Q1 2021

WORLD BUNKERING

THE OFFICIAL MAGAZINE OF IBIA

FRANKENSTEIN FUELS?
DEBUNKING THE MYTHS



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WEST MED: LNG ON THE RISE
QUANTITY: MFM USE EXPANDING?
INTERVIEW: ROTTERDAM BUNKER LICENCE

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A LONG HAUL AHEAD

Covid-19 vaccination programmes are underway around the world, but developing an approach that will allow the global shipping industry to return to 'normal' will take time

Dear Reader

In some countries significant proportions of the population have now been vaccinated against coronavirus but it is a complex picture. New variants of the virus are emerging and causing concern, and adding to the challenges facing the shipping industry in carrying out timely and efficient crew changes. And it is hard to be optimistic about the prospects for a rapid restart of cruising, an important customer base for bunker suppliers in several parts of the world.

Once again, this issue of *World Bunkering* is set against a background of an industry forced to cope with a global pandemic. This is particularly reflected in our geographical features on the Western Mediterranean and Americas and Caribbean. All of these areas are feeling the pinch from the complete absence of cruise ships.

The perennial issues in bunkering are quantity and quality. In this issue we take an in-depth look at quantity, and moves to towards expanding the global use of mass flow meters (MFM). Our interview, with Ron van Gelder, working as a senior adviser for the Harbour Master Division at the port of Rotterdam also touches on the possibility of making MFM use mandatory. For now though that would appear to be a bridge too far, with the port concentrating on implementing its new bunker licensing system.

Talking of quality, in our special feature on that subject, IBIA Director Unni Einemo debunks some of the myths that are circulating about VLSFO and the puts the record straight on a topic that has attracted ill-informed comment in the press.

Quantity and quality may still very much be with us as issues of contention, but the need to move towards zero carbon now overshadows almost every aspect of our industry, and in some form gets a mention in most of our pages.

One exception is our Legal page which covers a case that centred on what can be considered 'in rem'. That may sound obscure but can have significant financial implications when outstanding debts are more than the value of the only asset, the ship, available to creditors.

However, returning to the quest for zero carbon, you will find several of the main options set out in these pages. Our LNG feature reports the confident view of lobby group SEA-LNG that going for gas is the only viable way forward. The group's chairman Peter Keller asserts there is a "fundamental binary choice facing newbuilds in 2021, as decarbonisation forces a choice between using LNG now, or retrofitting [to use LNG] later". Be that as it may; our Environmental News pages report that liner shipping giant A.P. Moller–Maersk is taking a different path, with plans to launch a methanol-fuelled feeder vessel in 2023. It says that "methanol (e-methanol and bio-methanol), alcohol-lignin blends and ammonia remain the primary fuel candidates for the future".

In fact, there are more than a few other options and in our Scrubbers feature the Clean Shipping Alliance 2020 puts its case that not only did scrubbers play a crucial role in the smooth transition to compliance with the IMO 0.50% sulphur limit, but that scrubber-fitted vessels "show a significantly better CO_2 performance than similar vessels using refined fuels for compliance, such as MGO/VLSFO".

Meanwhile our Fuel Saving feature highlights that it is not only what fuel is burnt that matters. Two major coating manufacturers, Hempel and Jotun stress the importance of effective anti-fouling systems in the effort to reduce CO_2 emissions.

Similarly, our IT feature looks at how software can play a major role in the industry's transition to zero carbon.

So all in all, this is another info packed issue, reporting on recent developments but also looking ahead as the industry emerges from the pandemic nightmare.

Stay safe.



David Hughes
Editor

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OUR JOURNEY CONTINUES

We will keep our core focus during 2021 while we wait for normality to return

Around this time, most of you would be back home following some hectic days at the end of February in London after attending the annual IP Week.

But this year, things are different. Due to the coronavirus, IP Week was held online and we could not host the IBIA Annual Dinner physically. Instead, IBIA organised a virtual networking event, which attracted more than 200 delegates and many one-to-one video chats took place on the platform.

Despite the success of this online event, we do hope to be back at the Grosvenor House next year, so make sure the evening gowns and the black ties are still fitting.

At present, the situation is still not easy for our members around the world, nor for the many seafarers that are working under high stress and with challenges on crew changes still being an issue. We hope that some of this will ease during 2021 and the world will return to more normal conditions.

A small hope from us in IBIA is that we will be able to host our annual IBIA dinner in Asia later this year. This will be a clear signal of the world beginning to return to normality. However, we do know that things can change fast, but we keep the hope and ambition.

Despite the many challenges and obstacles that Covid-19 has caused our lives and businesses, we have to remember that we've all learned a lot and adapted to the new situation. In IBIA we had to take many though decisions and adapt both our organisation and our offerings to the new settings.

Along the way we've had both successes and things we could have done better, but they were all part of improving IBIA and strengthening our knowledge and we will emerge stronger as a team after this.

IBIA is working three main areas which will still be our focus for 2021:

- Organizational development in IBIA
- Bunker Licenses and MFM implementation
- The 2030/2050 decarbonisation challenges

The work on the organisational development is on track with the interim Regional Board for Asia being active for one year and we are close to launching interim Regional Boards for Africa and the Americas.

The Regional Boards aim at bringing IBIA closer to our members and to better understand the regional challenges as well as provide our members with a platform for dialogue, discussion and development and to make IBIA truly International.

The work on aligned bunker licence and massflow meter schemes has suffered most under the pandemic, but with a chairman being appointed for the working group and many members joining in, we are confident that we soon will be up to speed again and continue to work toward more alignment in bunkering procedures and rules and more transparency on the volumes delivered.

The third area of focus is the environmental challenges, which is not something we can postpone, as it will require prompt action to reach the targets. In IBIA, our working group on Alternative Fuels will be the place to engage if you seek knowledge, networking or information about the possibilities and challenges ahead. This working group will be an IBIA flagship toward contributing to our industry reaching the IMO's 2030 and 2050 decarbonisation targets.

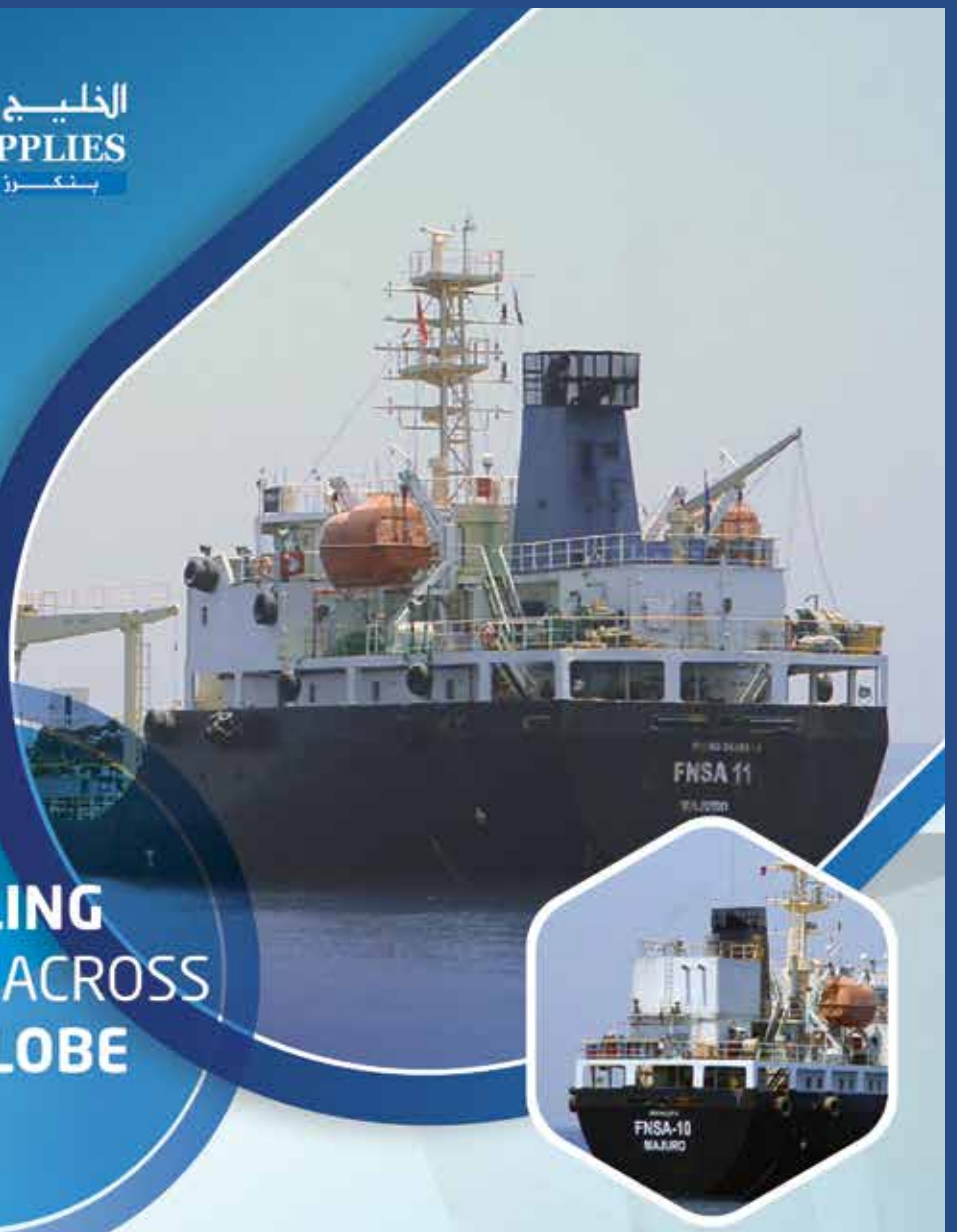
Finally, a big thank you for all your support – IBIA is a membership-based organisation, and without your memberships there would be no IBIA. To continue our work, we depend on your support and we kindly ask you to encourage you partners in the industry to join IBIA as together our voice will be stronger.



Henrik Zederkof
Chairman

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FULL SWING

2021 is already proving a busy year for engagements with IBIA members and activities at the IMO

This time last year, I had already attended my first 2020 meeting at the IMO, and we had held the IBIA Annual Dinner in London. My calendar was full of plans for further IMO meetings and lots of travel, mainly due to conference speaking engagements.

Then, the spread of Covid-19 accelerated and a pandemic was declared, and everything changed. All IMO meetings were postponed until further notice. Physical conferences were cancelled or postponed until later in the year amid optimism that the severe restrictions on human interaction imposed throughout most of the world during March 2020 would soon bring Covid-19 under control. Sadly, that was not the case, and a huge portion of our lives continues to take place online.

Online video platforms have become the go-to place for conferences and meetings. We can travel the world without leaving our (home) offices. IBIA has made full use of that opportunity in the past year. In April 2020, we held our first informal IBIA member meeting. These are not 'webinars', but rather free-flowing discussions allowing for exchange views and mutual learning. For 2021, we are planning to have either an IBIA member meeting or an IBIA conference every month. We will have a specific focus for each meeting, covering a range of subjects throughout the year. We may be physically apart, but we can come together online, and I look forward to seeing you at our 2021 meetings and conferences

.

Many of us can do our jobs from home, but not our seafarers, who have been severely impacted by the Covid-19 pandemic.

In February this year, IBIA joined hundreds of organisations and companies in signing the Neptune Declaration on Seafarer Wellbeing and Crew change, calling for urgent action to recognise seafarers as key workers and treat them accordingly. We hope the message is recognised by those with powers to make a difference. IMO has also been campaigning to resolve the crew change crisis, appealing governments to facilitate crew changes.

Formal IMO meetings took a while to get going online, but resumed during the second half of 2020. They last for only three hours because they need to accommodate delegates across all time zones. This means the agenda of IMO meetings in 2020, once they resumed, was severely curtailed with many items being postponed until 2021.

To get things moving, there has been a lot of work going on between the formal meetings in correspondence groups (CGs). IBIA has taken part in several of these as we contribute to IMO's work on addressing a range of issues that have a direct or indirect impact on our members. Subjects we are dealing with at the IMO currently include various aspects relating MARPOL Annex VI and other pollution prevention measures, work to further enhance the safety of ships when using fuel oil, adding new parts to the IGF Code to provide a clear framework for ships to use various types of low flashpoint fuels, guidance to address maritime corruption, and – of course – the thing everybody is talking about, the way forward to reduce GHG emissions from shipping.

One of the subjects IBIA has provided significant input to recently was to further develop an indicative example of a bunker licence for use as an annex to the Guidance for best practice for Member State/coastal State (MEPC.1/Circ.884). The purpose of this document is to provide a framework that countries can use to set up bunker licensing schemes.

We have also co-sponsored a commenting paper submitted to the eight meeting of the IMO's sub-committee on Pollution Prevention and Response (PPR8), taking place in late March. Our paper, PPR 8/5/3, seeks to ensure that a study into the link between fuels with high aromatic content and black carbon emissions doesn't get misconstrued. You can find our paper in on the IMO page on the IBIA website, and read about the subject in my VLSFO feature in this issue of World Bunkering.

These are just some of the things that have kept me busy so far in 2021, and the calendar is full of virtual conferences, meetings, IMO correspondence and other deadlines going forward.

On a final note, we have held our 2021 board elections. I'd like to thank Patrick Holloway of Webber Wentzel Attorneys (South Africa) and Adrian Pask of BP Marine (UK), who will be stepping down at the end of their elected terms at the end of March, for their dedication and efforts for the benefit of the Association during their time as board members.

Three candidates were elected and will join the board of IBIA on 1 April, 2021. They are Nicolas Vukelja of Terramar in Panama (re-elected for a second term), Jesper Rosenkrans of Total Marine in Singapore and Steve Simms of Simms Showers in USA. IBIA welcomes them all and we look forward to working with them.



***Unni Einemo,* Director, IBIA**
unni@ibia.net

IBIA EVENTS PROGRAMME 2021

IBIA 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 – Fuel quality, its impact on storage, treatment and use in the engine	Online at www.ibia.net
MARCH		
3 - 4	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
18	IBIA Members Meeting	Online
24 - 25	2 Days Advanced Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
APRIL		
12 - 13	IBIA Bunkering & Shipping in Transition (Part 1)	Online at www.ibia.net
19 - 20	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
22	IBIA Members Meeting	Online at www.ibia.net
28 - 29	2 Days Advanced Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
MAY		
5 - 6	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
18	IBIA Members Meeting	Online at www.ibia.net
19 - 20	2 Days Advanced Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
JUNE		
2 - 3	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
23 - 24	2 Days Advanced Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
JULY		
7 - 8	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
8	IBIA Member Meeting	Online at www.ibia.net
28 - 29	2 Days Advanced Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
AUGUST		
4 - 5	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
25 - 26	2 Days Advanced Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
SEPTEMBER		
1 - 2	IBIA Bunkering & Shipping in Transition (Part 2	Online at www.ibia.net
8 - 9	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
22 - 23	2 Days Advanced Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
30	IBIA Members Meeting	Online at www.ibia.net
OCTOBER		
6 - 7	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
14	IBIA Members Meeting	Online at www.ibia.net
27 - 28	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
NOVEMBER		
10 - 11	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
2 - 4	IBIA Annual Convention 2021	Online at ibiaconvention.com
24 - 25	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
DECEMBER		
1 - 2	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
2	IBIA Members Meeting	Online at www.ibia.net
15 - 16	2 Days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia

BUNKERING INDUSTRY EVENTS 2021

MARCH		
30 - 31	Ship Energy Summit	Online
APRIL		
12 - 15	Bunkerexperience	Rotterdam, Netherlands
14 - 15	Marsec 21 Virtual Conference	Online
19 - 23	Singapore Maritime Week	Singapore, Asia
27 - 28	Global Bunkering Summit 2021	Online
MAY		
20	EU Bunker Virtual Conference 2021	Online
17 - 21	The Oxford Bunker course	Oxford, UK
20 - 21	Platts European Bunker Fuel Virtual conference	Online
JUNE		
16 - 18	Maritime Week Egypt	Online
28 - 2	Maritime Week Las Palmas	Las Palmas, Spain
SEPTEMBER		
13 - 17	London International Shipping Week	London, UK
20 - 24	The Oxford Bunker course 2021	Oxford, UK
22 - 24	41st International Bunker Conference IBC	Oslo, Norway
OCTOBER		
5 - 6	Marine Energy Transition Forum	Antwerp, Belgium
7 - 8	Aracon	Rotterdam, Netherlands
26 - 28	Maritime Week Americas 2021	Panama
NOVEMBER		
21 - 26	Maritime Week Gibraltar	Gibraltar







*Please note that the above dates are subject to change. Please refer to IBIA's website for any postponements or changes that may occur due to the current pandemic

2021 IBIA ONLINE GLOBAL MEETINGS AND EVENTS

Our industry has always relied on networking and education, both of which IBIA continuously offers to our members

Our first event of 2021 took place on 21 January, when IBIA and the UK Chamber of Shipping co-hosted a webinar on alternative fuels. Shell delved into its journey along the energy transition pathway and shed light on alternative fuels that can be used in the shipping industry, focusing on its GTL marine fuel. After the presentation, there was a virtual roundtable with Shell (Marcel van den Berg – Business Development Manager GTL Fuel), IBIA (Unni Einemo – Director and IMO Representative) and DNV GL (Christos Chryssakis – Business Development Manager Maritime) who discussed the place these fuels have in the shipping industry's journey to using cleaner fuels.

Last February, we were very fortunate to host the most successful IBIA Annual dinner of the decade, before the coronavirus put all physical events on hold. This year, the International Bunker Industry Association invited all members and non-members to join the first ever online IBIA Annual Dinner Networking event and experience one of the bunker industry's oldest traditional annual events in a new way.

We had to keep the tradition, and offer the opportunity to our guests to network, meet old friends, and make new business contacts, hosting them in a business networking environment. Our guests were able to view all the attendee profiles, request appointments, take advantage of the 1-1 video chat, as well as exchange business cards in an electronic environment. Traditionally, we would have hosted over 1,000 attendees in London, but this year we hosted our members in a safe 24-hour online environment so our guests could join us from different time zones and from their office chair!

We would like to warmly thank our sponsors and media sponsors for their tremendous support: Sponsors: Ludoil, Peninsula, Turkish Chamber of Shipping

Media sponsors: World Bunkering, Ship & Bunker, Manifold Times, Bunkerspot/Petrospot.

Talking about networking, throughout the year will continue to host our monthly Member Meetings, where we meet and engage with our members, give them the opportunity to interact with each other, and listen to their views, helping IBIA to represent our industry better. If you are reading this article and you want to be part of these meetings, you can join now. Get in touch with us at ibia@ibia.net.

To continue with our events agenda, IBIA will deliver two major virtual Bunkering & Shipping Conferences in 2021, the first on 12 to 13 April and the second on 1 to 2 September, plus our IBIA Annual Convention 2021, which will take place on 16 to 18 November. Our Conferences will continue being the official platform bringing together the global bunkering and shipping industry for sharing experience and knowledge, and networking.

In this year's conferences we will focus on addressing the challenges the maritime and bunkering industries face today as well as envisioning/predicting/covering future aspects of the industry. We will gain first-hand insights and understand the challenges and successes faced in the bunkering and shipping sectors.

IBIA's Director, Unni Einemo will present the latest updates on legislation and guidelines from the IMO, alongside industry experts and leaders who will share important industry developments.

IBIA also acts as supporting organisation to major events such as the 12th International Fujairah Bunkering & Fuel Oil Forum, Singapore Maritime Week, London International Shipping Week and many others . You can find more information in our events calendar and the Diary. If you wish IBIA to support your conference/webinar you can get in touch with me directly.

Let's not forget training! We are planning to run an in-depth live IBIA Bunker Training Course on 23-24 June. We will keep you posted about the topics.

IBIA also runs a series of online training courses to inform the members of our industry and help them to understand international regulations, and offer 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. Delegates will be able to ask questions and seek clarification on any topics covered.

The duration of each module is up to 60 minutes. The modules can be taken as stand-alone courses. However, attendees will gain the best value by taking all modules in the order suggested. On completion of a module, delegates will receive the IBIA Certificate of Attendance.

For more information and to book your course modules, visit: ibia@ibia.net

IBIA will always find ways to educate, connect and 'meet' with its members. Stay tuned.

In the meantime, we warmly encourage you to take advantage of the Membership Portal on IBIA's website, where you can find important insights for the industry, our member directory and apply for participation in our working groups

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JOIN US

- IBIA MEMBERSHIP BENEFITS -

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.

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- IBIA Board Member eligibility
- The right to 1 vote for Board Member Elections
- IBIA Working Group eligibility
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- Individual discounts on other industry events
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- Representation at IMO (International Maritime Organisation)
- Use of IBIA logo on your website and stationery
- Access to IBIA's online membership directory
- Eligible to book up to 4 tickets at the prestigious IBIA Annual Dinner
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AFRICA ROUNDUP

One positive aspect of the pandemic is that we have access to more information as we remain online in our interactions for the foreseeable future

As we enter a new year, the world and our industry continue to grapple with the challenges presented by the Covid-19 pandemic, from the safety and health of our front-line workers – the seafarers – to the slowing down of shipping and port activity. One positive outcome of our new way of connecting is the increasing access to global thought leaders and information-rich online events, which we in the Africa region have made good use of. But of course, we are all waiting impatiently to find out when we will meet again in person.

Looking at South Africa the South African Maritime Safety Association (SAMSA) has recently announced the appointment of a new Acting Chief Operating Officer, Tsepiso Mashiloane. Her appointment to lead SAMSA is a transitional arrangement pending the finalisation of the recruitment and appointment process of a permanent CEO.

South African ports have had limited volumes of 180 cSt HSFO to supply for weeks. Two of the country's refineries, which make up about half of total capacity, have been offline since they were struck by explosions and fires last year. South Africa has imported significantly more oil products to cover its domestic production shortfall, including gasoil, but not yet fuel oil. South African LNG company DNG Energy received authorisation from Transnet National Port Authority (TNPA) at the end of last year to begin LNG bunkering operations in the Port of Coega, in the Eastern Cape, South Africa. DNG Energy Group Chief Executive Officer, Aldworth Mbalati, highlighted in his talk at Petrospot's virtual Maritime Week Africa conference that 1 September 2021 will be an important day for LNG in South Africa. Speaking at the same event, Rahul Choudhuri, MD for Asia, Middle East & Africa at VPS noted that bunker fuel volumes for the whole of the African continent are just 10% of Singapore's annual volumes.

Also speaking at Maritime Week Africa, Gert Nell, Trading Manager, Delta Energy Fuel Supply & Trading, advised that Mauritius has seen strong growth with bunkering volumes rising from 270,000tonnes in 2013 to 405,000 mt in 2017, and the Mauritius Government is reportedly now aiming to boost the market to around two million tonnes a year.

This transformation has happened as the Mauritius government launched their Blue Economy in 2016 with IBIA Africa having hosted a successful conference at the launch and subsequently two successful training courses in support of this growth.

Namcor has entered the bunker market in Namibia and sparked some changes. Namcor is a state-owned entity, the trading arm of the Namibian Government. Its key strategic objective is to become the sole importer of fuel into the Namibian market, with a new storage facility being built in Walvis Bay and a new oil terminal for imports. This is not however, linked to the existing supply network, and at this stage, the new facility is not linked via pipeline to facilitate the supply of bunker fuel to the port. Currently, transport of fuels between the new storage facility and the new bunkering berth is an expensive and time-consuming exercise.

The issuing of bunker licences has been put on hold, until such time as the process can be streamlined. We look forward to further updates from the region.

The Angolan government is going through a process of liberalising the bunker market. The group Sonangol currently has the sole licence for the import and export of oil products within the Angolan market. With the liberalisation of the market, this could mean that bunker licences would be awarded and would increase access to bunker fuel for the Angolan market both in port and offshore.

We encourage our local members to engage directly with us via the IBIA Membership meetings held on a monthly basis.

If you would like to engage with the IBIA Africa team, or become a member of IBIA, discuss opportunities to be a speaker, sponsor or find out more about our local engagements and events, please contact me.

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Tahra Sergeant

IBIA CODE OF ETHICS

IBIA is appealing to all of its members to join this important initiative by showing support for our Code of Ethics. It's an aspirational statement and an important step towards our aim of promoting the adoption of a common set of ethical values across the 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

To sign up for the Code of Ethics working group email **ibia@ibia.net**

PLANS FOR 2021 AND BEYOND

IBIA Asia has an ambitious line-up for the year ahead, including events, seminars and several new training courses

As the implementation date for the IMO 2020 sulphur regulation drew closer there was much speculation as to what it would mean for the industry. Would the use of scrubbers take off, how would very low sulphur fuel oil perform, would the price of marine gas oil surge, and that of high sulphur fuel oil plunge? No doubt 2020 has been a turbulent year for the world, taken to a whole new level by the Covid-19 pandemic.

Some of the major bunkering ports in Asia have been surprisingly able to ride the storm compared to others. According to Zhoushan's Bonded Bunker Fuel Association, the port of Zhoushan supplied 4.72 million tonnes of bonded bunker fuels in 2020, up by 15.14% year-on-year. Hong Kong, meanwhile, has seen a very different trend. The Hong Kong government announced restrictions on crew changes effective 29 July 2020 to curb the spread of COVID-19. Hong Kong's bunker sales declined by some 30%-40% year-on-year in 2020, linked to restrictions imposed to prevent Covid-19 from spreading. Bulk carriers and tankers have mostly been bunkering in Zhoushan instead as it falls en-route, and it is convenient for them to stop there to take bunkers.

According to the Maritime and Port Authority of Singapore (MPA), Singapore remained the world's largest bunkering port in 2020, with marine fuels sales of 49.8 million tonnes and a 5% year-on-year increase. Singapore is also on track with decarbonisation targets for 2030 and 2050, and digitalisation. To support the growing demand for LNG bunkers, the Port of Singapore is set to double the number of licensed LNG bunker suppliers early in 2021. Until now, only FueLNG Pte Ltd and Pavilion Energy Singapore Pte Ltd have been licensed for LNG bunker supplies in Singapore.

To be on track with the trends in shipping and bunkering, IBIA Asia is preparing and planning for the below:

1) Q2 2021- working closely with China Petroleum Circulation Association on a global ports ranking project.

2) Q2 and Q4 2021 – running IBIA Asia webinars on the following topics:
a) Sharing the bunker delivery digitalisation experience.
b) Sharing Asian perspectives on legal aspects in the bunker industry.

3) Q2 and Q4 - IBIA Asia is planning to run live on line-courses in June and November 2021, Understanding Marine Fuel - to be taught by IBIA Asia Regional Manager Alex Tang

4) Q2/Q3 2021 onwards – IBIA Asia to conduct new courses:
a) TR 56: 2020 - Technical Reference for LNG Bunkering – LNG as an alternative fuel for bunkering.
b) TR 80:2020 - Technical Reference on meter verification using the master mass flow meter.

Current Training Programme
The IBIA Asia office offers mandatory training for the bunker sector in Singapore with courses that have been approved and certified by the Maritime and Port Authority of Singapore (MPA).

a) Singapore Standard SS648:2019 - 1 Day Training for currently approved Bunker Surveyors and Cargo Officers. In 2020, we conducted this training for 90% of certified cargo officers and bunker surveyors.
b) Singapore Standard SS 600:2014+ SS648:2019 - 2 Days Basic Training for new Bunker Surveyors and Cargo Officers.
c) Singapore Standard SS 600:2014+ SS648:2019 - 2 Days Advanced Training for new Bunker Surveyors and Cargo Officers.

Courses were approved by MPA in May 2020 on the Maritime Cluster Fund grant of up to 90%, up from 70% earlier, for eligible trainees on courses taken between 1 May 2020 and 31 December 2020.

The enhanced co-funding support under the MaritimeSG Together Package has been extended to 30 June 2021. After that, 90% funding support for pre-approved MPA's mandatory bunkering course reverts to 70%.

The IBIA Asia office also offers specialised training for the bunker sector in Singapore, with a course approved MPA.

a) Understanding Marine Fuel- Two successful live on line-courses taught by IBIA Asia Regional Manager Alex Tang were completed in October and November 2020. IBIA Asia is planning to run these courses in June and November 2021.

MPA has approved courses on the Maritime Cluster Fund grant of up to 50% for eligible trainees.

