry.

Green Fuels, as an enterprise made in India, shall make every effort to seize every opportunity to gain a stronger foothold in this fast-growing market."

Government aims to modernise the industry and moves towards a cleaner sector and decarbonisation were also welcomed by the company.

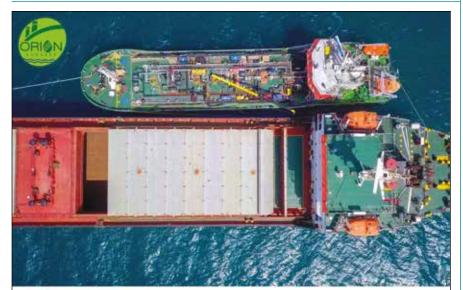
"While India is poised for increased fossil fuel consumption over the next decade, there has been an increased push from the government and various sectors for decarbonisation, including in the bunker industry. India is making a leap in biofuels, and at Green Fuels we are working to be at forefront of this transition. While the transition is quite challenging, it is equally an opportunity to create value for our customers."

Neighbouring Pakistan has been weathering a financial crisis for the past couple of years. Inflation is slowly coming down. In July, the government was able to pass a budget aimed at sharply increasing taxes to cut its deficit, a budget which was enough for an IMF to stop the country defaulting on its debt and being plunged into a fresh crisis.

But while the picture is maybe rosier than last year, this means the economy is still on fragile ground, growth in part dependent on ongoing Chinese support for its mining and infrastructure industries, and its bunkering sector is still dominated by ships taking import/export cargoes. On top of that, fuel availability has long been an issue, with Pakistan's Enar refinery producing VLSFO somewhat patchily. World Bunkering spoke to Zishan Arshad, director at Orion Bunkers, to get a clearer picture.

WB: What's the current state of the Pakistan market as you see it? How does business currently look for Orion?

ZA: The Pakistan market is doing quite well. We are seeing strong demand. However, supply side issues persist as only one refinery is producing VLSFO. Another refinery also started production, but the cost wasn't in place, so they stopped production. As far as Orion business is concerned, we are still holding 70% of market share and growing.



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WB: Has the region's bunkering been affected by trade shifts in the Indian Ocean due to the attacks in the Red Sea, or is it still broadly dominated by ships calling at Pakistan's ports for cargo?

ZA: The Red Sea attacks did not affect bunkering in Pakistan. As per data, most vessels taking bunkers from Pakistan are calling from Africa, India, Colombo, Bangladesh and Fujairah. And the majority of vessels doing cargo work are stemming.

WB: What's the outlook for the sector in the coming months?

ZA: The demand is strong persistently, the only problem we still have is limited supplies from the refinery. Going forward, we don't see any improvement on the supply side. However, we are still optimistic that in the coming years we will have additional supplies from other refineries.

Sri Lanka has been in the grip of its own financial crisis for the past year or so and is still clawing its way back from the brink of economic implosion – at the time of writing, the government is in talks with international bondholders about restructuring billions of dollars of debt to save a huge amount in write-offs and deferred payments; it owes US\$37bn in all.

It should be good news then that Hambantota port has continued to see a steady increase in bunkering traffic, following the trend since Sinopec relaunched bunkering at the thentroubled and still hugely under-utilised mega-port five years ago.

Hambantota International Port Group recorded over 300 oil and gas cargo vessel calls in 2023, a 132% increase on 2022, which HIPG credited to Sinopec's bunkering operations. Total products throughput - though not, presumably, direct supply; the port issues two sets of figures with very similar labelling - was 918,000 MT, of which 700,000 MT was bunkers and 218,000 MT LPG cargoes; that 700,000 tonnes was 250% up on 2022's figure and represented 114 bunker vessel calls

"We are looking at the energy sector as a growth market for HIP and are actively promoting it. We expect these figures to more than double in the current year. With Sinopec partnering with HIP, we are changing the dynamics of bunker supplies in the Indian Ocean, adhering to the highest levels of health & safety," said Tissa Wickremasinghe, COO of HIPG.

"We are moving forward amidst an economic downturn and a dollar crisis in Sri Lanka, continuing to provide services without interruptions. The Palestine and Ukraine wars have also impacted the oil market contributing to a surge in global prices. We have achieved our target volumes, in spite of these crises. With major projects and developments in infrastructure occurring simultaneously, the port manages vessel operations, handles manpower efficiently, and we have achieved all of this within a completely accident-free environment."

That trend has continued into 2024, in line with the port's targets. Second quarter figures showed bunker supply volumes up 128% and LPG volumes nearly doubling.

Bunker supplies within the port, at anchorage, and in outside port limit areas reached 66,044 MT within the first five months of 2024, compared to 28,923 MT handled during the same period last year.

These figures are obviously very low in the grand scheme of things, but Hambantota is coming from a very low base, and its fuel storage business is obviously doing decently well to support those much larger headline figures mentioned before.



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"2024 is a year of significant achievements for our energy services, and we are strongly reinforcing the port's position as a strategic energy hub in the regional and global maritime landscape, under the China Merchants Group and Sri Lanka Ports Authority," said Li Yongzhuang HIPG's general manager for energy services.

HIPG CEO Johnson Liu added: "We are actively promoting the energy sector as a growth market for HIP and expect these figures to continue rising. We are confident of meeting our target annual oil and gas volumes by the end of this year."

Sinopec isn't the only bunker supply operating out of Hambantota. The most recent addition is Maldives-based supplier The Hawks, which already operated out of other Sri Lankan locations, principally Colombo, and in March moved a bunker barge to the southern port, describing it as a "prime location [that] grants foreign going vessels minimise diversions, save time and fuel". The company is now looking to expand further east into Malaysia and reportedly sees 40,000 tonnes per day in fuel sales, but in July also strengthened its Maldivian fleet with the addition of a further bunker tanker for LSMGO supply across the archipelago.

However, the company may soon have local competition. Earlier this year, the Maldives State Trading Organisation announced a partnership with energy trader Vitol to establish an international bunkering hub in Ihavandhippolhu Atoll.

"Under the partnership, Vitol will market Maldives as a bunkering hub in the Indian Ocean and will help develop our technical capability in the industry," the STO said in a statement. "Ihavandhippolhu Atoll is a key area of the government's strategic plans to diversify the economy. The area has been designated as the Maldives Economic Gateway and is planned to have an international port, strategic oil terminal and other maritime activities."



The Maldives, in theory, enjoys many of the same geographic advantages as Hambantota and Mauritius, in that it sits reasonably close to main shipping routes. However, the amount of additional

infrastructure needed to make these ambitions a reality is huge, and it seems unlikely that the islands will become a major regional bunkering hub any time soon.



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Thirty years ago, a few Maldivians began developing tourism in the Maldives, making it one of the world's most luxurious destinations.

Now, the Maldives is poised to become a key player in the bunkering industry. We aim to provide top-quality bunker fuel to international ships and are seeking partners to develop this industry.

We invite you to join us as referral partners to promote the Maldives as a premier bunkering destination. Together, we can establish the Maldives as a central hub for maritime refuelling services, creating mutual benefits.

Regards,
Nazil Afeef (+960 9993997)
Founder & CEO

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awks Colombo Pvt Ltd commenced physical supply operations at the start of 2024.

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Hawks Colombo deploys the bunker barge MT Hawks Victory in Sri Lanka.

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Hawks Colombo is committed to be a market leader in the physical supply of bunker fuels in Sri Lanka, with a clear aim to expand our assets and operations in the country.

The Hawks Group has been in the bunker market for 17 years. It is active as a physical supplier of bunker fuels in Maldives and Sri Lanka, with bunker trading offices in Maldives, Dubai, Singapore, Shanghai and Monaco.

Hawks owns and operates 5 products tankers trading clean petroleum cargoes internationally. In Maldives we own a 30,000 cubic meter tank storage for gasoil, supporting a fleet of 3 floating storage tankers, 15 barges and more than 40 other craft, including tugboats and vessels capable of providing a broad range of support services.

In addition to bunker supply, tanker ownership and oil trading, Hawks represents a diversified group. We are active in shipbuilding and repair, light industry, petrol station networks, hotels, construction, real estate and numerous service sector industries.

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FOCUS ON EFFICIENCY

New products aim to boost performance and manage emissions

ceanly Performance, which specialises in the integration of decarbonisation and digitalisation for the maritime industry, has announced the release of its latest version, 18.

According to the company, this update introduces innovative features, including advanced Time Charter Party (TCP) management and an intuitive Itinerary Planner, designed to optimise fleet performance and operational efficiency.

The new version is said to provide the data needed to improve CII ratings and identify the most effective Energy Saving Devices (ESDs) for each vessel.

Oceanly asserts that efficient navigation of Time Charter Party (TCP) agreements and ship benchmarks is critical for maintaining fleet competitiveness and avoiding disputes. It says the offer advanced monitoring tools and alarms, empowering users to actively manage every aspect of TCP agreements and benchmarks.

"These tools, alongside detailed TCP and Benchmark reports, deliver the insights necessary for strategic adjustments and informed decision-making," said Ingela Mandl, Director, Sales & Marketing at Oceanly. Oceanly Performance also says it "provides an innovative approach to EU Emissions Trading System (EU-ETS) compliance". The EU-ETS mandates the monitoring, reporting, and verification of carbon emissions, placing a price on greenhouse gas emissions from ships. Oceanly Performance says it offers "a seamless pathway" for shipping companies to comply with these regulations.

Since 2021 MSC Cruises has used the Oceanly platform to enhance operational efficiency across its fleet.

Meanwhile, the Schulte Group has set up a new subsidiary company, Ocean Opt, to be "a one-stop solution for emissions management for ship managers, owners and charterers". The company says it offers independent consultancy, data management and platform-based services tailored for fleet performance optimisation, emission trading systems and regulatory compliance including the upcoming FuelEU Maritime regulation.

Schulte says that the new entity has been launched as the pressure on the maritime industry increases to demonstrate measurable progress toward climate neutrality. It notes: "Following the introduction of the International Maritime Organization's (IMO) Carbon Intensity Indicator (CII) rating scheme and Energy Efficiency Existing Ship Index (EEXI) in 2023, effective this year, the shipping industry has been included to the European Union's emissions trading system (EU ETS), which will have a major financial impact on shipping from 2025. While the industry is still busy adjusting to EU ETS, the next challenge is already on the horizon with FuelEU Maritime. In preparation for this new EU regulation, the monitoring plans for ships calling the EU must be submitted to authorised verifiers by end of August."

Another major shipping industry player, Columbia Group, has launched a similar service. It says: "Solutions must be in place to help ship owners with navigating the complex challenges of complying with the new FuelEU Maritime regulations."

Philippos Ioulianou, Director of Energy and Renewables at Columbia Group, said: "These new restrictions are going to have a big impact for owners and managers and it's important they look at what measures they are going to need to take to comply with the regulations and to avoid hefty fines. At Columbia Group, we believe that sustainability and profitability can go hand in hand."



SHANGHAI GOES GREEN

Over the past few months, there's been a significant shift in China towards greener fuels, as John Rickards reports

hile the Chinese conventional bunker market remains as competitive as ever, Shanghai has been aiming to carve out a firm niche for itself as a leader in decarbonisation efforts.

In March, Shanghai International Port Group held the inaugural meeting of the "Green Shipping Industry Alliance" in Lingang New Area, the newest part of the city's free trade zone. The group consists of the Lingang New Area's management committee, Cosco, SIPG, State Power Investment Corporation, China Classification Society and the Methanol Institute. The alliance is to serve as an open platform and cooperation mechanism to promote the application of green energy and well-to-wake sustainable low-carbon development in the shipping industry with a particular eye to green methanol and ammonia adoption, something the port is particularly keen to promote. Shanghai is the site for the country's pilot project in ship to ship green methanol bunkering and in April, completed China's (and Asia's, SIPG said) first ship-to-ship refuelling, of the 16,000 TEU Astrid Maersk at Guandong Wharf in Yangshan Port Area.

According to Chen Jinshan, the Lingang New Area's management committee director, basing the group in the free trade zone will help draw international cooperation and allow for a more "innovative development environment".

Not long after, SIPG signed a cooperation agreement with Hanxin Shipping to improve green methanol supply both for Hanxin's ships and for Shanghai in general. Hanxin has nine 9,000 TEU methanolpowered container ships currently under construction, scheduled to be delivered from 2025 to 2026. The two sides will jointly discuss the possibility of providing long-term ship clean fuel procurement, supply and refuelling services for the future LNG or green methanol dual-fuel fleet of Hanxin, to jointly promote the realisation of carbon reduction goals and promote global shipping cooperation in renewable fuels. SIPG said it would also accelerate the construction of Shanghai Port Green Energy Centre, and further build a low-carbon energy hub in the Asia-Pacific region, to provide efficient and reliable energy supply for international shipping companies.

In July, SIPG also announced it was launching a green energy trading platform for hydrogen-based fuels with Shanghai Environmental Energy Exchange, Shanghai Lingang Green Innovation and Guohua Investment Hydrogen Energy Company. The aim, group chairman Gu Jinshan said, was to accelerate uptake of and availability of green hydrogen-based fuels. The trading platform will be based in Lingang New Area, and will cover green hydrogen, green methanol and green ammonia, as well as green hydrogen certificate trading and data services, to ease distribution and availability of hydrogen-based green energy.

June saw bunker supplier Chimbusco sign a distribution deal with producer Bairin Zuoqi and Cosco's energy and logistics arms to sell up to 200,000 tonnes of green methanol to be produced at a new windpowered plant in Chifeng, Inner Mongolia. The 500MW plant will produce methanol for Cosco to transport and store, and Chimbusco to offer to ships. In a statement, Chimbusco said: "The signing of this strategic cooperation agreement further promotes the production, transportation, warehousing, fuelling and use of green



methanol across the whole industrial chain. The three parties will give full play to their respective advantages and take the green methanol supply chain as the entry point to further expand the field of cooperation."

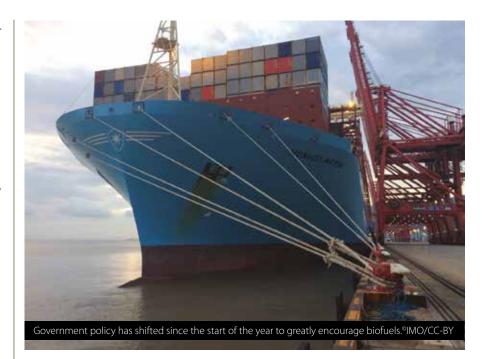
Shanghai has also seen in late May its first offloading of shipboard-captured carbon from Evergreen's 14,000 TEU Ever Top, the first ship to be fitted with a CCS system. According to SIPG, two months of sea trials, the capture rate of carbon dioxide by the system was over 80%, and the purity of carbon dioxide captured was over 99%, both meeting the design and classification requirements the amine-based system had been under. Shoreside reception for captured CO₂ is one of the main practical limitations for CCS use at present, and SIPG described the unloading process as "complex" and "cumbersome", needing careful control, eventually taking four hours to complete.

There are valid questions over the use of CCS versus reducing emissions by changing fuels and operational practices, but as a transitional step it's certainly encouraging that the practical hurdles to handling CO_2 output in port are being cleared.

For all the good work Shanghai and other ports and industry bodies have done to promote renewable fuels, conventional HFO will remain dominant for a long time to come.

Zhoushan is chasing hard on the heels of Fujairah for third spot in the list of major bunkering ports. Last year bunker sales topped 7m tonnes for the first time, up nearly 17% on 2022, which the Zhoushan Marine Fuel Association said was in part down to greater efficiency but also competition. Last year there were 19 licensed bunker suppliers active in the port, with private operators contributing almost half the total volumes supplied, up almost 25% year-on-year.

Overall, the association attributed its performance to "Zhoushan's steadfast commitment to developing the bunkering industry, implementing reforms, fostering innovation in response to market demands, and proactive efforts to enhance infrastructure".



That said, the association has been keen to point to its addition of China's first offshore LNG bunkering and anchorage biofuel bunkering, which it says makes Zhoushan the first port in China to provide multiple fuel types at once across its 20-plus anchorages.

LNG bunkering was launched fully at the end of February, with the dual-fuel bulk carrier *Gaoershan* taking on 1,222 tonnes of LNG, after trial LNG bunkering in August last year at Qushan anchorage. Following the bunkering trial, the port went through a lengthy review and optimisation process to ensure smoother service once commercial bunkering began.

The port was shortlisted for trial supply of biodiesel in April, one of 22 sites across China picked to do so, and the only one in a free trade zone, having carried out its first bunkering operation with B24 biofuel in October last year.

The Chinese government announced in November 2023 a new programme to boost domestic biofuel use and direct sale to customers, including bunkers. The timing was impeccable because an antidumping probe was launched by the EU in December 2023 - not expected to be completed until well into 2025, though tariffs of up to 36% could be imposed by the time *World Bunkering* goes to press. With much of China's biofuel production

and UCO feedstock previously going to export, and the EU a key market in all fuel grades (the Netherlands alone accounts for over three quarters of Chinese biodiesel exports), providing local demand for hundreds of thousands of tonnes of fuel potentially not going to export any more is obviously a boost to Chinese biofuel producers.

The administrative committee of Zhejiang Pilot Free Trade Zone welcomed the port's shortlisting, saying: "This will create new prospects in Zhoushan for advancing green and clean energy from biomass and establishing a significant bunkering centre for international vessels utilising renewable energy. The demand potential for biodiesel in Zhoushan Port is substantial. The current market demand for biodiesel fuel ranges between 300,000 to 500,000 tonnes annually. In the future, the biofuel bunkering sector is anticipated to generate numerous opportunities for resource alignment and trade."

Zhoushan wants to establish biofuel production within the port, construct storage and blending facilities, and turn the port into a regional biofuel bunkering hub. It has plans to build a 400,000 tonnes per year biofuel plant in Dinghai district and has said it intends to have 100,000 CBM of biofuel storage in the port.

Shenzhen has the current record for the largest biofuel stem taken in China so far, however. In June, Chimbusco provided Cosco's Xin Ya Zhou with 3,850 tonnes of B24 to beat the previous record set in Zhoushan last November. The company cited its local subsidiaries and Cosco's keenness to reduce its carbon output and said volumes of this size would be a boost for adoption of such dropin fuels: "Since the shipping industry has increased energy conservation and emission reduction efforts, the application of biofuels is still in the early stage. The largest supply of a single ship has laid a solid foundation for the regular supply of biofuel oil in domestic ports in the region."

