

WORLD



BUNKERING

THE OFFICIAL MAGAZINE OF IBIA

PERFECT STORM

INDUSTRY BATTLES FIERCE HEADWINDS



INSIDE THIS ISSUE:

**WHAT NEXT FOR ISO 8217?
DEFYING IMO 2020 PREDICTIONS
REGIONAL FOCUS: AMERICAS & FAR EAST**





THE CAPACITY TO DELIVER WORLD STANDARDS

IN THE CARIBBEAN



Operating with 1.5 million barrels of storage in the Caribbean and Jamaica's only ex-pipe bunkering terminal located at the Ocho Rios Cruise Terminal - West Indies Petroleum has become the Caribbean's leading bunker supplier. We're proud to be at the forefront of the industry, and continue our effort to maintain our reputation for integrity and reliability in supply.

www.westindiespetroleum.com



RELIABILITY • INTEGRITY • EFFICIENCY

KEEPING GOING IN TOUGH TIMES

The bunker industry is proving to be resilient but the pandemic is hitting hard

Dear Reader

Few of us will look back fondly at the 'middle bit' of 2020. From an industry point of view everything has been more difficult. More importantly from a wider perspective, as I write this letter the worldwide coronavirus death toll is rapidly approaching one million and at least seven million people are infected right now.

To add to the gloom, prospects for the rest of the year and into 2021 are not good. Most countries are still struggling with Covid-19 and the economic damage is becoming ever more apparent.

So, not surprisingly, the pages of this issue reflect these tough times. However, they also reflect an industry that has learnt to adapt and is resilient. And, as you would expect, the picture is patchy.

Those smaller bunkering ports that rely heavily on cruise ships have seen their customers disappear. Our features on the Caribbean and the Americas give an insight into what is happening.

Our look at the Far East highlights the variations. China is, more or less, back to business as usual. Indonesia is really struggling. Most of the rest of the region is somewhere in between.

Wind back nine months and expectations were for a very different year ahead, as IBIA Director Unni Einemorecounts in our Markets feature. The biggest surprise was the oil price crash that drastically changed the bunkering scene with the expected cost advantages of scrubbers greatly diminished.

One issue many thought would prove difficult was the implementation of the 0.50% sulphur limit. In the event, the transition has been less problematic than widely expected.

Our Fuel Quality feature notes that BIMCO, International Chamber of Shipping (ICS), INTERCARGO and INTERTANKO undertook an industry survey aimed at getting an overview of how the industry has experienced the transition to using compliant low-sulphur fuel oil.

The survey did find the switch had "not been without problems" regarding fuel quality.

However, as Unni Einemo notes on the same page: "One of the good news stories of IMO 2020 is that the shift from ships using HSFO to mainly VLSFO blends in order to meet the 0.50% sulphur limit is that the overall impact on bunker fuel quality has been positive, and certainly not nearly as bad as the many pessimistic forecasts from several quarters."

Fuel quality is also the topic covered in main interview. Unni Einemo caught up with Monique Vermeire who chairs the committee in charge of reviewing the ISO 8217 marine fuel standard. As is clear from the interview, this is a huge task.

You may think the industry could be forgiven for just focusing on the challenges of the here and now, that is to say Covid-19 and IMO 2020. But, in fact, pressure to cut carbon emissions is relentless and much work is going on to move shipping towards zero carbon.

In our LNG feature, SEA-LNG's Peter Keller again makes a powerful case for going for gas as a pathway towards zero carbon.

However, as reported in our Environmental News pages, rapid progress is being made on alternative fuels. The top story is one that will probably receive a mixed welcome, especially from environmental groups. That is because it offers a way of continuing to use fuel oil to propel the world's fleet.

Until recently, carbon capture had made little traction. A few projects were going ahead ashore but even some of those were cancelled. Extending the lives of coal and oil powered power stations for several decades did not get a good press.

Now though we are reporting big names and big money backing carbon capture with two new projects underway in Japan. Meanwhile, the very environmentally aware Swedish port Gothenburg has entered into an infrastructure project for the transport of liquefied carbon dioxide extracted using carbon capture storage technology.

There will be those who will not be overjoyed at the prospect of a merchant fleet burning fossil fuel for the foreseeable future thanks to scrubbers and carbon capture technology. It could though be a pragmatic solution to an increasingly urgent problem.

In normal years IBIA members would about now be checking their flight and hotel details for attending the Annual IBIA Convention. This year they will just need to make sure their diaries are clear for the virtual convention. That is yet another demonstration of the way the industry just adapts and gets on with it.