Interested parties are encouraged to contact Noraini *noraini@ibia.net* or Alex Tang *regionalmanagerasia@ibia.net*.


Alex Tang

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IBIA SEEKS AND RECEIVES SUPPORT TO ACHIEVE AMBITIONS

Unprecedented response from the industry to support IBIA

In February 2020, the Chairman of the International Bunker Industry Association (IBIA), Henrik Zederkof, outlined three focus areas for the Association:

1. Implement a new organisational structure to enhance IBIA's global reach.

2. Pushing for the adoption of broadly similar bunker licensing schemes with mass flow meters in major bunker hubs world-wide.

3. Pro-actively engage in achieving the IMO's CO_2 emission reduction goals.

IBIA is working on all these ambitions in tandem and has made some progress, as the Association moves with the changing times to prepare for the future.

IBIA provides a neutral platform for all industry stakeholders to air their views. As a principle, IBIA has always ensured a low membership fee and balanced the cost of running the association with income from events. COVID-19 has made this difficult as we have not been able to host any physical events since February 2020, and we cannot do so until we are confident that it is safe.

We have therefore taken steps to ensure we can achieve our ambitions through a fundraising campaign, reaching out to our members for support. Our request has been very positively received and we have secured 50% of the campaign objective. We are very grateful to our supporters who see the value in IBIA; their contributions have given us a positive start to the campaign we had only hoped for.

IBIA's Director, Unni Einemo, states: "We are deeply grateful to KPI Ocean Connect, Fratelli Cosulich, BMS United, Energy Petrol, A/S Dan-Bunkering, Glander International Bunkering, Monjasa A/S, Maersk Oil Trading, Bunker One A/S, Bergen Bunkers AS, Sullivan Shipping, Cockett Marine Oil and GOIL for their substantial contributions. Thanks to their support, we have a solid foundation to work with our members and industry partners in setting, and achieving, ambitions for the future. We appreciate all who contribute with resources to help IBIA's efforts in multiple areas, whether it is their time, expertise or through sponsorship."

If you wish to support IBIA further, please contact IBIA directly at ibia@ibia.net for information on how you can contribute, or visit the following link for credit card donations: *https://bit.ly/IBIAsupport*



NEW MEMBERS

CORPORATE A

Service
Nikolaos Lazarikos
Milaha
Middle East

Supplier
Peter Zachariassen
Bunker One
Europe

Service
Oil Industry Major
Richard Minton
Minton, Treharne & Davies Ltd
Europe

Supplier, Storage
Claudio Laurora
Ludoil Energia Srl
Europe

Trader
Jasmine Lyew
Banle Energy International Limited
Asia

CORPORATE B

Bunker Trader
Michael Ekdal Jacobsen
Bunker Holding A/S
Asia

INDIVIDUAL

Service, Surveyor
Abdul Farhan
Seahawk Services
Asia

Service
Joel Box
Gatehouse Maritime
Americas

Legal
Gautam Bhatikar
Phoenix Legal
Middle East

Legal
Maureen Poh
Helmsman LLC
Asia

Trader
Rami Kaddoura
Agataz Energy
Europe

Service
Eric Evans
EVANS Advisory LLC
Americas

Legal
Francisco Carreira
Carreira Pitti P.C.
Americas





IBIA ONLINE BUNKER COURSE

If you are looking for an online bunker course, IBIA should be the first place to check

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, teaches the online Bunker Training courses.

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 taken as stand-alone courses, however attendees will gain the best value by taking all five modules in the order suggested. On completion of a module, delegates will receive the 'IBIA Certificate of Attendance'. Questions will be sent to the teacher during the one-week access through the online platform and will be answered within 3 working days.



Module 1 – Bunker Market Regulations and Enforcement



Learn how the regulations were developed, how they are enforced and how effective use of formal procedures can avoid risk.

Three presentations on:
International Regulations – This covers the introduction of both SOLAS and MARPOL and the current status of IMO regulations which apply to bunkers and bunkering.

Compliance and Enforcement – This examines the requirements with which vessels must comply in order to meet the regulations of their Flag State and any Port State that they visit. It also discusses the enforcement methods available to Flag and Port and the penalties attached.

Bunker procedures - This covers the development and application of procedures and standards of bunkering operations including ISO 13739, SS600 and the application of Mass Flow Metering in the new SS648.

Module 2 – Understanding ISO 8217 and ISO 4259



Why we need standards, how to use and interpret them and how to deal with the results of the laboratory test.

Three presentations on:
International marine fuel standards. – The reason, the history and the development of quality standards.

ISO 8217:2017 – An examination of the principal clauses, the parameter tables and the informative Annexes.

ISO 4259 and precision – Understanding the concept of precision in testing and its application to results of laboratory test results. It also highlights some differences between the ISO 4259 requirements and those of SOLAS and MARPOL.

Module 3 – Best practice for suppliers with VLSFO



Looking at the Best Practice guide for bunker suppliers published by IBIA.

Three presentations on:
Objectives and Quality control – The purpose of the guide and its application to producing a product which meets the required standard.

Aspects of delivery – The best practice to maintain and assure the quality of the product from barge tanks to receiving vessel with an emphasis on sampling proper documentation and the provision of advice.

Contracts and disputes – Understanding contract and sales terms, the disputes procedures and a discussion on typical problems.

Module 4 – Best practices for users with VLSFO



Based on the Best Practice guide for bunker purchasers published by IMO.

Three presentations on:
Objectives – The requirements, the goals and the specific exemptions.

Aspects of delivery – This covers supplier selection and vetting, delivery procedures and fuel handling.

Testing and disputes – Further examination of delivery procedures, sampling, testing and guidance on disputes.

Module 5 – Adapting to a changing market



Looking at the issues of geopolitics, the current Pandemic and the way they may influence on maritime trade and ships fuel.

Four presentations on:
Changing fuel quality – Looking at the impact of new regulations and changing demand on the quality of fuel.

Changing fuel demand – Examining the way bunker demand may change in response to pressures on pricing, availability and new regulations.

Changing price and credit risk – Understanding how price instability and structural change will disrupt the business model of both sellers and users.

Alternative fuels and new regulations – An examination of the potential for alternative fuels, the pressure to reach zero carbon and sustainable fuels and the likely time frame for all these options.

Module 6 – Compatibility and stability – Issues with VLSFO fuels and the measurement of Stability



Understanding the physics of mixtures, the concept of stability and the available test methods to assess if fuel blend components will form a stable blend.

Issues with stability. More details of the available test methods including the laboratory only tests, sensible precautions on storage and treatment and comments on the 50:50 mix.

Coping with potentially unstable fuels. Advice and comment on implications of elevated levels of TSP, operational issues in storage, treatment and use.

Module 7 – Sales terms and conditions – The purpose, structure and application of Sales terms



The structure and principal clauses in sales terms and conditions with reference to BIMCO terms and Buyers terms.

A more detailed consideration of the incorporation of terms into the contract, the detail of the most important clauses and the use of the BIMCO "election sheet"

An assessment of using sales terms in the regulation of disputes and claims with a discussion on evidence and exclusions.

Module 8 – Quantity Measurement – The principles of quantity measurement including Mass Flow Metering



The fundamentals of getting from a sounding to a Mass in air quantity

A worked example of a quantity calculation.

An introduction to Mass Flow Metering covering the principles, current practice, comments on accuracy and fraud prevention.

Module 9 – Sampling – The basics of sampling, sampling methods and sample handling



The reasons for sampling and a discussion of the basic types and methods of sampling.

A detailed description of manual continuous drip sampling and a discussion on sample location and the regulatory requirements for a delivered sample in MARPOL Annex VI.

The transportation, retention and care of samples plus further discussion on the additional aspects of MARPOL samples.



Fuel quality and the impact of the principal parameters and the units involved.

The relevance of fuel quality parameters on storage and treatment of the fuel with a discussion on the relevance of the time in storage on quality.

The impact of fuel quality on the operation and performance in a marine diesel engine.

Speaker
NIGEL DRAFFIN served at sea with Shell from 1966, coming ashore in 1979 working in New Building, Research and Operations departments. In 1996 he moved to Bunker broking first at Gibsons then at LQM Petroleum Services where he was Technical Manager before retiring in 2015.

He has sailed on and supervised the construction and operation of bulk carriers, oil tankers and gas carriers.

He has acted as a consultant on technical issues for over 22 years. He gives expert opinions and is a supporting member of LMAA. A founder member of the International Bunker Industry Association, serving on its board and as Chairman in 2012. He is a member of the Institute of Marine Engineering Science and Technology, Past Master of the Worshipful Company of Fuellers and Liveryman of the Worshipful Company of Shipwrights.

He is the course director of the Petrospot bunkering courses and a regular presenter at bunker conferences. He has written 12 books on Bunkering and Shipping published by Petrospot.

COURSE FEES:
For IBIA members: £150 per topic. if you select 4 modules, you will receive one for free.

For non IBIA members: £216 per topic. If you select 4 modules, you will receive one module for free.

To purchase the course visit: www.ibia.net




Port of Rotterdam

MIXED FORTUNES IN 2020

Singapore and Rotterdam see growth but bunker volumes dip sharply in Panama

Singapore has reported a "resilient" 2020 maritime performance despite Covid-19, with sales amounting to 49.8 million tonnes, an increase of 5.0% year-on-year. This keeps the south-east Asian hub solidly in the number one spot globally.

Singapore's Senior Minister of State for Foreign Affairs and Transport, Chee Hong Tat, speaking at the Singapore Maritime Foundation New Year Conversations event in January, noted that container throughput in Singapore registered 36.9 million TEU in 2020, a slight decrease of 0.9% from 37.2 million TEU registered in 2019.

Chee noted the developments taking place in LNG bunkering at Singapore. "But," he said, "there is scope to do more beyond LNG, such as in the areas of setting new standards and developing green solutions, associated with zero or low carbon fuels."

He announced: "In the longer term, our target is to equip the Port of Singapore to supply a wide range of future, cleaner, fuels types, to meet the diverse needs of ships that choose to call here. These endeavours will not only help secure Singapore's lead as a top bunkering hub, but also support the vision for a greener and more sustainable maritime ecosystem.

Meanwhile Rotterdam saw bunker deliveries increase to more than 9.6 million cubic metres in 2020, compared to slightly over 9 million cubic metres in 2019. The port noted in a statement: "Rotterdam remains Europe's largest bunker port by far."

According to the port: "The increase in bunker volumes was caused in part by the growing demand for ship fuels by container vessels. A combination of delays in container loops and higher capacity utilisation rates has increased average sailing speeds in this segment – which has led in turn to extra fuel consumption."

It noted increased LNG bunkering: "LNG enjoyed substantial growth in 2020, to a total of over 0.2 million m^3 – a 170% increase compared to the preceding year.

The first vessels of CMA CGM's new series of LNG-powered 23,000 TEU container fleet have already been taken into operation, and are also taking in fuel in Rotterdam. Last year also saw the first cruise liners being supplied with LNG in the Dutch port. ... Around ten LNG bunker vessels currently have a permit to supply LNG to ships calling on Rotterdam."

In February, the Rotterdam Port Authority, on behalf of the Municipality of Rotterdam and "partly in response to an initiative taken within the bunkering sector", introduced its Bunkering Permit licensing system. Initially 24 permits were issued to 24 companies, representing a fleet of 143 bunker vessels.

While volumes held up in Singapore and Rotterdam, sales dropped significantly at Panama, with particularly steep declines in November and December. Total bunker sales in 2020 amounted to 4.7 million tonnes, down 11.4% on 2019. The number of stems dropped 13.2% to 6,625 according to the Panama Maritime Authority (AMP). The local bunker fleet increased slightly in 2020 with an average of 34.6 bunker tankers operating each month up from 31.6 in 2019

About three quarters of all bunkers supplied in Panama last year were VLSFO.

Straits Inter Logistics expands with additional vessel for HSFO

A subsidiary of Malaysia-based Straits Inter Logistics (SIL), Sierra Pioneer Marine, has bought an additional bunker tanker, the Guo Kang No 1, from Singapore-based Ocean World Inc for US$1.6 million.

Sierra is an investment holding company and a 51% owned subsidiary of Straits Marine Fuels & Energy (SMF) which itself is a 67% owned subsidiary of SIL.

According to the company, the acquisition of the 2006-built, 2,169 dwt tanker will enable it to meet increasing demand for HSFO in Malaysian ports and will add to its current 11 strong bunker fleet. The company operates in eight Malaysian ports.

GP Global unit seeks debt moratorium in Singapore

The Singapore-based subsidiary of troubled trader and supplier GP Global, GP Global APAC Pte Ltd, has applied to the Singapore High Court for a six-month debt moratorium. GP Global, owned by the India-based Goel family is reportedly attempting to restructure $1 billion dollars of debt.

GP Global has alleged fraud within the company and made criminal complaints against some of its former employees. Meanwhile, it is facing legal claims and some of its ships have been arrested.

Monjasa wins cargo claim case

Denmark's Supreme Court has confirmed previous decisions by lower courts that found that bunker trader and supplier Monjasa is not liable to pay Stena Oil US$6.5 million in compensation regarding the sale of bunker fuel cargo by the government of São Tomé and Príncipe in 2013.

The bunker fuel oil, owned by Stena Oil, was confiscated by the São Tomé authorities following an alleged illegal ship-to-ship transfer. Following legal proceedings, the fuel was sold to Monjasa.

Risk may emerge in 2021 cautions KPI Ocean Connect boss

In a recent online statement, KPI Ocean Connect CEO Søren Høll has warned risk that have been overshadowed by Covid-19 may come to the surface.

He noted: "This time last year VLSFO prices stood at highs not seen in many years. There were more than a couple of industry experts who believed that the IMO's global sulphur cap might have enduringly created large HSFO-VLSFO spreads. If that wasn't enough, rumours about quality management, fuel incompatibility, and adequate availability – mainly concerning low sulphur blends – heightened the industry's nerves during those first two months in 2020."

So far, those fears have not been realised. As Høll observed: "There were concerns that some regions wouldn't have the capacity to supply enough distillate fuels to meet both domestic and maritime demand when IMO 2020 was first introduced.

However, there's been plenty of compliant fuels, as many of the usual major consumers of distillates on land suffered huge demand drops due to Covid-19."

"Nevertheless," he continued, "it's becoming increasingly important for the industry to prepare for some of the risks highlighted back in 2019, which may surface in the coming months. Although we believe the severest predictions from those early weeks in 2020 are unlikely to come to pass, there will be consequences if oil prices climb. Many financial institutions have already predicted this situation, and with the huge volatility in bunker prices last year, we're already seeing prices gradually rise."

There have been fewer quality issues than many analysts predicted but Høll cautions that this may have been partly masked by the pandemic and the depressed oil price. He warns: "These challenges may rear their head once the world starts to recover from Covid-19, distillate demand increases in other industries, and if unscrupulous suppliers start using cheaper components for blending



Singapore port ©iStock


Ron van Gelder

ROTTERDAM MOVES AHEAD WITH BUNKER LICENCE

On 1 February 2021, the Port of Rotterdam introduced a mandatory licence requirement for bunkering vessels. Ron van Gelder, working as a senior adviser for the Harbour Master Division, has been the key architect behind it. IBIA's Unni Einemo discusses the development with him

UE: First of all, can you tell us which areas are covered by the Port of Rotterdam bunker licence for bunker fuel transporters?
RVG: In addition to Rotterdam the licence is also valid in the ports of Vlaardingen, Schiedam, Dordrecht, Papendrecht and Zwijndrecht.

UE: How many licenses have been issued so far, and do you expect more applications coming through?
RVG: At the moment we have issued 28 licences and we do not expect many more. The licences cover around 157 bunker facilities (barges), which is more or less consistent with the number of issued licences by the port of Antwerp, who issues licences per barge.

UE: Given the proximity to other bunkering ports, is there a risk that bunkering vessels that are not licensed make deliveries in your area of jurisdiction? How can you ensure that only licensed vessels perform bunkering operations?
RVG: Given the fact that (almost) every bunker barge is licensed we do not expect this to happen. But barges come and go and also, they often change trade, so it is possible that a barge is not reported to the port authority or that a bunker transporter is not licensed. Barges are 'marked' as a bunker facility and are as such recognizable on our live situation port map at the Harbour Coordination Center and on the patrol vessels.

UE: The initial licences are valid until 1 February 2023, by which time there will be a review to evaluate the extent to which the licence and the regulations need to be amended in response to the experience gained. Does this mean any further licences issued during 2021 and 2022 will also be valid until 1 February 2023?
RVG: That is correct, as I stated before, we do not expect to have many more requests for a licence. The short interval for the licence is so we can see what the impact is, assess if it works and what we can do to improve it. Which doesn't mean that after 2023, the licence cannot be adapted further, if this is required.

UE: What happens if anyone breaches the terms of the licence? Can you, for example, cancel or suspend a licence, or impose other types of penalties, and what type of breaches would lead to sanctions against the supplier? Would a bunker licence holder be able to appeal such decisions?
RVG: We are at the moment working on a (internal) directive for our supervisors and inspectors for which transgression is what measure appropriate. The measures will be from a 'simple' fine up to the utmost: revoking a licence. This is obviously the most severe intervention we have and this will not be used lightly. In fact, we hope this will not be necessary at all. If we have to revoke a licence, the former holder may appeal the decision of the Harbour Master in a court of law.

UE: You have set up a reporting centre allowing all relevant parties in the bunker chain to submit complaints. Your stated aim is to use information received to better monitor and trace where discrepancies are, and further improve transparency in the bunker chain in the future.



How will you use the information received? Will it be only to evaluate the need for changes in the licensing scheme, or can it lead to action against a licence holder for malpractice?
RVG: The setup of the centre is to learn if the license is helping in getting the bunker chain more transparent and get the number of disputes down. So, the primary objective of the reporting centre is to evaluate and adjustment of the licence.

UE: You have developed a complaint form, which will be treated confidentially and will not be shared with third parties. What is the process when a complaint is filed? Would you follow up with a party that has had complaints filed against them?
RVG: The objective of the complaint form is foremost to substantiate changes relating to the license. The complaints will be classified into categories of quantity, quality, sampling, surveying and other. Each category will be subdivided into the nature of the complaint and the possible solutions. Unless we have a reason for clarifying the report, we will not respond to the complaint or intervene in any disputes.

UE: During your consultation, you found great consensus between the wishes of the stakeholders on the need for a bunker transporter licence, but on some points, there was disagreement, including making mass flow meter (MFM) systems mandatory. What were the objections to making MFMs mandatory?
RVG: The obligation of a mandatory MFM would have a significant impact on the bunker market. We are convinced that the MFM could make a major contribution to reducing the number of protests concerning quantity. However, the bunker transporters claim that this is not necessary, if the regular ways of measurement are properly handled. In order to substantiate the claim (either way) we hope to have evidence which will prove the way forward, with or without MFM.

UE: Are you concerned by claims that bunker suppliers are selling fuel for less than it is being traded FOB?
RVG: No, after all it is a free market. If you want to sell something that costs you more, that's up to the seller. What we are concerned about is that if fuel is sold for less, and also delivered for less, and then the surplus is sold on the black market. That will be stealing or fraud and that is a criminal offence. However, that has not been proven at any time, only rumoured or by hearsay.

UE: How likely is it that MFMs are made mandatory in the future?
RVG: Depending on the number of (substantiated) complaints or reports which can be directly connected to the quantity and the current way of measurement on barges, we can mandate the MFM. Again, only if the complaints can be substantiated with evidence that if a MFM was used the quantity difference would be less / non-existent.

UE: Do you expect the same licensing system to be introduced in other ports in the region, such as Amsterdam and Antwerp? If this doesn't happen soon, do you think Rotterdam will be advantaged or disadvantaged in terms of its attractiveness as a bunkering port?
RVG: The licensing of the bunker market will be concentrated in two parts: quantity (bunker transporter) and quality (bunker supplier). We decided to focus at the start of the process on the bunker transporter. We have been in close consultation with the port of Antwerp and, at the start of the project, with the port of Amsterdam, throughout the process. The port of Amsterdam indicated that if only the quantity is addressed, they opted out of the process, until we will address the licence for suppliers. We will start this project this year. As for the port of Antwerp: they already have a kind of licence for bunker barges, and they are striving for the same principles as we do. However, the organisation of competent authority concerning the addressed conditions in the license(s) is totally different, then in the Dutch ports. If the port will have an advantage over other ARA ports that do not have (a more elaborate) bunker licence remains to be seen, it was/is not our intention. Our focus is solely on creating an effective bunker licence.

UE: In Singapore, there has been significant consolidation in the bunker sector over the past few years. Do you expect this to happen in the ARA region as well?
RVG: We do not foresee a huge restructuring of the bunker market in ARA at the moment. There is no significant change or condition that an applicant must invest in. That may however change in the future if the MFM will be mandated, though I doubt it.

UE: Work is going on at the IMO to draft an "indicative example" of a bunker licensing scheme that can be used as a framework by member States for voluntary adoption. What do you think of this? Is it possible to draft a "one size fits all" framework?
RVG: A 'one-size-fits-all' for all ports is wishful thinking, and would be nice. However, most ports are structured in different ways, so a framework or guidance on what the licence should contain would be the most fitting proposal. As you know we are also in consultation with IBIA to see if we can share our experiences with the development of the licence with other (major) bunker ports. It would be nice for the shipping industry to have one standard practice on bunkering in a safe and sound way in ports.

UE: Setting up the Port of Rotterdam bunker licensing system was a large and complex task. To what extent were you able to draw on the examples set by Singapore and Gibraltar?
RVG: We had extensive interviews with Gibraltar and Singapore. Both ports are managed differently than the port of Rotterdam. Both Gibraltar and Singapore are quite strict on sampling and, Singapore in particular, on quantity by MFM. From both ports we copied the suggestion of a reporting centre.

The interviews were mostly focused on how do you perform checks, how did you implement the licence, what were your experiences with the licence, and what were the lessons learned. Both issues, sampling and quantity, are addressed in the licence, and we are monitoring the complaints closely in order to adjust the license if necessary.

UE: The licence is currently centred on the bunker fuel transporter. Can we expect other parties in the bunker supply chain to be subjected to licence requirements in the future? And would it be local, like the Rotterdam bunker transporter licence, or perhaps national?

RVG: As said before, we are now setting up a project team for the (local) licence for bunker suppliers. The focus of this license will be on quality and reliability. Specific requirements for quality in bunker fuel are somewhat lacking, other than flashpoint or sulphur content, there is no legal requirement on the fuel. Next to these obligations there is only the (non-binding) ISO 8217 standard. If the ISO standard is mentioned in the licence it can and will be enforced in the port. We are also looking to take a further step to include the list of undesirable substances (We have a list on our website).

UE: The Rotterdam bunker licence for bunker fuel transporters covers the bunkering or debunkering of residual fuels and distillates (fuel oil and diesel) and biodiesel. Can a similar licence be used for other types of fuel in the future, as the industry moves toward low or zero-carbon fuels?

RVG: Licensing is not a primary goal of the Port Authority; there must be a motivation to do so. In case of LNG bunkering, there is a safety aspect involved, in regular, conventional fuels an environmental and transparency aspect. With other fuels it remains to be seen if a licence is necessary.



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VLSFO – FACT VS FICTION

IMO 2020 compliant fuels have been in use for over a year, largely without incident. So why the continued vilification? IBIA's Unni Einemo lays out the facts

Before the IMO's 0.50% sulphur limit for marine fuels took effect on 1 January 2020, there was a lot of speculation about the nature of the IMO 2020-compliant very low sulphur fuel oil (VLSFO) blends, and how they would compare to the high sulphur fuel oil (HSFO) blends that were the predominant fuel for the world fleet prior to 2020.

Fear of the unknown is natural and some apprehension was justified, but there was a lot of exaggeration and scaremongering. Already, prior to 2020, IBIA and others had dispelled myths and cleared up misunderstandings about VLSFO many times, and worked hard to help stakeholders prepare for the change and steer clear of anticipated problems. But the same negative misconceptions keep cropping up again and again as inaccurate or incomplete information is recirculated.

Let's look at some of the claims about VLSFO and try to separate fact from fiction.

"There is no specification for VLSFO" is a misconception

A prevailing misunderstanding prior to 2020, and still today, is that there is no specification for the new IMO 2020 compliant blends, or VLSFO.

The fact was, and still is, that VLSFOs – just like HSFOs – are blends, and must be blended to meet ISO 8217 specifications in order to be commercially viable.

Fuels with maximum 0.50% sulphur can be classified in accordance with ISO 8217 Table 1 for distillate marine (DM) fuels or Table 2 for residual marine (RM) fuels, which define the maximum, and some minimum, parameters limit for a number of fuel grades (specifications).

ISO 8217:2017 specifies limits for seven categories of distillate fuels (four DM and three with up to 7% FAME called DF) and six categories of residual fuel (RM grades). There are differences between them with regards to the specified minimum and maximum limits. The most common distillate is DMA marine gas oil (MGO), followed by DMB marine diesel oil (MDO).

The six categories in ISO 8217:2017 - Table 2 Residual marine fuels range from very high density/high viscosity RMK, to fuel grades that are close to distillates such as RMA. The most commonly sold fuel grade prior to 2020 was HSFOs with maximum 3.50% sulphur classified as RMG 380 (max. 380 cSt at 50°C RM fuels), followed by RMG 180 (max. 180 cSt at 50°C RM fuels) and RMK 500 (max 500 cSt at 50°C) RM fuels.

Price reporting services, prior to 2020, typically reported bunker prices as IFO 380, IFO 180, MDO and MGO, differentiating between regular (high sulphur) and low sulphur products meeting regulatory limits such as 0.10% for emission control area (ECA) fuels.

Unfortunately, with the advent of the 0.50% sulphur limit, fuels are now lumped together as just one category, either VLSFO or 0.50%S fuels, in price reporting. Also, a lot of bunker delivery notes (BDNs) say just "VLSFO" instead of specifying the ISO 8217 grade it conforms to. It is easy to see how this has contributed to the idea that there is no specification for VLSFO, which – after all – is simply a description of either a distillate (VLSFO-DM) or residual (VLSFO-RM) fuel grade that conforms to a maximum 0.50% sulphur limit.

VLSFOs typically have lower density and viscosity than HSFOs because to reduce the sulphur content, more light and less viscous blend stocks are required. There are, however, wide variations depending on which blend components have been used (more on that later).

Bunker fuel purchase contracts still require fuels to meet ISO 8217 specifications, mostly RMG 380, so VLSFOs will have to meet RMG 380 specifications in order to be placed on the market,

or other specifications (e.g. RMG 180) as required by purchasers.

It would help if all BDNs specified a grade, e.g. RMG 380/RMG 180/ RMD 80, to better describe the fuels provided. Meanwhile, unless the BDN specifies that the product is a high density/high viscosity grade such as RMK 700 or RMG 500, the default assumption is that VLSFOs meet RMG 380 specifications. This sets maximum limits for density, viscosity, catalyst fines (Al+Si), sediments, pour point, acid number etc. but the fuel may have density and viscosity well below the upper limits, which has a significant impact on how the fuel should be handled once onboard the ship.