Chimbusco was also on the same biofuel shortlist as Zhoushan and been a proponent of B24 as a bunker fuel since carrying out its first supply last year.

"China's shipping industry is in a critical stage of green transformation, with a huge potential demand for low-carbon fuels," the company said. "From the perspective of overall domestic economic development, the supply of biodiesel in domestic ports has stabilised the good development momentum of the biodiesel industry and promoted the green and low-carbon transformation of the shipping industry."

And while Hong Kong continues to slip down the list of busiest ports and has seen its bunkering market chiselled away by competition from mainland Chinese ports, the SAR is at least nudging forward with greener fuel options, with a number of suppliers now offering alternatives. One of the Chimbusco group's sister companies, Chimbusco Pan Nation, became the first Hong Kong supplier to receive ISCC-EU certification for its biofuels, making its first delivery of the fuel late last year, and in May made the largest B24 fuel delivery in the territory and the first of a B24-HSFO blend, again to a Cosco vessel. The company provided 4,300 tonnes of the fuel to the Cosco Netherlands, which CPN said "highlights CPN's dedication to sustainable development".

"Since 2021, CPN has established a dedicated taskforce to conduct research on alternative fuels, including marine biofuel, which aimed at contributing to a more sustainable shipping industry, and completed supplying B24 marine biofuel to more than ten ocean-going vessels."

While Hong Kong has lagged a long way behind on LNG bunkering and its first LNG terminal only opened last year, long after its regional rivals (and still won't actually provide bunkering until the end of this year at the very earliest), late in 2023, the government announced plans to establish green methanol bunkering in the territory. In July, it went some way towards backing up that intention by introducing a bill to allow ships to use non-fossil fuels in HK waters, and to allow for bunkering with methanol, ammonia and hydrogen.

Writing for the government online, Secretary for Transport and Logistics Lam Sai-hung said: "The bill signifies the initial step of Hong Kong's efforts to promote the use of green marine fuels. To further expand the utilisation of green fuels across Hong Kong, and to enable vessels to bunker green fuels in the city, it is imperative to establish the necessary supporting infrastructure and regulatory framework. The Hong Kong SAR government has thus commenced a feasibility study for providing green methanol bunkering for both local and

ocean-going vessels and will promulgate an action plan for the construction of bunkering facilities and development of supply chains by this year, with a view to equipping Hong Kong to leverage the emerging development opportunities presented by green marine fuels, and establish the city as the preferred green marine fuel bunkering centre in the region."

The move came just as the HK Marine Department launched a green incentive scheme for Hong Kong-registered ships, with those with an A or B rating on the IMO's Carbon Intensity Indicator qualifying for the maximum amount. The scheme grew out of the same strategic policy decisions of late 2023, and if concrete action can continue to follow, Hong Kong could yet become a bunker port fit for the future.

"Hong Kong, China, as an associate member of the IMO, has been committed to supporting the organisation's decarbonisation initiatives," a Marine Department spokesperson said. "Although various green incentives have been introduced by other flag administrations, so far none of them has introduced a CII-related green incentive. Hong Kong will be the pioneer administration supporting the IMO's green shipping policy on the CII. The measure will help promote the image of the HKSR as a green fleet and reinforce its brand in the international maritime arena."





RECORD BUNKER SALES CONTINUE

But Singapore's sights are firmly set on decarbonisation

ast year bunker sales in Singapore past the 51 million tonnes mark and this year could see even higher volumes. The Maritime and Port Authority of Singapore (MPA) has reported first half 2024 bunker sales at 27.2 million tonnes, up 85% year-on-year.

The Singapore establishment is very much looking to a zero carbon future, but conventional fuel supply is going to be at the at heart of the global shipping hub's bunker business.

However, change is coming there too. The MPA is strongly encouraging the digitalisation of bunkering. Specifically, the move to electronic bunker delivery notes (eBDN) is gathering pace.

MPA announced the launch of its digital bunkering initiative in November 2023 it is planning to make eBDN mandatory to enhance collaboration between bunker buyers and suppliers, enable better reporting of emissions and achieve time and cost savings.

Recently technology company ZeroNorth has started providing its eBDN solution on 12 barges operated by Vitol Bunkers in Singapore for supply to its shipping customers.

It is expected that the deployment of eBDN will help Vitol Bunkers streamline workflows, eliminate the risk of manual errors, enhance efficiencies and reduce

After comprehensive testing to validate its regulatory compliance functionality, data accuracy and security, the MPA granted ZeroNorth's eBDN solution whitelisting approval. ZeroNorth currently serves 56 barges and 10 customers in Singapore.

Ng Yi Han, Director (Innovation, Technology & Talent Development), at the Maritime and Port Authority of Singapore (MPA), said: "Digital bunkering can boost the efficiency and transparency of the bunkering process in Singapore. Since the launch of the digital bunkering initiative last November, the MPA is encouraged to see more licensed bunker suppliers, ship owners, and operators, including Vitol Bunkers, adopting digital bunkering solutions. Using the whitelisted solutions, including ZeroNorth's solution, to complete and issue digital bunkering documents can help save many man-days per year, which companies can redirect to other value-added work."

Meanwhile Singapore is backing the development of a range of alternative fuels

In May X-Press Feeders, Global Energy Trading (GET), and PSA Singapore (PSA) successfully completed the first simultaneous methanol bunkering and cargo operation (SIMOPS) in Singapore.

It took place at the new Tuas Port with the support of the MPA, together with various government agencies and local research institutions. The use of the mass flow metering (MFM) system for methanol, together with the use of digital bunkering, was also trialled.

The ISCC-certified bio-methanol used for the SIMOPS was produced by green methanol producer OCI Global and supplied via GET, an ISCC-certified supplier.

In another initiative the country's Energy Market Authority (EMA) and the MPA have shortlisted two consortia that will proceed to the next round of evaluations of proposals to provide a low- or zero-carbon ammonia solution on Jurong Island for power generation and bunkering.

The two consortium leads are Keppel's Infrastructure Division and Sembcorp-SLNG, and the bunkering players in these consortia are Itochu Corporation, Nippon Yusen Kabushiki Kaisha (NYK Line) and Sumitomo Corporation. The two consortia



will proceed to conduct engineering, safety and emergency response studies for the proposed project.

Once these studies have been completed EMA and MPA will select one of the two bidders as the lead developer of the project, it is hoped this will happen early next year.

The lead developer will develop the end-to-end ammonia solution comprising generating 55 to 65 MW of electricity from imported low- or zero-carbon ammonia via direct combustion in a Combined Cycle Gas Turbine and facilitating ammonia bunkering at a capacity of at least 0.1 million tonnes a year starting with shore-to-ship bunkering followed by ship-to-ship bunkering.

In a statement the MPA explains: "The project is part of Singapore's National Hydrogen Strategy launched in 2022, which outlines Singapore's approach to develop low-carbon hydrogen as a major decarbonisation pathway as part of the nation's commitment to achieve net zero emissions by 2050. A key thrust of this strategy is to experiment with the use of advanced hydrogen technologies that are on the cusp of commercial readiness. Ammonia is currently one of the most technologically-ready hydrogen carriers with an established international supply chain for industrial use."

The introduction of alternative fuels requires new, purpose-built bunker barges. Consort Bunkers, ClassNK, Yanmar Asia (Singapore) Corporation and Taiko Asia Pacific have signed a memorandum of understanding (MOU) to accelerate towards introduction of more bunkering ships capable of handling alternative fuels.

Singapore-based Consort Bunkers placed an order with COSCO SHIPPING Heavy Industry (Guandong) Co. Ltd. to construct four 7,999 DWT IMO Type 2 tankers, ready for biofuel and methanol bunkering. Incorporating their previous orders, a total of 13 biofuel/methanol bunkering tankers totalling over 90,000 DWT will join Consort's fleet. ClassNK has been providing surveys and audits, Yanmar Asia has been providing main engines and generator engines, and Taiko Asia has been supplying cargo pumps package and various pumps package in engine room and pump room of the majority of Consort Bunkers' fleet for more than a decade. Consort Bunkers has appointed them to take on the same role for this upcoming multi-fuel bunkering ships project.

Under the new MOU, the parties agreed to use their good relationship and respective expertise to complete Consort's fleet renewal and expansion project, including new fuel bunkering vessels, and to contribute to regional and global implementation of alternative fuel use.

Consort Bunkers' Director/General Manager SK Yeo said: "Establishing infrastructure capable of refuelling alternative fuels is essential for realising decarbonisation of ships. Our biofuel and methanol bunkering tankers reflect our commitment to respond to growing needs in this field quickly and sufficiently. Under the trusted partner ClassNK, Yanmar Asia, and Taiko Asia, we will continue increasing our engagement to offer any necessary bunkering options for the industry."

Moves are also underway to prepare ships' crews to operate ships using alternative fuels.

Technology group Wärtsilä has supplied its new dual-fuel engine simulator technology for Wavelink Maritime Institute (WMI), the maritime training arm of the Singapore Maritime Officer's Union (SMOU).

The navigational and technological simulators are a central feature of the simulation suite at WMI.

"Seafarers today must continue to reskill and upskill, particularly in the areas of decarbonisation and new alternative fuels. Wärtsilä's advanced simulator technology allows us to provide the highest quality maritime training, ensuring that our students are fully in step with the transition currently underway in the shipping industry," says Teo Keong Kok, Managing Director, Wavelink Maritime Institute.





ONE-SIZE-FITS-ALL WON'T WORK!

IBIA highlights problems with IMO's Carbon Intensity Indicator

In a widely circulated press statement, IBIA has made clear its reservations regarding IMO's Carbon Intensity Indicator (CII). It notes that IBIA's members, along with the wider shipping industry, are actively pursuing operational energy efficiency improvements as part of goals consistent with the IMO's 2023 Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships.

With the IMO's initial Carbon Intensity Indicator (CII) ratings applied to ships, like others IBIA has noted the current inadequacies of CII methodology to appropriately reflect the service of bunker vessels which predominantly operate over short distances (duration) in port areas. IBIA seeks a CII methodology that is accurate, reliable, and implemented in a manner that fully reflects the intent of the IMO Strategy for its members' bunker vessels that undertake a vital role in supporting internationally trading commercial ships.

IBIA agrees with other industry associations that to achieve the IMO's intent, the CII must be appropriate for each shipping sector. A one-size-fits all instrument, as the CII is currently designed, has inherent flaws that has resulted in the introduction of goals that, because of the way CII is calculated, penalises vessels that undertake short voyages.

The IMO's Marine Environment Protection Committee (MEPC) at its 81st session in March 2024, publicly acknowledged significant concerns raised by IMO Member States and industry, recognising "shortcomings and unintended consequences of the CII mechanism and the general agreement that these concerns should be fully considered and addressed during the CII review process".

IBIA supports the calls to amend the current CII mechanism, especially in view of the likely expected strengthening of the CII requirements after 2026, to avoid unintended consequences that are contradictory to IMO's key principle of maintaining a 'level playing field' through the regulation of international shipping.

IBIA looks forward to the commencement of the CII 'data analysis stage at MEPC 82 in September following the "data gathering stage" and to that end has proposed through a submission to that meeting an amendment of the current CII methodology and formula to incorporate a short voyage (duration) correction factor that will go some way to address the service duty of bunker vessel when they support international shipping.

IBIA's Representative to the IMO, Dr Edmund Hughes summarises: "IBIA as an organisation with consultative status at the IMO fully supports the effective and uniform implementation of the regulatory framework for international shipping. However, where anomalies are identified in those regulations IBIA will provide constructive input to their further development. IMO is undertaking a review of the Carbon Intensity Indicator (CII) and IBIA has submitted a document to MEPC 82 proposing a short voyage (duration) correction factor be applied to ensure bunker vessels, which perform an invaluable service to support international shipping, are not overly penalised due to the nature of their unique service duty."

New research has reinforced the widely held view in the shipping industry that the CII needs to be reviewed. In a collaboration with four Master's students from the Antwerp Management School (AMS), the Royal Belgian Shipowners' Association (KBRV) released a study that investigates issues with the CII formula. As part of their thesis project, the research conducted by the students included a comprehensive literature review, a qualitative analysis, and a quantitative analysis using data from Belgian-controlled ships.

The researchers identified three variables with the most adverse impact on CII ratings: waiting time; number of ports of call and distance travelled, found that quantitative analysis confirmed the significant impact of these variables.

KBRV concludes: "These findings underscore the multifaceted nature of CII ratings. If the IMO aims to maintain the CII as a meaningful measure to incentivise shipping's decarbonisation, a thorough review of the formula is necessary, considering the various factors beyond the control of both shipowners and charterers that influence the CII ratings. At a higher level, the scope and goal of the CII within the basket of measures needs to be reassessed as well."



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EMBRACING CHANGE, TRANSPARENCY, AND PARTNERSHIPS WILL SHAPE THE FUTURE OF THE BUNKER INDUSTRY.

In today's volatile industry, leaders are navigating an ocean of change

rom addressing geopolitical disruptions and advancing the green transition to building strong partnerships and embracing digitalisation, Peter Zachariassen, CEO of Bunker One, gives a comprehensive outlook on the industry's potential future. This insightful perspective underscores the necessity for flexibility, resilience, and collaboration to manage the sector's rapid shifts and emerging trends effectively.

Adapting to disruption

In recent years, the shipping industry has faced unprecedented changes driven by a myriad of geopolitical, local, and regional disruptions. Historically, such significant shifts occurred gradually over decades; however, since 2020, the pace of change has accelerated dramatically. Bunker One believes that this new reality, characterised by volatility and rapid shifts, necessitates a heightened readiness among market players to adapt and navigate these challenges effectively, empowering them to take proactive steps.

Geopolitical tensions, such as the ongoing conflicts in the Middle East and the Russian-Ukrainian war, have introduced considerable volatility into global shipping routes. These tensions affect the safety and accessibility of key maritime passages, influence global supply chains, and require the rerouting of shipping lanes. Additionally, local disruptions like trade disputes and economic sanctions further complicate the landscape, impacting shipping schedules and freight rates.

"We are in an era where disruptions come fast. Our strategy must be flexible and resilient to navigate these turbulent waters. At the same time, we must accept that disruptions will come, but it is important to remember that it is okay if they do. Some things are out of our control, but how quickly we react to the changes is what matters," says Peter Zachariassen, CEO of Bunker One.

Navigating the green transition

The maritime industry is experiencing a pivotal change moment, focusing increasingly on the green transition.

To achieve the ambitious targets, Bunker One believes the industry must ensure that operations, infrastructure, and vessels are ready to meet the future and increasing demand from our customers for low-carbon products.

"Ensuring our operations are fit for the green transition involves substantial investments in knowledge and expertise. For Bunker One, this includes training our employees and integrating new operational standards to deliver low-carbon products safely and seamlessly. Our goal is to stay ahead of the curve, guiding our customers and developing our operations to meet complex demands efficiently,"

says Peter Zachariassen and continues:

"We must also invest in the right infrastructure. Introducing new products like biofuels, LNG, methanol, and ammonia requires having the physical and operational capabilities to supply them. This means upgrading our fleet and ensuring our ships are equipped to handle new products. Bunker One is working closely with our customers to ensure we can supply various products



in due time, with a dedicated focus on the bunker industry's new building and refitting programmes of existing ships."

Building strong partnerships

The customer-supplier model that has dominated the shipping industry for decades is also transforming. To meet reduction targets, closer collaboration with customers is essential, and it is expected that customers and suppliers will increasingly look towards partnerships and new collaborative models. Bunker One is more open to these partnership models than ever because setting the direction and meeting targets require a joint effort. Bunker One is convinced that developing new solutions together with customers will ensure that the world fleet can meet their obligations.

"We are all in the same boat, and by working together, we can achieve these common goals more effectively. It's clear that our industry, which has operated in a certain way for the past decades, is entering a new era. This new way of working will bring much-needed transparency. Embracing this collaborative approach will allow us to adapt and innovate more rapidly, meeting the industry's evolving demands and contributing to our shared goals," says Peter Zachariassen.

Worldwide regulations will be key in driving the industry towards greater transparency. Enforcing new standards on a global scale requires the support of port authorities and government bodies. When these regulations are universally adopted, all suppliers and customers must comply, ensuring a level playing field and leading to a more transparent and efficient industry. This global enforcement ensures that everyone is aligned and ready to implement necessary changes.

"There have been numerous successful examples of local port authorities implementing new regulations, setting a precedent for others to follow. Singapore, in particular, has demonstrated effective enforcement of new standards, serving as a model for other regions. By learning from

such examples and implementing similar measures worldwide, Bunker One believes the industry can achieve a more transparent and efficient bunkering sector," says Peter Zachariassen.

Embracing digitalisation

Digitalisation is another factor that is becoming increasingly important across all industries, and the maritime industry is no exception. When looking to the future, it is essential that operations become more streamlined and transparent, leveraging advanced technologies to increase efficiency and customer satisfaction.

By adopting modern operational standards, Bunker One can make processes more transparent and deliver faster, more efficient services. This will save time, reduce discrepancies, and improve the overall customer experience. The aim is to improve standards on both the technology and operational sides.

"By using new digitalised solutions in the future, we aim to streamline our operations, improve customer interactions, and reduce operational discrepancies at Bunker One," says Peter Zachariassen.

Consolidation in the industry

The industry is currently experiencing a cyclical phase, with numerous players competing for market share. Following the 2020 transition, the bunker industry saw many smaller players emerging and suppliers expanding their global footprint.

Bunker One believes that as the industry moves forward, particularly with the introduction of new, more complex products, it is vital that the sector becomes as consolidated as possible. While different companies bring various expertise, visions, and missions, excessive fragmentation must be avoided. We need to work cohesively, steering development at the right pace and in the right direction.

To handle the increasing complexity, smaller companies may need more resources and naturally seek to collaborate to pool knowledge and expertise. This period of consolidation will help the industry manage the evolving demands more effectively. It is essential to be open to discussions about consolidation, not only from a partnership perspective but also by listening to and learning from colleagues within the industry.

"This consolidation approach requires a shift in mindset. We must move beyond viewing each other purely as competitors to embracing a more collaborative and colleague-like relationship. While this joint effort demands significant action from Bunker One and our industry peers, it is essential to develop the industry together. Adapting to disruptions, navigating the green transition, building solid partnerships, and embracing digitalisation are all essential steps. By staying active, showing courage, and taking proactive measures, we can navigate the challenges ahead and seize opportunities to lead the industry forward," says Peter Zachariassen, CEO of Bunker One.

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NEW FUELS, NEW IDEAS

The advent of methanol and ammonia as marine fuels is prompting innovation

anish company Pres-Vac
Engineering has announced the
certification of its innovative high-velocity
methanol valves, "setting new standards
in the construction of dual-fuel vessels".
The valves, essential for the safety and
efficiency of methanol tank systems,
are now certified under the IMO 1621
standard among other rigorous regulatory
benchmarks.

Pres-Vac says that the newly certified valves enable greater flexibility in ship design, accommodating long vent-pipes up to 128 metres for DN 65 size, with allowances for even longer pipelines. This development offers shipbuilders and owners unique options in creating more efficient and compliant dual-fuel systems.

Sofia Alexandra Grave, R&D Manager at Pres-Vac, stated, "This certification marks an important moment for Pres-Vac as we provide the only valves on the market that meet such stringent standards."

The valves, including the PV-ECO and PV-VOC models, incorporate advanced technological features such as improved flow control and minimised gas emissions. These mechanical valves operate without electronic controls, adding a layer of safety to their functionality.

Meanwhile Lloyd's Register (LR) has granted Approval in Principle (AiP) to HD Korea Shipbuilding & Offshore Engineering (HD KSOE) for their ammonia fuel supply system, which will be used on ammonia new constructions.

The newly developed ammonia fuel supply system is said to be completely compatible with high-efficiency cargo handling systems and ammonia engines.

The approval certifies the fuel supply system against LR's rigorous risk-based certification (RBC-1) process and marks the successful conclusion of a Joint Development Project (JDP) between LR and HD KSOE, which began in April 2024.

The primary objective of the JDP was to develop and refine the design concept of an ammonia fuel supply system for ammonia-fuelled vessels.

Young-Doo Kim, Global Technical Support Office Representative for Korea, Lloyd's Register said: "This approval in principle represents another significant step for developing the technology required for shipowners and operators' adoption of ammonia, one of the primary candidate fuels for the maritime energy transition. We are pleased to continue our strong working relationship with HD KSOE through this joint project that will provide a valuable solution for ammonia propelled ships."

Young-jun Nam, Vice Present & COO of HD KSOE said: "Ammonia is a zero-carbon fuel

that is attracting great attention in terms of economics and supply stability. HD Korea Shipbuilding & Offshore Engineering will lead the field of eco-friendly equipment and materials to take the lead in commercialising ammonia in 2025."

Fellow South Korean shipbuilder Hyundai Mipo has been awarded Approval in Principle (AiP) by classification society DNV for the design of a new ammonia dual fuel feeder container vessel. The AiP is the result of a collaborative effort between HD Hyundai Mipo, WinGD, HD Hyundai Heavy Industries, Kangrim Heavy Industries, and DNV.

Dongjin-Lee, Head of the Initial Design Division of HD Hyundai Mipo said: "Ammonia fuel is important as a means to achieve the IMO's 2050 carbon emission net zero target, but its toxicity makes safety a top priority. HD Hyundai Mipo has successfully delivered various worldfirst dual-fuel propulsion ships, including LNG, LPG, and methanol-powered vessels. Through our proven experience with dual fuel technology, we have developed this ammonia-powered container ship collaborate with partners. HD Hyundai Mipo has taken a significant step closer to ammonia-powered ships and the company is expected to lead a safer decarbonisation trend."



With over two decades of unwavering dedication and immersed experience in the dynamic shipping industry, our team stands as a beacon of reliability and expertise.

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ENVIRONMENTAL NEWS

Our regular round-up of shipping's 'green scene'

IMO 2020 "caused global warming spike"

The currently very high temperatures being experienced worldwide are, to a large extent the result of IMO's sulphur limit regulations that came into force in 2020, according to research published in the online journal *Communications Earth & Environment*.

Authored by Tianle Yuan and others, the report notes that human activities affect the earth's climate through modifying the composition of the atmosphere, which then creates radiative forcing that drives climate change. It notes; "The warming effect of anthropogenic greenhouse gases has been partially balanced by the cooling effect of anthropogenic aerosols."

The report's abstract states: "In 2020, fuel regulations abruptly reduced the emission of sulphur dioxide from international shipping by about 80% and created an inadvertent geoengineering termination shock with global impact. Here we estimate the regulation leads to a radiative forcing of 0.2 watts per metre, averaged over the global ocean. The amount of radiative forcing could lead to a doubling (or more) of the warming rate in the 2020s compared with the rate since 1980 with strong spatiotemporal heterogeneity.

The warming effect is consistent with the recent observed strong warming in 2023 and is expected to make the 2020s anomalously warm. The forcing is equivalent in magnitude to 80% of the measured increase in planetary heat uptake since 2020."

Peer reviews have raised some issues with the methodology employed by the authors but the reflective properties of sulphur particulates in shipping emissions were recognised prior to the formulation of the IMO's sulphur regulations.

The online platform Live Science reported that Gavin Schmidt, the director of NASA's Goddard Institute for Space Studies said, that while the researchers' estimate for the increased solar energy entering earth's atmosphere is accurate, "their estimate of the temperature response is not quite right, I think". Schmidt pointed to an analysis made by Zeke Hausfather, a climate scientist at the Breakthrough Institute, which argues that the study's warming calculation relies on an overly simplified model that misunderstands heat uptake from the ocean, meaning the study overstates the sulphur reduction's warming impact.

European green shipping fuel projects "at risk"

Two-thirds of European green shipping fuel projects are at risk, according to study by campaign group Transport & Environment (T&E).

The group says its mapping of green hydrogen projects across Europe shows that nearly 4% of European shipping could run on green e-fuels by 2030. But it warns, fuel suppliers appear to be reluctant to commit financially to projects without more guarantees that there will be demand for these fuels in the near future. This means the vast majority of projects may never come online in this decade, putting Europe's climate ambitions and thousands of jobs at risk, says T&E.

Inesa Ulichina, shipping officer at T&E, said: "Hydrogen projects are popping up across Europe. They have the potential to power hard-to-decarbonise sectors like shipping and provide thousands of good jobs. But at the moment there just isn't enough certainty and we risk missing this golden opportunity."

There are at least 17 projects across Europe, set up to provide hydrogen-based e-fuels for ships. If all of these projects become



operational, they could meet nearly 4% of EU shipping's total energy demand by 2030. T&E says it has found 44 other hydrogen projects in Europe that could also provide green fuels for ships, but project developers eye other hydrogenhungry industries, too.

Ulichina concluded: "Shipping has a chicken and egg problem. E-fuels producers are waiting for clearer demand signals from ship operators before making large investments. Shipping operators, on the other hand, are waiting for these fuels to scale up and become cheaper before signing off-take agreements. The EU should ensure more supply and demand of e-fuels through regulation, which will provide fuel producers and shipping companies with investment certainty."

New DNV rules enable hydrogen vessels and on-board carbon capture

Norwegian classification society DNV has published updates to its rules for classification of ships and offshore structures. In addition to rules supporting the development and deployment of decarbonisation technologies, the new in-operation class notations seek to bring clarity to the responsibilities of class customers for notations that have a mix of design and operational requirements.

"One of the most striking aspects of the maritime industry today, is the huge diversity of challenges and opportunities where our customers are looking for classification support," said Geir Dugstad, DNV Maritime's Global Technical Director. "It's not just new fuels, but ways for owners and managers to demonstrate their own efficiencies, new vessel types to unlock new markets, through to advanced technologies like on-board carbon capture."

While hydrogen is a potential zerocarbon fuel for shipping it is presently not covered by international regulations. The Gas Fuelled Hydrogen notation sets out the requirements for the ship's fuel system, fuel bunkering connection, and consumers, providing owners with a practical path to develop hydrogen fuelled newbuildings. The Onboard carbon capture and storage (OCCS) notation provides a framework and requirements for these OCCS systems, including exhaust pre-treatment, absorption, after-treatment systems, liquefaction, CO₂ storage, and transfer ashore.

Port call optimisation "key to reducing GHG emissions in ports"

Using SMART port technologies to facilitate 'just in time' ship arrivals have the potential to reduce greenhouse and pollutant gas emissions significantly at global container ports, according to research by shipping consultants, Drewry. Its latest research shows that targeting investment at ports with a disproportionate amount of waiting time will generate the highest benefits for the industry as a whole.

A major element of avoidable GHG emissions in ports is the time vessels spend waiting at anchor before moving onto a berth. Using its proprietary AIS model, Drewry has analysed the performance of 193 of the world's largest container ports, accounting for over 85% of global container trade, and showed that in 2023 total pre-berth waiting time remained 40% above 2019 levels. There is also considerable regional variation, driven by differences in traffic levels and port congestion.

FuelEU penalty risks

Implementation of the FuelEU Maritime regulation from 2025 presents an accountability dilemma for shipping as it is currently the Document of Compliance (DoC) holder that will be held responsible for fuel selection and could therefore face penalties - contrary to the 'polluter pays' principle, according to technology firm OceanScore.

FuelEU is intended to promote uptake of zero and low-carbon fuels, as well as adoption of sustainable technologies like wind power for fuel efficiency, by mandating progressive reductions in the GHG intensity of energy used by ships over 5000GT compared with a 2020 baseline, rising from 2% next year to 80% by 2050, with penalties for noncompliance.

The default responsible entity for FuelEU compliance remains the DoC holder - typically the technical manager - that has operational responsibility for the ship and handles compliance with a wide range of EU regulations relating to maritime safety under the IMO's ISM Code.

"However, this poses the risk of significant cost exposure for the DoC holder in the event of heavy penalties due to noncompliance with carbon intensity targets, which would far exceed the financial capacity of most ship management companies. They are in no position to carry the related burdens - neither financially nor contractually," Albrecht Grell, co-Managing Director of the Hamburg-based firm explains.

Alternative fuel uptake

Investment into alternative fuel continued in first half 2024, accounting for around one third of all newbuild orders and 41% of all tonnage according to Clarksons Research's latest Green Technology Tracker

The Global Head of the shipping consultant, Steve Gordon, noted that there had been orders announced for vessels capable of using either LNG (109 orders, 51 excluding LNG Carriers), methanol (49 orders), ammonia (15 orders), LPG (42 orders) and Hydrogen (4 orders). Excluding LNG Carriers, the relative share of ordering of LNG fuel capable tonnage increased relative to methanol capable tonnage in the first half compared to 2023 levels.

Clarksons estimated that shipping's global GHG emissions would increase by ~3% in 2024 to 1,046 million tonnes of CO_2e on a WTW basis and to move above start Covid-19 levels, with a higher proportion of time being spent at sea (assuming continued Red Sea re-routing), some increases in speed (especially in the container market, albeit it projected the underlying long term trend for declining speed would continue) and trade growth offsetting the growing share of alternative fuelled vessels, "eco" ships and tonnage with ESTs.



TRAINING THE NEXT GENERATION

Irene Notias Fuel Broker & Trader and Project Connect Director at Prime Management Services, Hellas, explains the need to prepare new entrants for work in the marine energy sector

he marine fuel industry is a world of its own and has quite a complex dynamic that literally is key to vessels delivering goods, and without both the world would suffer.

How do we sustain it? How do we ensure know-how in our new employees when things are changing so rapidly and we who are experienced, cannot keep up?

The current and older fuel suppliers, traders and brokers of this era were trained by experts in the field and possessed innate sales and customer service qualities. They were customer service oriented and successful despite the fact they were uneducated, specifically in bunkering.

Experts with hands-on experience just passed the information forward as there was little to no education and theory in shipping & business schools (i.e.: on how to buy or sell fuels). There were several helpful books written and Oxford supplemental courses, and IBIA seminars but never a full course lasting a year and to be graded on all about the bunker industry from the creation and specs of the products to the sale, handling and assessment of the fuel procurement process.

Today, this is changing with IBIA providing courses and shipping universities adding bunker buying to Master's class curriculums, and with Project Connect, a NPO that trains freshmen for the workplace and prepares them on how to successfully meet challenges by true effort.

By 2025 decarbonisation, and the expansion of the EU ETS to shipping, the industry will need experts in more

advanced fields besides salesmen and customer servicemen. Fields like psychology, mathematics, electricians, IT techs, besides the usual chemists and physicists. It will need strong characters too.

There are increasing gaps in the know-how of the basics, in our freshman and junior workforce. Some have not been able to navigate in an office for instance, besides what to know in the fuel and energy products of sale. It is all new and it must be addressed now before the experts retire. Who will the next generation learn from if not the current "brain bank" as this author calls them?

The current personnel who are running the energy industry are using their energy and time for the new challenges and meeting them on time, they must not waste time on training interns who leave after three months or one year for a better paying job. There is much to be organised and provided in this field.

How can employees who have serious tasks to execute also become teachers on the job, for the next generation to learn the basics of even answering a phone, taking a message and dictation, or communication via e-mail writing?

The role of the shipping educational institutions and their professors is to teach theory and provide some internships for practical work experience. The role of NPO's like Project Connect and IBIA can be to teach the basics of working in an office environment and delivering goals as the key performance indicator of success.

Train youth to aim for excellence and to be result-driven.

In the olden days, parents paid professionals to teach their children in APPRENTICESHIPS. This created many craftsmen. Nowadays, the young adult or teen could practice by hands-on application taught by the professional. Getting an early start in the field is a proven win – win for all companies and employees concerned.

The idea is that "young professionals in-the-making", who have excellent grades, and are keen to work hard, don't get lost in the system. The new energy industry requires their talent.

If you are looking for young talent that is guided, you can find them here on Project Connect's pre-screened young professional's database – CV PLATFORM. https://www.project-connect.gr/cv-platform-for-companies/cv-platform/

Inquire how to become a member to use it, by e-mailing your request to bridge@project-connect.gr



PIVOTAL ROLE

The recent Posidonia event once again underlined the importance of the Greek shipping community, not least to the bunkering industry

ne very unscientific but nevertheless revealing way to find out how important Athens is as a bunker business centre is to scan the online daily Ship & Bunker for bunker trader job advertisements. Openings in Athens, or just "Greece", seem to emphatically outnumber other locations.

There is a good reason for this. According to Clarksons Research, in a paper published just before Posidonia, Greek shipping companies "retain their remarkable collective scale", with 252 million GT, behind only behind China, and 427m DWT which puts them at the top of the rankings. That equates to some \$183 billion worth of tonnage in operation.

As Clarksons' note Greek owners are largely involved in bulk carrier and tanker ownership. These sectors may not have been at the forefront of moving to new fuels, in line with whole global merchant fleet, change is coming.

Sifis Vardinoyannis, Executive Director of prominent physical supplier and trader of marine fuels and lubricants in Greece and globally, SEKAVIN explained to World Bunkering: "As the shipping industry continues to adapt to the EU's emissions regulations, the bunker industry is also undergoing a significant transition. There are various misconceptions regarding the upcoming fuels available in the market, and it is evident that no single solution will serve as a panacea. Instead, a comprehensive mix of strategies—ranging from carbon offsetting and alternative fuels to HSFO-based scrubbers, biofuels, slow steaming, LNG, LPG, methanol, hydrogen, ammonia, nuclear energy, batteries, and various mechanical solutions like kites—will be necessary. Additionally, the implementation of a new Emission Control Area (ECA) in the Mediterranean is on the horizon."

He adds: "The current supply network for alternative fuels remains limited, though it is steadily gaining momentum. Nevertheless, industry players are confronted with challenges on multiple fronts, including geopolitical uncertainty, price volatility, compliance issues, KYC requirements, and the complex, everchanging landscape of the shipping industry. Despite these challenges, there will be ample opportunities for innovation and leadership. Companies that have proactively prepared for this major energy transition will emerge as leaders and pioneers in the industry. We consider ourselves among them."

Vardinoyannis says that SEKAVIN is a Greek company with a long-standing tradition and strong relationships throughout the shipping ecosystem and is "well-positioned to guide our partners towards a sustainable future". As a global organisation, we have established three trading teams across the EMEA region, with headquarters in Athens, Limassol, Cyprus, and Dubai, UAE. We are also looking to expand into Asia and increase our physical footprint globally."

He explains what he sees as being important for companies operating in the current market: "Our mission is to assist our clients in meeting their worldwide bunker and lubricant demands while navigating the unique complexities of the industry. SEKAVIN's organisational structure and strong collaborative culture empower our personnel to act swiftly, efficiently, and always in alignment with our corporate governance. Our expertise lies in the delivery of bunker fuels and lubricants worldwide, whether through our physical supply network or our highly skilled trading teams."

"Our approach has always been centred on providing commercial solutions that place our clients at the heart of everything we do. By leveraging our in-depth knowledge of the marine and shipping industries, as well as our competitive pricing, we aim to directly enhance our customers' business operations. Whenever our clients think about their fuel and lubricant needs, SEKAVIN, with its financial stability and robust group backing, will continue to offer reliable solutions for the years to come."

Meanwhile another Greek bunker company is upbeat about its prospects following healthy financial results. It was founded

in 2001 and has emerged as a significant supplier of marine fuels in all Greek ports. Revenue for the year 2022 amounted to €25.85 million, compared to €13.74 million in 2021, a 92% increase. During the same period, gross profit was €3.85 million, compared to €2.04 million in 2021. For the fiscal year 2023, the company says it has "continued its upward trajectory", with revenue exceeding €32.40 million, up from €25.85 million in 2022.

Finecor is now reported to expand its operations in Singapore, the United Arab Emirates, and Malta and also considering acquiring a petroleum storage facility in Greece.

Posidonia provided an opportunity for global companies to showcase their products to the Greek shipping community and to deepen their engagement with the local market.

Among them Chinese equipment manufacturer, Headway Technology exhibited its low-carbon product ecosystem, centred on methanol/ammonia fuel supply systems and carbon capture. At the same time the Qingdao-based company officially opened its Greek office.