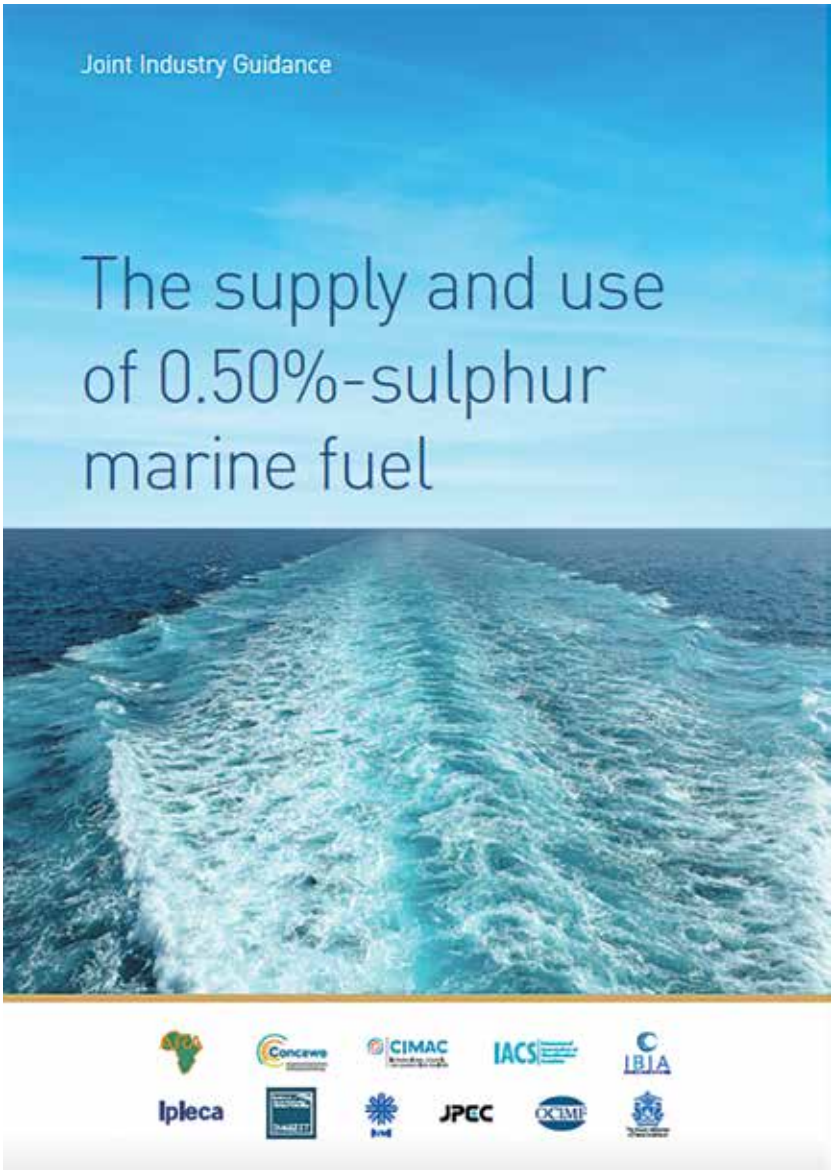
In September 2019, "ISO/PAS 23263:2019 Petroleum products — Fuels (class F) — Considerations for fuel suppliers and users regarding marine fuel quality in view of the implementation of maximum 0,50 % sulphur in 2020" was published. It confirms that ISO 8217 specifications apply to fuels meeting the 0.50% sulphur limit, and provides technical advice on fuel characteristics that might apply to particular fuels for kinematic viscosity, cold flow properties, stability, ignition characteristic and catalyst fines. In addition, it provides information on how to consider compatibility between fuels, including test methods for checking whether fuels are compatible.

Addressing VLSFO safety concerns

Prior to 2020, the prevailing fears were that compliant fuels would not be safe to use due to instability, incompatibility, non-compliance with the SOLAS and ISO 8217 flashpoint limit of minimum 60°C, excessive cat fines, poor ignition and cold flow properties, high acid number as well as contaminants which are not specified in the ISO 8217 standard.

The fact is that IMO 2020 compliant fuels still have to be blended to meet ISO 8217 specifications, which address all of those issues apart from compatibility, which is a fuel management issue. Unspecified contaminants are covered under Clause 5, "General requirements". The latest edition, ISO 8217:2017, says fuels shall be made from hydrocarbons and not contain any additive, added substance or chemical waste at a concentration that jeopardizes the safety of the ship or adversely affects the performance of the machinery, is harmful to personnel or contributes overall to additional air pollution.

There was no shortage of guidance to help stakeholders prepare for safe management of VLSFO. IBIA was a major contributor to the IMO's work in this area, as we are one of the NGOs with consultative status that bring relevant expertise through submissions and discussions in working groups and meetings. IBIA also took part in producing the "Joint Industry Guidance on the supply and use of 0.50% – sulphur marine fuel" to give stakeholders tools to prepare for safe supply and use of IMO 2020 compliant fuels. This publication was developed by experts from across shipping, refining, supply and testing of marine fuels and made available to all in August 2019.





Thanks to the industry's preparations and efforts to raise awareness, the transition from HSFO to mainly VLSFO, but also some MGO, went more smoothly than most had anticipated. Managing VLSFO puts demands on ships' crew due to wide variations in key handling characteristics like viscosity and cold flow behaviour in VLSFOs provided to the market. They also need to pay close attention to avoiding co-mingling of different batches of fuel onboard due to the risk of incompatibility. These challenges are not new. The industry has known about them for decades as they also apply to the well-known HSFOs, but the VLSFOs are more variable.

There have been some incidents of VLSFOs causing operational problems, but nothing like the operational nightmares that had been predicted prior to 2020. VLSFOs exceeding the ISO 8217 limit of max. 0,10% for sediment, an indicator of fuel stability, has been higher than what was seen for HSFOs pre-2020, but numbers are still low at no more than 1.5% of all samples tested during the first half (H1) of 2020, according to data collected by the International Organization for Standardization (ISO).

VLSFOs often have higher pour point temperatures, but as long as the temperature is known, it can be managed, ensuring the fuels are sufficiently heated to stay liquid and maintain optimum flow characteristics.

The 'Frankenstein fuel' allegory

In order to meet the lower sulphur limit, the blend recipes for VLSFO are different from HSFO. There has been an element of secrecy about VLSFO production methods and blend formulas among companies that were working on achieving well-performing fuels in preparation for IMO 2020, and some sought to patent their methods.

Maybe it was the secrecy, combined with ignorance about how fuels are produced and/or limited initial knowledge of which blend components would be used, that led some quarters to refer to VLSFO as "Frankenstein fuels". Presumably, this moniker was meant to refer to creating "monster" fuels due to an experiment gone wrong.

In the novel by Mary Shelley, a young scientist, Victor Frankenstein, undertakes a mysterious laboratory experiment to create a sentient being out of human body parts and chemicals. Frankenstein's creation started out as a kind and gentle giant, but his looks scared anyone who saw him, and the way humans treated him turned him into a monster.

Let's be clear: all oil-based marine fuels are blends of various refinery streams, and the blending process has two main targets: to meet ISO 8217 specifications (including the minimum 60°C flashpoint limit and General Requirements), and a specific sulphur limit in accordance with MARPOL Annex VI or local regulatory requirements. HSFOs and VLSFOs are created in the same way, but the components vary.

Some VLSFO blends have been problematic, but the same applies to HSFO. Judging all VLSFOs, or HSFOs for that matter, on the basis of a few bad examples is as meaningless as judging all cyclists or drivers on the basis of a minority that behaves badly.

Referring to VLSFOs as "Frankenstein fuels" is scaremongering, as it implies that all VLSFOs are experiments gone wrong. After more than a year when the majority of the global fleet has been using VLSFOs without incident, it is time to put the Frankenstein allegory to rest.

Quality concerns aside, another reason VLSFO was referred to as a "super-pollutant Frankenstein fuel" was the theory that the shift from HSFO to VLSFO would lead to a massive increase in black carbon emissions. Let's look at where that came from.

VLSFO and black carbon emissions

In January 2020, VLSFO came under attack amid claims these blends would cause an increase in emissions of black carbon (BC) due to being more aromatic than the HSFO they were replacing. IBIA and others in the industry were baffled, as the expectation was that VLSFOs would generally be less aromatic and more paraffinic in nature than HSFOs.

These claims originated from conclusions drawn from a measurement study submitted to the IMO in mid-November 2019, investigating the potential link between fuel specimens with high aromatic content and the formation of black carbon. The study, submitted by Germany and Finland to the seventh session of IMO's Sub-Committee on Pollution Prevention and Response (document PPR 7/8), said the tested 0.50% sulphur fuels were ordered as "possible sample mixtures from refinery-streams most likely to be used in 2020" and that "high aromatic content in future low sulphur marine fuels after 2020 is expected."

The three ordered VLSFO specimens used in the measurement study had aromatic content ranging from 70% to 95%. By contrast, the study used HSFO with 50% and MGO with 20% aromatic content.

The subject was thoroughly discussed at PPR 7 in February 2020, where it was made clear that the VLSFO specimens used in the measurement study were not representative of the VLSFOs actually in the market. Suggesting, therefore, that VLSFOs would cause an increase in black carbon emissions was based on flawed assumptions about the nature of the fuels that were expected to come on the market.

Data available in February 2020 suggested that VLSFOs in the market until then on average were more paraffinic in nature than the HSFOs they have replaced.

Papers submitted to PPR 8, scheduled to take place virtually from 22 to 26 March this year (2021), provide further comment and evidence as to why linking VLSFO to an increase in BC emissions is flawed, as the majority of VLSFOs that have actually been supplied to ships appear to be less aromatic than HSFOs, as documented by fuel testing data. It should also not be overlooked that the operational pattern of the engines, as well as maintenance and general condition are equally important factors - if not more so - in the tendency to emit BC.

VLSFO vs HSFO test data

ISO/ TC28/SC4/WG6, the committee in charge of ISO 8217, has analysed fuel testing data from fuels actually delivered to ships, gathered from most of the major testing agencies for the first half (H1) of 2020, and compared these with HSFO data for 2018.

"This collected data shows that 2020 RM VLSFOs have lower viscosity, lower density, lower MCR and lower CCAI, higher net specific energy and along with the percentage of VLSFOs having higher pour points point to VLSFOs in general tending to be more paraffinic in nature. As a result, VLSFOs, in general, are proving to have enhanced ignition and combustion properties over that of HSFOs and would be expected to reduce the tendency to form BC emissions in comparison to HSFO," says a paper submitted by ISO/ TC28/SC4/WG6 to PPR 8.

Apart from demonstrating that VLSFOs, at least those supplied during H1 2020, are likely to emit less black carbon than HSFOs, the data also suggest that VLSFOs generally are better fuels than HSFOs in terms of energy content and how well they burn.

ISO/ TC28/SC4/WG6 has submitted a more detailed review of marine fuel quality of bunkers supplied in H1 2020 to the 76th session of the IMO's Marine Environment Protection Committee, looking at both DM marine fuels and RM VLSFO, drawing comparisons with HSFO data for 2018.

The most notable change is the broader spread of viscosity of VLSFOs to that of HSFO, requiring increased attention to fuel management practices. 95% of RM HSFO samples in 2018 had a viscosity at 50°C above 180 cSt, compared with just 13-14% of RM VLSFO samples in the first half of 2020. The majority (80%) of RM VLSFO samples had a viscosity at 50°C between 80 and 180 cSt and 6.5% were below 20 cSt – with the average at 105 cSt compared to 355 cSt for HSFO in 2018.

There is good news regarding cat fines, as only 0.2% of H1 2020 VLSFO samples had Al+Si exceeding 60 mg/kg compared to 1.5% of 2018 HSFO samples. 60 mg/kg is the upper limit for RMG, the most common fuel grade, in ISO 8217:2017. Moreover, the lower density and viscosity of most VLSFOs mean that cat fines are easier to remove during normal onboard fuel treatment prior to engine injection.

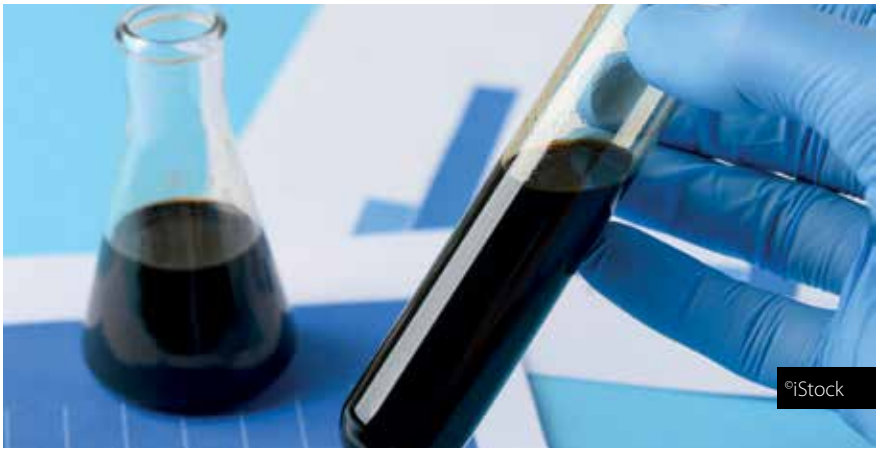
Flashpoint off-specs always get a lot of attention, as a flashpoint below 60°C is not only outside the ISO 8217 specification, it is also a breach of SOLAS regulations. Looking at the H1 2020 data, ISO noted there had been a small increase in DM samples with a flashpoint below 60°C compared to the 2018 DM samples, but still below 1% of all samples. It found that 99.9% of RM VLSFO samples had a flash point at or above 60°C and 0.08% had a flash point between 55°C and 60°C. In both 2018 and 2020, more than 99.5% of HSFO samples had a flash point at or above 60°C. Overall, then, it seems VLSFOs have been no more prone to off-spec flashpoint than HSFOs, while the share of DM samples below the limit showed a small increase.

The most noticeable quality issue from a fuel safety perspective is an increase in the percentage of samples exceeding the Total Sediment (TSA) specification limit of max. 0.10%, indicating a fuel that is either prone to asphaltene precipitation (unstable) or contains extraneous dirt – both of which result in sediments that affect separators and filters. The ISO review found that 0.7% of the H1 2020 RM VLSFO samples showed TSA ranging from 0.10 up to 0.15%, and 0.8% had TSA exceeding 0.15% in comparison to 0.09% and 0.14%, respectively, for the RM 2018 HSFO samples. That means 1.5% of H1 2020 VLSFOs samples tested above the specification limit for TSA, compared to 0.23% of HSFO samples in 2018.

Sludging caused by unstable fuels is one of the most serious operational concerns. Further complicating the picture is the fact that problems have been reported on some ships not only for VLSFO exceeding the TSA/ TSP specification limit, but also for VLSFO having TSA/TSP well below the maximum specification limit.

The root cause for a ship experiencing sludging can be hard to determine. It can be an inherent stability problem in the fuel which was not discovered during routine testing; some fuels have limited reserve stability causing them to deteriorate faster. It can be due to comingling, as two fuels that are stable in themselves may be incompatible, meaning the mix becomes unstable (e.g. if a new fuel is loaded on top of a previous fuel in the bunker tanks or when fuels are mixed in the fuel system (including settling and service tanks) during change over). Another possible factor is too high temperature during storage and treatment of the fuel onboard the ship.

Further investigation is ongoing to better understand the sediment formation tendency of VLSFOs. We need ships, suppliers and fuel testing agencies to work together on this and share information to try to get to the root of these problems. By identifying the factors behind these problems, they can be avoided or mitigated.





Where does the bad reputation come from?

The study referred to above (PPR7/8) caused a reputation for VLSFO as a more polluting fuel than HSFO by linking it to high aromatic content and an increase in black carbon emissions. This has been hard to shake, despite all the evidence to the contrary. But where did the assumption come from that VLSFOs would have high aromatic content?

PPR 7/8 makes reference to a 2018 research paper which suggested that 0.50% sulphur fuels were expected to be highly aromatic. The objective of the research was to look into the combustion of fuels that have caused operating difficulties in marine engines and the paper postulated that 0.50% sulphur fuel blends could lead to more fuels with poor ignition and combustion characteristics, as the authors identified refinery streams that typically have high levels of aromatics as potential blend components for lower sulphur fuels.

Indeed, prior to 0.50% sulphur fuels coming into the market, there was speculation that blenders would increase the use of by-products from the fluid catalytic cracker (FCC) process in refineries, including slurry oil, or clarified slurry oil, heavy cycle oils and light cycle oils, all of which typically have high aromatic content.

FCCs use specialised aluminium and silicon particles as catalysts. Some of these particles, the cat fines or Al+Si, end up in the slurry oil and when used as a blend component, it therefore introduces them to bunker fuels. The previous 1.00% sulphur limit in emission control areas saw a marked increase in cat fines in RM fuels produced to meet this limit compared to HSFOs, largely attributed to increased use of slurry oil as a blend component to reduce the sulphur content of RM fuels.

Some thought this would get even worse for RM fuels with the 0.50% limit, but it doesn't seem to have been the case. Indeed, the test data compiled by ISO/TC28/SC4/WG described above show that VLSFOs have, on average, less Al+Si than HSFOs.

Another blend component that appears to be used extensively in VLSFOs is vacuum gas oil (VGO). This is a heavy distillate most commonly processed in FCCs to produce gasoline. It makes excellent marine fuel with a high energy content, but because it is highly paraffinic, mixing it with mainly aromatic blend components could create unstable fuels. zAromatics have an important role to play in the stability of RM fuels because they help to keep asphaltenes in suspension; introducing too high a proportion of paraffinic components into the blend can upset this balance and cause asphaltenes to precipitate, causing heavy sludging.

This has caused fears of unstable fuels coming into the market, and increased the onus on ship's crew to ensure segregation of fuels as each new batch can be materially different and hence incompatible with other fuels onboard.

The prevalence of mainly paraffinic fuel with high pour point temperatures indicates that a lot of VGO or other distillates has entered the marine fuel pool, but thanks to good practices, sludging caused by mixing incompatible fuels has largely been avoided. For any ship operator concerned about being able to manage potentially incompatible fuels, they have the option of running on distillates, as they have no asphaltenes and hence no risk of incompatibility causing asphaltenic sludge. It will cost a bit more, but the choice is there.

Conclusions about VLSFO so far

VLSFOs have been the main answer to the need for ships to meet IMO 2020 requirements, accounting for a bigger share of total marine fuel use in 2020 than marine distillates, exhaust gas cleaning systems with HSFO and alternative low emission fuels like LNG or methanol combined.

It has led to a 70% cut in total sulphur oxide emissions from shipping, according to the IMO. This is good news for air quality and hence human health, the protection of which was the key objective behind the reduced sulphur limits under MARPOL Annex VI.

Apart from a small share of VLSFOs being prone to sludging, overall, the quality of VLSFOs has so far been better than HSFOs, with higher energy and better ignition and combustion properties.

Overall, around 3% of all VLSFO samples tested conclusively outside ISO 8217 specification limits in 2020 globally, which is no worse than during preceding years. Some fuel testing agencies report a higher percentage of off-specs, as they do not consider the inherent variability in test results and disregard the 95% confidence limit of the test methods.

The most prevalent off-specs seen in 2020 were for sulphur and sediment, but on average, RM VLSFO sulphur content during H1 2020 was 0.45% versus 2.61% for HSFOs tested in 2018, according to the review by ISO/ TC28/SC4/WG6.

VLSFO has some challenges, especially due to the huge variations in its composition and key characteristic, which requires operators to pay close attention to fuel management. Suppliers can help by providing more detailed relevant information to buyers about the fuels they supply,

beyond just putting "VLSFO" on the BDN, and declaring the sulphur content and density as required under MARPOL Annex VI. VLSFOs could, for example, be described more accurately by applying ISO 8217 grade names to various products that reflect their composition more accurately, so we are not comparing RMB 30 (maximum 30 cSt at 50°C) with RMG 380 (maximum 380 cSt at 50°C), for example.

There will always be those who will seek to give VLSFOs a bad reputation for their own reasons, whether it relates to protecting the environment or promoting specific business interests.

VLSFOs have provided an effective response to IMO 2020 and are the preferred option for most ship operators.

We should not let ulterior motives or misconceptions cloud our judgement about VLSFO, but of course also not ignore – and try to resolve - any real issues that arise. Let's get the facts and put them into context to ensure a more balanced view.



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RESEAWORLD - THE NEXT GENERATION

World Bunkering sat down with Valeria Sessa of Reseaword to see how they are adapting and thriving in the current climate

WB: How was 2020 for Reseaword? How did the covid situation and the fall of oil prices affect your business?
VS: 2020 has been a complex and tremendously difficult year for the entire world and our sector has certainly faced a great strain due to the pandemic. Despite everything, our year, work-wise has gone better than we expected.

The covid situation did not bend our volume of business. On the contrary, the decrease in the price of fuel oil created a greater purchasing power and, consequently, gave our Shipowners the possibility to buy at better prices.

The shipping industry guaranteed the supply of raw materials and essential goods and, despite the difficulties of this year, continuously produced results of enormous efficiency in order to satisfy customers and citizens worldwide.

I believe that due to the high quality standards of the maritime sector its made it possible to maintain the essential services we offer, in spite of all the difficult times we are all facing.

WB: Did new 2020 regulations have any effect on bunkering in your region?
VS: From the beginning of January 2020 the new regulations deciding the change of the level of allowed emission of sulphur in the atmosphere from 3.5 to 0.5. This created strong uncertainties at first regarding price trends and the availability of products that respect these parameters.

Our efforts concentrated solely on supporting our clients, developing the best solutions in terms of availability of product demanded at the best price possible in different ports and geographical areas.

Synergies with physical suppliers and the comprehensive knowledge of our region made it possible for us to give prompt answers/ solutions to our clients.


Giovanni Battista Della Gatta

In light of these new regulations that benefit the environmental impact of our sector, more green alternatives are also being evaluated in Italy. New alternative sources are being developed such as LNG, Hydrogen and electrification of docks.

From the larger discussion of the environmental impact of our actions, we have gained awareness that even the smallest actions are fundamental to make a change towards green sustainability. For this reason we have decided to make our offices plastic free and gifted our employees personal stainless steel water bottles while also extending this idea to our clients and suppliers. It is important for everyone to do their part, however small it may seem.

WB: With all shipping and bunkering events and exhibitions cancelled and business travel limited in 2021, did you find IBIA activity helpful during the covid crisis?
VS: Yes, very much so. IBIA's activities, as an association, have been of immense support in this historical moment.

This network and its activities has done an important job in keeping the spirit of IBIA and sense of belonging it creates as strong as ever, giving all of its members the possibility to stay informed and discuss topics.

WB: How was the start of the year 2021 for Reseaworld and what are the plans for this year?
VS: Our vision for this new year is to be positive and we are hopeful for a comeback for all shipping and economic activities.

Despite the moment we believe our relations and skillset, linked to the culture of shipping and trust, are the essential elements to survive in our sector.

Our company is young and finds its strength in a young team, rooted in an important past that grows in the present and looks towards the future with great confidence and positivity.

Our goal for 2021 is to develop our activity in the oil lubricant sector to amplify our range of products offered while guaranteeing our current high quality performance.

We plan to better our business quality by obtaining new certifications, in addition to ISO 9001:2015, such as the Safety Management System and Ethical Code certifications required by Italian law.

We are also evaluating collaborations with universities and institutions, paving the way for future projects to be born.

WB: Your company faces tough competition in this volatile market. What is the key to success in running a family business in bunkering?
VS: A family activity is always a guaranteed success when you are able to trust the younger generation to "steer the vessel" in the right direction - with trust and a great sense of responsibility.

I am particularly proud of my three children.

My daughter Luciana is my right hand bunker trader whereas my other daughter Alberta will be joining us when she completes her studies in Economics of the Sea.

My son Giovanni gained experience abroad and decided to return home and work with us at the beginning of the year. Trusting the younger generation means having a positive vision towards the future, new skills and new perspectives.

We take pride in our company culture at Reseaworld, this translates in culture of the sea, history and a tradition that cannot be imitated.

Our experience from the past is transformed in accordance with the times, making the present the future, day by day.

In light of my strong belief in the value of the younger generation, this year I will be working on the creation of a scholarship that will give the students of my old highschool the possibility, starting from the sea, to travel and broaden their horizons in the necessary manner to prepare for the future. The idea is to underline the importance of learning from different cultures and heritages.

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RSW RESEAWORLD MARINE FUEL AND OIL



Alberta Della Gatta, Valeria Sessa, Luciana Della Gatta

MAERSK GOES FOR METHANOL

Major container carrier says it will launch "world's first carbon neutral liner vessel" in 2023

Liner shipping giant A.P. Moller–Maersk has announced that it plans to speed up decarbonisation with a methanol-fuelled feeder vessel on the water in two years' time. It said this will be a scalable pilot project, offering a carbon neutral product to customers and incentivising fuel suppliers to increase production of the fuels of the future.

The 2023 launch date puts Maersk seven years ahead of its initial 2030 ambition for a carbon neutral vessel. It is now intended that all future Maersk-owned newbuildings will have dual fuel technology installed, enabling either carbon neutral operations or operation on standard VLSFO.

"A.P. Moller - Maersk's ambition is to lead the way in decarbonising global logistics. Our customers expect us to help them decarbonise their global supply chains, and we are embracing the challenge, working on solving the practical, technical and safety challenges inherent in the carbon neutral fuels we need in the future. Our ambition to have a carbon neutral fleet by 2050 was a moonshot when we announced it in 2018. Today we see it as a challenging, yet achievable target to reach," said the company's CEO Søren Skou.

According to Maersk, about half of its 200 largest customers have set, or are in the process of setting, ambitious science-based low or zero carbon targets for their supply chains, and the figure is on the rise. Maersk's methanol feeder vessel will have a capacity of around 2,000 TEU and be deployed in one of its intra-regional networks. While the vessel will be able to operate on standard VLSFO, the carrier plans to operate the vessel on carbon neutral e-methanol or sustainable bio-methanol from day one.

"It will be a significant challenge to source an adequate supply of carbon neutral methanol within our timeline to pioneer this technology. Our success relies on customers embracing this groundbreaking product and strengthened collaboration with fuel manufacturers, technology partners and developers to ramp up production fast enough. We believe our aspiration to put the world's first carbon neutral liner vessel in operation by 2023 is the best way to kick start the rapid scaling of carbon neutral fuels we will need," said Henriette Hallberg Thygesen, CEO, Maersk's Fleet & Strategic Brands.

According to a statement, both the methanol-fuelled feeder vessel and the decision to install dual fuel engines on future newbuildings are part of Maersk's ongoing fleet replacement. It added: "CAPEX implications will be manageable and are included in current guidance."

It continued: "A carbon neutral future for shipping requires innovation, test and collaboration across multiple industry partners. Maersk continues to explore several carbon neutral fuel pathways and expects multiple fuel solutions to exist alongside each other in the future. Methanol (e-methanol and bio-methanol), alcohol-lignin blends and ammonia remain the primary fuel candidates for the future."

A key partner in the project will be the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping, an independent, non-profit research and development centre, that works across sectors, organisations, research areas and regulators to accelerate the development and implementation of new energy systems and technologies.

The Methanol Institute, which advocates the adoption of methanol as a fuel in marine and other transport modes, has welcomed the announcement. Its COO, Chris Chatterton, said: "Maersk is once again showing industry leadership in adopting renewable methanol as a key plank in its strategy towards carbon neutrality. Methanol is proven as a clean, efficient and safe marine fuel that offers immediate decarbonization benefits to vessel operators with substantial net GHG reductions, full compliance with IMO2020 and a pathway that leads to net carbon neutrality as production of renewable methanol grows."



Researcher claims Nile dams caused warming of North Atlantic, not CO_2

Edinburgh, UK-based researcher Conor McMenemie claims to have discovered a relationship between human efforts to control the annual River Nile flood in Egypt to levels of rainfall further down wind. Vast amounts of evaporation from the flood had been a component in forming of one of the planet's major equatorial weather systems. He says that his research found human interference in a previously unrecognised weather system.
This human activity, and not carbon emissions, he says inadvertently caused an increase in the Atlantic Ocean temperatures and thus in the number and intensity of hurricanes.

The research indicates that Atlantic hurricanes originate in a relatively small area off the West African coast. This body of water, which he has called the 'Summer Sea', has been increasing in temperature due to a reduction in (African Easterly Wave marine stratocumulus) cloud cover, making the ocean surface warmer, fuelling hurricanes. The original Nile flood helped form the African Easterly Wave (AEW) weather system, which in turn created these huge cloud-scapes and had kept the seas underneath cooler. Since the Aswan dams were built on the Nile in 1902, then enlarged in the 1960s, it no longer floods, thus the flood's evaporation no longer initiates this climatic chain reaction, which means that the clouds don't form and the sea water is warmer, causing more extreme weather around the Atlantic basin.

McMenemie claims multi-billion-dollar climate industry and academia are censoring the flow of information to conform to the emissions theory of global warming.
He claims he has attempted to share his data with leading climate change policymakers and academics around the world, but has been told the information is "too hot to handle", as it puts into question a focus on reducing carbon emissions to fight the climate emergency.
However, his research was presented at the 101st meeting of the American Meteorological Society in January.
He asserts that governments and academia are too focused on reducing carbon emissions to consider the bigger picture, saying: "Much as it was widely believed that global warming was due to a hole in the ozone layer not that long ago, carbon emissions have become the new focus for global environmental policy. This speculation has become a multi-billion-pound global economy as governments and businesses act to meet carbon reduction targets, however our research shows it is changes to our weather system which is having the observed warming and climatic impact."