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SCRUBBER UPTAKE CONTINUES

But economic edge reduces while washwater restrictions increase

ccording to Clarksons Research, scrubbers are now fitted to over 5,838 ships in the world merchant fleet, equivalent to 28.3% of total tonnage. It says that scrubber retrofitting activity and newbuild uptake has continued in the first half of this year.

Up to late June,156 vessels had been retrofitted with a scrubber and 151 scrubber fitted ships reported ordered. In the whole of last year 521 vessels were retrofitted while 401 newbuild orders specified scrubbers.

Clarkson also noted that price differentials between HSFO and VLSFO had narrowed since the start of the year, from about \$125/tonne at the start of the year to about \$75/tonne in key ports, by the end of June.

Meanwhile, scrubbers are facing increasing opposition, with Sweden proposing prohibiting washwater discharges from open loop scrubbers from 1 July next year. This will be followed by a ban on discharges from all other scrubbers from 1 January 2029 and would apply in Swedish territorial waters.

This follows a similar move this year by Denmark.

Sweden's Deputy Director, Ministry of Rural Affairs and Infrastructure, Mattias Rust asserted: "Hopefully, these national bans will fuel discussions on regional bans in the Baltic, the Northeast Atlantic and the entire EU. The IMO need to move forward on this topic as well, although I think a global ban is quite a few steps away. There are intermediate steps to make nevertheless."

Opposition to the use of scrubbers to remove sulphur from engine emissions and meet IMO regulations, has been fuelled by a report by Sweden's Chalmers University of Technology that claims exhaust gas cleaning systems and the discharge of their scrubbing water between 2014 and 2022 has polluted the sensitive Baltic Sea. The report, disputed by proponents of scrubbers, claims that environmental damage of some \$732 million has been caused by the use of scrubbers on ships.

Despite such opposition to scrubbers the technology continues to be developed.

Technology group Wärtsilä has signed a six-year Lifecycle Agreement with Malaysia-based Nautica Ship Management. The agreement covers two vessels, the MTT Saisunee and MTT Senari, and is designed to ensure that the ships' exhaust gas treatment systems operate at maximum efficiency. The vessels are feeder container vessels and are fitted with Wärtsilä hybrid scrubber systems. The order was booked by Wärtsilä in Q2 2024.

"It is central to our commitment to sustainable operations that the scrubber systems on these vessels are working with optimal efficiency. This enables the ships to comply with the relevant environmental regulations," said Azreen Nor Bin Mohamad, Senior Technical Superintendent of Nautica Ship Management.

The scope of the agreement includes remote access capabilities. This feature enables seamless monitoring and troubleshooting of the Exhaust Gas Cleaning (EGC) systems installed on the two vessels, aimed at ensuring prompt response and minimal downtime.

PureServ

THE SERVICE PROVIDER

PureServ, a cerertified service organization by PureteQ A/S, provides maintenance services for all brands of scrubbers and sensors worldwide.

PRE-DRYDOCKING INSPECTION

PureteQ offers inspections that assess all components and structural conditions, creating a work scope for the yard, crew, suppliers, and stakeholders well before the scheduled drydocking. Scrubbers installed around 2018 have operated for thousands of hours, making motors, dampers, sensors, and moving parts due for overhaul or replacement, some of which can have long lead times.



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TENERIFE'S NATURAL DOME: A PRIME BUNKERING HUB IN THE MID-ATLANTIC

The Port of Santa Cruz de Tenerife, located in the Canary Islands, stands as a premier destination for bunkering in the Mid-Atlantic.

Boasting an impressive 98% operability rate, the port's anchorage area, dubbed "Tenerife's Natural Dome," offers unparalleled safety and efficiency for maritime operations.

This unique advantage is complemented by a range of services designed to meet the demands of the ever-evolving global shipping landscape.

The Anchorage Area: Tenerife's Competitive Edge

The anchorage area of the Port of Santa Cruz de Tenerife is its main competitive edge. Its exceptional operability, maintained at close to 98% throughout the year, makes it a top choice for vessels navigating the Mid-Atlantic. The seabed in this area is clean, devoid of shallows or obstacles, ensuring vessels can anchor safely. The currents are generally imperceptible and directly related to the tides, reducing the risk of unexpected movements during bunkering operations. Additionally, the geographical configuration of the Anaga massif provides full shelter from adverse winds, creating a naturally protected area.

Tugs and pilots are also available around the clock, ensuring vessels receive necessary support at any time.

Comprehensive Bunkering Services

The Port of Santa Cruz de Tenerife supplies over half a million tons of fuel annually, offering a wide variety of fuel types to meet the needs of the maritime industry. Fuel supply is available 24/7, ensuring vessels can refuel without delays. This level of service reliability is a key factor in why the port is so highly regarded in the maritime community.

Recent advancements have further solidified the port's reputation as a premier bunkering hub. Notable developments include the introduction of MARPOL services directly in the anchorage area, ensuring strict adherence to environmental regulations during bunkering operations.

Vessels will soon be able to replenish their water supplies while anchored, enhancing the convenience and efficiency of port services.

Furthermore, the port has introduced round-the-clock crew change services, allowing maritime companies to rotate their crews efficiently without disrupting operations.

Global Mercy and Commitment to Humanitarian Efforts

A notable project currently taking place at the Port of Santa Cruz de Tenerife is the maintenance and repair work on the Global Mercy from Mercy Ships. This vessel, dedicated to providing medical care to





those in need, is undergoing significant refurbishment at the port. This project highlights the port's capabilities and commitment to supporting humanitarian efforts, ensuring that Global Mercy is fully equipped for its next season of aiding those in need.

Strategic Position and Economic Benefits

Tenerife's strategic position in the Atlantic Ocean, located amid major trade routes, allows the island to offer a wide range of services beyond bunkering. These services include offshore projects and repairs, containerized and general cargo transshipment, and a robust cruise and tourism industry. This gateway to three continents—Europe, Africa, and the Americas—enhances Tenerife's appeal as a central hub for maritime activities.

Tenerife benefits from a unique economic and tax system within Spain and the EU, fostering an excellent environment for investment and trade. The Tenerife Free Zone (ZFT) and the Canary Islands Special Zone (ZEC) offer significant tax incentives. Companies meeting certain requirements and registering within the ZEC benefit from a 4% corporate tax rate on operations carried out in or from the Canary Islands. This advantageous tax regime, coupled with Tenerife's stable and reliable economic framework as a member of the European Union, makes it an ideal destination for doing business.



This year, Ports of Tenerife has been an advertising sponsor of the International Bunker Industry Association (IBIA) in London. This sponsorship underscores the port's commitment to staying engaged with industry developments and maintaining a high profile in the global bunkering community.

Being part of IBIA provides Tenerife with a platform to showcase its capabilities and connect with key stakeholders in the bunkering industry.

Responding to Increased Traffic

The recent Red Sea Crisis has led to a significant increase in maritime traffic, with the Port of Santa Cruz de Tenerife experiencing a 20% rise in activity.

Amidst these evolving dynamics, the port remains a steadfast beacon in the mid-Atlantic region. Ports of Tenerife extends unwavering support to affected companies while offering a reliable alternative for those choosing to prioritize the safety of their crews and assets.

Ports of Tenerife is committed to meeting the demands of the evolving global shipping landscape. The ports in Tenerife guarantee a secure environment for vessels, ensuring the safety of both cargo and crew. Located as the gateway to Europe from the Cape of Good Hope route, Tenerife's strategic position makes it an ideal choice for maritime companies seeking reliable and secure passage to the region. Tenerife Ports offers top-notch bunkering services to meet the fueling needs of all types of vessels.

The anchorage area's exceptional operability ensures efficient and secure bunkering operations, contributing to the seamless journey of fleets. Tenerife's ship repair companies provide unparalleled services, with skilled professionals and advanced facilities catering to the maintenance and repair needs of vessels.

This ensures that ships remain in optimal condition throughout their journeys.

For more information about the Port of Santa Cruz de Tenerife and its services, visit Puertos de Tenerife.

www.puertosdetenerife.org/en/ business/bunkering/ Email: commercial@tenerifeport.org





INDUSTRY NEWS

Our regular round-up of developments

World Kinect Corporation Q2 marine sales down 13%

Major global fuel company World Kinect Corporation has announced total Q2 2024 revenue in all sectors of US\$11.0 billion, "effectively flat year-over-year".

Its marine fuel operation reported a gross profit of \$36.7 million, a decrease of 13% year-over-year, "principally due to reduced market volatility".

"Our continued focus on expense control and working capital management resulted in \$68 million of operating cash flow in the quarter," said Ira Birns, Executive Vice President and Chief Financial Officer. "Our cash flow together with the proceeds from the recent sale of the Avinode Group has further increased our liquidity available to invest in our core business activities while continuing to return value to our shareholders through buybacks and dividends."

"Modest profit" for Bunker Holding

Denmark-based Bunker Holding has announced that "in a year characterised by geopolitical unrest, macroeconomic shifts, and instability in the energy markets, it emerges from challenging year with a modest profit of US\$1.7 million". Revenue declined from US\$16.6 billion in 2022/2023 to US\$14.5 billion in 2023/2024 "a result of a decrease in price for marine fuel". Gross profit in 2023/2024 US\$418 million and a profit before tax of US\$127 million from continuing operations and the company had an equity base of US\$359 million.

The company said financial year 2023/2024 stands out as a challenging one for the company "due to encountering geopolitical tensions, macroeconomic shifts, and mixed demands across shipping segments". In addition, it notes, because of unfavourable market conditions and political instability, Bunker Holding terminated its cargo activities in Africa that focused on non-maritime onshore customers.

Bunker Holding said it had been extending its reach and collaborating closely with strategic partners around developing low- and zero-carbon fuels and building the infrastructure for last-mile delivery.

Meanwhile Bunker Holding, in a new partnership with carbon insetting experts 123Carbon, and Bureau Veritas, has concluded their first blockchain-powered carbon insetting operation. According to Bunker Holding: "This insetting partnership allows for the additional cost delivery of lower carbon, alternative marine fuels – such as sustainable biofuel – to be shared by carriers, freight forwarders, and cargo owners within the same value chain; allocated based on a globally accepted book and claim methodology."

Dan-Bunkering's "strong results"

Denmark-based Dan-Bunkering reported "strong" 2023/2024 EBT of US\$47 million, up from US\$46 million in the previous financial year and a revenue of US\$3.8 billion.

"In a year characterised by geopolitical tensions and shifting demands across shipping segments, we are immensely proud of the results we have achieved. They are a testament to the great work from the teams around the world in navigating these challenges," says Claus Bulch Klausen, the company's CEO.

He added: "The past financial year saw an increased focus on the transition towards decarbonisation. We have put increased effort into assisting our clients and suppliers in adapting to the recently implemented environmental regulations, such as the EU ETS scheme, and demands within, for instance, the alternative fuels space. We are therefore investing time and resources to assist our partners with finding the best way forward."

Vitol charters 3 LNG bunker barges

Netherlands-based global bunker company Vitol has secured seven to ten year time charter agreement with Avenir LNG for one LNG bunker vessel and ordered for two more from CIMC Sinopacific Offshore & Engineering shipyard in Nantong, China.

The time charter with Avenir is for one newbuild 20,000 cubic metre vessel start at delivery from the shipyard in China in Q4 2026. Vitol's orders are for one 12,500 cubic metre and one 20,000 cubic metre vessel, to be delivered in Q4 2026 and Q3 2027 respectively.



KPI OceanConnect

KPI OceanConnect has announced its results for the financial year 2023/2024. KPI OceanConnect delivered an increase in volume of 9% to 12m MTS, with a revenue of US\$5.6 billion. EBT was US\$ 20m, "resulting in a solid balance sheet position of US\$78m total equity". This compares with the company's previous results of revenue of US\$5.87 billion and EBT of US\$49 million with all parts of the business seeing strong performance throughout the year.

The company said its trading performance for the financial year 2023/2024 was in line with management expectations in light of the prevailing market conditions. It added that its focus on international trade compliance had continued in response to geopolitical events and the consequential impact this has had on global oil market fundamentals.

KPI OceanConnect's CEO, Anders Grønborg, said: "Our robust performance and nomination by Thetius as one of the most innovative maritime companies are testament to our continued commitment to partnerships and environmental, social and governance measures. We strive to deliver tailored, value-adding services to our clients and, of course, have a keen focus on supporting them through the energy transition and its complexities. We firmly believe in the value of collaboration, transparency, and digitalisation to drive innovation and future-proofing operations."

Bunker buying deal

ZeroNorth and Hapag-Lloyd have announced a "new strategic partnership aimed at launching an industry leading bunker procurement and planning solution". The two companies say they will set out to create a new digital solution that enables Hapag-Lloyd to effectively navigate the energy transition, reduce their fuel spend, and cut their cost to serve.

In a statement the companies say: "The solution aims to set the new industry standard for digitalising the end-to-end bunker planning and procurement process. It will offer a brand new and enhanced user experience and new features such as streamlined contract and port planning, contract tender capabilities, a true price algorithm and more. For customers, this solution is available and is ready to be rolled out immediately."

Kenneth Juhls, Managing Director ZeroNorth Bunker, says: "We are excited about this impactful partnership with Hapag-Lloyd, which will see us leverage the extensive knowledge and ambition between our two organisations with the aim of transforming the way companies approach bunker planning and procurement during the energy transition."

Glander's "resilient" results

US-based Glander International Bunkering has reported turnover of US\$3.23 billion and EBT of US\$22.17 million for 2023/24 with a 25% return on equity and 21% solvency ratio. This compares with EBT of US\$40.9 million, Return on Equity of 44% and a Solvency Ratio of 23% for 2022/23.

CFO David Varghese said, "Despite a turbulent energy sector, we demonstrated our ability to navigate dynamic market conditions, while delivering new products and new value to our stakeholders. As shown by our numbers, we were able to maintain a financially healthy organisation because of our resilience, adaptability and commitment to our maritime partners."

"Throughout the year, we maintained a strong focus on facilitating global trade, with teams around the world dedicated to supporting our clients," CEO Carsten Ladekjær said.

Reflecting on 2022/23, he said it was marked by extreme volatility, price hikes and supply disruptions due to political turmoil compared to 2023/24, when shipping and bunkering experienced a notable return to normalisation with energy prices dropping to stable levels. He said that demand was affected due to prevailing and continuously increasing sanctions on specific shipping trades.





FUEL FROM TYRES

Circtec and bp agree renewable drop-in marine fuel deal

irctec and bp agree renewable drop-in marine fuel deal

Oil major bp has signed an eight-year offtake agreement with Circtec, a UK-based technology company that develops and operates innovative pyrolysis chemical process technology.

Circtec's plants convert hard-to-recycle waste tyres into HUPATM, the firm's proprietary renewable drop-in marine fuel, and circular naphtha petrochemical feedstock.

Under the agreement bp is committed to purchasing up to 60,000 tonnes per year of HUPA™ renewable drop-in marine fuel and up to 15,000 tonnes per year of circular naphtha petrochemical feedstock, on a take-or-pay basis, from Circtec's new commercial-scale plant, for eight years after the new plant is commissioned.

The €285 million new plant, currently awaiting construction in Delfzijl, The Netherlands, will have the capacity to process 200,000 tonnes per year of waste tyres into HUPA™ renewable drop in marine fuel, circular naphtha petrochemical feedstock and circular chemical recovered carbon black (rCB).

Construction of the new plant is planned to start this year with the first phase of the plant intended to become operational in 2025. bp has also committed to providing €12.5 million of investment through debt capital, to support the €100 million development of the first phase of the Delfzijl plant.

Over the past decade Circtec has invested in research and development, patent protection and extensive trials with multiple shipping operators to bring the HUPATM product to the marine transport market. HUPA is 50% biogenic and its biogenic portion is certified as having a GHG reduction impact of 87% compared to fossil marine fuel.

Circtec says that its product, which is compliant with marine fuels regulations and standards, is ISCC certified for its Greenhouse Gas reduction effect and can be used by shipping operators to meet the requirements of legal mandates on marine decarbonisation under the EU's FuelEU Maritime Regulation and Renewable Energy Directive.

Circtec says that it is the only company globally that can make HUPA[™] drop-in marine fuel from waste tyre feedstock that addresses European mandates.

The Delfzijl plant is Circtec's first commercial-scale plant investment following a 15-year technology and product development process.

However, the company says it is also planning the development of several plant projects globally over the next few years, starting with North America and Southeast Asia, as direct owner operator plants and as joint-venture licensing partnerships.

A previous long-term offtake partnership for the entire output from the new Delfzijl plant of Circtec's circular chemical product, recovered carbon black (rCB), was announced in 2021 with Birla Carbon, one of the world's largest producers and distributors of the chemical carbon black. This is supplied to Birla Carbon for their ContinuaTM SCM flagship decarbonisation product line.

The processing capacity of the Circtec Delfzijl plant will account for about 6% of European waste tyres annually; over 50% of European waste tyres are currently burned in cement plants or exported to Asia for disposal.

An ISO-standard Life Cycle Assessment of the Circtec plant investment shows it will reduce GHG emissions by equivalent to circa 3% of the national emissions of the Netherlands' chemical industry sector.

Allen Timpany, CEO and co-founder of Circtec, said: "This entry into offtake and funding agreements with bp provides Circtec with a long-term offtake relationship, which will assist with our growth plans over the coming years, and accelerate the development of our pyrolysis plant capacity to produce renewable and circular products from waste feedstock.

We hope that by working together Circtec and bp can help shipping operators tackle their GHG emissions, while addressing the serious environmental problem of end-of-life tyres. The Delfzijl plant will be a significant industrial decarbonisation investment in the Netherlands, and bp's support is an important part of making that happen".



FUEL CELL RETROFIT

Research vessel project "shows technology ready for wider uptake"

ydrogen electric solutions specialist PowerCell ordered two 100 kW Marine Fuel Cell Systems from O.S. Energy for the Transship II sustainable vessel project.

This initiative focuses on retrofitting the research vessel Prince Madog with a cutting-edge hydrogen-electric hybrid propulsion system, showcasing the potential for sustainable propulsion solutions in the maritime industry.

The retrofit work is to be completed in early 2025 with a demonstration planned for March 2025. The project is supported by the UK Department for Transport as part of the Clean Maritime Demonstration Competition Round 3 (CMDC3) – delivered in partnership with Innovate UK.