Rotor sail design collaboration

UK-based classification society Lloyd's Register (LR) has signed a joint development project (JDP) with Anemoi Marine Technologies (Anemoi) and Shanghai Merchant Ship Design and Research Institute (SDARI) to develop a series of energy efficient vessel designs equipped with rotor sails.

The project is intended to address one of the most significant roadblocks for the commercial adoption of emission abatement technology – the collaboration between original equipment manufacturer, designer, regulator and shipowner to agree a pathway for the commercial success of installed technology onboard vessels. Along with the installation of rotor sails, the vessels could also incorporate new hull forms, new energy management systems, a new powering arrangement and modified operational requirements.

Proposed ship types include 85,000 dwt and 210,000 dwt bulk carriers, a 325,000 dwt very large ore carrier (VLOC), a 114,000 dwt aframax tanker, a 50,000 dwt MR tanker and a VLCC. LR will review the designs in accordance with the latest regulatory requirements and will ensure it meets LR's Rules to issue an Approval in Principle (AiP).



Cruise lines "only aim at modest CO_2 reduction goals"

Cruise companies are not ambitious enough regarding their CO_2 emissions for the next decades, according to Poland-based Gliese Foundation, which analyses annual sustainability reports from the main cruise lines.

Gliese says that the lines "support the modest goals by the IMO in its preliminary strategy, but none is committing as Maersk has done—carbon neutrality for the year 2050". It adds: "The cruise companies are not involved in the long-term discussion about the future's green fuels; that is disappointing."

The research foundation was unenthusiastic about the use of LNG. It cautioned: "The cruise industry is ecstatic about its new LNG vessels or the ordering of LNG newbuilds. The fuzz is even noisier than in the container carrier industry. The cruise industry talks about LNG almost as if it were a green fuel when it is not.

The mention of fuel cells or biofuels is marginal, and there is no mention of ammonia or methanol. LNG-powered engines' benefits are undeniable for SOx, PM, and NOx, but the amount of CO_2 remains considerably high, even if it reduces by 20% or 25%. Let's hope that the cruise industry will not be carried away in the next years by an LNG euphoria, ignoring the maritime industry's critical challenge for the 21st century—creating the Zero-Emission Vessel (ZEV)."

However, Gliese acknowledged that although 2020 was a terrible year for the cruise sector the information in most of the cruise lines' reports is of "great quality, similar or even better and deeper than the quality of the top container carriers, the other sector well advanced in the preparation of sustainability reports".

Moreover, according to Gliese, cruise companies deal with their HORECA (food service and hotel sector) environmental reporting "much better than the largest hotel chain in the world".

ECSA calls for IMO market based measure

In new developments, EU shipowners have called for the establishment of a fund coupled with targets for fuel suppliers to decarbonise shipping.

The European Community Shipowners Association argues that the European Commission should address fuel suppliers by introducing sub-targets to make low- and zero carbon fuels available for shipping and by increasing the multiplier for renewable fuels used in the maritime sector under the Renewable Energy Directive (RED).

It says that a fuel standard as a requirement for ships instead of fuel suppliers under the FuelEU Maritime proposal would risk failing to deliver emissions reductions and would be challenging to enforce.
If a Market Based Measure (MBM) is introduced, a fund could invest the revenues to support the uptake of these fuels.

A global approach must be the cornerstone of the EU's policies and any regional measures would risk undermining the international negotiations at the IMO level, says ECSA. As the shipping industry is fully committed to decarbonisation, success hinges primarily on the introduction of zero- or low-emission, safe and widely available alternative fuels, which do not yet exist. ECSA advocates a two-pronged approach if any EU measures are to be introduced:

ECSA calls on the EU to establish a fund under an MBM and using the revenues to finance R&D projects and to bridge the price gap between new and conventional fuel. It also wants the EU to require fuel suppliers to include a certain percentage of low- and zero carbon fuels in their offering by introducing sub-targets and a higher multiplier for low- and zero-carbon fuels under RED.

"Introducing the right incentives and requirements for fuel suppliers in order to make low- and zero-carbon fuels for shipping available in the market is a prerequisite for the decarbonisation of the sector. As with the uptake of all new fuels, the chicken-and-egg dilemma can only be addressed by the introduction of appropriate requirements for fuel suppliers. A fund under an MBM could support the uptake of these fuels," said Martin Dorsman, ECSA Secretary-General.

A fund under an EU MBM would also minimise the administrative burden for the sector and would make sure that all revenues are invested in its energy transition.



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Refining and production is an ongoing issue in parts of the Caribbean

OUT WITH THE OLD

While the economic aftershocks of 2020 will be with us for some time yet, there are still reasons to be guardedly optimistic going into 2021 and beyond across the Americas and the Caribbean, as John Rickards writes

To say that 2020 was a challenging year for the bunker sector is stating the obvious, but few regions have seen fuel demand as affected by Covid-19 and its attendant ills as the Caribbean. While a couple of larger hubs have tried with varying degrees of success to lure Panama- and US-bound cargo traffic for bunker calls, it's the cruise sector that still shapes the bulk of regional demand. For the majority of the past 12 months there's not been a cruise sector to service. Throw in the need to source IMO 2020-compliant fuels at a time when most island states' own refining capabilities are at a historically low ebb and the coming year promises some hard decisions.

The Limetree Bay refinery in St Croix, the US Virgin Islands, was originally slated to begin production of IMO 2020 fuels in late 2019, having been mothballed from 2012 until its purchase by US-based energy capital firm ArcLight and fuel trader Freepoint Commodities in 2016. A deal was inked in late 2018 with BP, which would supply 200,000 bpd of crude and buy the refined output, but start-up issues caused by the length of time the 210,000 bpd facility had been out of service, budget overruns - to the tune of over $1bn - and then Covid's crippling effect on Caribbean fuel demand have meant that the refinery complex still hadn't produced anything but spotty amounts of semi-processed fuels by the close of the year.

BP reportedly (the company declined to comment to World Bunkering) issued Limetree Bay with an ultimatum, threatening to pull out of the deal altogether if it couldn't begin full production by mid-January. However, at the time of writing the refinery was said to have begun reasonably stable fuel production, with BP due to load its first consignment of MDO from the plant shortly.

If Limetree Bay can finally put its problems behind it, local production of fuels could be a boon to the eastern Caribbean, where shuttering of local production, the implosion of Venezuela and its oil industry, and overwhelming reliance on imports has been the pattern over recent years.

In January, the Trinidadian government rejected a bid from an Oilfield Workers' Trade Union-owned firm for the former Petrotrin refinery in Pointe-à-Pierre citing a lack of credible financing, and then immediately U-turned and offered the company, Patriotic Energies and Technologies, a further 15 days to come up with the US$500m needed to take over the site and its assets. Petrotrin's refinery was closed and the state-run company broken up in 2018 due to enormous losses, mounting debts, and the need for crippling levels of investment to upgrade and replace ageing infrastructure. The refinery's fate has been a political hot potato and the cause of considerable controversy for years, with the enormous outlay counterweighted by the level of employment it offered.

Even if the OWTU/Patriotic Energies bid was successful, it's by no means certain what level of output it might be capable of producing, nor how soon.

There's a similar dilemma to the west in Jamaica, a nation still keen to draw cargo bunkering more than passenger ships. Tendering is underway to overhaul Petrojam's refinery, state-owned and, like Petrotrin's was before, struggling with the economics of the refining business even before Covid.

On top of that, Petrojam spent much of 2020 mired in allegations of cronyism and corruption dating back to the mid-2010s. These allegations led to the resignation of Jamaica's then-energy minister Andrew Wheatley and various board members as well as to three separate Integrity Commission reports into goings-on at the company. These highlighted several alleged criminal breaches. In addition, two former heads of the company - Howard Mollison and Floyd Grindley, himself then cited in the commission reports - have sought millions of Jamaican dollars in damages for wrongful dismissal, with the first of the two cases lost by Petrojam in September.

Eighteen months ago, the Zacca committee recommended to the then-Jamaican government that it quit the refining business and focus instead on Petrojam's terminal and storage farm.

The refinery, it said, was largely kept viable only by government tariffs on imported petroleum products, and even then refining accounted for 43% of Petrojam's income but 70% of its costs. The current government doesn't seem keen to kill off Petrojam's refining capability yet but, particularly in the bunker sector, it would seem that imported fuel is likely to remain the norm.

In a spot of bright news, Prostar Capital announced late last year that it had secured US$15m in investment to expand and upgrade its GTI Statia fuel storage terminal on St. Eustatius. The investment will form part of the US$100m planned two-year upgrade to improve the 14 million barrel capacity terminal's flexibility for better IMO 2020 capability.

"We're excited to receive this ongoing support from our investors as we embark on a shared vision to enhance the performance of GTI Statia's existing infrastructure and attract new, global long-term customers that recognize the strategic value of this terminal in the global energy trading value chain," said Prostar's senior MD Steve Bickerton.

All told, though, a lot in the Caribbean depends on the cruise sector. Business development consultant Eric Evans, speaking at IBIA's annual convention last year, put the cost to the Caribbean and Florida coast bunker market of the post-Covid cruise shutdown at 3 to 4 million tonnes, and with refinery margins elsewhere already squeezed by reduced demand, there's little incentive for a plant like Limetree Bay urgently needing to recoup investment to stick with producing fuel types if nobody wants them in sufficient volume.

The major US cruise companies had tentatively hoped to see at least trial restarts beginning at the end of April. However the state of the US vaccine rollout is still uncertain even though the Biden administration is making this a top priority. Cases are still extremely high and so a summer restart seems more likely, but some analysts suggest that any kind of regular service won't resume until September or October 2021. Carnival, at least, has said it has cash reserves to survive that long without issue, but with a US$10bn loss for the company in 2020, the amount of buffering available to cruise companies must be wearing thin.



The loss of the cruise sector the past year has seriously impacted the market ©Terry Ott/CC-BY



Panama has seen a market squeeze over recent months

PANAMA'S TOUGH TIMES

Like its Caribbean neighbours, Panama has also endured a torrid few months after an early spell in the pandemic when it looked like, difficulties in crew change and onboard inspections aside, the country's shipping concerns might weather the storm reasonably well

Nicolas Vukelja, the CEO Terramar, laidout the problems the country's supplies have endured at IBIA's annual conference. "Big, big issues have come in the last four months," he said. "Sales have come down 30% comparing each month with the month of last year. 30% since July. From January to [October], comparing this year to last year, we are a grand total of 10% under on sales so right now, we are on 3.1m tonnes on sales.

"So, it's getting very competitive, the market in this region. We have more than 30 barges operating. And also Covid was a big issue here. There were policies in some companies here that some shipowners from the start were not giving permission to go on board. That's been an issue with some surveyors also.

"Anything that happens in Panama I've always said I'm sure happens in all ports in the world. We have the same players here, the same majors here, we always buy products from the same refineries in the States or in the Gulf, so Panama doesn't escape from any issue that has happened in other ports.

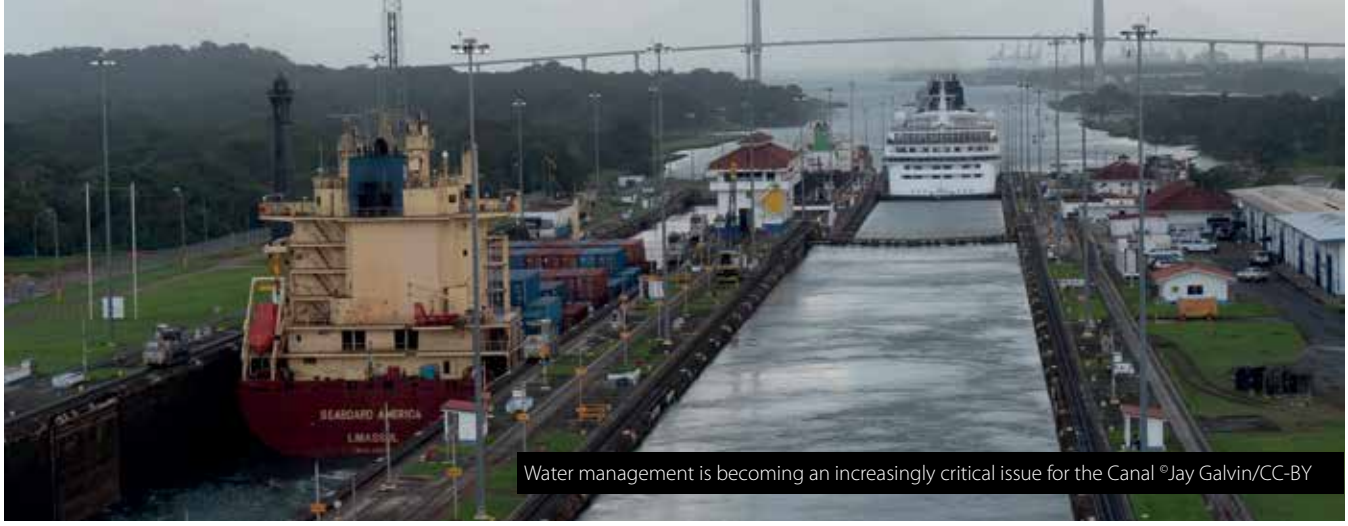
"This has been a very regional issue [Covid and IMO 2020]. I think these two subjects have changed a lot the bunker market here in Panama, in the Caribbean region, in the Americas and Buenos Aires."

Vukelja also touched on the refining question, and the availability of different fuel types, especially given the region's spotty ability to produce IMO 2020-compliant fuel. "Something interesting is that we are buying products from other countries that we didn't use to buy products from. With this IMO specification this is something new that has come also: unbelievably, Panama is exporting to some other small countries in the area that own refineries but the refineries were not prepared to handle IMO 2020, so Panama is exporting some of the product that we already import, so we are doing some transshipment in Panama for some countries in the area, especially in South America."

Strange times indeed. Domestic bunker sales fell off a relative cliff towards the end of 2020 as Covid battered trade - though it should also be borne in mind that comparisons with 2019 are slanted by stocking up of VLSFO ahead of the IMO 2020 switch. The country saw an 11.4% drop in fuel sales to 4.7 million tonnes across the year according to the Panama Maritime Authority, the sharpest fall ever seen. Though, to put this in context the year was still the Panamanian market's second busiest on record. Bunker calls were down 13.2%. In line with ongoing fears of HSFO demand becoming so niche that supply for scrubber-equipped ships could potentially hit obstacles, high-sulphur fuels accounted for just 11.7% of Panamanian sales.

Ship traffic and consequent bunker demand is likely to recover whenever global trade recovers from the pandemic. The Canal, though, whose capacity to serve that traffic represents an upper limit for local bunker trade, has started looking to longer-term issues. Water supply has been a looming problem for some time, with years of poor rainfall reducing levels in Gatun Lake and threatening the number of lock passages allowed on any given day during dry months. There's no sign that climate change is going to make that situation any better any time soon, particularly with action to counteract it still somewhat limp.

2019 was the fifth driest year the Canal watershed had experienced in 70 years. This unprecedented drought constrained water levels severely at Gatun and Alhajuela Lakes and with water levels projected to drop below operational levels, the Canal implemented measures such as a charge for fresh water that came into effect in February, on top of water conservation practices already in place.


Water management is becoming an increasingly critical issue for the Canal ©Jay Galvin/CC-BY

Average draft was steadied in less than three months and by the end of the year was back to 50 feet, the highest allowed and most offered in more than 20 months.

The Panama Canal Authority launched pre-qualification for a tender to design and build an optimised water management system for the Canal watershed in September, amending it late in the year after receiving more inquiries from over 250 potential bidders.

This tender is the first component of a programme that, as a whole, the ACP says will maintain the objective of managing water resources in an integrated manner to provide an adequate water supply for both Canal operations and local consumption for the next 50 years.

"Based on the information received from interested companies and market conditions, modifications have been made to the process to strengthen the viability of the project, as well as its attractiveness to potential bidders," said vice president of water projects at the Panama Canal, José Reyes.

Among the changes, the first component now focuses on the development of solutions to maximize the storage of water within the Panama Canal watershed. As the watershed is not expected to have the capacity to meet the demand for water alone in a sustainable manner, the Canal is to launch the second component of the program.

This will be executed through contracts for the study, design and construction of a solution that complements the water volumes achieved by maximising storage in Gatun Lake, an outcome of the program´s first component.

The amendment, however, preserves the financial and technical requirements of the request for qualifications, including a successful track record of project execution - something that keen watchers of other major civil engineering projects in the region will be pleased (and unsurprised) to see. Applications were due to close shortly after the time of writing.

The optimised water resource management system consists of a portfolio of projects to strengthen and modernize the current one. The goal is to guarantee the water supply for half of the country's population, concentrated in the provinces of Panama, Colon and West Panama, in addition to the operation of the Canal, for the next 50 years, taking into account sustainable development and socio-environmental management.

South America weathers the storm

South America has endured its own particular challenges on all sides of the sector, but its bunker players have done their best to weather the storm. Eugenia Benavides Buitrago, marine director at Colombian fuel group Terpel, outlined the view going into 2021 to World Bunkering:

"The year 2020 has been very significant for everyone in the world due to Covid- 19. But for the maritime business it has been significant because of the famous IMO 2020 as well. We had big expectations for 2020. In 2019 we were thinking 24/7 about IMO 2020 in terms of compatibility, quality and offering products that would comply with the IMO 2020 sulphur limit.

"We were also thinking that marine gas oil was going to be the solution and that our sales were going to increase like three times the market size but this did not happen. Instead, there was enough LSFO for the market; MGO [sales] increased but [not as much as if there had been limited] availability of VLSFO."

"In Colombia, the IFO is produced by companies who buy the raw materials from private and independent well-owning companies and they blend it, while the marine gas oil is sold by the state oil refinery. Being a new product more expensive than the HSFO requires more of a credit line and more capital from our customers to buy the products. "We could summarise that the year 2020 was going great, but it was suddenly impacted by Covid.


Colombia's bunker suppliers have had to make do without cruise calls at ports like Cartagena

The 'millennium virus' arrived and people were not prepared for this. Due to the pandemic we had practical challenges presented for fuel deliveries, getting documentation signed and avoiding human interactions. Digitalisation came very fast for the sector and it should stay from now on. Our market is very resilient; while aviation stopped in all airports and land transportation was interrupted and frontiers closed, the maritime business kept working in a reduced way but never stopped.

"Covid- 19 created a breakout and unexpected volatility in the market. It generated a global recession which caused a drop in the number of ships coming to Colombian ports, cancellations to some degree but the cruise industry was the segment most affected in this market. They stopped operations and have not restarted yet. We were deprived of seeing the cruise ships arriving in Cartagena and Santa Marta and therefore the market volumes dropped.

"This year has been very difficult due to additional requirements in ports to comply with biosafety protocols, more time to enter the terminal for the delivery, but we believe as life returns to normal everything will become smooth again. Since August we have seen a recovery in general volumes and we hope it will keep recovering."

One of the classic bellwethers at any time of market instability, and in particular with a downturn of the scale of the Covid one, is a major player with no pressing need to take risks moving into a new market or expanding its offering in an existing one. In that context, Bunker One's reinforcement of its existing offshore bunkering operations to cover the coast of northern Brazil late in the year is one to watch. The company launched its Brazilian arm in 2017 based out of Rio de Janeiro, and says it's still harbouring ambitious growth plans for the region now.

"To provide access to more flexible offshore bunkering solutions," the company said, "Bunker One (Brazil) has expanded its offshore operation 50 nautical miles from the Itaqui coastline by adding the tanker MT Thornton to its fleet. The tanker will be supplying VLSFO and LSMGO and is fully equipped for offshore bunkering."

Flavio Ribeiro, managing director of Bunker One Brazil, said: "Brazil continues to be of strategic importance to Bunker One. Expanding our presence to northern Brazil is in line with our ambition to strengthen our position in the Americas. This region is of vital importance to Brazilian export of commodities, and our presence there will provide our customers with more flexibility in terms of bunkering options on their voyages.

We listen to our customers' requests for places of delivery, and we want to continue to meet the increased demands of our business partners."

"Having a large fleet at its disposal makes Bunker One adept at providing prompt and agile bunker delivery services wherever the need arises. Bunker One's tanker fleet is highly specialised and equipped for offshore bunkering operations and ensures the highest level of quality, safety and efficiency of supply."

Group CEO Peter Zachariassen added: "I am very pleased that we can sustain momentum and stay on course with our plans to expand our operational reach. As we continue with our ambitious growth plans, we will, of course, remain dedicated to our business partners and maintain our strong focus on providing our customers with services of the highest quality."

Petrobras, while not expanding, seems to be looking to continue bunkering in Vitoria, after receiving an extension late last year to its supply capability from Vale's terminal until May this year. Despite Vale requiring it to cease past that point, "Petrobras will still keep looking for alternative options to perform operations using technically safe and economically effective solutions," it said.



Bunker One's Brazilian service expansion is hopefully a sign of things to come ®Bunker One

North American volumes drop

The US has seen the same issues as everywhere else, and with Covid-19 still hammering the domestic economy, bunker suppliers have seen a corresponding drop in demand, particularly in those ports most heavily affected by the closure of the cruise industry.

Bunker One USA MD Sara Shipman Myers told IBIA's convention in November: "Here in the Gulf Coast we are still about 30% under the lowest for this time of the season. In addition to that, it's also changed the capacities of how refineries are operating, about the programmes that are coming through, and so where we were concerned that there would not be enough availability of product in the beginning of 2020, that stockpile has gone through. And as that stockpile has gone through, the demand has gone down and the number of suppliers and producers has remained the same, which has created an irrational equilibrium in the marketplace for pricing across the board.

"It's created an unprecedented instability of what the pricing is in the market. It very quickly became a buyer's market. We have a glut of suppliers in the market. Everyone is trying to maintain brand loyalty in the market, that we still are a partner of suppliers in this industry, but the market, with that rationale, is being pushed down. And that can't be maintained. Now we have refiners cutting what their crude streams are, supplies are getting tighter, and it's been a very interesting economical roller coaster."

No surprise, then, that the company put out a statement around the same time committing itself to good relationships with the rest of the bunker chain. "The challenges caused by Covid-19 and the transition to low-sulphur fuels are some of the most recent instances that have impacted the bunkering and shipping industries on the shorter as well as the longer term," the company said. "To tackle these challenges, and to continue being a contributor to an industry that is constantly evolving, it is our conviction that future customer-supplier relationship will be centred around mutual value creation, trust and openness

This means that we will increase our focus on knowledge sharing and partnerships.

"To succeed in this, we must try to keep one step ahead of the curve… The reduction in CO_2 emissions to meet IMO´s targets of 2050 will require an even larger degree of pro-activeness [than the successful IMO 2020 transition]. We must continue to think ahead and prepare for future challenges. By this, we mean that we cannot afford to assume that a solution will present itself to us, and at the end of the day we are all in the same boat. We will benefit from our shared knowledge and acumen from across the value chain to ensure we come up with the best solutions for the industry."

Words much as expected, of course, but given the likelihood of market consolidation on both the refining and supply side across major US ports, particularly those hubs like Houston with a high number of suppliers active in the market, going through 2021 it's still an understandable position.

One such significant consolidation happened at the turn of the year, with Centerline Logistics buying up Saltchuk Marine Services' California bunkering operation previously run by Saltchuk subsidiary Foss Maritime. Centerline already operated eight bunker barges in the ports of Los Angeles and San Francisco, and has fleet supply presence on all US coasts. The deal will see it take over Foss's six bunker barges as well as its established customer contracts in the California market, while Centerline's harbour tugs in California and the Pacific North-West will move to Saltchuk.

"Safe and versatile ship refuelling is essential to keeping vessels and trade moving through American ports. As one of the largest bunkering operators in the United States, we are excited about the synergies this acquisition will deliver to our customers," said Centerline CEO Matt Godden. "With Foss's California bunker barges joining Centerline's fleet, we will be in an even stronger position to provide our full suite of industry-leading maritime refuelling services."

A couple of days later, John W Stone bought out the marine lubricants branch of Texas-based energy products storage and transportation company Martin Midstream Partners, Mega Lubricants, for US$22.4 million. For MMLP, the deal was a chance to cut the company's debt and focus on refinery services, an arrangement incoming CEO (at the time of the deal, CFO) Robert Bondurant said reflected his aims "to make our Partnership attractive to investors again. Reducing our leverage is integral to that vision."

John Stone Jr., general manager of Stone Oil, said: "John W. Stone Oil Distributor has been in the marine fuel and lubricants distribution business for nearly 75 years, plying its trade on the lower Mississippi River and the Gulf of Mexico. With the acquisition of the lubricant formulation, blending, and distribution business, we are excited to expand our offering. Mega Lubricant's delivery operations will expand Stone Oil's existing distribution and delivery operations. We look forward to integrating seamlessly because of the similarities in corporate culture and personnel. We are excited about this acquisition and continue to look at growth in the future."

At the same time, though, there's certainly still some long-term optimism in the US ports sector, with at least two major expansion projects going ahead this year.

Houston's "Project 11", the widening and deepening of the Houston Ship Channel which the port has been lobbying for since 2014, won Congressional approval with the passage of the 2020 Water Resources Development Act in late December. The day before the inauguration in January, amid a flurry of last-minute moves by the outgoing Trump administration and the outgoing Senate, the expansion was awarded "new start" designation and an accompanying US$19.5 million in federal funds, enabling the US Army Corps of Engineers to begin construction work. In addition, the port also received US$55.5 million in annual operations and maintenance funding to ensure safe and efficient vessel traffic on the current channel.

"To go from Congressional authorization to securing a pathway for construction in less than a month is phenomenal news," Port Houston Chairman Ric Campo said. "Project 11 will provide the greater Houston metropolitan area continued job growth and economic development opportunities, while improving air quality by reducing traffic congestion on the channel."

The port of New Orleans has begun a two-year due diligence process for a potential new US$1.5 billion multimodal container terminal intended to serve the largest generation of box ships. Port NOLA intends to acquire 1,100 acres of naturally deep-draft riverfront acreage at Violet that has historically been used for maritime operations including ship repair, cargo handling and more in St. Bernard Parish to build the new terminal.

"Three months ago, the U.S. Army Corps of Engineers launched a landmark project that will dredge the Mississippi River to a depth of 50 feet, from the Gulf of Mexico to Baton Rouge," New Orleans Governor John Bel Edwards said.

He added: "The Corps believes that work will pay for itself quickly by bringing larger vessels and more commerce to our state. I applaud the Port of New Orleans for investing in Louisiana's future through key container terminal improvements. Port NOLA's vision will greatly increase our global container business, support our industries, attract new logistics investment to Louisiana and secure quality jobs for our people."

Port NOLA has seen burgeoning box traffic, with container volumes more than doubling across the past 10 years, and has already earmarked over US$100m for new handling equipment and other improvements. The new terminal, Port NOLA said, would complement the port's existing Napoleon Avenue Container Terminal by exceeding water draft levels and completely eliminating air draft restrictions.

"Providing the next generation of critical infrastructure which meets the needs of our container carrier partners and provides economic prosperity for St. Bernard Parish, our region and the State of Louisiana is Port NOLA's number one priority," said Port NOLA CEO Brandy Christian.

"This property acquisition and due diligence process is an exciting step forward. Our Strategic Master Plan identified the opportunity, and we are working hard to move forward with a project that provides regional and statewide benefits," he said.

An increase in ship capacity and traffic would be a welcome boost for Gulf fuel suppliers, albeit one on the longer-term horizon.

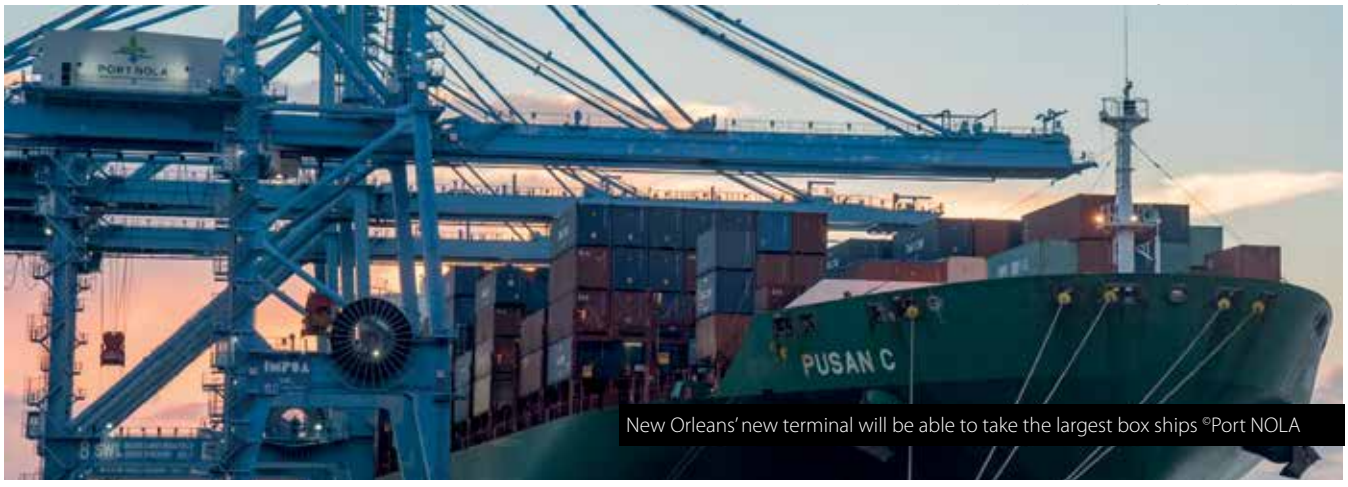
Canada has a long history of looking further ahead, particularly with respects to alternative power sources, and going into 2021 that's certainly not showing any signs of slowing, with electricity very much the focus.

In December, the Greater Victoria Harbour Authority said it was going ahead with plans to provide shore power at BC's Victoria Cruise Terminal at a cost of around C$24 million - if and when the cruise industry recovers and funding can be sourced, as the 2019 gross revenues for GVHA, when it had 256 ship calls, were only C$16.3 million.

An impact assessment carried out as part of the project's planning estimated that shore power at two cruise berths would mean a 46% reduction in GHG emissions across the port.

Dave Cowen, chair of GVHA's board of directors, said: "Despite the devastating impact of Covid-19 on the economic strength of GVHA, we know the tourism industry and cruise sector will recover over time. It is our intention that, with the support of the Board of Directors for this path forward, GVHA can pursue shore power in a timeline that dovetails with the global restart and rebuilding of tourism." It's expected that 85% of all 85% of all vessels calling to the Victoria Cruise Terminal will be shore power-capable by 2030; that number will increase to 95% by 2040.

"Our goal is to be one of the greenest ports in North America, so we are committed to this project as part of our overall strategy. The path to get to this decision has been anything but a straight line due to the Covid-19 pandemic, but I am pleased that the business case findings show that emissions can be reduced through the implementation of shore power," said Ian Robertson, CEO of GVHA.



New Orleans' new terminal will be able to take the largest box ships ©Port NOLA

"The challenge now is finding the right sectors of financial support for shore power. As a community-based, not-forprofit organization, we cannot afford tobuild this project without support fromexternal partners."

BC Ferries is going a step further, with the launch of the third and fourth of its Island-class battery electric-hybrid ferries at yards in Europe late in the year. The fourth ship should undergo sea trials in April before heading to Victoria in Q3 of this year, joining its sister vessel on the Campbell River-Quadra Island route in 2022. The first two Island-class vessels were deployed on the Powell River–Texada Island route and the Port McNeill–Alert Bay–Sointula Island route in mid-2020. The fifth and sixth new ships will provide two-ship service on the Nanaimo Harbour–Gabriola Island route in 2022.

The Island class is a battery-powered ferry with a number of key features that the company says supports it goal to be efficient and environmentally responsible throughout its system. When electric charging technology matures to make electricity available in the quantities required, BC Ferries will operate these new ships as all-electric ferries, using clean energy. In the interim, these ships will use an on-board low sulphur diesel hybrid system.

Island class ferries have the capacity to carry at least 47 vehicles and up to 400 passengers and crew depending on configuration, and allow for fleet redeployments and retirements of existing diesel-fuelled vessels.

BC-based clean energy company Vanadium Corp announced in January this year that commercial development work has commenced on the first phase of key design and engineering of next-generation vanadium redox flow-battery systems for marine propulsion, in a trilateral partnership with Dutch firm Conoship and Germany's Vega. VFRB systems pump liquid electrolyte through fuel cells where the reaction occurs, and while VFRB systems have been the most promising of such technologies for a while, they are a little hampered by power density. It's this latter challenge that VanadiumCorp aims to overcome in order to make the power plants suitable for maritime use, employing high-energy-density vanadium electrolyte in a more compact form suitable for use at sea, for which Vega will arrange trials.

Adriaan Bakker, CEO of VanadiumCorp, said: "Greenhouse gas reduction is exceptionally challenging for the shipping industry.

The industry's 2050 climate goal of halving greenhouse gas emissions from 2008 levels can only be achieved with the accelerated construction of zero-emission ships and novel solutions."

The company said that, if successful, the new designs could provide significant environmental and economic benefits in the decarbonisation of shipping routes and in-port ship movements. Solving the energy-density challenge would allow the company's designs, it said, to "scale to large capacities, deliver energy without waste heat, and vastly extend energy storage beyond lithium-ion's typical 4-8 hour operating time".

Sufficient power storage without adding excessive weight or space demands, or the use of non-renewable liquid fuel, has long been a major engineering challenge for the use of electrical or fuel cell power on ships beyond short-sea routes. Green hydrogen for use in fuel cells, or direct combustion, is an approach various European nations are leaning towards, but hydrogen has significant storage challenges of its own and combination with atmospheric CO_2 to produce renewable methanol e-fuel represents another prospect in its early stages (Porsche and Siemens launched a pilot production plant in Chile late last year, for instance). Battery power capable of longer-duration use at higher power output could be a major step to the greater use of electrical propulsion.



The newest addition to BC Ferries' all-electric fleet should be in service soon ©BC Ferries

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SEEING RED

Chevron Marine Lubricants reports scuffing on older engines using VLSFO

Some ship owners using very low-sulphur fuel oil (VLSFO) have reported build-up of red deposits on piston crowns and top edges, sometimes combined with red iron burrs in scavenge ports, according to Chevron Marine Lubricants. The deposits are associated with abnormal liner wear (or scuffing) since the switch from high sulphur fuel oil (HSFO), particularly on older two-stroke marine engines.

The lubricant manufacturer says it has helped ship owner customers identify and manage this distinctive engine condition challenge associated with the widespread switch to low-sulphur fuels.

Chevron used a four-step laboratory analysis to narrow down likely causes. The deposits were found to include a compound of materials including harmless detergent additive residue and iron oxide. The detergent residue was determined not to be a source of wear as the deposits were only found in single cylinders rather than across the engine.

The fuels associated with the red deposit and scuffing incidences were also analysed. Chevron found that the VLSFO blends involved showed differences from others in two fuel characteristics, typically a lower calculated carbon aromaticity index (CCAI) and high estimated cetane number (ECN).

Although VLSFOs have been found to offer a typically higher energy value content than HSFO, and therefore can offer value for money, VLSFO density properties can result in harsher operating conditions and more stress on the engine components. While most users transitioned smoothly, these properties can cause trouble for older engines, said Luc Verbeeke, Senior Engineer, Chevron Marine Lubricants.

"While newer ships do not have a problem using these fuels, engines already closer to an overhaul did struggle sometimes," said Luc Verbeeke. "Cylinder units that could have run for another six months or a year on HFO did not survive the tougher conditions with the new fuels."



An engine maintenance programme recommended by Chevron Marine Lubricants – supported by routine testing with Chevron's DOT.FAST onboard testing kit – was offered to provide protection against liner wear and damage. Incidences of red deposits and scuffing that were relatively frequent in the early days of VLSFO operation have since reduced significantly.

Meanwhile, ExxonMobil Marine Lubricants has signed an agreement with Drew Marine to extend the availability of its range of high performance oils and greases. ExxonMobil lubricants, including Mobil SHC Aware, will now be available via Drew Marine's global supply chain.

The agreement covers a range of ExxonMobil's synthetic marine industry lubricants. These include specific grades for compressors, hydraulic systems, gears, auxiliary engines and refrigeration plants.



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Endesa's Algeciras facility will be Spain's largest LNG bunkering terminal ©Endesa

IT'S A GAS

The future looks a lot like gas in the western Mediterranean, with hydrogen projects joining LNG on the region's future fuels list, John Rickards reports

Spain has bought heavily into building up its LNG bunkering infrastructure over the course of the past couple of years. These efforts received a further boost in the late part of 2020 with electricity and gas company Endesa given the green light to add bunkering services to its Algeciras gas terminal. Adapting the facility will cost an initial €15.6 million by 2022, with a second phase expanding gas storage to 4,080 cubic metres costing a further €34.5 million by 2023, and will make it the largest LNG bunkering terminal in Spain.

According to Endesa's general director of energy management Juan María Moreno, "The strategic location of our terminal offers opportunities for growth and diversification into new lines of business, such as LNG bunkering, which are a good fit and will enable us to make progress with our decarbonisation strategy by focusing on activities that lead to a reduction in emissions."

According to Endesa, the Los Barrios terminal has additional space for possible future expansion depending on demand to the tune of two additional docks. The facility will be able to progressively increase its storage capacity further as bunker demand grows to around 10,000 m3 within the decade. The company also plans to open a gas station to supply LNG by road. As part of the approval from the Port of Algeciras Bay Authority (APBA) Endesa was granted a 10-year terminal concession extension.

Endesa's compatriot company Enagás, meanwhile, has been given the green light for joint financing by the European Commission for the building of a dedicated LNG bunkering barge to operate at Algeciras, the port's first such. The project consists of the construction of a 12,500 cubic metre bunkering barge, entering into service in 2023. Once in operation, the vessel will be loaded with LNG at the Enagás terminal in Huelva and will then either supply it directly to ships or transfer it to smaller barges for subsequent supply to smaller vessels berthed in Algeciras.

Not to be left behind, on the other side of the bay, the Gibraltar government has granted Shell's application for an LNG bunkering licence. Minister for the Port, Vijay Daryanani said: "I am pleased to see that Shell has been successful in its application and welcome the trust and confidence that Shell continues to place in Gibraltar with the completion of its application.

"The Gibraltar Port Authority now looks forward to working with Shell to further develop the range of bunkering service at the Port of Gibraltar to include LNG bunkering. This is in line with the aspiration to keep Gibraltar on the leading edge of developments in the bunkering industry and to reinforce our position as a bunkering hub."

Chief Minister Fabian Picardo said: "Including LNG bunkering as one of the services on offer at our port demonstrates our forward-thinking approach to developing the maritime industry, as well as ensuring that Gibraltar is part of the transition to cleaner fuels and reduced environmental impact."

Spanish sustainable transport association Gasnam, in its 2020 review of the industry released in January, said that the year saw 741 LNG bunkering operations, up from 199 in 2019, involving just over 122,000 cubic metres of LNG, and that the number of Spanish ports offering regular LNG bunkering had increased from six to nine. 68.5% of the volume supplied was to ferries, 31.1% to cruise ships and 0.4% to other vessel types.

Gasnam also pointed out that LNG bunkering operations have continued to gain flexibility and efficiency, and that more than 75% of supplies have been carried out using multitruck to ship operations to reduce refuelling time.

"2020 has been marked by important regulatory changes that, added to Europe's support for infrastructure development, will be determining factors to accelerate the incorporation of this sustainable maritime fuel," the association said.

"In October 2020, the new Spanish LNG bunkering tolls, which are the most competitive in Europe, came into force.

Also this year, the European Commission's support for the LNGhive2 strategy was announced for the construction of two new LNG supply ships that will operate in the ports of Barcelona and Algeciras, thus showing its support for the development of the LNG market as maritime fuel.

"Both milestones will allow our country to continue consolidating its position as a benchmark for LNG bunkering in Europe."

Endesa isn't the only Spanish energy interest making significant investments in decarbonisation and alternative fuels. Oil major Repsol has launched two major projects aimed at producing commercial quantities of renewable fuel.

The first, announced in late October, is the building of an €188m advanced biofuels plant at Repsol's Cartagena refinery which will have an annual production capacity of 250,000 tonnes of various grades of fuel, including biodiesels, once operational.

At the press conference unveiling the development, the first on this scale in Spain, Repsol CEO Josu Jon Imaz said: "With this initiative, we at Repsol are decisively promoting a new technological route that will be key in our path towards carbon neutrality. It is added to the projects we have already implemented in energy efficiency, low-emissions electricity generation, renewable hydrogen, circular economy, synthetic fuels, and CO_2 capture, use, and storage, among others.

"Spain must base its decarbonization strategy on its industrial and technological capabilities, because that will be the way to promote a competitive and innovative business fabric," said Imaz, before adding that "all forms of decarbonization are valid and complementary and incentivizing them so that they can all contribute, without exclusion, will accelerate the energy transition and help us, as a society, achieve a speedy economic recovery, so necessary under the current circumstances of the coronavirus pandemic."

The biodiesel produced at the plant, rising up to 600,000 tonnes by 2030, is likely to be used as with Repsol's existing production and similar biofuels on the market as a drop-in.

While the full array of end products and target markets hadn't been released at the time of writing - and Repsol were approached for comment but unable to provide before going to press - the company specifically noted that the IEA considers biofuels a key part of transportation decarbonisation from 2030 and particularly in sectors where electrification is difficult, such as maritime transport. So watch this space, I suppose.

The company is certainly looking at e-fuels - methanol made from green hydrogen and atmospheric CO_2 in particular - for the maritime market. At the unveiling of its new five-year plan this winter, across which it will invest €18.3 billion, €5.5 billion of it on low-carbon projects, and which it promises will be self-financing at $50/barrel of Brent and $2.5/MBtu at the Henry Hub, Repsol said:

"Renewable hydrogen will be another important vector for the decarbonization of the industry. The applications range from its use as a raw material to produce synthetic fuels to the storage of renewable energy. Repsol has the ambition to be a leader in renewable hydrogen in the Iberian Peninsula by reaching a production of the equivalent of 400 MW by 2025 and with the ambition of exceeding 1.2 GW in 2030. The capture and use of CO_2 will also be key to this transformation process, thanks to projects like the one developed at Petronor in Bilbao, the only refinery in the Iberian Peninsula and one of few in Europe that has implemented this kind of processes."

The Petronor plant was announced in June last year in the port of Bilbao, at an initial investment of €60m. The facility, planned to be operational in 2024, will act as a pilot plant - one promised to be scalable if results are promising - producing green hydrogen from renewable energy and captured CO_2 to produce e-fuel for use across all transport and industrial sectors. The pilot plant will only produce 50 barrels per day when operational, but if successful - and if it can be scaled to commercial levels still using renewable energy, which seems achievable on the face of it - then adoption could be relatively swift in the years to come.

It's not only Spanish energy majors eyeing green hydrogen either. France's Total - which has also snapped up the country's biggest producer of biogas in a deal which the Managing Director of its bunkering arm described as "an important step forward for us to realise bio-LNG as a real marine fuel solution for shipping's decarbonisation" - inked a deal with gas group Engie in January to develop and operate the Masshylia project, the country's largest green hydrogen production plant at Châteauneuf-les-Martigues near Marseille. Some of the hydrogen produced is earmarked for load-balancing electricity generation, but the rest will be used at Total's nearby La Mède biorefinery for producing biofuels.

Meanwhile, Italy's national energy producer Enel has announced a partnership with oil major Eni to produce and use the gas at two Eni refineries, with production hopefully beginning by 2023.



The Petronor plant in Bilbao will pilot renewable e-fuel production for Repsol ©Repsol

The country's gas firms are continuing to push towards establishing LNG bunkering infrastructure, albeit not at the same pace as Spain. It was only in October that the first Italian LNG bunkering operation took place, with Costa Cruises' Costa Smerelda taking on a stem at La Spezia supplied by Shell.

Greater scope for gas bunkering is coming, though. In December, Venice LNG became the latest firm to receive government approval to construct and operate an LNG storage and bunkering terminal in Porto Marghera, which like similar ventures in Spain has co-financing from the European Commission to the tune of €18.5m. Once built, Venice LNG expects to have a storage capacity of 32,000 cubic metres and handle a maximum of 150,000 cubic metres annually during its first phase of operations, eventually rising to 900,000 cubic metres. LNG bunkering will be offered by truck and barge.

Other gas terminal proposals have included possible LNG bunkering, or seem likely to support it - such as OLT Offshore LNG Toscana's FSRU terminal off the Tuscan coast, given approval for LNG carriers and bunker barges to refuel in October. It's a little rarer for Italian terminal plans to specifically cover bunkering, so this hopefully augurs well for the future.

While waiting for LNG infrastructure to catch up, Italian shipowners have had to find other ways to reduce their carbon footprint. At the turn of the year, Grimaldi Group took delivery of the Eco Barcelona, the second of its series of ro-ros - the largest in the world for short-sea shipping, the company says - late last year, and will similarly operate between Italy and Spain.

As well as voyage fuel optimisation, the scrubber-equipped vessels generate electrical power through shaft generators and solar panels while en route for storage and use at berth, meaning zero emissions in port.

A third vessel in the class should have followed by the time of going to print, and a further nine are on order.



The Eco Barcelona generates electrical power for at-berth operations en route ©Grimaldi



TANGER MED IN 2021

Tanger Med has established itself as a global maritime and logistics hub, with a strategic location at the crossroads of major routes for the largest global maritime alliances

On the southern side of the Med, Tanger Med has spent 2020 building its position as a major cargo hub and targeting partnerships with ports in Europe, inking deals with Algeciras and Hamburg to add to the port's existing alliances.

Bunkering was a particular success, despite the proximity of its rivals across the Strait, with nearly 1.6million tonnes of bunkers sold across 2020.

Given that degree of local competition, and the overall context of bunker trade at post-Covid trade levels, those are very healthy volumes indeed.

Cargo tonnage at Tanger Med, which handles nearly 50% of all throughput in and out of Morocco, was up 23% last year to 81 million tonnes despite trade reductions due to the pandemic, while box traffic of 5.7 million TEU put it, the port says, at the number one slot for the Mediterranean as a whole.

From the beginning, Tanger Med has positioned itself as a major transshipment platform for intercontinental trade to and from Africa, which represent nearly 40% of the container traffic handled.

Major maritime players such as Maersk and CMA-CGM, major logistics players such as DHL, CEVA Logistics, Nippon Express and Decathlon and major industrial players such as Varroc, Hands Corporation, SIEMENS, Valeo and Magneti Marelli are located in the industrial-port complex, which is now the number one container port in the Mediterranean.

Tanger Med maintains partnerships with its port partners, joining the initiative of the Port of Singapore in January this year to guarantee the continuity of global logistics chains during the epidemic, and it maintains a close collaboration with the port of Algeciras and has an agreement with the port of Hamburg dealing with operational and technical ideas exchange.

The port is the number one export platform for Morocco. It saw over 350,000 TIR trucks in 2020, including 180,000 trucks and 100,000 TEU for exports, mainly driven by agribusiness products. The port has 19 hectares of dedicated export infrastructure, able to process more than 2,100 units per day with a transit time of 2 hours through digitised processing. Exports are expected to grow to 600,000 units by 2025.

Passenger traffic was obviously much reduced by Covid-19. Activity was suspended in March 2020 due to the closure of borders as a result of the health crisis. Traffic resumed slightly in June 2020 in strict compliance with health measures; 701,599 passengers travelled through Tanger Med port in 2020, a decrease of 75% compared to 2019.

Tanger-Med's tank farm and fuel terminal operates on a 24/7 basis to deliver multiple grades of bunkers, including VLSFO, IFO380, and MGO. Tanger Med and its partners HTTSA and Minerva Bunkering say they have been able to offer IMO 2020 compliant fuel since day one without any interruption.

Over 80% of the bunker stems at Tanger Med to the Strait of Gibraltar is delivered at two anchorage areas by seven barges of 6,500 tonnes capacity each. Fnideq-Tanger Med East and Alkazar-Tanger Med West are emerging as a major global bunkering hub for ships passing through the Strait of Gibraltar.



©Yassine Abbadi/CC-BY



Yaskawa Environmental Energy / The Switch's Large Drive Testing Centre: ©Yaskawa Environmental Energy / The Switch

TESTING ELECTRIC DRIVES

New testing centre for large electric drive systems begins operations

Finland-based Yaskawa Environmental Energy / The Switch has started operations at its heavyweight Large Drive Testing Centre (LDTC) in Lappeenranta in the south-east of the country.

This state-of-the-art testing centre is intended to develop bigger and ever more efficient electric drive system. The company says the centre "can provide some of the answers to questions being asked by the maritime sector as shipowners, system integrators and shipyards navigate towards a greener future, while also looking to cut costs through better performance, greater efficiencies and improved reliability."

Yaskawa Environmental Energy / The Switch produces its permanent magnet (PM) direct-drive shaft generators, propulsion machines and auxiliary generators at Lappeenranta. It says that the trend across the marine sector has been to move to increasingly higher capacity propulsion systems to power larger and larger vessels and the new testing centre can now push the boundaries for the biggest machines in the business.

The centre can handle 12-megawatt drive systems, and this will increase soon to a giant 18 MW, "outstripping almost anything else being offered across the globe". It also has 80-tonnes heavy-lift capacity.

Matti Nikkinen, vice president of operations at Yaskawa Environmental Energy / The Switch, says: "Equipment is getting bigger and bigger all the time. We had to have a place where we can verify these units. It is important we can show the customer that our equipment can pass all the tests. Drives are continuously getting more powerful. So the main purpose for the testing facility is we can now answer the questions coming from the market."

The new centre is attached to the main factory at Lappeenranta so finished units can be extensively tested to full capacity and complete certification can be carried out on site. This saves time and money down the line when it comes to the commissioning phase for any vessel using the equipment.

Nikkinen claims that the test centre is "nimble for such a heavy hitter as it offers a great deal of flexibility".



New testing centre can "push the boundaries for the biggest machines in the business". © Yaskawa Environmental Energy / The Switch

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CYBUTRYNE BAN A "NON-ISSUE"

Jotun says latest IMO move will not affect any of its products

In November 2020 IMO's Marine Environment Protection Committee (MEPC) 75 approved draft amendments to the Convention for the Control of Harmful Anti-fouling Systems on Ships (AFS Convention), to include controls on the biocide cybutryne. These amendments are expected to adopted in June this year at MEPC 76.

The ruling to prohibit anti-fouling systems containing cybutryne (also known under its industry name Irgarol-1051) would apply to ships from 1 January 2023 or, for ships already bearing such an anti-fouling system, at the next scheduled renewal of the anti-fouling system after 1 January 2023, but no later than 60 months following the last application to the ship of such an anti-fouling system. The AFS Convention already prohibits the use of biocides using organotin compounds.

Stein Kjølberg, Global Category Director, Hull Performance, Jotun commented: "The ban of cybutryne is a non-issue for Jotun, as it's not been used in any of our antifouling coatings for more than 20 years. Although cybutryne was among potential candidates to replace tributyltin (TBT) – when that too was banned by the IMO, back in 2001 - we realised its low degradation rate in seawater might lead to the same issue of environmental persistence. MEPC 75 also approved two new quantitative measures to reduce carbon dioxide emissions per ton-mile of cargo transported: Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII).

EEXI sets a baseline reference and may require a vessel to retrofit energy saving devices, or impose an engine power limit, while CII will be used to track and rate the vessel's energy efficiency in actual operation, on a yearly basis. Vessels with favourable ratings will unlock advantages in operational profitability, charter attractiveness and financing options.

"This is where developments in high quality antifoulings can make all the difference," asserts Kjølberg. He adds: "Energy efficiency and carbon emissions are inextricably linked to fouling growth on ships' hulls. Algae and barnacles add significant frictional resistance, and this results in speed loss. To compensate for that, and keep up with sailing schedules, vessels are forced to increase power. As a result, fuel consumption and carbon emissions also increase. That creates obvious financial ramifications, environmental impact, and difficulties in terms of regulatory compliance. So, in short, a dirty hull is bad news for everyone. Keeping clean is unquestionably the way forward. " Last year Jotun launched Hull Skating Solutions (HSS). This new package involves proactive cleaning that is designed to maintain an "always clean" hull, removing bacteria and biofilm before macro-fouling can take hold. In doing so it optimises performance while diminishing the need for reactive cleaning.

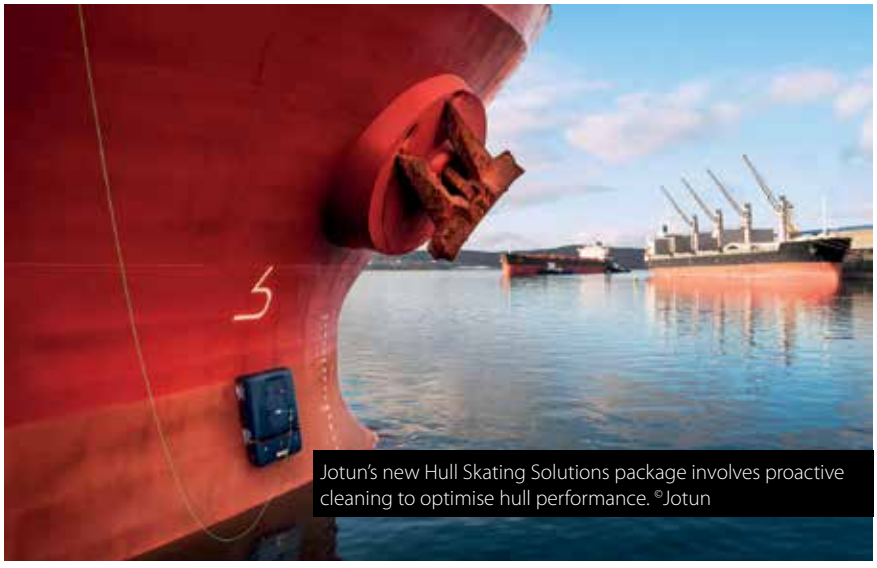
HSS features the 'always-onboard' Jotun HullSkater, described as "the industry's first robotic technology purposely designed for proactive cleaning". The unit is remotely controlled via a 4G connection by expert Jotun Skate operators, who inspect and clean, when required, a specially developed SeaQuantum Skate antifouling. A proprietary algorithm, big data and condition monitoring (tailored to each individual vessel) are utilised to help set optimal inspection and proactive cleaning schedules.

Hempel's reformulated antifoulings

Global coatings manufacturer Hempel says it has enhanced its "established and proven" Olympic+ and Oceanic+ antifouling range and has launched five additional antifouling solutions: Oceanic Protect+, Oceanic Flex+, Olympic Protect+, Olympic Flex+ and Olympic Protect.

The company says that its Olympic+ and Oceanic+ antifouling coatings have been in use since 2009 and 2012 r espectively and "the introduction of the new, re-formulated products delivers an even higher performance through better control of the leached layer and an enhanced mechanical strength".

In a statement it says: "Coupled with this, higher volume solids, high dry film thickness per coat and lower volatile organic compounds reduce costs, time and emissions during application. These new antifouling solutions are designed to suit different trading patterns, and this ensures the best possible fouling protection in all trading conditions."