The installation of the fuel cell system on the *Prince Madog*, co-owned by Bangor University, will cost £5.5 million (US\$7.1 million) and is expected to reduce the vessel's emissions by up to 60%.

According to PowerCell, large oceangoing ships that will require new fuels make up approximately 85% of the maritime industry's carbon footprint. However smaller shortsea vessels represent approximately 150 million tonnes of carbon emissions emitted each year and potentially could be suitable for fuel cell retrofits.

PEM "exceeds expectations"

Blue World Technologies says it has successfully tested the "world's first" 200 kW high-temperature polymer electrolyte membrane (PEM) fuel cell module. The test was completed at the newly established test facilities connected to the Blue Aalborg Factory, where the fuel cells for the system are produced.

According to Blue World initial testing has exceeded performance expectations. It adds that, with an electrical efficiency of up to 55% when reaching a commercial stage, the fuel cell system will typically provide a fuel saving of 20-30% which enables a costefficient use of green fuels. Additionally, the fuel cell system allows for up to 100% carbon capture for both utilisation in green fuel production and for storage. The first pilot system will be a 1 MW system for onboard power production. It is expected to be installed on one of A.P. Moller - Maersk's large dual fuel-enabled methanol vessels in the first half of 2026. Maersk is an investor in Blue World.

Blue World will initially supply systems for auxiliary power and expects that their maritime system will reach a commercial level in 2027. Eventually, the company plans to supply multi-megawatt propulsion systems for global shipping.

"This is a major breakthrough within maritime decarbonisation and with the test of our 200-kW system, we are proving that the HT PEM fuel cell technology has the potential of being one of the key technologies to decarbonise the hard-to-abate sectors. During the test period, we successfully validated our system setup with the methanol fuel processor, the series connection of the fuel cell stacks, as well as the balance of plant components surrounding the fuel cells," Dennis Naldal Jensen, Chief Technology Officer at Blue World Technologies explains.

The order for the pilot system was followed by a venture investment by Maersk Growth – the venture arm of A.P. Moller - Maersk – where they, at the end of 2023, participated in an 11 million EUR pre-C-round, together with the Export and Investment Fund of Denmark (EIFO), Cycle Group, and other new and existing shareholders.

Alex Smout, Investment Director at Maersk Growth, says: "As an investor in Blue World Technologies, we are pleased to follow the progress of the system development, and we share the team's excitement for the successful testing of the 200-kW fuel cell system. The maritime industry needs multiple new technologies and pathways to reach its net-zero targets, and high-temperature PEM fuel cell technology is very promising in finding a balance between the high electrical efficiency, size, and load adjustment. This is a great example of how we can support innovation through both investment and partnership."

TURNING HYDROGEN DEMAND INTO REALITY

ICS report focuses on the potential of clean hydrogen to function as an energy carrier

oday - the International Chamber of Shipping (ICS) – presents a new report, written by the Professor of Energy Economics at Biberach University of Applied Sciences, Germany, identifying hydrogen demand sectors, demand locations and the demand-pull timeline at the Malaysia Maritime Week event.

The groundbreaking report titled "Turning hydrogen demand into reality: Which sectors come first?" focuses on the potential of clean hydrogen to function as an energy carrier and feedstock to decarbonise multiple sectors, especially hard to abate sectors. The report identifies that to meet future hydrogen demand, the scale of renewable electricity demand for green hydrogen production is unprecedented and leads to once-in-a-generation opportunities and challenges.

The report, produced in collaboration with Professor Stefan Ulreich, Professor of Energy Economics at Biberach University of Applied Sciences, and ICS, seeks to better assess the future supply and demand dynamics of the new zero emission fuels that industrial sectors, including shipping, will use in the coming decades.

Secretary General of the International Chamber of Shipping (ICS)
Guy Platten,comments: "For global hydrogen demand to keep the net-zero by 2050 scenario within reach, demand for hydrogen-based fuel sources would need to scale five times from current levels to reach approximately 500 million tonnes from 2030 to 2050. One of the main takeaways in this report is the high variability in potential demand. Industry will dominate the hydrogen demand. Shipping however can play a key role as an enabler to the hydrogen economy."

The report highlights three economies as the main markets to initially drive hydrogen demand – South Korea, Japan

and the EU. Europe has a target of 20 million tonnes of hydrogen per year by 2030, with half of that volume to come from imported sources. To meet this expected demand of the EU, the fleet will need to increase by up to 300 vessels for the EU2030 target.

According to the International Energy Agency (IEA) hydrogen use is expected to remain static and within current industrial use cases into 2030. However, to go beyond the current hydrogen demand by existing sectors, infrastructure, enabling regulation and power access barriers need to be addressed for new sectors to begin uptake of hydrogen the report finds.

Platten adds: "Regulatory certainty is vital, and governments are the key to unlocking the opportunity for early adopters by prioritising demand incentives over supply support to catalyse off-take agreements. One thing is certain, readiness at ports and infrastructure development to remove barriers for maritime uptake will be crucial. This will allow for both the maritime and other sectors to move forward, adding energy-security and enhancing diversification.

This is a once in a generation opportunity to transform the whole energy-maritime value chain."

Stefan Ulreich, Professor of Energy Economics at Biberach University of Applied Sciences asserts: "Key for the realisation of a future hydrogen economy is the infrastructure for production, but also transportation infrastructure. The maritime industry will play a key role by connecting the hydrogen surplus regions with the high consumption areas. However, this necessitates port infrastructure for loading/unloading and pipeline transport from the port to the consumers. A coordinated action would help most to deliver this."

He concludes: "What we are seeing is that the annual hydrogen demand would mean increasing the fleet to transport hydrogen by ship. To just meet a global increase: if 30 million tonnes of hydrogen traded worldwide, we could need up to 411 new hydrogen vessels (for long distances) or up to 500 vessels if transported as ammonia."





Hydrogen guidance

As new fuels are coming into use the classification societies are updating their rules and class notations accordingly.

Norway-based DNV has published updates to its rules for classification of ships and offshore structures. In addition to rules supporting the development and deployment of decarbonisation technologies, the new in-operation class notations "seek to bring clarity to the responsibilities of class customers for notations that have a mix of design and operational requirements".

DNV notes: "While hydrogen is a potential zero-carbon fuel for shipping it is presently not covered by international regulations. The Gas fuelled Hydrogen notation, sets out the requirements for the ship's fuel system, fuel bunkering connection, and consumers, providing owners a practical path to develop hydrogen fuelled newbuildings."

Meanwhile Japanese classification society ClassNK has published its Guidelines for Ships Using Alternative Fuels (Edition 3.0). In addition to safety requirements for ships using methanol, ethanol, LPG, and ammonia as fuel, the edition adds requirements related to hydrogen-fuelled ships, providing guidance for the design of alternative-fuelled ships.

The guidelines comprehensively describe safety requirements for alternative-fuelled ships. It stipulates requirements for installation, controls, safety devices, etc., aiming to minimise the risks to ships, seafarers, and the environment posed by the use of alternative fuels.

In the newly released edition, the provisions of its rules including part GF of its 'Rules and Guidance for the Survey and Construction of Steel Ships' incorporating the IGF Code, are taken as the basic requirements. Based on the deliberations at the IMO Subcommittee on Carriage of Cargoes, held in 2023, and the knowledge gained from design reviews conducted by ClassNK to date, additional requirements corresponding to the physical properties of hydrogen fuel and assumed hazards are newly established as Part D.

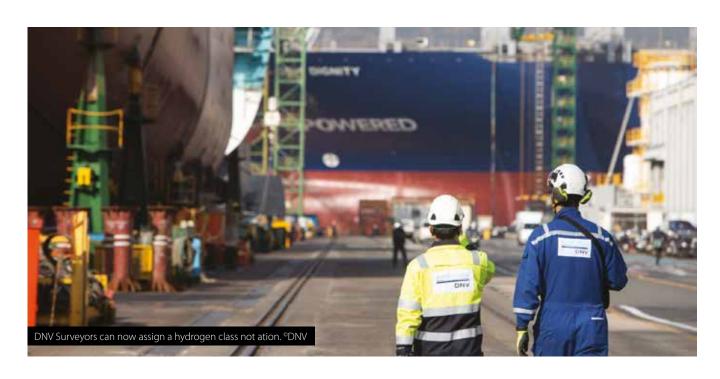
Specifically, it includes requirements that contribute to the safety of hydrogen-fuelled ships, such as points of consideration for preventing explosions due to the ease of ignition of hydrogen and impacts on seafarers and the environment due to hydrogen fuel leakage.

ClassNK has also recently issued an Approval in Principle (AiP) for a design concept of the hydrogen-fuelled engine compatible 5,000 DWT tanker with electric propulsion system developed by Uyeno Transtech, Yanmar Power Technology Co, and Mitsui E&S Shipbuilding Co. According to ClassNK this is the world's first AiP certification for the design of an oil tanker using liquefied hydrogen as a fuel.

The ship was designed as part of the 'Development of Large-scale Hydrogen-fuelled Domestic Tanker and Demonstration of Zero-Emission Ships' project by the Nippon Foundation.

ClassNK carried out a review of a design concept of the ship based on its rules including part GF of its 'Rules and Guidance for the Survey and Construction of Steel Ships' incorporating the IGF Code, Part D of 'Guidelines for Ships Using Alternative Fuels; Guidelines for Ships Using Hydrogen as Fuel (Edition 3.0.0)', and 'Guidelines for Fuel Cell Power Systems On Board Ships (Second Edition)'.

ClassNK says it will "contribute to the further consideration of the project from the perspective of safety evaluation and will strive to support the decarbonisation of shipping."





CARBON CAPTURE "FEASIBLE"

DNV says onboard carbon capture is technically feasible but commercial uptake relies on industry collaboration and regulatory acceptance

orwegian classification society
DNV says that onboard carbon capture
(OCC) is attracting interest within the
shipping industry, providing shipowners
with the opportunity to continue
operating on conventional fuels while
reducing emissions. However, according to
DNV's recent white paper The potential of
onboard carbon capture in shipping, the
success of OCC depends on collaboration
between regulators, policy makers,
industry stakeholders, class, and suppliers.

With decarbonisation targets rapidly approaching, demand for cost-efficient solutions for emission reduction is increasing. DNV's latest white paper explores OCC as a decarbonisation solution for shipping by looking at its technical, economic, operational, and regulatory challenges, as well as its integration into the carbon capture, utilisation, and storage (CCUS) value chain.

CCUS is the process of capturing CO_2 and recycling it for future use or permanently storing it in deep underground geological formations. DNV notes that the maritime industry is exploring its application onboard ships, which will require an onboard system to capture, process and store the CO_2 and a network of offloading which is integrated into wider CCUS infrastructure.

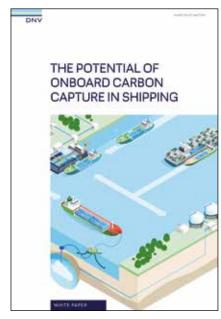
Chara Georgopoulou, Head of Maritime R&D and Advisory Greece, says: "OCC is expected to be part of a range of future options which will help shipping achieve its decarbonisation goals. However, further collaboration and testing is required to verify its performance. The commercial attractiveness of OCC will depend on the terms under which regulations can credit the removal of carbon emissions, and how smoothly it can be integrated into the growing CCUS value chain."

DNV asserts that, for OCC to be relevant for wider application, it must be economically viable and competitive with other decarbonisation alternatives. Nevertheless, DNV states that, if successfully deployed, OCC can become a key way for shipowners to comply with decarbonisation regulations, while also helping to reduce the demand for alternative fuels.

The classification society notes: "The EU ETS is the only regulatory framework currently providing commercial incentives for OCC. To encourage shipowners to adopt the technology, future environmental and greenhouse gas (GHG) emissions regulations must also provide credit for captured CO₂."

Georgopoulou stresses "If we are to achieve IMO decarbonisation targets, we must leave no stone unturned in continuing to investigate OCC and other potential technologies that can accelerate shipping's decarbonisation journey,".

Meanwhile DNV has added an onboard carbon capture and storage (OCCS) notation in an update to its rules. It says that OCCS systems are currently being trialled and offer a way for vessels to reduce emissions and contribute to greater sustainability and regulatory compliance. It adds that the notation offers a framework and requirements for these new systems, including exhaust pre-treatment, absorption, after-treatment systems, liquefaction, CO₂ storage, and transfer ashore.





MOVING FORWARD

A round-up of developments in the methanol marine fuel scene

Methanol bunker barge design

Design and engineering consultancy Houlder has designed a 10,000 cubic metre methanol bunkering vessel as part of the UK's SPINE project.

The project, supported by MarRI-UK under the Smart Maritime Land Operations Call, brings together a consortium of organisations, led by MSE International, focusing on energy and autonomy in the maritime industry.

The methanol bunkering vessel design includes semi-automated crane systems for supplying methanol to other ships of a wide size range, including cruise and large container vessels. Houlder says: "This design represents a key milestone in the development of methanol infrastructure and a strategic step towards wider alternative fuel bunkering in maritime decarbonisation."

Houlder says it had to navigate complex constraints to optimise the vessel's layout for maximum efficiency and compliance. The use of methanol as both cargo and fuel presented unique spatial considerations, given its lower density compared to conventional fuels, the different regulatory requirements concerning storage and use as cargo or fuel, and associated handling spaces. Houlder's design team explored allocated space within the hull to balance these requirements within a vessel that is of comparable size to existing small tankers, while adhering to strict safety regulations.

Methanol-ready cruise ship

Finland-based fuel supply systems company Auramarine has delivered a methanol fuel supply system and associated equipment to the Meyer Turku shipyard for installation on TUI Cruises' newbuilding *Mein Schiff 7*.

Mein Schiff 7 will be powered by lowemission marine diesel oil, with a sulphur content of 0.1 per cent, and a shore power connection for almost zero-emission operation in port (which accounts for 40 per cent of its operating time).

According to Auramarine its methanol fuel supply system ensures the safe delivery of methanol from the service tank to the master fuel valve, regulating the flow, pressure and temperature of the methanol to meet the specific requirements of the engine. The system actively maintains the supply pressure within the specified tolerances during load changes and filters the fuel to prevent any impurities from entering the engine. As part of the order, Auramarine will supply the methanol bunker and transfer systems including the "vital automation and safety systems that ensure safe and reliable operations". A gas detection system and a methanol bilge system are also included.

New methanol tank concept

SRC and Green Marine are collaborating to develop and market SRC's Methanol Superstorage. SPS says its Methanol Superstorage uses its Technology Sandwich Plate System instead of traditional cofferdams to separate tank walls.

SRC says its system boosts shipboard tank volumes by 85% and provides effective mitigation for methanol's significantly lower energy density than conventional HFO.

Methanol Superstorage has already received approval in principle from a "leading IACS society, which indicates that no conceptual issues have been identified relating to ship regulatory requirements". In parallel to class approvals, SRC and Green Marine will also oversee and manage 3rd Party technical development," says SRC Group CEO Hannes Lilp.

Digital tokens to underpin methanol trading

Digital tokens minted using the EarnDLT platform contain the attributes of 1000 MT of methanol produced by Proman and sold by Valenz to Evonik

Global methanol producer Proman and its marketing arm Valenz, have delivered the first Quantified Emissions Tokens ® (QETs) to speciality chemicals company Evonik, "providing an immutable digital record of the attributes of the 1,000 tonnes of methanol purchased.

The QETs, minted by leading SaaS provider EarnDLT, contain information such as the origin of the product, which was produced at Proman's International Sustainability and Carbon Certification (ISCC) EU/PLUS certified facility in Pampa, Texas. In future, the tokens will contain the Product Carbon Footprint (PCF), and other attributes required by Evonik to correctly record its own Environmental, Social and Governance (ESG) data. All data will be independently verified by SCS Global.

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METHANE SLIP"WILL BE ELIMINATED"

One the biggest objections to the use of LNG as a marine fuel could be removed, lobby group claims

ro-LNG lobbying organisation
SEA-LNG says significant progress is being made to eradicate methane slip as uptake of the LNG pathway accelerates. It claims: "With continued collaborative efforts across the value chain, methane slip will be eliminated for all engine technologies within the decade."

The assertion comes as Clarkson Research paints an upbeat picture of LNG's prospects and methanol champion Maersk is reportedly looking at ordering LNG-fuelled container ships.

SEA-LNG notes in a statement that, currently, 2-stroke diesel cycle engines account for approximately 75% of the LNG-fuelled vessel order book. It says: "These engines have effectively eliminated slip already. For low-pressure engine technologies where methane slip remains an issue, manufacturers have already cut the levels of slip from low-pressure 4-stroke engines by more than 85% over the past 25 years. It is worth noting that methane slip has been eradicated for the similar LNG dual-fuel engine technologies used in the heavy-duty vehicle sector. The science is clear, the technologies exist, and engineering will soon solve the problem."

Peter Keller, Chairman of SEA-LNG, says: "We congratulate the efforts and initiatives such as the Methane Abatement in Maritime Innovation Initiative (MAMII) and the Green Ray project. As LNG continues to gain widespread recognition as the current practical and realistic alternative fuel pathway, it is reassuring to see growing evidence that the challenge of methane slip will be eliminated within this decade."

Keller concluded: "There is universal agreement that the science is understood, and we have the necessary tools and technology to abate methane emissions, it is the final elements of the engineering that are being worked on. This, in combination with the option to transition to net zero emissions through biomethane and e-methane, provides ship

owners and operators with the confidence that vessels ordered today are future-proofed for the next 25 – 30 years. This cannot be said for any other alternative fuel right now."

Meanwhile independent maritime research consultant, Drewry, expects LNG to be feasible as a marine fuel until 2035 amidst the EU Emissions Trading System (EU ETS) and the FuelEU Maritime (FEM) despite the scrutiny over its fossil footprint and methane slippage. The recent move by Maersk deferring its methanol-powered ship orders in favour of LNG, has added fuel to the fire.

The consultant adds: "Over 1,100 LNG-fuelled vessels and 1,000 LNGCs will be in service by 2029, securing LNG's maritime demand while vessel re-routing, and technology-led structural fleet changes are expected to befall under the regulated regime."