Jotun's new Hull Skating Solutions package involves proactive cleaning to optimise hull performance. ©Jotun

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Mr. Mohammed Majed Bin Al Aleeli
Director-General
Department of Industry & Economy
& Board Member
National Bank of Fujairah, UAE

Dr. Mohammed Saeed Al Kindi
Chairman
FUJCON Steering Committee
UAE

Keynote Speakers

Dr. Fereidun Fesharaki
Chairman, FGE

Mr. Mike Muller
President, Vitol Asia
Singapore

Mr. Roel Hoenders
Acting Head of Air Pollution & Energy Efficiency, Marine Environment Division
International Maritime Organisation, UK

Confirmed Speakers

Capt. Salem Al Hamoudi
Director, Fujairah Oil Industry Zone, UAE

Ms. Katharina Stanzel
Managing Director
Intertanko, UK

Mr. Siavash Alishahpour
Managing Director
VTTI Fujairah Terminals
UAE

Mr. Anders Onarheim
CEO, BW LPG

Mr. Dave Ernsberger
Global Head of Content & Market Insight, S&P Global Platts, UK

Dr. Axel Wietfeld
CEO, Uniper Hydrogen
Germany

Mr. Lars Liebig
Managing Director,
Uniper Energy, UAE

Mr. Gary Hubbard
COO, Neutral Fuels
UAE

Mr. Andrew Laven
COO, Sahara Energy Resources, UAE

Mr. Sonnich Thomsen
Managing Director
Bunkers, Sing Fuels
Singapore

Capt. Rahul Choudhuri
Managing Director
Asia, Middle East & Africa, VPS

Mr. Richard Matthews
Director, Consultancy & Research, EA Gibson Shipbrokers, UK

Ms. Unni Einemo
Director
IBIA

Mr. Vivek Chandra
CEO/Founder, Texas LNG Inc, Melbourne

Mr. Saunak Rai
General Manager
FueLNG, Singapore

Mr. Alok Sharma
Senior VP Business Development, INATECH (Glencore Group), UK

Mr. William Tan
Vice President, Miyabi Industries, Singapore

Mr. Mads Bjornebye
Manager, Bunker Services
Teekay Tankers, UK

Mr. Martijn Heijboer
Business Development Manager, Port of Fujairah, UAE

Mr. Colin Holloway
Global Head Technical
Cockett Marine Oil, UAE

Mr. Robert Braithwaite
Marine Sales Manager
PetroChina International (Middle East), UAE

Mr. Chris Turner
Manager, Bunker Quality & Claims, Integr8 Fuels
Singapore

Mr. Douglas Raitt
Regional Advisory Services Manager, Lloyds Register
Singapore

Ms. Deanna MacDonald
CEO & Founder, Bloc & Co-Founder BunkerTrace, UK

Mr. V Bala
Partner, Shipping & International Trade, Rajah & Tann, Singapore

This is only a partial list of speakers. Please visit the website for an updated list of speakers.

Fujairah Bunkering Week (FBW) Optional Pre-Conference Courses

15 - 16 March 2021 - 2-day course on Practical Handling of VLSFO & ULSMGO Post 2020 & Future Trends of 2030 Alternative Fuels
17 - 18 March 2021 - 2-day course on International Oil Trading: Introduction & Special Focus for the Marine/Shipping Industries
21 - 22 March 2021 - 2-day course on The Science of Buying Bunker Fuels

**Please contact the FUJCON Secretariat for more details on the training courses.*

SCRUBBERS "HELPED" IMO 2020 SWITCH

Clean Shipping Alliance also argues ships using scrubbers have lower CO_2 footprints than MGO or VLSFO

Scrubbers played a crucial role in the smooth transition to compliance with the IMO 0.50% sulphur limit that came into force on 1 January 2020, according to the lobby group Clean Shipping Alliance 2020 (CSA).

On the anniversary of the implementation of the new regulation, CSA executive director Poul Woodall commented: "Despite the severe impact of the COVID-19 pandemic on the global supply chain last year, which will most certainly continue until the second half of this year, ships continue to carry goods and commodities around the world, such as essential food and medical supplies. In this context, it is remarkable that the shipping industry was able to make that smooth transition to the IMO 2020, and many of our companies were able to do so thanks to the timely installations of Exhaust Gas Cleaning Systems (EGCS)."

According to CSA, about 4,000 ships are currently fitted with EGCS, or 'scrubbers'.

The CSA was founded in 2018 to serve as an "advocate for shipping companies working to reduce marine exhaust gas emissions through the use of Exhaust Gas Cleaning Systems". It says its member companies and other shipping companies using EGCS were able to "play an important role in the shift to IMO 2020, avoiding the uncertainties of new alternative fuels while leading the industry in rapid transition to the new global sulphur emission reduction".

The CSA says that it strongly believes that EGCS make a positive difference to the ports and ocean environments in which ships operate and will promote global environmental progress – especially the goal of reducing the health impact from airborne sources, which is at the heart of the IMO 2020 regulation.

Woodall asserted that in addition to achieving much lower sulphur oxide (SOx) emissions than required by IMO 2020, and reductions of other pollutants as well, there are added advantages of EGCS in minimizing the ships' carbon footprint: "On a well-to-wake basis, EGCS-fitted vessels have a lower CO_2 footprint than the most widely-used alternative fuel options of MGO and VLSFO. A recent CE Delft study found the increase in CO_2 footprint from the additional refining of MGO to likely be in the range of 10-15% and potentially as high as 25%. In contrast, the increased CO_2 from EGCS is only in the range of 1.0-1.5%."

"Therefore," he added, "there should be broader awareness that EGCS-fitted vessels show a significantly better CO_2 performance than similar vessels using refined fuels for compliance, such as MGO/VLSFO. This supports the current ambitions of significantly lowering CO_2 emissions by 2030."

CSA says that, with its member companies, it will "continue to advocate and support ongoing research to further the industry's efforts towards the common goals of continually reduced emissions and carbon neutrality".

Generating urea for scrubbers onboard

UK-based specialist chemical bunkering solutions supplier Fluechem has developed a new system that allows ships to generate urea solution onboard.

It says it Urea Generator "was born out of a deep understanding of the challenges faced by the shipping industry and in particular the challenges related to abating SOx, CO_2 & NOx exhaust gas emissions through scrubber, additive and SCR based technology".

The Urea Generator is a fully automated onboard Urea blending system, housed in a shipping container, that enables users to blend Urea solution themselves as opposed to purchasing pre-mixed liquid. This product helps eliminate the need to transport large quantities of Urea solution ashore as well as freeing up a considerable amount of space onboard which is traditionally reserved for storage tanks. Fluechem says its system reduces the risks associated with pre-made solutions going out of date.

Fluechem Director, Frazer Lang commented: "When we developed the system we wanted it to be as cost effective and easy to use as possible whilst not affecting the quality of build. Initial research shows that the Urea Generator can help ship owners save up to 60% on OPEX costs. This doesn't take in to account the shear convenience of blending Urea onboard and only being reliant on the delivery of Urea prill (beads) which take up far less space than when in its blended format."



Fluechem has developed an onboard urea generator ©Fluechem

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I.T IN THE DRIVING SEAT

Information technology has been making gradual inroads into the bunker industry's day-to-day operations for many years but a global pandemic has accelerated that process with numerous new initiatives announced

Digital record keeping

Prominent oil-in-water monitoring specialists Rivertrace has published a new digitalisation white paper which predicts traditional reporting methods are on the way out as digital technology is "continuously changing the landscape of the international shipping industry and how ships are operated".

Maritime Industry 2.0: The Future is Digital explores key milestones passed in the shipping industry's digital transformation journey to date and examines how traditional, manual methods for monitoring and record keeping are evolving towards the greater use of electronic documentation, supported by digital monitoring equipment.

It notes that the move towards exploiting the power of digitalisation for monitoring and reporting purposes has been accelerated by a recent shift in international regulation. From 1 October 2020, the International Maritime Organization (IMO) amendments to MARPOL Annexes I, II, V and VI that permit the use of electronic record books entered into force.

This permitted use of electronic oil record books is a welcome step-change in the industry, and Rivertrace supports this transition with the development of smart monitoring technologies and services, and collaborations with other original equipment manufacturers (OEMs).

In publishing the new white paper, Rivertrace has advised that greater demands for electronic methods of reporting, and also for the collection and transfer of data from ship to shore, are fast becoming the norm. Therefore, many adaptations will be required, supported by innovative technologies and connectivity that support smarter shipping to ensure a smooth transition into the digital era.

Mike Coomber, Managing Director of Rivertrace, says: "For Rivertrace, the evolution of smart water quality monitoring technology is part of embracing digital transformation in our specific area of technical expertise. We are continuously developing our systems to support automated data logging and we are putting our services online to support those customers who prefer to use electronic formats for reporting and the calibration of equipment. We are also working to connect our water monitoring systems and enhancing and expanding the ways in which we can help our customers remotely is always evolving."

Cutting fuel consumption

IT can of course do much more than assist with record keeping; it can also help ships improve efficiency and cut fuel consumption.

According to major technology group ABB, insights into ship's operational data, amplified by Artificial Intelligence (AI) can help reduce fuel consumption by up to 10% and cut other costs. The use of advanced analytics can, it says, increase vessel uptime and reduce essential service visits by up to 30%.



ABB expects digital technologies, including AI, data integration and analytics solutions, to transform international shipping in the coming decades as shipowners seek solutions that allow them to increase operational efficiency and sustainability and help to comply with environmental regulations.

ABB notes in a recent statement: "A persistent challenge has been the tendency to gather and process data on a system-by-system basis, rather than analysing interdependent operations. Feeding datasets into disconnected 'silos' limits meaningful analytics capability, burying potential efficiency gains in an ocean of data."

The company says that its new Ability Genix Industrial Analytics and AI Suite, uses advanced analytics and AI to drive better decisions and achieve significant efficiency gains.

The new product is a scalable advanced analytics platform that collects operational, engineering and information technology data from onboard equipment and converts it into actionable insights that help shipowners improve operational efficiency, safety and sustainability.

According to ABB: "The solution opens the way to analyse the relationships between processes and events, using embedded fusion hubs, machine learning and advanced analytical components to map out a far richer picture of what is really taking place on a vessel or across a fleet."

IT underpinning 'green' financing

METIS Cyberspace Technology says it has refined its cloud-based data acquisition and ship performance reporting solution to offer shipping's first tool to predict the trade-off between emissions reduction and debt servicing for ships financed under the Poseidon Principles.

Designed to incentivise maritime decarbonisation, the Poseidon Principles offer a framework for financial institutions to lend in line with IMO goals to halve greenhouse gas emissions by 2050. So far 20 institutions have signed up, representing over US$150 billion in loans – "more than a third of shipping's global financing", according to METIS. It adds: "Assessing whether ships merit further investment to keep pace with the IMO average efficiency ratio (AER) underpinning the Principles will be key but, to date, exact emissions targets have not been forthcoming."

If in doubt get on the phone (and ring a trusted number!)

In these email-dominated days the phone remains a useful weapon against fraud, according to the International Transport Intermediaries Club (ITIC).

The mutual insurer warns that cyber-crime connected with fraudulent demands for payments continues to plague the maritime sector as a large claim handled by ITIC demonstrates.

A ship manager received an email from a shipyard detailing the first payment that was due for agreed repairs. The ship manager scheduled the payment but on the day before the monies were to be released, the ship manager received a further mail.

This message explained that due to a certain difficulty, the routing details for the first payment had been changed. However, this second email was fake and was not noticed by the ship manager (in effect, the fraudster has simply changed part of the email address from "irn" to "im").

The ship manager soon received a replacement invoice and new routing instructions - on an identical template to the original - from the fraudster and made the payment. Shortly afterwards, they received payment confirmation.

A few days later, the yard sent a further invoice which was intercepted by the fraudsters and replaced with a fake invoice and fake payment details.

In total, the ship manager paid US$500,000 to the fraudsters and, as the yard had received nothing, they claimed this amount from the ship manager. With ITIC's involvement, the claim was reduced to US$ 360,000 to reflect that the yard was partly at fault for not operating secure internal systems. ITIC settled the claim.

ITIC has reinforced its advice that all companies should be very aware of vendors or partners who change their bank details and should always telephone to confirm.

And when doing so, they must use a phone number they trust, and not simply the one stated on the (potentially fraudulent) invoice.



Be certain, phone somebody you can trust ©iStock



MATTER OF 'RESPECT'

Court declines to put narrow interpretation on "ordinary words in the English language" in a case reported by Hill Dickinson

International commercial law firm Hill Dickinson has reported on a case in January this year which turned on the meaning of the words 'in respect of'. The full report, authored by Hill Dickinson partner Lewis Moore, senior associate Chris Primikiris and associate Charlotte Wood, can be found at https://www.hilldickinson.com/insights/articles/

The law firm notes: "This was an application for default judgment in in rem proceedings against the vessels Columbus and Vasco Da Gama which were sold on 22 October and 16 October 2020 respectively and the actions continued against the proceeds of sale. Those proceeds would be insufficient to satisfy the many claims against the funds. Hence, each individual claimant had an interest in ensuring that only claims that were genuinely in rem claims were admitted and that those claims were properly scrutinised and quantified."

The claimants were bunker suppliers, subsidiaries of US-based World Fuel Services. The claims were for six stems of bunkers supplied in the first quarter of 2020 to both vessels. The claimed sums comprised the principal amounts for the supplies of bunker oil and (i) contractual interest on overdue amounts at 2% per month, (ii) an administrative fee of 5% of the principal amount on all amounts more than 15 days overdue, and (iii) a contractual indemnity in respect of the claimants' costs. These claims derived from the claimants' standard terms and conditions, which were in each case incorporated into the contract of sale by the claimants' order confirmation and invoice.

Hill Dickinson explains that it was not in dispute that the principal amounts were in rem claims. But two of the other in rem claimants, Carnival Plc and P&O Princess Cruises International Ltd (POPCIL) disputed that items (i) – (iii) could be so characterised. Their position was that these claims could only rank as in personam claims and should be re-directed against the operators of the vessels. Admitting them as in rem claims, would improperly deplete the funds available for distribution.

The point turned on whether the claims fell within the wording of section 20 of the Senior Courts Act 1981 headed 'Admiralty Jurisdiction of the High Court', specifically section 20(2)(m) regarding 'any claim in respect of goods or materials supplied to a ship for her operation or maintenance'.

Counsel for POPCIL and Carnival, submitted that the interest, the administrative fee and the costs indemnity were to be regarded separately and were not 'in respect of' the supply of the oil. Counsel for the claimants, submitted that these items were 'part and parcel' of the bargain and that it was not permissible to 'unpick' or 'slice and dice' the package of contractual terms upon which the bunkers were supplied.

The law firm noted that the judge did not think it appropriate to gloss the statutory words 'in respect of' or to attempt to define them further. They were ordinary words in the English language.

To date, and notwithstanding the involvement of numerous very distinguished admiralty practitioners and judges, no court had found it necessary to do that. It was enough to note that they were 'wide words which should not be unduly restricted'.

The judge acknowledged that the costs were further removed from the price of the bunkers than the interest and the administration fee. But they were no less a part of the contractual bargain and he saw no reason in principle to treat them differently. In the circumstances, the judge held that all four elements of the claims fell within section 20(2)(m).

The Hill Dickinson team notes: "This case offers useful confirmation that interest, administration fees and indemnity costs regarding bunker supply debts fall within the jurisdiction of the Admiralty Court. It is interesting to note that the judge found that the Hong Kong case of The Oriental Dragon HCAJ 162/2012 offered no support to POPCIL and Carnival's submissions. That case concerned a contract for the supply of a wide variety of goods and services and the judge noted that in such a case it would be correct to examine each one or at least each broad category. The present case though concerned the supply of a single commodity, oil bunkers, which was, and was accepted to be, for the operation of the ship. This finding leaves open the proposition that in appropriate circumstances the court could unpick the contractual consequences of non-payment or treat those consequences as separate and distinct claims for the purpose of section 20(2)(m)."



The new 'Superstar' Finnlines ferries will feature Wärtsilä engines and hybrid systems. ©Finnlines Plc

HYBRID SYSTEMS FOR NEW FERRIES

Finnlines's newbuildings will incorporate shaft generators to boost energy efficiency and cut emissions

Technology group Wärtsilä is to supply the engines and a range of electric solutions for two new ferries under construction at the China Merchants' Jinling Shipyard, Weihai, China, for Finnlines, part of the Grimaldi Group.

The two 'Superstar' vessels will operate between Finland and Sweden across the Baltic Sea. They will feature Wärtsilä 46F main engines, thrusters, and a state-of-the-art electric package. This includes a hybrid shaft generator system comprising a fully integrated multi-drive capable of driving the shaft generators in both directions as motors and/or generators. The package also includes the thruster control system, and a "highly efficient" energy management system for performance optimisation. This will enable the vessels to operate free of emissions on either batteries or shore power while in port.

The 230 metre long ferries will be capable of carrying approximately 1,100 passengers and will have 5,100 lane metres for rolling freight.

The Wärtsilä equipment is scheduled for delivery to the yard commencing in spring 2022, and the vessels are expected to enter operational service in 2023.

Battery replacement service

Following studies into the use of emergency and back-up batteries on ships, Furukawa Battery Co and Eco Marine Power Co., Ltd. (EMP) have launched a service aimed at enabling ship owners to reduce battery replacement costs.

The two companies say their Ship Battery Replacement and Management Service will also reduce waste, reduce the workload for the crew and help improve safety.

They add that they will review the installed batteries on a fleet basis and provide recommendations to ship owners or ship managers regarding replacements or upgrades. Details regarding how a testing plan can extend the life of the installed batteries will also be included. In addition, advice regarding safety or storage issues will be highlighted.

Hybrid electric power systems guidelines

Classification society ABS has launched a new publication, ABS Guide for Hybrid Electric Power Systems for Marine and Offshore Applications, aimed specifically at marine and offshore assets designed, constructed, or retrofitted with a hybrid electric power system. Assets meeting the Guide's requirements are eligible to receive a notation that denotes the hybrid application onboard.

ABS notes: "As the maritime and offshore industries focus on a low-carbon future, hybrid technology has gathered increased interest. Based on an asset's operational profile, hybrid electric power systems (HEPS) offer the opportunity to improve safety, reliability, operational efficiency, and reduce the fuel consumption, environmental footprint, and equipment maintenance when compared to traditional electrical power systems."

New emissions reporting service

WNI (Weathernews) has launched a Carbon Intensity Monitoring (CIM) service.

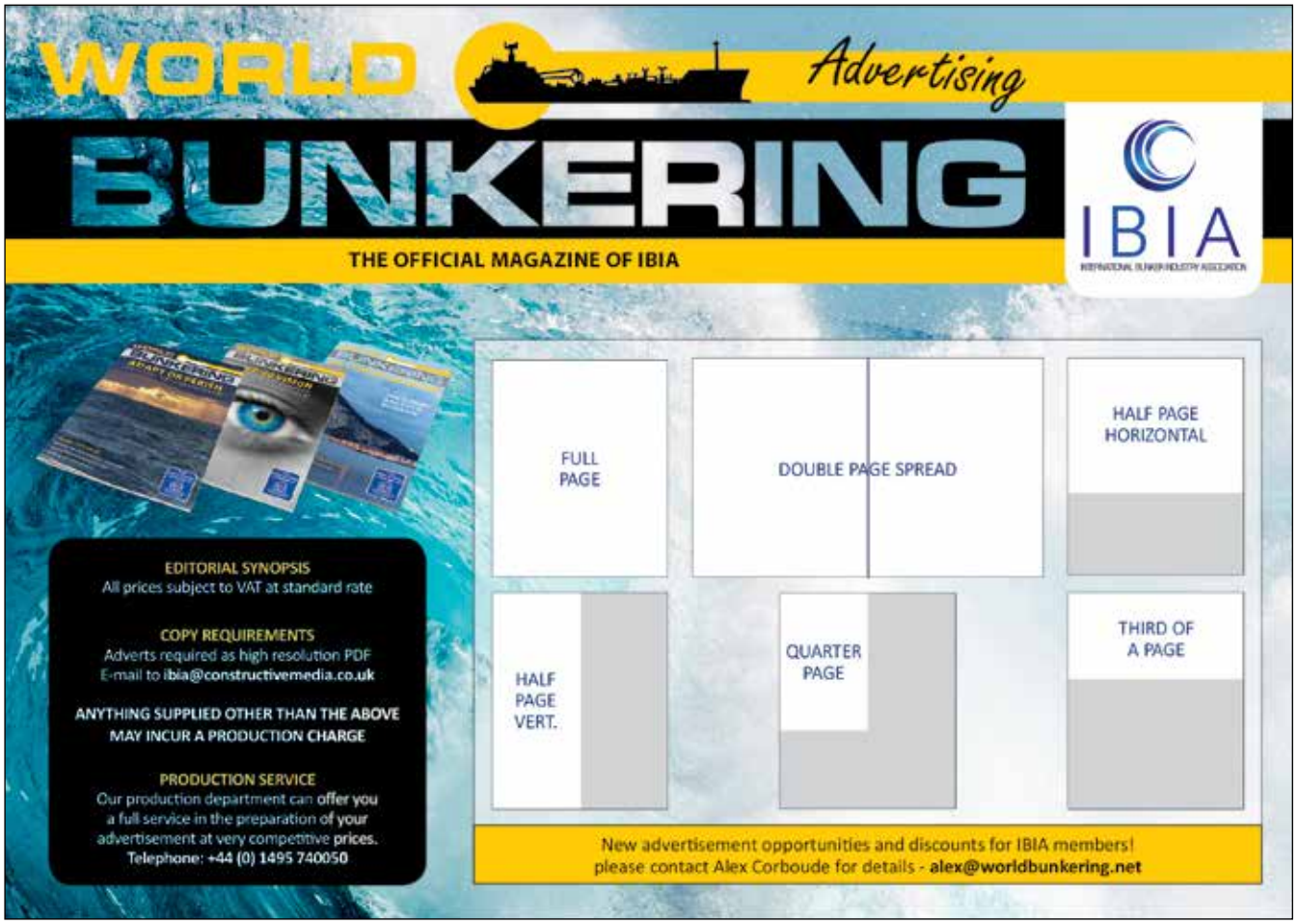


Weathernews says that climate regulation compliance and the ability to precisely monitor individual vessel and fleet emissions is a big challenge for shipping companies.

"Aligning shipping and chartering activities to be environmentally responsible is the ultimate goal of CIM, through measuring and reporting CO_2 emissions from berth to berth, including the voyage legs under spot chartering," says Weathernews Americas CEO Antonio Brizzo.

The company says that CIM collects all required data via interactive reporting tools and provides multi-layered data verification for accurate calculation of a vessel's Energy Efficiency Operational Indicator (EEOI) and CO_2.

Weathernews adds that CIM is "fully compliant with the technical guidance outlined in the Sea Cargo Charter, a global framework for aligning chartering activities with responsible environmental behaviour to promote the decarbonization of international shipping".





Bunkering in Turkey where the Customs authorities enforce strict oversight on quantities delivered ©Energy Petrol

MFM - NOT QUITE THERE YET

IBIA continues to champion the mandatory use of MFM to ensure confidence in the bunker supply industry but not everyone is convinced

In his message to World Bunkering readers in the Winter 2020 issue, IBIA chairman Henrik Zederkof emphasised that IBIA policy is to push for mandatory mass flow meter (MFM) as part of bunker licensing schemes, in the major bunker hubs of the world.

A recent IBIA statement asserted: "Given the very positive impact that mandatory MFMs has had on the bunker market in Singapore, there is a strong argument for introducing this requirement in other major bunkering ports to enhance transparency and reliability regarding delivered volumes, as well as boosting efficiency of bunkering operations, and reducing disputes."

That view does have widespread support. Major global commodity trader Trafigura only entered the bunker business some two years ago, in a joint venture with shipowners Frontline and Golden Ocean Group.

In that short time, TFG Marine has established itself as one of the top 20 suppliers in Singapore and has recently set up in ARA. It has also become an outspoken advocate of transparency in the bunker market and, especially, of the use of MFMs.

TFG Marine's Global Head of Bunkering, Kenneth Dam, pointed out to World Bunkering that the introduction of mandatory MFM in Singapore has led to an increase in overall compliance in the market. "There was something wrong in the market when suppliers were selling at lower prices than they were paying the refineries for the fuel. That has changed since MFM became mandatory, leading to a higher quality of performance for customers and consolidation of active participants in the market."

According to Dam the ARA market operates in a very similar way to that of Singapore before MFM became mandatory. TFG Marine has entered the ARA market using MFM barges, which will be fully calibrated and operational from March.

The credit afforded to bunker buyers in the current flat price environment comes at significant working capital cost, and marine fuel buyers and shipowners should study PRA-assessed price information in ARA, he suggested. "It simply does not make sense to see delivered bunkers trade lower than where FOB barges and cargoes are trading," he added. Following on from several bankruptcies in the industry last year, a more transparent approach including the use of MFM has received strong support from our banking and finance partners.

"TFG firmly believes that customers should receive the bunker fuel that they have paid for, no more no less – and advocates a move toward the compulsory use of MFM in support of this," said Dam.

In a similar vein Zederkof asserted: "We believe that the efforts of the Singapore Maritime and Port Authority (MPA) have set the right course to demonstrate how active use of bunker licences and MFMs can improve the quality of the supply chain and build trust in the industry."

He highlighted that, not long ago, the Singapore bunker market was regarded as a 'cowboy' market, with prices of delivered bunkers well below prices at the terminals. He stressed: "The MPA's wisdom and courage has changed that, and today Singapore is an example to be followed by others."

IBIA had hoped the Port of Rotterdam and other ports in the Amsterdam-Rotterdam-Antwerp (ARA) region would commit to make MFMs mandatory at the start of 2022 as part of a move to introduce bunker licensing. It notes in a recent statement that there was an ambition to do that during the consultation and planning period during 2019 and early in 2020. But it adds: "For now, it has proven too complex to set up a licencing scheme that covers the entire ARA region."

The Port of Rotterdam has gone ahead with a licensing scheme, but one that will not initially make MFMs mandatory.

The port explained that doing so "could have a considerable impact on the operational management of the bunker transporters and must therefore be properly substantiated. A decision will be taken on this in 2022 after the evaluation."

One major bunkering country that is not likely to move towards mandatory MFM on bunker barges is Turkey, according to IBIA Board Member and Bunker Committee Chairman for the Turkish Chamber of Shipping Mustafa Muhtaroğlu.

He told World Bunkering that every tonne of oil coming into the terminals goes through MFM connected to Turkish Customs and is then reported to the national oil authority by each terminal. The terminal subsequently reports all products loaded onto barges for delivery to ships to the same authority. All loadings from terminals are measured by MFM connected to Customs whose officers monitored every delivery to every ship.

Muhtaroğlu emphasised that all bunker suppliers "are licensed by same authority and every licensed bunker supplier reports every single tonne of bunker fuel delivered to ship is cross checked with Customs records".

"So," he stressed, "there can't be any quantity games, shortages or differences in Turkey due to our very efficient licensing and reporting systems which are enforced by law. In Turkey there is complete transparency. Every bunker buyer can see the whole supply chain transparently - which tanks at the terminals have been used, which lines to the bunker tanker and which tanks in the bunker tanker."

He added: "Turkey has been doing this since 2005 and has become the most reliable bunker hub in the world. Only five barges out of the total of 60 have MFM installed. That nine out of total 10 physical suppliers in Turkey not using MFM demonstrates the suppliers' confidence in the integrity of the licensing and reporting systems."

Generalising, Muhtaroğlu said: "Consequently the global bunker industry needs transparency and very clear licensing and reporting schemes for all players, i.e. terminals, suppliers, barges and trucks. IBIA is working on this."


Kenneth Dam,
Global Head of Bunkering
TFG Marine

Singapore cracks down

Recent court cases have reinforced the message that bunker theft will not be tolerated while new technology offers the prospect of additional reassurance that deliveries are being measured accurately.

Back in 2019 the Maritime and Port Authority of Singapore (MPA) revoked a company's bunker supplier licence after the company's employees were found to have "engaged in bunker malpractices, which include the use of magnets to interfere with the mass flow meter during bunkering operations". The MPA statement said Southernpec had failed to ensure that its employees complied with the terms and conditions of their licence. Its cargo officers also did not record the information in the bunkering documents accurately, which breached the terms and conditions of its bunker supplier licence.

In the same year, Inter-Pacific Petroleum had its licence revoked after MFM tampering was discovered. Two crew members of one of the company's barges were jailed in separate court hearings for their parts in the attempted fraud, which had been discovered during an MPA spot check.

Meanwhile, at the time of writing, criminal cases continue to be heard relating to the theft of 340,000 tonnes of gasoil with a value of over US$150 million from Shell's refinery on Pulau Bukom over about five years.

While malpractice has not been eradicated, there is general acceptance that the introduction of MFM has been a game changer. Initially, the operation of MFM was governed by Technical Reference (TR) 48. Last year this was superseded by a new Singapore Standard, SS 648 – Code of Practice for Bunker Mass Flow Metering (MFM).