According to Drewry: "The recent shift by Maersk towards LNG-fuelled container vessels while deferring its order for methanol-powered ships indicates that the shipping companies are circumventing their bets on alternative fuels by investing in LNG."

Methane slip reduction

The Methane Abatement in Maritime Innovation Initiative (MAMII) is calling for universal standards for measuring methane emissions from ships to address regulatory voids.

It says there is an "urgent" need for universal methane measurement standards and regulatory frameworks to drive adoption of technologies reducing methane emissions from ships, according to MAMII.

The maritime methane group has issued a report warning that without a unified system for measuring methane emissions from vessels, progress on cutting emissions





will be slowed. It calls for the creation of globally standardised measurement and monitoring frameworks, and the creation of technology-centric regulatory frameworks incentivising the development and adoption of methane abatement technologies.

Panos Mitrou, Chairman of MAMII, states: "From better engine combustion to the abatement or catalysis of harmful gases and the blending of hydrogen with traditional fuels, the range and potential of these technologies have exceeded our expectations. It's clear that with informed and early decision-making, we have the tools to abate methane. Yet, without a universally accepted certification method or regulatory framework providing business-critical incentives, the progress and adoption of these technologies will face significant delays."

Meanwhile Daphne Technology's innovative SlipPure system has been awarded Approval in Principle (AiP) from Lloyd's Register ("LR") for its Plasma-Catalytic technology, with LR witnessed results confirming its performance.

The system, which previously received AiP for its plasma-only configuration, now runs its full Plasma-Catalytic process. The company says: "This advanced technology improves efficiency by lowering plasma power consumption, enabling very high methane slip reductions at exhaust temperatures well below those required for catalyst-only solutions, in Daphne Technology's view, making it both the most effective and efficient methane slip reduction system available. The SlipPure™ Plasma-Catalysis system is also Approved in Principle by DNV."

Biomethane deliveries

United European Car Carriers (UECC) and Titan Clean Fuels say they are collaborating on a series of major liquefied biomethane (LBM) bunkering operations in the Port of Zeebrugge.

Titan delivered ISCC-EU certified mass balanced LBM, also known as bio-LNG, to all of UECC's LNG dual fuel car carriers in July.



The pure car and truck carriers (PCTCs) used 100% LBM as part of UECC's 'Green Gas Month', an initiative that supports its wider 'Sail for Change' sustainability programme. Three of the ships also feature battery hybrid technology, further enhancing their environmental performance.

The GHG emissions reductions generated from these major LBM bunkering operations is available to UECC customers through a $\rm CO_2$ registry that it opened in January 2024. This registry allows UECC to transfer the environmental benefits of clean fuel use to charterers in a transparent, traceable and independently verified manner across its entire supply chain.

Daniel Gent, Energy & Sustainability Manager at UECC, comments: "Tightening environmental regulations and emissions levies like the EU Emissions Trading System are also increasingly boosting the commercial rationale for using clean shipping services. The use of LBM as a marine fuel reduces UECC's, and our customer's exposure to the costs of emitting within the EU ETS, which will continue to ramp up quickly over the coming years," continued Gent.

UECC and Titan assert: "Unlike other fuel pathways, LBM is frequently being introduced at scale today. Depending on the feedstock, LBM can be net-zero GHG emissions or even net-negative if the avoided emissions of waste are taken into account. The next phase is the introduction of e-methane produced using renewable electricity and electrolysis. All of these molecules can be blended at any ratio and used in existing LNG infrastructure without adaptation.

LNG crew training

Kawasaki Kisen Kaisha ("K" LINE) says its training programme for its seafarers on gas-fuelled ships has been certified by the Philippine Maritime Industry Authority as a training course that meets the International Code of Safety for Ships using gas or other low-flashpoint fuels (IGF Code). The IGF Advanced Training Course was introduced at the "K" Line Maritime Academy Philippines

The IGF code stipulates training requirements based on the STCW Convention*3 to familiarise seafarers with fire and explosion hazards onboard ships that use LNG fuel and other fuels with low flash points. The requirements consist of basic and advanced training. "K" Line's training uses a new, "cutting-edge" LNG bunkering simulator with 3-D models.



NUCLEAR TRANSFORMATION ON WAY?

Lloyd's Register report points to "more reliable, emissions-free and longer-lived ships"

he rise of small modular reactors points to a step change for nuclear applications in shipping if regulatory hurdles can be overcome, according to a new report from Lloyd's Register (LR).

Fuel for Thought: Nuclear report says that nuclear power could transform the maritime industry with emissions-free shipping, whilst extending the life cycle of vessels and removing the uncertainty of fuel and refuelling infrastructure development, but regulation and safety considerations must be addressed for its widespread commercial adoption.

The report assesses the opportunity presented by nuclear for commercial maritime given its proven track record in naval applications, with the study pointing to the role of new small modular reactors (SMRs) in bringing to market suitable low-maintenance reactors to meet the propulsion and energy requirements of commercial ships.

According to the report, the commercial relationships between shipowners and energy producers will be altered as power is likely to be leased from reactor owners, separating the shipowner from the complexities of licensing and operating nuclear technology.

SMRs represent a leap forward in reactor design, emphasising safety, efficiency, and modularity for streamlined production. As SMR technology matures and regulatory clarity increases, ship designs optimised for nuclear propulsion will emerge, ushering in a new era of efficient and environmentally friendly vessels.

The report outlines the vital importance of adopting stringent safety protocols to prioritise the protection of seafarers and the environment. It suggests that for novel designs and nuclear technology in the short-term, LR's Risk Based Certification (RBC) could provide an approach for first movers to certify their projects by demonstrating an equivalent level of safety to that achieved with conventional oil-fuelled systems.

The report adds that "technology readiness" for nuclear is improving, as per the most recent update of the LR Maritime Decarbonisation Hub's Zero Carbon Fuel Monitor with pressurised water reactors (PWR), micro reactors and molten salt reactors (MSR) emerging as some of the most promising technologies for maritime applications.

However, community readiness levels (CRL), which are affected by the public's perception of nuclear power and investment readiness levels (IRL) remain low due to the uncertainties around the wider uptake of nuclear technology in commercial shipping.

Mark Tipping, Power-to-X director, LR, said: "Fuel for Thought: Nuclear represents one of the first easily accessible overviews on the use of nuclear power in shipping, combining information from a wide range of sources into one report tailored for commercial shipping and the wider maritime value chain. Whilst its use in commercial shipping has been limited, by overcoming negative perceptions and a lack of investment levels, nuclear propulsion could provide immense value for the maritime sector in its decarbonisation journey, allowing for emissions free vessels with longer life cycles which require minimal refuelling infrastructure, or in best case scenarios limit the need entirely."



GOING NUTS

Cashew-based fuel under development

orwegian ro-ro shipowner United European Car Carriers (UECC) is taking a leading role in developing a cashew nut shell liquid (CNSL)-based biofuel.

UECC is collaborating with Lloyd's Register FOBAS, engine manufacturer Wartsila, and biofuel supplier ACT Group.

ACT Group has created a CNSL-based biofuel, FSI.100 that has received approval from engine manufacturers as a 30% blend component in an ISO 8217 DMA grade distillate fuel oil to carry out sea trials.

UECC says: "FSI.100 addresses concerns about the popularity and suitability of CNSL-based biofuels. It also offers compelling advantages: a certified sustainable, fully controlled supply chain that ensures traceability and accountability from the point of origin to extraction, conversion, and consumption. This approach enhances confidence in CNSLderived marine fuels, reduces waste, and promotes resource efficiency, aligning with circular economy principles in the maritime sector. Additionally, FSI.100 utilises sustainable land use practices and exhibits high-quality maritime fuel properties, such as ultra-low sulphur and winter spec pour points. It also delivers significant

greenhouse gas savings, with well-to-wake emissions reductions of 90% (9.50gCO₂eq/MJ) compared to conventional maritime fuels."

The shipowner adds that it recognises the importance of this thorough evaluation and transparency in sustainable fuel procurement to ensure the reliability and safety of operations, especially in light of recent incidents in the Rotterdam area that highlight challenges posed by the blending of "unestablished" biofuel feedstocks in marine fuels.

Daniel Gent, Energy & Sustainability
Manager at UECC, emphasises the
significance of this collaborative approach,
stating, "In our decarbonisation journey,
it's essential to leave no stone unturned.
UECC is proud to lead the industry in not
only implementing creative solutions but
also establishing a blueprint for the critical
assessment of future fuels such as CNSLbased FSI.100, which holds great potential
for sustainable shipping."

Korean biofuel stem

KPI OceanConnect says it has carried out the first biofuel delivery for a foreign container shipping company in South Korea.

In July the global provider of marine energy solutions announced the successful delivery of 500 tonnes of B30 HSFO 3.5% to Yang Ming Marine Transport's 11,000 TEU container vessel YM Together on 26June in Busan, South Korea. The supply was made in collaboration with Seoul-headquartered bunker supplier GS Caltex Corporation.

KPI OceanConnect asserts: "With the potential to reduce GHG emissions by up to 25%, when compared to conventional fuel oil, the ISCC certified biofuel is helping Yang Ming meet its sustainable development and energy transition goals. Demand for biofuel bunkering is expected to more than double in 2025 due to the emissions reduction pathways biofuels offer, enabling compliance with tightening environmental regulations in the shortterm. This first-of-its-kind commercial delivery in South Korea is a strong signal for biofuel demand in smaller bunkering ports. The successful delivery will lay the groundwork for more vessel owners to invest in alternative fuels to minimise the greenhouse gas emissions of their vessels and voyages."

A ROLE FOR LPG?

LPG could not only fuel LPG carriers but also other ship types

ccording to a new Fuel for thought report from classification society Lloyd's Register (LR), LPG as a fossil-derived fuel offers significant air pollution advantages compared to conventional fuel oil, securing compliance with IMO regulations on sulphur oxides. LR adds that LPG also delivers a greenhouse gas emissions reduction that could be enhanced by combination with onboard carbon capture to deliver compliance with IMO ambitions into the next decade.

The long-term decarbonisation potential of LPG will depend on the scaling up of renewable fuel production, which is anticipated to be rapid as traditional LPG users seek to reduce their environmental impact. Meanwhile demand and seaborne trade is expected to grow in the coming years, necessitating growth in the global

fleet of LPG carriers and providing the opportunity for further uptake of LPG as a fuel in that fleet.

According to LR, there is potential for LPG to be used as a fuel in other vessel types. The transportation, storage and use as fuel have been established over several decades, while supply and supply infrastructure are widespread. Based on long-term projections of fuel prices - especially when considering new renewable fuel types – the report suggests LPG could also offer attractive operating and capital costs compared to other alternatives.

However, LR cautions: "Increased uptake of LPG in the commercial maritime sector is not without challenges. The range of available engine technologies, though

well-established, will need to be expanded to enable full use of the fuel. Currently, for example, there is no four-stroke marine engine capable of using LPG, meaning auxiliary engines on vessels would need to be decarbonised through an additional fuel. The regulatory framework for LPG use, particularly for bunkering, remains patchy, with the first interim guidelines for ship construction and design only just started at IMO level."

LR concludes: "Ultimately, the deciding factor in whether LPG will be a significant fuel candidate either as a zero or near-zero emission fuel, or as a transitional fuel, will be the pace and scale of decarbonisation of the fuel production, and how quickly other supportive energy-saving technologies - such as carbon capture can mature."

FUEL SAVINGS "VERIFIED"

Classification society validation for anti-fouling coating

lassification society DNV has validated potential fuel savings of up to 20% and average speed loss of 1.4% through the use of Hempel's Hempaguard X7's hull coating.

The Danish coatings company says its silicone-based product helps shipowner's IMO targets by reducing fuel consumption and, in turn, carbon footprint. It adds that 4,000 Hempaguard applications had been carried out by 19 June this year. The company's Executive Vice President and Head of Marine, Alexander Enström, says that is "equivalent to taking approximately 5,125,978 cars off the roads in saved CO₂ emissions".

Eradicating cybutryne in anti-foulings

In its Class News 11/2024, Lloyd's Register (LR) notes that IMO has updated its Guidelines for the Development of the Inventory of Hazardous Materials (IHM) and now include cybutryne as a substance to be included in the ship's IHM.

Controls on the use of cybutryne as an anti-fouling substance were introduced into IMO's International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS Convention) last year.

The European Maritime Safety Agency (EMSA) has also published Guidance on the inclusion of Cybutryne in the Inventory of Hazardous Materials IHM requirements under Regulation (EU) No 1257/2013.

LR reminds suppliers that they should now ensure that any material declaration (MD) supplied to a shipowner includes confirmation that no cybutryne is present. The MD must follow the format given in Appendix 6 of Resolution MEPC.379(80).

For new ships (built on or after 1 January 2023), shipbuilders and shipowners should ensure that any anti-fouling system containing cybutryne is not applied to the ship.



A Hempaguard coated container ship. [®]Hempel

For existing ships, before the next IHM renewal survey, shipowners should record if cybutryne is present in the antifouling system of the ship.

Where cybutryne is detected above the required concentration threshold, it should be recorded in the ship's IHM and actions to ensure compliance with the requirements of the AFS Convention should be taken.

Where cybutryne has been listed in the IHM and subsequently removed from a ship, in compliance with the AFS Convention, the IHM must also be updated to record its removal.

SUCKING ENERGY SAVINGS

Autonomous suction sail technology could make big fuel savings

panish shipping company Marflet has contracted automated wind-assisted propulsion (WAP) systems firm bound4blue for the installation of four 22m eSAILs on the 49,999 DWT oil and chemical tanker *Santiago I*.

The intention is to enable the Santiago I to dramatically reduce conventional fuel use, optimising operating costs and cutting GHG emissions. Depending on vessel routing and operations, and according to detailed modelling, the tanker should save around 10% and 15% of annual energy consumption with the reduced main engine loads.

The contract, with installation in mid-2025, makes Marflet the first Spanish merchant fleet owner to adopt a WAP system.

The fully autonomous suction sail eSAIL technology has recently been selected by other leading industry names, including Eastern Pacific Shipping, Louis Dreyfus Company and Odfjell.

The system works by dragging air across an aerodynamic surface to generate exceptional propulsive efficiency.

According to bound4blue, its system is "unique, simple, robust, highly efficient and requires zero operational input from crew".



The Santiago I, which operates worldwide, will have four Model 2 turnkey eSAIL units fitted, with Spanish engineering specialist Cotenaval taking charge of tasks including designing the sail bases and electrical installation.

GETTING READY

An ammonia fuel supply system gets class approval while guidance is being developed to cope with an ammonia spill

loyd's Register (LR) has granted Approval in Principle (AiP) to HD Korea Shipbuilding & Offshore Engineering (HD KSOE) for its ammonia fuel supply system, which will be used on ammonia-fuelled newbuildings.

The shipbuilder says that the newly developed ammonia fuel supply system shows complete compatibility with high-efficiency cargo handling systems and ammonia engines.

The approval certifies the fuel supply system against LR's rigorous risk-based certification (RBC-1) process and marks the successful conclusion of a Joint Development Project (JDP) between LR and HD KSOE, which began in April 2024.

The primary objective of the JDP was to develop and refine the design concept of an ammonia fuel supply system for ammonia-fuelled vessels. The AiP represents the substantial step that LR and HD KSOE have taken towards pioneering innovative solutions for emission reduction in the maritime industry.

HD KSOE notes that ammonia, with its capacity to meet the rising demand for

emission reduction solutions, represents a promising alternative fuel for the maritime industry. It asserts that its fuel supply system addresses the pressing need for sustainable fuel solutions, significantly contributing to efforts aimed at reducing greenhouse gas emissions from the global fleet.

Young-Doo Kim, Global Technical Support Office Representative for Korea, Lloyd's Register said: "This approval in principle represents another significant step for developing the technology required for shipowners and operators' adoption of ammonia, one of the primary candidate fuels for the maritime energy transition. We are pleased to continue our strong working relationship with HD KSOE through this joint project that will provide a valuable solution for ammonia propelled ships."

Young-jun Nam, Vice Present & COO of HD KSOE said: "Ammonia is a zero-carbon fuel that is attracting great attention in terms of economics and supply stability. HD Korea Shipbuilding & Offshore Engineering will lead the field of eco-friendly equipment and materials to take the lead in commercialising ammonia in 2025."

Meanwhile the Singapore-based Global Centre for Maritime Decarbonisation (GCMD) has been developing an emergency response plan (ERP) to cope with an ammonia spill, with a definitive version expected to be published later this year.

The GCMD says in a statement: "Given ammonia's toxicity, it is important to have a well-defined emergency response plan (ERP) to minimise the impact of accidental ammonia release and safeguard life, property, and the environment. Working closely with industry partners, GCMD has been developing a draft ERP specifically tailored to accidental ammonia release."

It adds: "Existing ERPs for oil and chemical spills can provide a valuable foundation, especially in areas such as tiered response levels based on the severity of release. This, in turn, determines resource needs and multi-agency coordination protocols. However, it is important to recognise that we will need to supplement these plans with procedures tailored to ammonia's properties."

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THE BUNKER FIRM

Charting a Course for Excellence in Marine Fuel Supply

n the competitive and ever-evolving marine fuel industry, The Bunker Firm has emerged as a beacon of excellence, innovation, and reliability. Established in September 2021 in Toronto, Canada, The Bunker Firm has swiftly expanded its footprint globally, solidifying its reputation as a key player in the marine fuel trading market. With strategic offices now in Dubai, UAE, Fredericia, Denmark, New York, USA, and a representation in Seoul, South Korea, The Bunker Firm is well-positioned to meet the diverse needs of the global maritime industry.

A Rapid Rise to Global Prominence

The Bunker Firm's journey began as a niche trading house, specializing in marine fuel supply in Africa and the Middle East. This focused approach allowed the company to develop a deep understanding of the unique challenges and opportunities in these regions. Leveraging this expertise, The Bunker Firm has successfully expanded its operations to become a global entity, offering a wide range of products and services to clients worldwide.

Diverse Product Portfolio

Today, The Bunker Firm's portfolio includes conventional fuels, bio-and-alternative fuels, lubricants, and Diesel Exhaust Fluid (DEF). This diverse product range ensures that clients have access to the latest and most efficient fuel solutions, tailored to their specific needs.

The company's commitment to sustainability is evident in its investment in bio-and-alternative fuels, reflecting a forward-thinking approach to environmental stewardship.

Strategic Global Presence

The Bunker Firm's global presence is a testament to its strategic vision and commitment to serving the maritime industry. Each office plays a crucial role in the company's operations, ensuring that clients receive prompt and efficient service, regardless of their location. The Dubai office serves as a central hub for operations in the Middle East, while the Fredericia office anchors the company's presence in Europe. The New York office caters to the bustling maritime activities in the Americas region, and the representation in Seoul extends The Bunker Firm's reach into the vibrant markets of Asia.

Leadership and Expertise

A cornerstone of The Bunker Firm's success is its leadership team, comprised of seasoned professionals with extensive experience in the marine fuel industry. The partners bring a wealth of knowledge from their previous leading roles at industry giants such as Bunker Holding, World Fuel Services, Monjasa, and Cockett. Their collective expertise and strategic vision have been instrumental in guiding The Bunker Firm's rapid growth and ensuring its continued success.

Comprehensive Support Services

In addition to its core product offerings, The Bunker Firm provides a range of support services designed to enhance client satisfaction and operational efficiency. These services include fuel management, quality control, and logistical support, ensuring that clients receive comprehensive solutions tailored to their specific requirements. By offering end-to-end support, The Bunker Firm helps clients navigate the complexities of the global marine fuel supply chain with ease and confidence.

Commitment to Excellence

At the heart of The Bunker Firm's operations is an unwavering commitment to excellence. This commitment is reflected in the company's stringent quality standards, customer-centric approach, and continuous drive for innovation. By prioritizing the needs of its stakeholders and staying ahead of industry trends, The Bunker Firm consistently delivers superior value and service.

Looking to the Future

As The Bunker Firm continues to expand its global footprint, the company remains focused on its core values of integrity, reliability, and innovation. With a strong foundation and a clear vision for the future, The Bunker Firm is poised to lead the marine fuel industry into a new era of growth and sustainability.

www.thebunkerfirm.com





Green Fuels Group of Companies: 🚫 GREEN











GREEN FUELS GROUP:

SETTING NEW STANDARDS IN BUNKER FUEL SUPPLY

In the ever-evolving maritime industry, Green Fuels Group stands as a beacon of excellence and reliability

s India's largest integrated bunker supplier, Green Fuels Group has revolutionized the supply chain with a fleet of 11 barges strategically positioned across the East and West Coasts of India. This extensive network ensures that the company can meet the demands of its clients seamlessly and efficiently, providing a competitive edge in the market.

A Legacy of Excellence and Innovation

With over two decades of experience, Green Fuels Group has established itself as a leader in the maritime bunkering sector. The company operates through its sister companies - Genesis Petrochemical & Logistics, Supreme Marine Bunkers, Kesari Marine Services, and Indhan Enterprises each contributing to the robust and efficient operations that define the Group.

The company's success is built on its core pillars of operational efficiency and safety. By owning and operating the majority of its logistical chain, Green Fuels Group ensures a high level of control and reliability. This strategy has fostered long-standing relationships with major bunker fuel suppliers, ship owners, charterers, and trading houses. The Group's commitment to excellence is further demonstrated by its plan to deploy its own vessels at all Indian ports, ensuring direct control and monitoring of bunker deliveries.

Commitment to Sustainability

In today's world, sustainability is no longer a choice but a necessity. Green Fuels Group understands this and is committed to reducing its carbon footprint and promoting sustainable practices within the maritime industry. The company actively collaborates with key stakeholders to develop and

promote cleaner and greener alternatives in marine fuel and lubricant solutions.

Green Fuels Group's dedication to sustainability is reflected in its efforts to innovate and implement eco-friendly solutions. Through strategic partnerships and collaborations, the company is at the forefront of promoting sustainable maritime practices, ensuring that the industry moves towards a greener future.

Customer-Centric Approach

At the heart of Green Fuels Group's operations is a passion for operational excellence, innovation in service, and customer satisfaction. The company's investment in world-class barges and tankage terminals is a testament to its commitment to providing top-notch services. By continuously adapting to the evolving needs of the bunker industry, Green Fuels Group ensures that its clients receive the best possible service.

The company's customer-centric approach is evident in its dedication to building strong relationships. By understanding and anticipating the needs of its clients, Green Fuels Group delivers customized solutions that enhance operational efficiency and ensure satisfaction.

Looking to the Future

Green Fuels Group is not just about meeting the demands of today but also about preparing for the future. The company aims to expand its operations and continue its legacy of excellence. With plans to have its own vessels at all Indian ports, Green Fuels Group is set to further enhance its service delivery and maintain its position as a market leader.

The company's vision for the future includes a strong focus on sustainability and innovation. By investing in new technologies and sustainable practices, Green Fuels Group aims to lead the way in the maritime industry, setting new standards for operational excellence and environmental responsibility.

Core Values

At Green Fuels Group, we conduct our Business under the core values of Safety, Respect, Innovation, Agile and One team. We encourage diversity, inclusion and drive sustainable solutions. We remain focused on delivering high-quality services and products to our clients. . With a clear vision for the future and a passion for customer satisfaction, Green Fuels Group is set to continue its legacy as a leader in the maritime bunkering sector.

Email: ks@greenfuelsinternational.com Mobile: +91 80089 05888

Dubai Office

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PH.NO: +971 45770946

India Office

GREEN FUELS GLOBAL TRADING PVT LTD. D.No.7-8-22, 3rd Floor, Akaasam Building, East Wing, Opp. **RK.Mission Road, Waltair Ward,** Visakhapatnam - 530003 Ph: +91 891 2788210, 2726824



HOW TO REALIZE THE FULL POTENTIAL OF YOUR SCRUBBER

When maintained in good operational condition, a scrubber system will not only serve you well throughout the lifetime of your ship but also reduce operational expenses.

ureteQ specializes in designing and maintaining scrubber systems. With established offices in Europe and Asia and extensive expertise in exhaust gas cleaning, PureteQ is a leading service provider for all brands of scrubbers worldwide. PureServ, the certified service organization of PureteQ, assists shipowners and operators in safeguarding the continuous operation, reliability, and MARPOL compliance of scrubbers with its team of experienced marine engineers.

ENERGY OPTIMIZATION AND MINIMAL CARBON FOOTPRINT

While PureteQ Maritime Scrubber Systems are known for their high energy efficiency, even less efficient ones can be fine-tuned to lower electrical consumption caused by excessive scrubbing.

To support this effort, PureteQ offers all service agreement clients access to Pure-SPOT, a web-based Scrubber Performance Optimization Tool that plays a crucial role

in reducing energy consumption on all scrubber systems. Data is automatically uploaded to a cloud-based platform for optimizing and reporting environmental performance across ships equipped with scrubbers to assist shipowners and operators in making their operations more environmentally friendly, lowering operational expenses, and enhancing the Carbon Intensity Indicator (CII) rating.

To combat climate change and facilitate the transition towards a more sustainable and low-carbon future, lowering the carbon intensity of the shipping industry is key. Most ships are forced to lower their speed by derating engines, which in turn means less trade and more focus on saving costs. Cost of energy in any form is very high and cost of low-carbon fuel even higher. Furthermore, it may take years before alternative fuel and onboard carbon capture technologies become available for shipping. In the meantime, we must be energy efficient in every way possible.





ALL-IN-ONE-SERVICE

A PureteQ Service Agreement is all you need to realize the full potential of your scrubber system. Based on the ship's operational pattern and crew proficiency level, it is tailor-made designed to meet specific needs. Included (but not limited to):

- 24/7/365 hotline service
- · Spare part management
- Training of crew on-site or remote via our Internet for Remote Assistance
 Services (IRAS) – a complete hardware and software installation for ship-wide
 WiFi access and real-time support
- Operational advice & reporting
- Certified calibration & sensor replacement program

Note that a scrubber's pH sensor requires calibration every three months, while gas analyzers need calibration once a year.

Through our sensor replacement program, you will be notified well in advance of when calibration is due. You will receive a newly calibrated sensor before sending the old one to us for refurbishment.

PRE-DRYDOCKING INSPECTION

Scrubbers installed around 2018 have operated for thousands of hours, making motors, dampers, sensors, and moving parts due for overhaul or replacement. The most economical approach is to inspect, replace, or refurbish these parts. Some parts have long lead times, so arranging a pre-drydocking inspection well before the scheduled drydocking is prudent. This inspection assesses all components and structural conditions, creating a work scope for the yard, crew, suppliers, and stakeholders. PureteQ offers these inspections for any scrubber system globally, tailored to the shipowner's convenience.

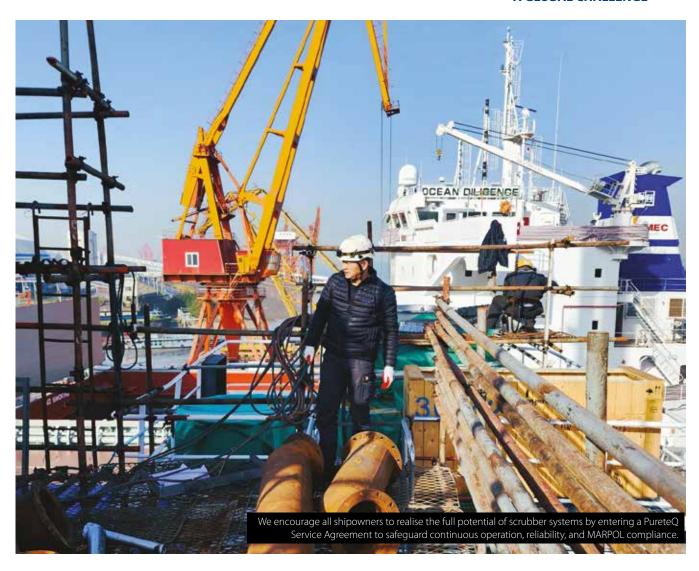
ABOUT PURESERV

PureServ is a registered trademark and certified service organisation that provides service and support to all scrubbers and sensors including shipment of critical spare parts and replacement of compliance equipment such as Continuous Emission Monitoring Systems – CEMS (gas analysers) and Water Monitoring Systems (WMS).

CONTACT
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A SIMPLE SOLUTION TO A GLOBAL CHALLENGE





DELIVERINGUNPARALLELED SERVICE

For over two decades, OMTI has stood as a distinguished and privately-owned enterprise, demonstrating unwavering dedication to its customers

perating Uninterrupted for 22 years within the esteemed bunker hub of Fujairah, ranked among the world's top three, OMTI has consistently delivered unparalleled service to discerning clients. The company's commitment to being a dependable and adaptable partner in the Gulf region has solidified its reputation as a premier choice for those seeking superior service. Over 2000 vessels put their trust in OMTI in 2022 for their legacy of reliability and flexibility in an important hub of the global maritime industry.

Boasting a collective experience exceeding 150 years, OMTI's operations team expertly manages a dynamic fleet of SIRE approved and Oil Majors recognized vessels as well as a barge with a mass flow metre capable for quantity determination. Charterers can take pride in selecting OMTI's services, confident in the team's seasoned proficiency. To complement the operations team, strategically positioned offices in Fujairah, Dubai, Singapore, and Greece provide a 360° perspective and seamless contact with the majority of the world's ports and clients.

Experience unparalleled connectivity without delays or disruptions, as OMTI brings a global reach to clients' fingertips. Trust OMTI for a comprehensive maritime solution that seamlessly integrates operational excellence and strategic trading acumen.

OMTI ensures each interaction is marked by punctuality, personalization, and seamless execution. The company adopts a ONE-STOP shop approach, providing tailored fuel procurement, risk management, and bunkering solutions that meet the

specific needs of each partner, reflecting OMTI's commitment to elevating clients' businesses.

In addition to its supplying operations, OMTI maintains a floating storage of 75,000MTs with a mass flow metre fitted for accuracy in quantity and enabling uninterrupted loading – supplying – loading cycles independent of terminal congestions and shortages. This strategic approach offers flexibility and assurance to both OMTI and its clients, aligning with the practical needs of shipping companies.





The proximity of neighbouring ports, Kalba and Khorfakkan, further expands supply options, accommodating the schedules and routes of OMTI's clientele. The company delivers a comprehensive and adaptable approach to fuelling success in the maritime industry, grounded in operational efficiency and strategic foresight.

OMTI specializes in the supply of all distillate and residual grades of bunkers, deploying experienced barge crews and officers for seamless operations. The company pioneered the provision of high-quality Very Low Sulphur Fuel Oil (VLSFO) following the enforcement of the IMO 2020 regulation, maintaining this commitment across all bunker grades.

Integral to OMTI's operational success is a robust supply chain management system that ensures the quality of its products. With meticulous oversight from sourcing to delivery, OMTI adheres to stringent quality standards at every stage. This dedication to a meticulous supply chain empowers the company to consistently deliver bunkering solutions that meet or exceed industry regulations. OMTI stands as a reliable and quality-focused leader in the Fujairah fuel sector.



Since April 2022, OMTI has strategically aligned with Fujairah Engineering Company (FECO), the exclusive fuel supplier in Salalah, Oman. As the operator of the port's bunker terminal and the sole bunker barge in the region, FECO has been providing fuel and Marine Gas Oil (MGO) at the anchorage and berths of the bustling port since April 2022.

Remaining forward-focused, OMTI and FECO are well-prepared to address and fulfill the biofuel requirements of their clients.

With established facilities and enduring relationships cultivated over two decades, the forthcoming milestone in bunkering comes with the assurance of OMTI's steadfast commitment and guarantees.

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LISBON AND SINES FOR BUNKERS ONLY CALL

Lisbon and Sines are able to offer special conditions for bunkers only call

alling Lisbon represents a short deviation, it is a sheltered port with protected anchorage (inside port limits) during the whole year for safe bunkering by barge. Draft restrictions – 14 m wp Calling Lisbon for bunkers only gives our clients the opportunity to do other activities without extra costs, namely changing crews, loading spare parts, food and water, lubricants or making small repairs, with all the resources of an European Capital.

A few miles south of Lisbon the deep waters Port of Sines can receive for bunkers only call almost all type of vessels.

Clients can find in this port the particular advantage of being able to berth the ship with no extra costs if weather and /or sea conditions are not the safest for anchorage supply.

Contact the Galp bunkers team for further details. +351 963 407 650 bunkers@galp.com





BUNKEROIL.

PHYSICAL SUPPLIER AND BUNKER TRADER IN THE MEDITERRANEAN SEA

Passionately engaged in the bunkering and supply of marine lubricants for over 40 years

hroughout this period, we have earned the trust of many prominent shipowners and have become the reference supplier in the Mediterranean, relied upon by foreign shipowners when they navigate our waters.

We work with passion, both as a physical supplier and as a trader, aiming to cover all ports where our clients need to refuel.

Our experience as a physical supplier in Italy has taught us that shipowners today place increasing importance on service, precise and timely communication, continuous management along the entire supply chain and expertise in proactively addressing any unexpected issue. In addition we ensure the maximum attention is paid to the quality of the products delivered.

Given the high price levels that marine fuels have reached in recent years, financial services enabling tailored and deferred payment conditions for the customer have become a decisive factor, allowing us to differentiate ourselves from competitors and expand our clientele.

In recent years, we have heavily invested in expanding our know-how and expertise in the field of alternative fuels and also managing the energy transition in the marine sector. As a result, we are now able to offer many clients, upon request, our consultancy service on alternative fuels.

In ports where we act as physical suppliers, we work to complement our comprehensive offering of traditional fuels with biofuels capable of immediately reducing greenhouse gas emissions.

Furthermore, in various ports where we operate as traders, we are collaborating with different suppliers to ensure that alternative fuels are increasingly integrated into the package of solutions offered to the customer.

We also operate as a physical supplier and as a trader of marine lubricants. In 2018 we launched a constantly stocked lubricants storage service as leading ExxonMobil Distributor for the local market in Italy.

BUNKEROIL CONTACTS: For bunker enquiries please send an

For bunker enquiries please send an e-mail to: bunker@bunkeroil.it

For lubricant enquiries please send an e-mail to: lubricant@bunkeroil.it

Phone: +39 0586 219214 Address: Via Pietro Paleocapa 11, 57123, Livorno, ITALY.

ENACOL, CONNECTING CONTINENTS

Based in Cape Verde, strategically located on the main maritime routes between Europe, West Africa and the Americas

NACOL, offers high quality fuels and lubricants and ensures efficient delivery service to all types of vessels:

Guaranteed Marine fuels quality according with ISO 8217: 2017 standards:

- LS MGO Max 0,1%S (constant availability)
- IMO 2020 Compliant Fuel Oil with max 0.5% Sulphur Content
- Competitive prices in the region
- Safe and efficient supply service
- Fleet compliant with international standards: MARPOL, SOLAS, ISPS and ISM
- High quality lubricants in partnership with GALP-LUBMARINE

Enacol can deliver bunker fuels to international fleets in Cape Verdian main ports of **Mindelo** (alongside berth and anchorage) and **Praia** (service alongside berth only) by barge, truck or pipeline.

Mindelo have been reinforcing its position as a recognized and specialized "bunker-only" port due to its perfect anchorage conditions for a safe and efficient quick turnaround bunker operation without congestion, bad weather or security risks.

The port, supported by an international airport nearby and quality hotels for accommodations, offers a wide range of

maritime services, such as crew changes, spare parts supply, ship chandling, sludge disposal, fresh water, among others.

We look forward for your enquiries!

Phone: (+238) 5346065;

Mobile: (+238) 9968405; (+238) 991 5964

bunker@enacol.cv | energia@enacol.cv www.enacol.cv





GOIL PLC (GOIL) is a Public Listed Oil Marketing Company. The company is ISO 9001:2015 as well as ISO 14001:2015 Certified. GOIL has as its subsidiaries, GOEnergy Limited, a Bulk Distribution Company, GOIL Upstream Limited to cater for its offshore business and GOBITUMEN Limited, a joint venture bitumen production and distribution company.

GOIL is currently the market leader in additivated premium quality fuel (Super XP RON 95 and Diesel XP) and has the largest and growing retail network in Ghana with over 440 stations. The marketing arm is represented in eight zones country-wide. GOIL also supplies Mining Diesel and lubricants to mining firms and the leading LPG marketer in Ghana.