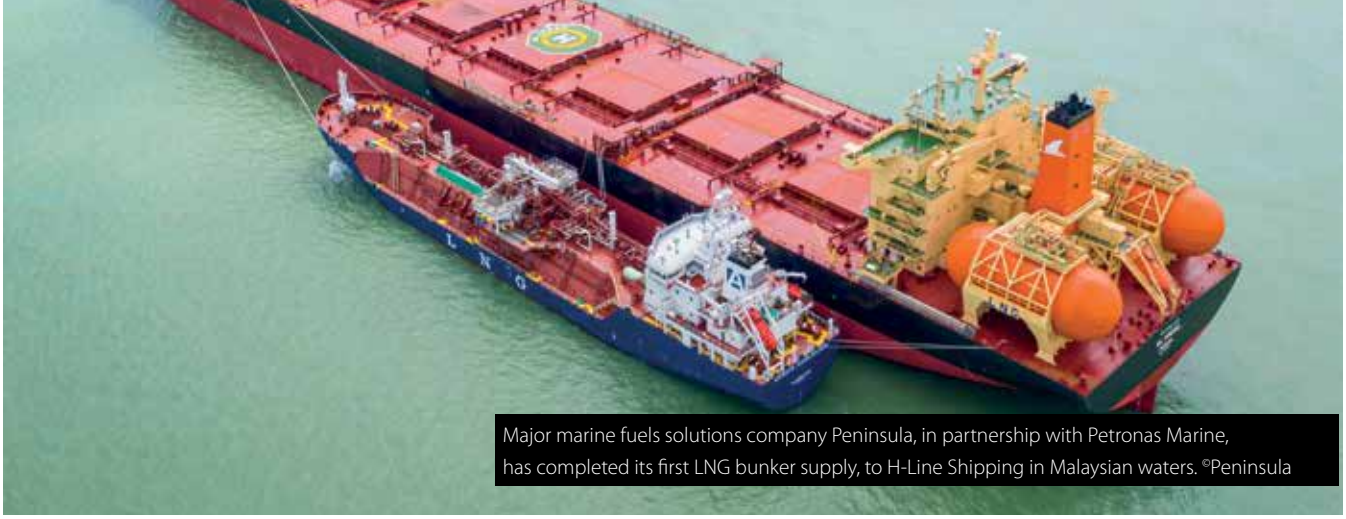
Last year also saw the launch of a new standard: Singapore Standard 660: 2020 (SS 660) Code of Practice for Bunker Cargo Delivery from Oil Terminal to Bunker Tanker using Mass Flow Meter.SS 660 integrates quantity measurement methods at terminals and on the barges.

In addition, the required regular verification procedures for checking that MFMs are accurately calibrated has been updated with a new formalised method; Technical Reference TR 80: 2020 Code of practice for meter verification using master mass flow meter.

Under TR 80, the use of a master meter can replace a three yearly physical test of the MFM, a time-consuming process involving the need for two barges. The Autumn issue of World Bunkering reported in depth on a master meter developed by Singapore-based company Metcore.

Another system to monitor MFM accuracy is being developed by local company, Mogas. The product FMDV ASSIST is based on software that constantly monitors and "makes visible the health" of MFM. A dedicated screen is situated inside the bunker barge's control room.

Mogas CEO Teo Seng Eng told World Bunkering that he believed 90% of the Singapore market was operating satisfactorily and the Mogas product, which is currently in the development stage, is intended to provide additional reassurance to reputable suppliers.



Major marine fuels solutions company Peninsula, in partnership with Petronas Marine, has completed its first LNG bunker supply, to H-Line Shipping in Malaysian waters. ©Peninsula

BINARY CHOICE?

Pro-LNG lobby says the options facing shipowners are ordering LNG capable ships now, or retrofitting later on

While the development of various alternative fuels is progressing fast and environmental groups warn against investing in expensive LNG infrastructure, Peter Keller, Chairman of SEA-LNG, has asserted there is a "fundamental binary choice facing newbuilds in 2021, as decarbonisation forces a choice between using LNG now, or retrofitting later".

He spoke after the publication of the organisation's annual report which outlines how "LNG as a marine fuel has moved from being a niche option to a mainstream fuel of the future." It claims: "Instead of avoiding making a decision and waiting for technologies to develop in the future, LNG enables ship owners to reduce emissions now while protecting the future."

According to SEA-LNG, bio-LNG is a "prime pathway to carbon neutrality", and its gradual introduction alongside synthetic LNG will incrementally decarbonise shipping towards the IMO's 2050 targets.

SEA-LNG further argues: "As there is likely to be a basket of future marine fuels, comparison on a level playing field is critical." The report notes the need for lifecycle analysis with current data taking actual operational environments into account, and working with seafarers, ports and port communities is essential. Specifically, the industry must make decisions on future fuels on a well-to-wake basis, looking at total emissions throughout the lifecycle of a fuel.

Waiting is "not an option" for getting to zero, it says, adding that going for LNG represents "a positive step down the decarbonisation pathway to carbon neutrality in marine fuels".

LNG comparison tool

Independent global LNG supplier Titan has launched a free-to-use LNG-delivered prices overview, together with a fuel basis energy compare sheet.

Available on Titan LNG's website, the new LNG delivered price page provides an overview of LNG prices delivered onboard in various quantities and ports, aiming to increase transparency and understanding of the cost of LNG as a marine fuel. It also displays up to date indicative pricing on a weekly basis in five key LNG fuelling locations: Rotterdam, North Sea, Baltic, Mediterranean and Singapore. Reference prices are available for two different drop sizes – 250 and 1,000 tonnes – for each location. The prices are presented across three delivery options where applicable, including truck-to-ship, FlexFueler barge, and sea-going bunker vessels.

The fuel comparison sheet is said to enable "informed decision-making by providing insight into the costs for LNG as a marine fuel – usually priced by € per megawatt hour – compared to other existing fuels in € or US$ per ton or MMBtu delivered now and in the future for accurate budgeting".

The pre-formulated table enables users to input relevant market prices, which are automatically converted into the LNG equivalent, allowing owners and operators to follow market trends. Moreover, premium access also provides forward curves, illustrating the delta of LNG vs MGO in terms of pricing.

Régine Portocarero, Business Development Manager, Titan LNG commented: "One of the biggest hurdles we face in the progress towards a low emissions future is the lack of transparency and understanding of LNG, which already contributes to reducing carbon and eliminates local harmful emissions. It is clear that LNG offers a clear pathway to decarbonisation through Bio-LNG and eventually using green hydrogen converted into E-fuels (synthetic liquid gas)."

She continued: "With our efforts, we hope to increase transparency and accuracy around LNG pricing, enabling shipowners and operators to make informed choices. It's essential that fuels are being compared on an energy equivalent basis – for example if you take 1,000 tonnes of MGO, you only need ~815 tonnes of LNG; it takes less fuel to travel the same distance."

"World's first" LNG hybrid tug

Singapore's Sembcorp Marine Integrated Yard is building what is said to be the world's first LNG-hybrid powered tug.

The harbour tug will be operated in Singapore by Sembcorp Marine subsidiary Jurong Marine Services. The newbuilding is the first of 12 tugs that Sembcorp Marine plans to design and build to replace the existing diesel-powered ones between now and 2025.

"The mtu marine gas engines are part of RollsRoyce's Green and High-Tech programme. Without exhaust gas after treatment, they emit no sulphur oxides, only very small quantities of nitrogen oxide and particulate mass is below the verification limit," said Chew Xiang Yu, Head of Rolls-Royce Power Systems' commercial marine business in Asia.

LNG fuel tank for big box ships

French LNG containment specialist GTT has obtained approval in principle (AiP) for its NO96 membrane containment system for LNG fuel tank application for an ultra large container vessel (ULCV) from Bureau Veritas (BV) classification society.

GTT and BV reviewed the compatibility and safe integration of the NO96 technology as an LNG fuel tank in a container vessel hull. Over the course of the AIP study, a liquid motion assessment of the tank configuration has been performed.

Philippe Berterottière, Chairman and CEO of GTT, said: "We are pleased to receive this new Approval in Principle which allows GTT to offer increasingly competitive solutions that meet the requirements of the LNG market as a marine fuel. This will enable all our licensees to offer membrane solutions to this market."

LNG bunker safety guide

Japanese classification society ClassNK has released its Guideline for Survey and Facilities/Equipment of LNG Bunkering Ships, which outline the additional safety requirements for LNG bunker tankers.

ClassNK says: "There are currently no established international conventions for the facilities/equipment of ships that transfer LNG to other ships at sea, and additional safety equipment has been considered individually. Based on the examinations conducted so far, ClassNK has developed the Guideline which compiles the requirements for additional equipment for the safe transfer of LNG, a cryogenic substance, between ships, and surveys. The Guideline stipulates the layout and system design of LNG bunkering ships, fuel transfer systems, and operation, as well as class notations according to the equipment to be installed."

The Guideline is available to download free of charge at ClassNK's website www.classnk.com.

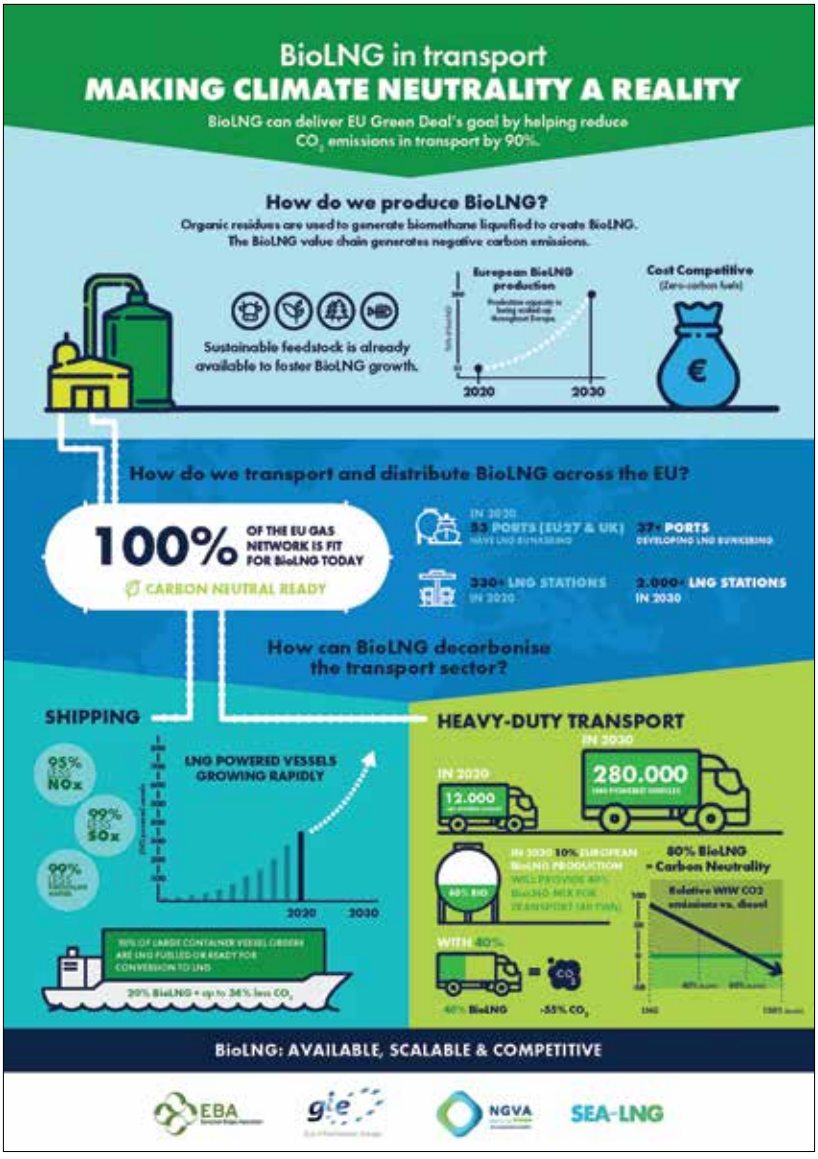
Biogas bunkering at Gothenburg

In December 2020, the UECC PCTC-owned vessel Auto Energy received what was said to be the first ship-to-ship bunkering of LNG blended with 10% renewable liquefied biogas (LBG).

Gasum's LNG bunker vessel Coralius performed the bunkering operation at anchor off the port of Gothenburg, Sweden.

"With this delivery, UECC strengthens our position in front of the ro-ro market, through our commitment to increase the uptake of renewable fuels," said UECC's CEO Glenn Edvardsen. "We have made a significant investment in a pioneering solution that recognises our customers' desire for a sustainable logistics partner. This initiative sends a signal to the market that it is possible to achieve carbon-neutral transport."

LBG supplied by Gasum is typically sourced from biodegradable waste streams in Scandinavia, including residential, retail, and commercial sewage and/or agricultural waste streams.





LOOKING BACK AT 2020

The President of the Russian Association of Marine and River Bunker suppliers, Vladimir Kovalev, explains to Olga Bogacheva how the country's bunker sector fared in the face of coronavirus and IMO 2020

OB: On January 1, 2020, further global restrictions on the sulphur content in marine fuel came into force. What effects did this have on the Russian bunker market?

VK: In general, Russian bunkering companies confidently complied with the IMO requirements - maximum 0.5% sulphur content globally and 0.1% for the emission control areas. All supplies for foreign and Russian shipowners were delivered. All claims, when there were any, were resolved by the parties in a reasonable manner.

However, there were shortages of fuel at times, especially in the north-western ports of the Russian Federation. These were caused by the global situation. In accordance with the OPEC + deal, oil production was reduced in all countries party to the agreement. Russia had to decrease its share of oil production. Since the government could not allow a shortage of automobile fuels, other markets - and in particular the bunker market - suffered reduced supplies.

All industry experts were wrong in their forecasts regarding bunker fuel prices. They expected increases due to IMO 2020 restrictions, the only question was how significantly. In reality, the global pandemic, predicted by no one, occurred and everything happened the other way around. In the spring, the cost of the crude oil dropped and did not recover during the year.

Here is just one example from the Far Eastern market. There the price of fuel oil with 0.5% sulphur content (VLSFO) at the beginning of last year was $645 a tonne. It dropped to just $190 a tonne in April, and was still only $295-305 a tonne in the autumn. Similar situations were observed in all other regions.

High-sulphur fuel oil, contrary to forecasts, still enjoys quite stable demand and the price for it has remained relatively high.

OB: How has demand for bunker fuel changed during the pandemic?

VK: For global shipping, 2020 was a year of decline. Russia is no exception. The final figures for the year have not yet been released, but approximate figures are available. They show total cargo turnover decreased slightly, by about 3%. But the northern regions saw cargo drop significantly - the Baltic (-7%) and the Arctic (-9%). This was due to reduced energy exports (oil -14%, petroleum products – 4.8%, liquefied gas – 1.4%). The number of ship calls in the whole country also decreased by about 8%.

This fall in economic activity reduced bunker fuel demand. According to available statistics and reports, sales fell by 30-40% in 2020.

The only exception was the Black Sea basin, where supplies remained at the level of the previous year. A favourable demand-supply situation occurred there. Bunker prices in the nearest Mediterranean ports were significantly higher. For example, at the beginning of the year, the discount in Novorossiysk was more than $200 per tonne compared to prices in Istanbul.

OB: How has the market structure changed in this regard?

VK: Around the world, independent bunkering companies have lost out heavily to big oil companies. The reason, apparently, was that buyers were not sure about the quality of blended fuel, particularly about its stability. These problems more likely appear when the supplier does not produce its own fuels. Experience has confirmed the validity of such concerns, particularly in the market of the Far East.

In Russia, bunker market consolidation has been going on for a long time, since the arrival of the vertically integrated companies 10 years ago. In 2020, several independent companies suspended their activities or completely stopped operations. Some have managed to diversify activities and offer other related services, or just leased their assets.



We hope that these companies will return to the market one day.

OB: How did the introduction of the excise tax on medium distillates affect the activities of bunkering companies?
VK: As we expected, companies in all regional markets are experiencing difficulties with the return of excise duty. For example, in the Far East, the price for MGO subject to excise duty fell by more than $80 per tonne. Shipowners clearly prefer an excise free product to avoid potential problems and losses.

From 1 January this year, the procedure for calculating the reverse excise duty on crude oil has changed again. A new list of documents required for obtaining the tax deduction was released. Moreover, producers of middle distillates are now required to confirm the excise tax calculation and to certify the quality of petroleum products. The definition of 'middle distillates' has been revised in law.

In the autumn, ship owners, represented by the Russian Shipping Chamber, and fuel suppliers, represented by the Russian Association of Marine and River Bunker Suppliers, discussed how the new requirements of the Tax Code should be met in practice. The procedure for collecting and preparing the documents required for the return of the excise tax remains extremely complex. However, the problems can be partly resolved within the framework of contractual relations between the supplier and the consumer of fuel. We discussed all the details thoroughly with the shipowners. Initially we will see how the new legal regime will develop. If something goes wrong, we will be ready to act.

OB: What was the major focus of the Association in 2020? What would you call a victory and what would you call a failure?
VK: In the previous year our main efforts were focused on improving legislation as part of an administrative reform known as the 'regulatory guillotine'.

Vladimir Sergeev, the Chairman of the Council of our Association, joined two working groups on the regulatory guillotine mechanism under the Government of the Russian Federation.

We involved all members of our Association without exception to obtain the opinion of the professional bunker community. Eventually, a group of highly qualified experts was formed. They worked quickly and efficiently, focusing on the most acute problems of recent years.

As a result, a significant easing of a number of requirements and procedures governing bunker activities was achieved.
In particular:

- the requirements for the compulsory equipment of the emergency booms have been significantly eased. For example, booms can now have a "wall height of at least 830 mm" (previously at least 1500 mm). The requirements for the lifting capacity of cranes and the performance of oil pumping systems have also been adjusted. Experts are aware that in the real port conditions, where bunkering actually takes place, this is absolutely enough to contain hypothetically possible spills. However, excessive norms have been remaining in the laws for decades, and companies had to comply, buying and storing powerful equipment that was unnecessary in real conditions. Now these costs can be decreased without any damage to the effectiveness of oil spill response.
  In case of catastrophic circumstances (extreme weather conditions), private rescue companies have got the right to additionally engage third-party vessels;
- a compulsory licence for handling dangerous goods has been abolished for bunkering operations;
- pilotage exemption arrangements for masters of bunkering vessels working within port limits have been clarified;
- the requirement to conduct expensive training to check the readiness to eliminate oil spills every three years has been cancelled for bunkering companies

The regulatory guillotine has had the positive result of bringing the industry together and forced the authorities to respond.

Specialists from several related industries have created an effective mechanism for solving common problems. We can confidently state that respect for our Association has grown significantly.

Among other serious issues, we can recall that in the spring of 2020 the Association, along with other trade unions, prepared an opinion on the ban on the use of marine fuels with a sulphur content of more than 1.5% in internal Russian waters. The introduction of this rule was postponed until 2024, which will undoubtedly help both owners of ships operating on inland waterways and their fuel suppliers.

Since April 2020, the Association has been a member of the Operational Headquarters for Supporting the Russian Fleet during COVID-19 pandemic under the Ministry of Transport of Russia.
This body responded both to requests from companies and to the general situation connected with the pandemic. The following issues were considered and solved: the rotation of crews in Kaliningrad, Murmansk and Krasnodar Kray, the introduction of a moratorium on any training courses during the pandemic, delays of the inspection of ships in the Sea and River Registers, etc. We managed to obtain positive decisions in almost all cases.

There were also obvious failures. It is a pity we were unable to hold our traditional events, the All-Russian Bunker Forum in June and the autumn reception. Now most meetings, including general meetings, boards of directors, operational meetings are held online. Somehow it is even more convenient, especially for our colleagues from the Far East. However, live communication is priceless, and I hope that soon we will be able to return to the live format.

In 2020, we managed to organize only a single training program "Development of a List of Hazardous Materials" recommended by MERCK Resolution 269 (68).

We are currently discussing a series of online seminars on the practical aspects of the laws changed with our participation.



LNG bunker vessel

I believe that this project will be successful and very useful for bunker professionals.

OB: When will the transport sector recover from COVID-19: when can we expect recovery?
VK: That is a good question. I would also like to know the answer very much. Obviously, this will happen when the economy and logistics chains begin to recover. Do you remember, at the beginning of the pandemic, optimists talked about the inevitable explosive V-shaped recovery? I would like it to happen as soon as possible.

RUSSIAN NEWS

More cargo on Northern Sea Route
The cargo transportation along the Northern Sea Route (NSR) in January-December 2020 amounted to 32.97 million tonnes, 4.7% higher than in 2019, according to Rosatom State Corporation.

The Russian Federation's 2020 target for its Northern Sea Route project was 29 million tonnes. The project aims to develop the NSR and increase cargo flow to 80 million tons in 2024.

There are six seaports, Pevek, Dixon, Tiksi, Khatanga, Sabetta and Dudinka, on the NSR. In addition, 17 other coastal and island locations carry out cargo operations in the waters of the NSR.

First Russian LNG bunkering tanker launched
Gazprom Neft launched the first Russian LNG bunker vessel in December. The new vessel will join the Gazprom Neft fleet in the second half of 2021 and will provide low-tonnage LNG fuel transportation and bunkering services in St. Petersburg, Ust-Luga and Primorsk.

The LNG bunkering tanker was named after Dmitry Mendeleev, a famous Russian chemist. She is 100 metres long with a cargo capacity is 5,800 cubic metres and an average bunkering time of about 8 hours. Assigned Arc4 ice class, the LNG bunkering vessel can work independently in 0.80 metre thick ice.

Drone checks for oil spills at Vladivostok
Vladivostok port's harbour master has started daily environmental monitoring of port waters using a drone, according to the Primorsky Krai and Eastern Arctic Port Administration.

If detecting pollution of the seaport area, the drone sends the information, along with photos and video, to the Primorsky transport Prosecutor's office, the Primorsky Interdistrict Environmental Prosecutor's office and the Far Eastern Interregional Department of Rosprirodnadzor.

The drone is equipped with modern still and video cameras. Monitoring is designed to prevent pollution of the seaport water area with solid waste, sewage, oil-containing waters, oil, and other dangerous and harmful substances, thereby helping to reduce, or even eliminate the consequences of pollution.

Previously, environmental monitoring of the water area was mainly carried out using patrol boats.

NOVATEK resumes LNG transshipment in Murmansk
NOVATEK is resuming LNG transshipment operations from ice-class gas carriers to conventional tankers near Kildin Island in the Murmansk region, Kommersant has reported.

Earlier, due to the coronavirus pandemic, the company was unable to mobilise foreign technical specialists to undertake transshipment in the Russian Federation and these operations were moved to Honningsvåg , Norway. Transshipment in Russian waters is more difficult than in Norway due to exposed conditions in the Kilda Strait which is narrow and open to the waves.

NOVATEK in German LNG terminal project
A NOVATEK and Fluxys joint venture plans to design, build, finance, own and operate a medium-capacity LNG transshipment terminal with annual capacity of about 300 thousand tonnes in the port of Rostock, with operation aimed at starting in 2023. The terminal is intended to receive LNG carriers, including those transporting production of the NOVATEK LNG plant which is currently under construction in the port of Vysotsk, and the subsequent sale of LNG to the market. It will also provide for bunkering services and transshipment of LNG to bunker barges.

NOVATEK is the largest independent producer of natural gas in Russia. In 2017, the Company entered the international LNG market after successful launch of the Yamal LNG project.

Cruise ship business collapses
Cruise ship calls in Russian ports stopped completely last year due to the COVID-19 pandemic. St. Petersburg and Vladivostok were particularly affected.

Gazpromneft Marine Bunker, the leading player in the St. Petersburg market, has been partnering with Royal Caribbean since 2008 and deliveries since then have amounted to more than 400,000 tonnes. During the summer navigation season of 2019, the company sold 55,000 tonnes of bunker fuel to cruise ships.

Profits also dropped in the Far East where the authorities have put a lot of effort into attracting cruise tourism to their region. In particular, dredging works were carried out at the berths of Vladivostok, allowing in 2019 the Royal Caribbean passenger ships, the 169,379 gt Spectrum of the Seas and the 168,666 gt Quantum of the Seas to enter Amur Bay for the first time.

Inland passenger traffic down

In 2020, passenger navigation on Russian inland rivers started much later than usual, at the end of June instead of April, which on average reduced the passenger traffic by almost 30%.

According to the St. Petersburg Association of Passenger Boat Owners, the past season was the worst for 12 years. In total, only 1.1 million people were transported, which is 41% less than in 2019. Some small carriers suspended their operations after the 2020 season. Larger companies have frozen their development programs. The construction of ships commenced before the pandemic has been stopped.



LNG vessel under constraction



BUSINESS PROFILE: TOTAL LUBMARINE #TLM

Total Lubmarine: your trustworthy and reliable supplier

Total Lubmarine is a specialized marine lubricants business which provides innovative solutions to the global shipping industry.

Our history began in 1952, when Antar, a small petroleum business in France, began supplying marine lubricants to some 40 steam vessels. Elf Aquitaine expanded this activity internationally in 1961 when it created Lubmarine, a worldwide network of partners and distributors dedicated to marketing and supplying the same high-quality marine lubricants, backed by industry-leading customer services around the world.

Today, Total Lubmarine - a division in the Total Group - is now one of the leading marine lubricants suppliers, and our products and services are trusted to protect marine engines and auxiliary equipment on board more than 7,000 vessels each year. IHS Markit's data report revealed we are the second largest port network in the international marine lubricants segment. In addition to the officially listed ports, Total Lubmarine also makes its products available via non-listed ports, bringing total coverage to 1,000 ports in about 100 countries.

We have become the shipping industry's partner of choice, providing local support to our global maritime industry customers with a pioneering range of marine lubricants, greases and services.

Working through the pandemic

One of the Total Group's core values is safety and this has been, and continues to be, a major priority for us, extending to everyone across the Total Lubmarine customer and supply chain network.





At the height of the pandemic our teams remained available in a 'business as usual capacity' to help with any of our customers' needs – and we used technology to provide that immediate, real-time support for all our customers. Daily contact with ports and port operations provided a level of reassurance for our customers on product supply and logistics, as many of the challenges we face are centred on how vessels, ports and ship-to-shore operations can operate 24/7. This includes our International Port Directory which is updated with the latest information on each port's delivery status, and on-demand downloadable listing.

To minimise potential disruption for our customers, we also developed operational Tech Care kits for use onboard vessels to ensure engine maintenance and performance can be frequently assessed and diagnosed with immediate and localised decision making with online support from our experts when needed.

Increasing support for all our customers

With IMO2020 regulation transitioning the shipping industry towards lower sulfur fuel oils, the industry has been encouraged with exploring options to meet stricter emission reduction targets. As highlighted in the findings of the 2020 Fuel Oil Quality and Safety Survey published by BIMCO, The International Chamber of Shipping (ICS), INTERCARGO and INTERTANKO, engine cleanliness is by no means a superficial concern. Fouling and deposits can impact engine efficiency and risk malfunction which often leads to more serious problems down the line.

It is why we launched a series of new videos to raise the importance of drain oil analysis in helping achieve optimized lubricant oil feed rates to identify and prevent potentially costly engine damage.

A single cylinder oil for all 2020 compliant fuels

Engine cleanliness requires a high level of in-depth technical awareness and solutions for ship operators and OEM's to ensure they implement the right lubricants and fuels strategy – and are using the right combination of solutions to operate successfully. It is one of the reasons why our technical expertise is focused on ensuring all our customers use lubricants and monitoring tools that deliver optimal engine performance and engine cleanliness. And, we have made progress.

Earlier in May 2020, MAN ES endorsed the use of TALUSIA UNIVERSAL, with a No Objection Letter (NOL) confirming TALUSIA UNIVERSAL's 57 BN [SAE 50] approved use in MAN B&W two-stroke engines operating on <0.50% S VLSFO, and fuels with a sulfur content ranging from 0.5 to 1.5%.

TALUSIA UNIVERSAL 57 BN [SAE 50) recently received a revised NOL from Winterthur Gas & Diesel (WinGD) adding Dual Fuel (DF) validation for the WinGD range of DF engines.

This DF validation adds to the existing TALUSIA UNIVERSAL NOL, issued on March 3, 2020, for use in WinGD X, WinGD X-DF, WinGD RT-flex, WinGD RT-flex-DF, Wärtsilä RTA, Wärtsilä RT-flex and Wärtsilä X engines, as well as in Sulzer 2-stroke engines operating on fuels with a sulfur content from 0.00 % m/m up to 1.50 % m/m.

This means TALUSIA UNIVERSAL is seamlessly compatible for any IMO 2020 compliant fuel strategy such as LSFO, VLSFO, ULSFO and including LNG.

Looking to the future

At Total Lubmarine we are strengthening our work with OEMs and the shipping supply chain on how best to develop new formulations of cylinder lubricants and Trunk Piston Engine Oils appropriate to the new fuels of the future, and their application for both 2 stroke and 4 stroke engines. We are also taking into consideration not only engine characteristics, but emission control and energy saving systems, as well as operating conditions so we can create solutions designed to help further reduce CO_2 emissions.

www.totallubmarine.com





PORT OF CEUTA

Located in the Spanish enclave of Ceuta in North Africa, the Port of Ceuta is a key port and bunker supply location in the Strait of Gibraltar

One of shipping's main checkpoints, the Strait of Gibraltar is at the crossroads of East-West/North-South trade lanes, with over 100,000 vessels passing through the channel each year.

But the year 2020 was a very difficult year for all industries due to coronavirus and, in spite of there has been reduction in the number of vessel calls at the port during the pandemic, there has not been any marked reduction in bunker volumes. In fact, at the end of the first quarter of 2020, the port of Ceuta ranks fourth nationally with about 200,000 tons of marine fuel supplied. At the end of November 2020, it has reached 536,572 tons supplied to a total of 6,653 vessels, March being the month it was supplied more fuel, 79,774 tons. Besides, the anchoring has increased by approximately 7%, that is, supplies by barge to ships anchored in bay.

In the same line, it is important to highlight that the Port of Ceuta started supplying VLSFO at the end of 2019. Since then, this fuel has become the star product with 125,000 tons supplied between ships docked and anchored in the bay, the VLSFO has become an unexpected rival, surpassing even the MGO (Marine Diesel).

On the other hand, our objective related to bunkering is to boost the competitiveness of the port through infrastructure investment and modernising its fuel supply facilities.

With regards to cruises, the port of Ceuta was working very hard on this issue with the clear intention of attracting tourists to our city. Our facilities have been transformed in recent years to receive larger ships, in the case of tourist cruises the adaptation of the Spain Pier to accommodate larger ships is a reality and large cruise ships that reach 300 meters in length visit us with capacity for more than 3000 passengers between tourists and crew.

Now, with the situation we are dealing with, we are working in respecting all the sanitary conditions but with the same goal. In fact, we will receive the first calls this year and we expect to host more cruise companies in the next months and years so as to recover the normal pace of this industry and betting heavily on this traffic.

comercial@puertodeceuta.com





BUNKER ONE

Bunker One introduces one of a kind video monitoring of the bunkering process

Transparency is a crucial part of any bunkering procedure. Therefore, we are proud to introduce our new unique solution; Live Streaming (www.bunkerone.com) - a digital concept providing tamper-proof and uninterrupted on-site video recordings of the vital steps in the bunkering process.

What makes Bunker One Live Streaming so unique?
Suppose safety precautions preclude the crew from the customer's vessel to board the supplying barge to witness the bunkering processes, including the sampling procedures. Bunker One Live Streaming take an enormous step in making bunkering much more flexible and transparent by digitalising the process.

With Live Streaming, we offer our customers the opportunity to witness the sampling and the bunkering process remotely and even retrospectively for 45 days. Video cameras are installed in vital positions on our ship and will start recording as soon as the delivery begins. The video recording is then uploaded to a server which will be available for review by customers via the internet or by accessing the Bunker One Local Area Network (LAN) onboard the barge.

Bunker One still invite and warmly welcome our customers on board our barges to witness the entire bunkering process and sampling processes, but if boarding is not possible for some reason, we offer Live Streaming as an alternative or as a supplement.

The system complies with the EU's GDPR directive and works on all standard browsers and tablets.

Commenting on Bunker One Live Streaming solution Steffen Kortegaard, Technical Manager at Bunker One says,

"We are very excited about our new innovation taking us one step further on our journey becoming digital pioneers in our industry. We want to digitalise our processes making bunkering simpler and more convenient, enabling our customers to focus on their business. We are fully up and running with Bunker One Live Streaming on M/T AMAK SWAN, and it will be installed on other of our supplying units in the coming period. The solution has been tested by a number of customers with strong results and great response. We hope that this initiative will set new standards for our industry, thus enhancing transparency, embracing digitalisation and creating more value for our customers."

On the M/T AMAK SWAN a router with 4G GSM is installed on the top of the deckhouse along with three cameras.



Bunker One goes digital
2020 was indeed an eventful year in shipping with new regulations, COVID-19 pandemic and a dramatic development in oil prices. Altogether, this calls for transparency and a significant focus on new ways of working and digitalisation within our industry.

At Bunker One, we focus on digitalising our processes and Bunker One Live Streaming is a part of more immense IT solutions. Bunker One will introduce a new IT platform, Bunker One AtoZ which features digitalised document flow from enquiry through to invoice, including client dashboards, live operational updates, e-BDNs and other transparency initiatives.

Bunker One knows the importance of connecting and interacting with customers. "We are very focused on transparency, and by introducing these new operational standards, I am confident that our customers value us even more as the quality supplier, we pride ourselves to be." Peter Zachariassen, CEO at Bunker One, says.

Learn more
Please feel free to get in touch if you would like to learn more about Bunker One Live Streaming.

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Bunker One



FUJAIRAH NATIONAL GROUP (FNG)

Fujairah National Group (FNG) is one of the leading, diversified business entities located in the Emirates of Fujairah, on the East Cost of United Arab Emirates

Structured into Eight operational divisions - Construction, Real Estate, Healthcare, Education, Oil Storage, Aviation, Trading, Services and Hotels. The group maintains a decentralized approach, giving individual businesses flexibility and versatility to maintain a competitive stance which benefits employees, providing a clearly defined work culture wherein individuals are empowered with authority and responsibility for their work. The success of FNG is attributed to the proactively managing changes, whilst upholding the values of integrity, excellence, and social responsibility.

Entrepreneurship and rigorous customer focus has enabled the FNG Group to grow its business by responding to the ever changing needs of the customers and societies in which it operates. We are committed to offer customers, an unrivalled choice of product and services with exceptional standards.

Gulf Petrol Supplies LLC is 100% owned by FNG, which is owned by Fujairah Ruling family members and is part of a larger entity. Within a short span of time, GPS Bunkers has established its reputation as a service-oriented company, with a broad knowledge of the bunkering business, particularly in the ports of UAE along with Indian Sub-continent, Sri Lankan Ports and across an array of Global ports.

Our specialized knowledge of physical bunker trading along with B2B business, gives us an edge to dedicate our attention in building and maintaining solid relationship with our customers and through these collective efforts, we consistently endeavor to create value for our customers, driving the chain of conducive relationship with them.

We operate and function in one of the busiest ports of the world as a physical distributor, as well as a reseller of global marine fuel, with a strong base in Fujairah, always guaranteeing high quality products and elite services. Along with handling of bunkering and cargo trading of fuel oil & marine gasoil in the port of Fujairah, Khorfakkan & Kalba, we also cater to onshore gasoil retailing. GPS has its owned and controlled infrastructure, which includes oil storage facilities and fleet of barges, which provide an edge over any other market players. These core competencies along with our commitment to excellence, provides us a very strong foundation for delivering immaculate services and support for all our customers across the regions.

These services of ours are backed by years of expertise and knowledge in these areas. Endeavoring always to provide the utmost professional and economical solutions for meeting marine fuel needs, along with the best local knowledge efficiently.

Gulf Petrol Supplies also holds a 60% stake in GPS Chemoil Storage Facility, a joint venture between Gulf Petrol Supplies and Glencore in Fujairah. With a total capacity of 700,000 CBM the GPS terminal provides storage facilities for the whole range of petroleum products. This Oil Terminal is a state-of-the-art terminal, with topmost advanced technologies, wherein the tanks are equipped with heating systems, blending facility with ejector nozzles and can handle all qualities of Fuel Oil. GPS recognizes and has always embraced the importance of taking the long view. Our business model, strategies and growth plans are driven by a clear vision of the role we aspire to play in creating energy for a better world.





GIBRALTAR PORT

REMAINS OPEN FOR BUSINESS!

GIBRALTAR PORT AUTHORITY

Despite the upheaval which the COVID19 pandemic has caused globally, and to the world of shipping in particular, Gibraltar Port has remained open for business throughout, albeit with a variety of restrictions in place to protect both its maritime partners and the local population. The implementation of strict health protocols has provided an environment whereby the Gibraltar Port Authority (GPA) has been able to facilitate vital maritime operations and offer a humanitarian lifeline for its customers.

Manuel Tirado, CEO and Captain of the Port commented 'We have been one of the few ports to implement measures to ensure that maritime services such as crew changes have been able to take place safely, allowing crew to be able to get home safely to their families while adhering to the health protocols to protect everyone involved. He added that Gibraltar Port had recently received special thanks from major maritime organisations acknowledging Gibraltar's help in this regard.

But it is not just crew changes where Gibraltar has been able to offer support, for the cruise sector in particular Gibraltar has been a vital hub for cruise companies whose ships have needed refuelling, restocking of supplies and all-important crew changes. In fact, Gibraltar has recently been recognised by the Medcruise Association, representing the second largest cruise market in the world, with an award for the 'Western Mediterranean MedCruise port showing the greatest commitment during the pandemic.'

Bunkering operations, despite the pandemic, have also continued throughout and the numbers of ships conducting bunkering operations have not been dramatically affected.

These are all examples of Gibraltar's nimble response which has enabled it to service the needs of visiting ships safely and effectively.

And all the while, Gibraltar has also been looking to the future with the recent announcement that Shell has successfully completed its application formalities for an LNG Bunkering licence with the grant of the licence being then approved.

Minister for The Port, the Hon. Vijay Daryanani MP, sees this is a key step in the evolution of marine services in Gibraltar and is also in line with its aspiration to keep Gibraltar on the leading edge of developments in the bunkering industry globally. The grant of this LNG bunkering licence has demonstrated the Port's forward-thinking approach to developing the maritime industry, as well as ensuring that Gibraltar remains one of the leaders in the transition to cleaner fuels, thereby helping to reduce the environmental impact which shipping is often associated with.

The Gibraltar maritime industry is now starting to focus on the rest of 2021 and beyond with more optimism especially now that the global vaccine rollout was underway and he hoped that the terrible impact of the virus would start to ease soon, allowing sectors which had been severely affected to start their recovery. He added that the cruise industry in particular had been devastated, and the general consensus was that there would not be much activity until towards the end of 2021, leading into 2022 but that Gibraltar would continue to work as hard as ever to promote itself as a premier cruising destination and he looked forward to welcoming back cruise liners and their passengers.

Minister Daryanani was also hopeful that as 2021 progresses it will be possible to restart the GPA's marketing programme of direct engagement with its existing and new customers but, for now, the GPA wanted to take this opportunity to remind companies that Gibraltar continues to be 'Open for Business as Usual'.





FuelVision365 BY LOGIC VISION

LOGICVISION

FuelVision 365 is the no.1 ERP software solution for bunker companies
IMPROVE YOUR BUSINESS WITH OUR SPECIAL SOFTWARE SOLUTION FOR BUNKERING

About:
Logic Vision is the ERP software provider that supports business processes for companies in the Oil & Gas, Maritime and Manufacturing sectors. Founded in 1992, Logic Vision has supplied and implemented business software integrated with Microsoft Dynamics 365. More than 2,500 satisfied users work with our software and services daily.

Microsoft Dynamics 365 has been the go-to flexible ERP solution for companies for 30 years. More than 160,000 different organizations in over 195 countries work with this powerful software solution.

Bunker industry, dynamism at its best. Variable prices, fluctuating stocks, and increased pressure on the margins mean that a clear overview of business processes is a must.

FuelVision365:
FuelVision 365, insightful, easy to use and has several adaptable features. You can simply build a complex pricing structure. FuelVision 365 meets the strict legal and tax regulations. Excise registration is transparent, easy to understand and to report. With nomination functionality, commission registration, credit checks and digital files, you can switch between different menus with ease while registering everything in an easy-to-use software solution.

That saves time. Absolutely perfect for companies in the bunker industry.

FuelVision 365 consist amongst others of:
- Contract management
- Purchasing & Sales
- Back-to Back management
- Inventory management
- Excise management
- Digital files
- Reports
- Financials

The future:
The future is now and it is challenging. Is it a threat or an opportunity? Business software is evolving at a rapid pace. The integration between FuelVision 365 and other Microsoft business applications such as Office365, PowerBI and Azure intensifies every update.

Did you know that there are many add-ons available that support your daily business processes?

We believe that the future offers many opportunities.

Our is goal is to be the one stop shop for business software in the sectors we serve.

FuelVision 365 based on Microsoft Dynamics 365 is a choice for the future!

More information:

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The Netherlands
+31 (0)184-677588
info@logicvision.nl



FUELVISION365
Powered by Microsoft

MICROSOFT DYNAMICS 365

GOIL COMPANY LIMITED (GOIL)

GOIL Company Limited (GOIL) is a Public listed Oil Marketing firm

The company is ISO 9001:2015 as well as ISO 14001:2015 Certified. GOIL has as its subsidiaries, GO Energy, a Bulk Distribution Company Limited and GOIL Offshore Limited to cater for its upstream business.

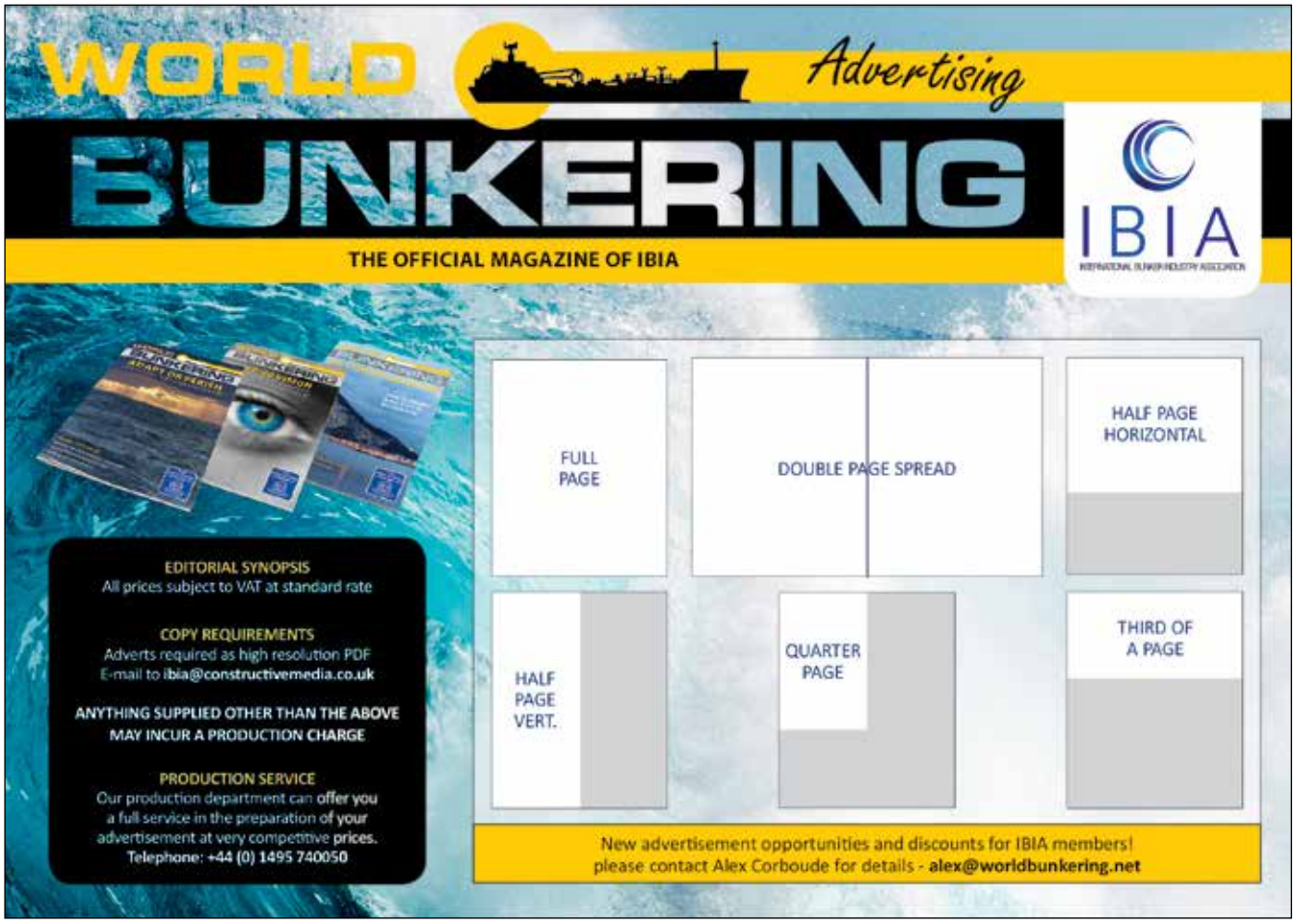
GOIL is currently the market leader in additivated premium quality fuel (Super XP RON 95 and Diesel XP) and has the largest and growing retail network in Ghana with over 400 stations. The marketing arm is represented in seven zones country-wide. GOIL also supplies Mining Diesel to mining firms in the country and the leading LPG marketer in Ghana.

GOIL presently supplies MGO ex-pipe and RTW from three main ports, Tema and Takoradi Ports as well as the Sekondi Naval Base and markets premium Lubricants some of which are blended locally.

The rest are imported. GOIL also supplies aviation fuel to major airlines.

www.goil.com.gh





DIARY

22 - 24 MARCH 2021
12TH INTERNATIONAL FUJAIRAH BUNKERING & FUEL OIL FORUM
FUJAIRAH, UAE (VIRTUAL)

FUJCON is the pre-eminent and most prestigious bunker forum for the Middle East bunker markets. The previous event was successfully held from March 25-27 2019 during the "Fujairah Bunkering Week" – a week of specialized professional training comprising bunker courses and briefings, laboratory visits & an off-shore anchorage site visit to the Port of Fujairah – FUJCON has grown to enjoy international recognition and attendance from over 50 countries covering the full supply chain of the bunkering industry. Attended by nearly 500 participants from 35 countries, FUJCON has raised the profile of Fujairah as an internationally recognised service anchorage, being among the world's top three bunkering locations and as a global hub for both fuel oil and crude storage and product supply.

For more information: http://www.fujcon.com/

12 - 13 APRIL 2021
IBIA Conference Series 2021
Bunkering & Shipping in Transition Part 1
ONLINE

Join the International Bunker Industry Association ONLINE for our first of a two-part conference series for 2021 to gain first-hand insights and understanding the challenges and successes in the bunkering and shipping sectors.

IBIA's Director, Unni Einemo will present the latest updates from the IMO, alongside industry experts and leaders sharing important industry developments and experiences.

The Conference will bring together the global bunkering and shipping industry for networking, create a platform for engagement with industry and government, and shared learning.

For more information: www.ibia.net

19 - 23 APRIL 2021
SINGAPORE MARITIME WEEK
SINGAPORE, ASIA

Driven by the Maritime and Port Authority of Singapore, the Singapore Maritime Week gathers the international maritime community for a week of flagship conferences, dialogues and exhibitions to advance key issues.

For more information: https://www.smw.sg/

27 - 28 APRIL 2021
Global Bunkering Summit 2021
ONLINE

Global Bunkering Summit 2021 (GBS), is a global online bunker conference that offers so much more than a webinar or online meeting, by including live debate and Q&A sessions, 1-to-1 meetings with fellow attendees, private access to speakers, sponsors and exhibitors and a wide range of other ways to communicate with your peers.

For more information: info@petrospot.com

20 MAY 2021
EU Bunker Virtual Conference 2021
ONLINE

An insightful overview of the European Bunker Fuels Market, looking at how global market volatility and European regulations are changing the bunker industry. Find out what the main challenges are in the market today, including: the key trends in the bunker buying market; supply and demand dynamics that are impacting the value chain today; and what the next steps are for the industry.

For more information: https://plattsinfo.spglobal.com/2021_Webinar_European_Bunker_Fuel_Conference_PD190_00-LP-Register-VirtualConference.html?/summary

28 JUNE - 2 JULY 2021
MARITIME WEEK LAS PALMAS
LAS PALMAS, SPAIN

The Port of Las Palmas and its key government and industry stakeholders have joined forces with Petrospot to create the inaugural Maritime Week Las Palmas – Supplying Ships in the Atlantic, a major new biennial event designed to showcase and promote this dynamic logistics hub and the wide range of maritime services provided by Las Palmas to ships sailing to and from Africa, Europe and the Americas.

For more information: https://www.petrospot.com/events/mwlp-2020

1 - 2 SEPTEMBER 2021
IBIA Conference Series 2021
Bunkering & Shipping in Transition Part 2
ONLINE

Join the International Bunker Industry Association ONLINE for the second session of a two-part conference series in 2021 to gain first-hand insights and understanding the challenges and successes in the bunkering and shipping sectors. The Conference will bring together the global bunkering and shipping industry for networking, create a platform for engagement with industry and government, and shared learning.

For more information: www.ibia.net

All dates are correct at time of going to print and are subject to change, please review the related websites

13 - 17 SEPTEMBER 2021
LONDON INTERNATIONAL SHIPPING WEEK
LONDON,
UNITED KINGDOM

LISW21 will be the 'must attend' event of 2021, offering up to 250 industry functions and unique networking opportunities for leaders across all sectors of the international shipping industry – regulators, charterers, ship owners, ship managers, bunker suppliers, lawyers, ship brokers, bankers, insurers, insurance brokers, commodity traders and brokers, ship suppliers, port operators, shipping service providers and many more.

For more information: https://londoninternationalshippingweek.com/

27 - 30 SEPTEMBER 2021
SEATRADE CRUSE GLOBAL
MIAMI, USA

13,000+ cruise professionals get together each year at Seatrade Cruise Global because they know if they are not here, they sacrifice huge growth opportunities. Seatrade Cruise Global is your chance to expand both your knowledge base and your entire network in a forum like nowhere else.

For more information: https://www.seatradecruiseglobal.com/en/home.html

22 - 24 OCTOBER 2021
41ST INTERNATIONAL BUNKER CONFERENCE IBC
OSLO, NORWAY

The International Bunker Conference (IBC) has become a world-renowned forum for the international bunker industry. The previous IBCs have focused on the industry milestones and challenges presented by MARPOL Annex VI. Challenges consequences and opportunities approaching new regulations in the bunker industry. We have passed the doorsteps of a paradigm shift in bunker fuels as we know it. Did we manage and succeed?

IBC 2021 will summarise 2020, provide market overviews and solutions in the new regulatory regime, and ask whether the real storm is brewing on the horizon.

Don't miss the chance to obtain an update on what's happening in the bunker industry as well as to meet old and new friends at this great networking arena.

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

26 - 28 OCTOBER 2021
MARITIME WEEK AMERICAS
PANAMA

Maritime Week Americas 2021 returns to Panama with a week of key maritime events, including the MWA Conference plus top-level training and other specialist training. MWA remains the largest and most popular bunkering conference in the Americas.

For more information: https://www.petrospot.com/events/mwa2021-panama

2 - 4 NOVEMBER 2021
IBIA ANNUAL CONVENTION 2021

The IBIA Annual Convention is one of the most anticipated Bunker and Shipping events in the industry, held annually, with highly acclaimed speakers, sponsors and delegates. Attendees, including Ship Owners, Bunker Suppliers, Traders, Port Authorities, Regulators, NGOs, Brokers, Lawyers, Surveyors and Academics, are expected to attend the Convention.
IBIA has arranged a dynamic series of sessions around diverse topics, which will cover a broad spectrum of issues, with a specific emphasis on the future challenges facing the Bunker and Shipping Industry.

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

22 - 26 NOVEMBER 2021
MARTIME WEEK GIBRALTAR
GIBRALTAR

Maritime Week Gibraltar is a major biennial event designed to showcase and promote Gibraltar's thriving maritime sector to a wider international audience.

Strategically located at the crossroads of the Mediterranean and Atlantic and of Europe and Africa, Gibraltar is the most important bunkering hub in the Mediterranean but also provides a range of key maritime services, from ship repair and agency to hull cleaning and surveying, from major cruise destination to superyacht haven, from thriving financial and legal centre to preferred crew change location. Through a range of events, including a Flagship Conference, training courses, seminars, B-2-B meetings, technical site visits, an exhibition and some spectacular networking, Maritime Week Gibraltar will demonstrate the advantages that make Gibraltar the rock-solid partner for global shipping.

For more information: https://www.petrospot.com/events/MWG2021

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WORLD BUNKERING

Q2 2021... NOW OPEN FOR BOOKINGS

Q2 2021

SPECIAL FEATURES:

Scrubbers

The squeeze on the differential between HSFO and VLSFO prices has had an impact on the take up of scrubbers. What are the prospects for exhaust gas abatement technology as the industry focuses on moving towards zero carbon.

Fuel Management

After more than a year's experience of complying with the 0.50% sulphur limit, what lessons have been learnt? Has the industry overcome the 'teething problems' identified a year ago?

GEOGRAPHICAL FOCUS:

Africa

Many African countries have been badly affected by the coronavirus, while bunkering in the Gulf of Guinea remains overshadowed by the threat of piracy. We take a look around the ports of this vast continent.

Eastern Mediterranean

After year without the important cruise ship business, we see what is happening in the region's main bunkering hubs. How have they responded to the pressures caused by Covid-19 and the switch to VLSFO.

Indian sub-continent

Our annual survey of the marine fuel industries in Bangladesh, India, Sri Lanka and Pakistan. How has the pandemic affected the bunker business. Have prospects for developing the region's bunker markets suffered a setback?

Regular Features

Russian Update
News, Views, Analysis
Interview, Industry News, Environment,
Testing, LNG, Lubricants, Innovation, Legal News,
Equipment and Services, Diary
Event Previews & Reviews



WWW.WORLDBUNKERING.NET **ibia@constructivemedia.co.uk**

TANGER MED

YOUR BUNKER CALL ON THE STRAIT OF GIBRALTAR

3 BERTHS

7 OPERATIONAL BARGES

2 ANCHORAGE AREAS

15 MT TOTAL ANNUAL HANDLING CAPACITY

6 MT ANNUAL CAPACITY OF BUNKERING (IN / OUT)



Tanger Med is situated on a strategic location on the North African coast of Morocco at the entrance to the Strait of Gibraltar where the Mediterranean Sea meets the Atlantic Ocean.
Located at the crossroads of major maritime routes, Tanger Med offers dedicated bunkering facility only 14 km from the European Union, Algeciras and Gibraltar.

Dedicated Oil Terminal operated by Horizon Terminals
Multiple anchorage areas directly on the strait

CHARACTERISTICS OF TANGER MED OUEST AND TANGER MED EST :

- Bunkering activities under way in both anchorage areas and inside the port
- Up to 16 anchorage positions
- Adequate sea ground for anchorage
- Good meteorological and sea conditions
- Other services available (crew change, ship chandelling, spare parts transportation....)
- Low congestion

Tanger Med includes an oil terminal, managed by Horizon Terminals with a capacity of over 530,000m³, fully equipped to provide a bunker service by barge in the port and within the two well situated anchorage areas:

- 'Alcazar – Tanger Med West': situated in front of Tanger Med Port within the strait
- 'Fnideq-Tanger Med East': situated below the east part of the port

Both anchorage areas offer a great number of anchorage position. Both anchorage areas offer no congestion for bunkering and service to ships and within reach of transiting shipping lines of the straight.

The bunkering activity in the port and the anchorage areas, supplied and managed by Minerva Bunkering has developed tremendously since its inception in 2011 and expect a steady growth due to special conditions applicable for bunker calls only.

Further information on the bunkering activity within these anchorage areas can be provided by the Port Authority of Tanger Med www.tmpa.ma

TANGER MED PORT AUTHORITY

HORIZON TERMINALS

MINERVA

Bunker One

LET'S STAY ONE STEP AHEAD

Benefit from our high level of quality, safety, and efficiency of bunker supply.



Meet our experts worldwide at
www.bunkerone.com

Bunker One. Fuelling Simplicity.