GOIL supplies Marine Gas Oil, (MGO) at offshore and Anchorage through ship-to-ship (STS) via ex-pipe, and Road Tank Wagon (RTW) from three main ports, Tema and Takoradi as well as the Sekondi Naval Base and markets premium Lubricants some of which are blended locally. GOIL also supplies aviation fuel to major Airlines.

In line with GOIL's commitment to contribute towards building a resilient national economy with free-flow of goods and services, the company has taken steps to diversify its product range by constructing a 35-million-dollar Bitumen plant in Tema. The plant is expected to supply higher- grade Polymer Modified Bitumen (PMB) for the expansion of the nation's road network.



TERPEL ORGANIZATION

TERPEL ORGANIZATION is a company that sells Fuel in Colombia for automobiles, aircraft and vessels

t also produces lubricants with international operations in Panama, Ecuador, Peru and the Dominican Republic in the aviation market.

In Colombia, we are market leaders in liquid fuels and natural gas retail. We also have the largest chain of gas stations and network across the whole nation.

We have a highly qualified team that makes our operations fast and safe for every customer.

The team of Terpel gathers 3,000 partners in five different countries: Colombia, Peru, Ecuador, Panama and Dominican Republic who commit every day to hard work and service, to keep industry and transportation moving. Our team is highly qualified and specialized in making our operations reliable, fast and secure for each of our customers.

Our team is constantly innovating our products to offer the best quality and price for you at all time. Therefore, we offer proposals that provide value to our customers at each service station, airport and maritime ports.

Our bunker business is located in Colombia and Panama where we deliver by barge, truck and pipeline. We provide marine diesel for passenger ships, fishing vessels, tuna seiners, dredges, general cargo ships, tugboats, and logistics support vessels on the high sea.

We offer Marine Gas Oil and marine lubricants with the best quality and the best prices, in the principal terminals in Colombia and in Panama.

We are proud to have earned the trust of our customers by offering quality products as well as constant innovation at the best price for you.

If you need us, please contact us at bunkers@terpel.com and check our web page www.terpel.com

AT YOUR SERVICE! Come with us as we continue to fulfill our dreams



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EVENTS DIARY 2024/2025

10 SEPTEMBER 2024

16TH ANNUAL CAPITAL LINK SHIPPING & MARINE SERVICES FORUM LONDON, UNITED KINGDOM

This event provides investors with a comprehensive outlook on shipping markets, addressing key topics for industry participants and financiers.

Capital Link's conferences, held in major cities worldwide, gather top speakers to discuss trends in shipping, marine services, and financial markets. This year, IBIA's Chair, Constantinos Capetanakis, will join the "Sailing towards a Blue Economy" panel, sharing his insights on sustainable maritime practices.

For more information:

https://forums.capitallink.com/shipping/2024london/index-overview.html

11 SEPTEMBER 2024

OIL SPILL INDIA 2024 NEW DELHI, INDIA

In the backdrop of the recent oil spill incident, caused during cyclone Michaung in Chennai's Ennore Creek, it is with a sense of urgency and shared responsibility that we announce that the 7th edition of Oil Spill India (OSI 2024), the region's flagship conference & exhibition on the Oil Spill Prevention, Planning, Preparedness, Response & Restoration industry at Hotel JW Marriott, Aerocity, New Delhi, India.

For more information: https://www.oilspillindia.org/index.php

11 - 13 SEPTEMBER 2024

ARGUS SUSTAINABLE MARINE FUELS CONFERENCE HOUSTON, UNITED STATES OF AMERICA

The implementation of policies like the EU ETS, CII rating, and FuelEU Maritime is driving cleaner fuel adoption in North America's maritime sector and impacting compliance costs for shipowners trading with Europe. Meanwhile, the US is advancing with initiatives like the Inflation Reduction Act, supporting renewable energy and zero-emission technologies. This evolving landscape calls for collaboration among maritime stakeholders to discuss profitability while investing in green fuel production and infrastructure. Join industry leaders at our event, where IBIA Vice Chair Adrian Tolson will moderate two panels, to explore these critical developments and strategies.

For more information: https://www.argusmedia.com/en/events/conferences/sustainable-marine-fuels

18 SEPTEMBER 2024

4TH SAFETY4SEA LONDON LONDON, UNITED KINGDOM

The 4th SAFETY4SEA London Forum will take place on Wednesday,
18 September 2024 at the Ocean Suite of ICS Maritime Hub, London.
This non-profit event is expected to attract around 200 attendees from
Safety, Technical, and Marine departments of shipping operators and related
industry stakeholders. Attendance is complimentary.
Dr. Edmund Hughes, IBIA's Representative to the IMO, will speak on
"Decarbonisation and Digitalisation – The Future of Ship Bunkering."
For more information:

https://events.safety4sea.com/2024-safety4sea-london-forum/

3 OCTOBER 2024

15TH SAFETY4SEA ATHENS ATHENS, GREECE

The 15th SAFETY4SEA Athens Forum is scheduled as a full day event on Thursday, 3 October 2024 at the Grand Hyatt Athens.

This is a non-profit event expected to attract a target group of more than 600 Delegates / 300 Organisations attendance from Safety,
Technical, Marine departments of shipping operators and other related industry stakeholders. Attendance will be FREE of charge to delegates, a common feature of ALL SAFETY4SEA forums with sponsors covering all the expenses of the event.

For more information:

https://events.safety4sea.com/2024-safety4sea-athens-forum/

8 - 10 OCTOBER 2024

SIBCON

SINGAPORE, ASIA
Organised by the Maritime and Port Authority of Singapore, the Singapore
International Bunkering Conference and Exhibition (SIBCON) has

a proven track record. Powered by a Steering Committee of senior decision makers from industry, SIBCON 2024 will bring to you unparalleled knowledge, engagement and collaboration opportunities.

For more information: https://www.sibconsingapore.gov.sg/

11 OCTOBER 2024

IBIA SIBCON GOLF DAY SINGAPORE, ASIA

Join us for the IBIA SIBCON Golf Day on Friday, 11 October 2024, at the Serapong course, Sentosa Golf Club. Enjoy a day of golf and networking with industry leaders, while supporting the IBIA Bursary Fund, which has provided scholarships to maritime students since 2011. For bookings and sponsorships, contact Siti Noraini Zaini at siti.zaini@ibia.net or Noraini Salim at noraini.salim@ibia.net. Don't miss this chance to make a difference!

15 - 17 OCTOBER 2024

ARGUS BIOFUELS EUROPE CONFERENCE & EXHIBITION LONDON, UNITED KINGDOM

IBIA is pleased to support the Argus Biofuels Europe Conference in London on 15-17 October 2024. This event will gather over 300 industry stakeholders to discuss evolving IMO and EU legislation, supply chain challenges, and scaling up zero-carbon fuels. IBIA Board Member Nigel Draffin will moderate the session "Biofuel Tickets and Mandates:

What the Marine Sector Needs to Know."

For more information: https://www.argusmedia.com/en/events/ conferences/biofuels-europe-conference-and-exhibition

23 OCTOBER 2024

4TH SAFETY4SEA SINGAPORE SINGAPORE, ASIA

This full-day, non-profit event will feature industry experts, including Siti Zaini, IBIA Regional Manager (Asia), who will speak on the KEYNOTE PANEL:
"All hands-on deck – collaboration across the maritime ecosystem."
The forum is expected to draw 200 professionals from 100 organizations, including Safety, Technical, and Marine departments of shipping operators.

Attendance is free, with sponsors covering all event expenses.
For more information:

https://events.safety4sea.com/2024-safety4sea-singapore-forum/

5 - 7 NOVEMBER 2024

IBIA ANNUAL CONVENTION 2024 ATHENS, GREECE

Join us at the IBIA Annual Convention 2024, a key event for the global bunker and shipping industry, taking place in Athens, Greece. Set against the backdrop of one of the world's most significant maritime hubs, this Convention promises to be a hub of innovation and networking. Scheduled for 5 – 7 November, it offers a unique platform for industry professionals to discuss the latest trends, regulatory changes, and future directions. Don't miss this opportunity to connect with industry leaders and shape the future of the bunker and shipping industry.

For more information: https://www.ibiaconvention.com/

19 - 21 NOVEMBER 2024

THE NIGERIA INTERNATIONAL BUNKER INDUSTRY CONFERENCE 2024 (NIBIC 2024) LAGOS, NIGERIA

IBIA is a proud supporting association of the inaugural Nigeria International Bunker Industry Conference 2024 (NIBIC 2024), which will bring together stakeholders from Nigeria's oil, gas, and maritime sectors to explore bunkering opportunities, regulatory issues, maritime security, and the impact of energy transition and IMO 2020 on West Africa.

This three-day event will feature presentations, panel discussions, and a focus on women's participation in the maritime industry.

For more information: https://nibunkerindustry.conference.com/

EVENTS DIARY 2024/2025

20 NOVEMBER 2024

1ST SAFETY4SEA DUBAI FORUM DUBAI, UNITED ARAB EMIRATES

The 1st SAFETY4SEA Dubai Forum is scheduled as a full day event (09:00 – 15:30) on Wednesday 20th November 2024 at the Sofitel Dubai Downtown, Dubai, UAE

This is a non-profit event expected to attract a target group of approx. 200 delegates / 100 organisations attendance from Safety, Technical, Marine departments of shipping operators and other related industry stakeholders. Attendance will be FREE of charge to delegates, a common feature of ALL SAFETY4SEA forums with sponsors covering all the expenses of the event. For more information:

https://events.safety4sea.com/2024-safety4sea-dubai-forum/

24 FEBRUARY 2025

IBIA ANNUAL DINNER 2025 LONDON, UNITED KINGDOM

Join us for an unforgettable evening on Monday, 24 February 2025, at the luxurious Grosvenor House Hotel for the IBIA Annual Dinner—a prestigious event dedicated to our valued members and guests. Renowned for fostering connections and creating lasting memories, this must-attend gathering in the bunker industry sells out quickly, so book your tickets soon. For more information: https://ibia.net/event/ibia-annual-dinner-2025/

26 MARCH 2025

IBIA ASIA GALA DINNER 2025 SINGAPORE, ASIA

Save the Date! The IBIA Asia Gala Dinner 2025 will take place on Wednesday, 26 March 2025, in Singapore during Singapore Maritime Week 2025. Sponsorship and booking opportunities will be available from end of August. For more information contact: siti.zaini@ibia.net

TRAINING DIARY 2024

25 - 26 SEPTEMBER 2024 20 - 21 NOVEMBER 2024

2 DAYS ADVANCED BUNKERING COURSE (SS600:2022 & SS648:2019) - MPA APPROVED SINGAPORE, ASIA

IBIA offers a 2-day Advanced Bunkering Course that is MPA-approved and designed for professionals looking to deepen their knowledge of bunker delivery processes in Singapore. The course aims to provide advanced knowledge and skills for utilising the latest industry practices and standards. It is focused on enhancing industry professionalism and improving workforce competitiveness and employability. The program provides formal qualifications recognised by the industry. It creates opportunities for workers to advance their careers through structured training and progression pathways. This measure enhances the career prospects of workers in the bunker industry.

Please note course dates may be subject to change. For more information contact: noraini.salim@ibia.net

14 OCTOBER 2024

IBIA TRAINING COURSE: BIOFUELS LONDON, UNITED KINGDOM

IBIA in collaboration with Argus will deliver the IBIA Biofuels Training Course on 14 October 2024 in London. This course will cover the technical, operational, regulatory, and economic aspects of bio-based marine fuels, including an overview of alternative fuels, detailed sessions on specific biofuels, and a discussion on the IMO's shift to Well to Wake assessment and the economics of these fuels.

For more information: https://ibia.net/event/ibia-bio-fuels-training-course/

23 – 24 OCTOBER 2024 11 – 12 DECEMBER 2024

2 DAYS BASIC BUNKERING COURSE (SS600:2022 & SS648:2019) - MPA APPROVED SINGAPORE, ASIA

IBIA offers a 2-day Basic Bunkering Course (SS600:2022 & SS648:2019) approved by the MPA. This program provides essential knowledge of Singapore's bunker industry and aims to establish a solid foundation for participants. The course covers the guidelines outlined in SS600:2022 -Code of Practice for Bunkering and SS648:2019 in Singapore, including technical and operational principles related to mass flow meters, system integrity, sealing requirements, and processes. Emphasis is placed on personal safety, the necessity of personal protective equipment (PPE), safe boarding practices, dispute resolution, workshop activities,

and case studies to enhance learning. Please note course dates may be subject to change. For more information contact: noraini.salim@ibia.net

4 NOVEMBER 2024

IBIA TRAINING COURSE: ISO 8217:2024 7TH EDITION ATHENS, GREECE

This course is designed for those involved in supplying, purchasing, and verifying fuel quality to the new standard, covering the reasons for standards, the development of ISO 8217, and the changes in the 7th edition. It will also address primary test methods, significant annexes, and focus on conventional fuels and biofuel blends, while exploring potential future changes for compliance with the shift from "Tank to Wake" to "Well to Wake" and other alternative fuels. The course will run from 09:30 to 12:45.

> For more information: https://www.ibiaconvention.com/training-registration

5 NOVEMBER 2024

IBIA TRAINING COURSE: FUTURE FUELS **ATHENS, GREECE**

This course will explore the current state and future developments of future fuels, focusing on adoption, regulation, and key challenges. It's designed for those with a basic understanding of conventional bunkering and an interest in future fuels. The course covers general safety, with specialist insights on LNG, methanol, biofuels, and ammonia, and includes discussions on IMO regulations, measurement, and economic considerations. Led by Nigel Draffin, it will conclude with a Q&A session.

https://www.ibiaconvention.com/training-registration

19 NOVEMBER 2024

IBIA BASIC BUNKER COURSE LAGOS, NIGERIA

IBIA will host a one-day Basic Bunker Course the day before the inaugural Nigeria International Bunker Industry Conference 2024 (NIBIC 2024). This course, led by IBIA Africa Regional Board Member Siyamthanda Maya, is designed to introduce new entrants or those with limited knowledge to the key aspects of the bunker industry.

For more information contact: tahra.sergeant@ibia.net

All dates were correct at time of going to print but may be subject to change, please review the related websites

WORLD BUNKERING Q4 2024... NOW OPEN FOR BOOKINGS

Q4 2024

SPECIAL FEATURES:

Bunker market overview

We look at how the global market is changing in response to geopolitics and economic pressures. Are the old divisions between traders, brokers, independents and physical suppliers becoming blurred?

Fuel additives

The marine fuel market has become much more complex as the shipping industry moves towards net zero. One example is the incorporation of additives into lubricants for new generation marine engines.

GEOGRAPHICAL FOCUS:

Northern Europe

The EU's Emissions Trading System (EU ETS) and FuelEU Maritime Regulation have hit the headlines but what do these initiatives mean for the bunker sector in the ARA ports and other major Northern European bunkering hubs?

Middle East

We look at how turbulent times in the region have affected the bunker sector. To what extent has the effective partial closure of the Red Sea route to the Mediterranean affected suppliers? More generally what are the prospects for the bunker industry in the ME as the shipping world moves towards decarbonisation.

Australia

Long an exporter of energy, notably in the form of coal, Australia is now developing alternative fuels that could see the country become a significant player in the move to net zero.

Regular Features

IBIA News, IBIA Africa Report, IBIA Asia Report, Events Reports, Views & Analysis.

Plus: Interview – Industry News – Environment – Testing – LNG – Lubricants –
Innovation – Legal – Scrubbers – Carbon Capture – Electric Propulsion

Methanol – Biofuels – Hydrogen – Ammonia – Alternate Fuels – Diary – Legal
Equipment and Services – Diary – Event Previews & Reviews

GOIL PLC OCEAN BUNKERING





GOIL PLC has attained the enviable Integrated Management System (Quality, Health, Safety and Environment) and has successfully been certified ISO 9001:2015, ISO 14001:2015. This endorsement attainment makes GOIL PLC stand out among the majority of the Oil Marketing Companies (OMCs), with such international excellence in providing bunkering services in Ghana and towards West Africa Coast.

Our Marine Gas Oil (MGO) meets the requirements of our esteemed clients in accordance with the ISO 8217-2017 fuel standard. GOIL is IMO 2020 - Low Sulphur Fuel (VLSFO 0.5%) compliant. We have built an ultra-modern state of the art bunkering facilities at the Sekondi and Takoradi Ports in Ghana to serve our numerous customers and also deliver by barges through ship-to-ship (STS).

Our barges serve as mobile fuel or filling stations, where our bunkering team supplies MGO and Marine Lubricants offshore across the coast of Ghana to a diversified portfolio of customers.

We leverage on GOIL's brands and sales strategies ensuring a seamless service from product sourcing to delivery by focusing on quality and reliability, thereby guaranteeing product quality, quantity, and availability.

GOIL Bunkering thrives on our customers trust in our management principles which are focused on EHS, quality products, exact quantity or equitable distribution and reliability as well as timely deliveries.

GOIL, GOOD ENERGY.
GOIL, YOUR RELIABLE AND EFFICIENT PARTNER.
GOIL, WE DO IT RIGHT THE FIRST TIME.



KEY ACTIVITIES

Our key activities include, cargo sourcing, marketing, and credit management. We deliver at offshore, anchorage and at ports through Ship-to-Ship (STS) and ports via ex-pipe and Road Tank Wagon (RTW).

KEY RESOURCES

Our key resources include, Cargo Sourcing Network, Sales Network, and Operational knowhow.

SERVICE & PRODUCT

Marine Gas Oil (MGO) and Marine Lubricants.

GOIL OCEAN BUNKERING STRENGTH MARKETING ABILITY

We provide high quality product and Service. Our product is on-Spec, on-time, accurate quantity ensuring value-for-money and nationwide sales network.

OPERATIONAL EXCELLENCE

We have an excellent team of highly trained professionals equipped with a wealth of knowledge in marine industry practices.

COMPETITIVE EDGE

We operate in a very competitive environment and therefore employ best in class competitive strategies. We have been able to weather the storm with our experience onshore, and expertise in the field of bunkering to maintain the number one spot in the industry.

OPERATIONAL AREA

We cover offshore, anchorage, and ports in Tema and Takoradi.





email: bunkers@goil.com.gh website: www.goil.com.gh



LET US BE YOUR PROFESSIONAL COUNTERPART