David Hughes
Editor

ITALY IS READY FOR IMO 2020

VLSFO: CHOOSE THE RIGHT PARTNER



**THE ITALIAN MARKET SPECIALISTS
SINCE 1980**
BUNKER SUPPLIERS AND TRADERS
LUBRICANT SUPPLIERS

Authorized **Mobil**™ lubricants distributor



Bunker Mediterranean enquiries

✉ bunker@bunkeroil.it
☎ +39 0586 219214



Lubricant worldwide enquiries

✉ lubricant@bunkeroil.it
☎ +39 0586 219214



Our experience at your side.

CONTENT

- 7**
Chairman's Letter
.....
- 9**
Director's Report
.....
- 11**
IBIA Events
.....
- 12**
IBIA Events
Physical events on pause
.....
- 17**
IBIA Africa
Positivity in a time of change
.....
- 19**
IBIA Asia
Riding through the storm
.....
- 20**
Interview
Setting standards: what next for ISO 8217?
.....
- 23**
Industry News
Bunker credit initiative
.....
- 24**
Feature
Defying expectations
.....
- 28**
Environmental News
Carbon capture moves up the agenda
.....
- 32**
Independents
Weathering the storm?
.....
- 34**
North America
Grim up north
.....
- 36**
South America
Proceeding with caution
.....
- 39**
Fuel Quality
Switch to VLSFO sees shift in off-spec claims
.....
- 44**
Russian Update
How is the Russian bunker market faring?
.....
- 49**
Caribbean
Cruise control
.....
- 52**
Scrubbers
Still optimistic about scrubbers
.....
- 56**
LNG
SEA-LNG fights its corner
.....
- 59**
Equipment & Services
Steaming into compliance
.....
- 60**
Singapore
Maintaining and measuring the bunkering edge with mass flowmeters
.....
- 62**
Far East
Bouncing back
.....
- 65**
Innovation
Machine learning system saves fuel
.....
- 66**
Legal
Bunker convention "no longer fit for purpose"
.....
- 67**
Company News
.....
- 70**
New Members
.....
- 71**
Online IBIA Bunker Training Course
.....
- 72**
Diary
.....
- 74**
Next Issue
.....

Publisher & Designer:
Constructive Media
ibia@constructivemedia.co.uk

Editor: David Hughes
anderimar.news@googlegmail.com

Deputy Editor: Unni Einemo
unni@ibia.net

Project Manager: Alex Corboude
alex@worldbunkering.net

On behalf of:
IBIA Ltd
Office 239
New Broad Street House
35 New Broad Street
London, EC2M 1NH, UK

Tel: +44 (0) 20 7417 1803
Email: ibia@ibia.net
Website: www.ibia.net

The views expressed in World Bunkering are not necessarily those of IBIA, or the publishers unless expressly stated to be such. IBIA disclaims any responsibility for advertisements contained in this magazine and has no legal responsibility to deal with them.

The responsibility for advertisements rests solely with the publisher. World Bunkering is published by Constructive Media on behalf of IBIA and is supplied to members as part of their annual membership package.



CONSTRUCTIVE MEDIA.

Constructive Media

50 George Street,
Pontypool
NP4 6BY

Tel: 01495 740050

Email: ibia@constructivemedia.co.uk
www.worldbunkering.net





Vivcore Energy Solutions Pvt Ltd is a *subsidiary* of Cyprea Marine Foods Pvt Ltd and a member of Cyprea Group of companies.



MGO (Diesel)



ULG (Petrol)



LPG Gas



Lubricant Oil

SERVICES

We believe that reputation and trust are fundamental in an oil distribution service in order to sustain customer confidence.

We currently cater to:

- Resorts
- Commercial Fishing fleets in EZ
- Bunkering to Luxury Cruise vessels and Super Yachts
- EU certified Food Processing facilities
- Fishing fleets
- Regional Utility stations



AS RELEVANT AS EVER

We have many new and unknown challenges ahead of us. As a member of IBIA, you can take part in influencing the future of energy in shipping

During these times, we face new and unknown challenges caused by the Covid-19 pandemic, causing insecurity on how this will impact both our personal and professional lives in the short, mid and long term. Quite naturally, membership of an organisation like IBIA is not top of the agenda for industry players.

But perhaps it should be?

IBIA is today more relevant and important than ever before, as crises like the one we are facing today force us to adapt and increase our willingness to change to accommodate the new environment.

Our industry has recently climbed what we thought was a major mountain when we had to change the product portfolio as part of the transition to IMO 2020. This was a major step toward a cleaner and more environmentally friendly shipping and transport industry.

We have since had to realise that IMO 2020 was not the biggest mountain, and that higher mountains are still ahead of us.

Today, we are busy negotiating the unfamiliar and treacherous slopes of the Covid-19 mountain. Once we have crossed the peak, we expect to find steep declines in the form of a tough financial crisis while still needing to continue changing and improving the shipping industry.

Another mountain, albeit very different, is the agenda to pursue more consistency and alignment on bunkering procedures and quality in the major bunker hubs. We from IBIA, in close cooperation with bunker consumers, port authorities and other partners, will work toward a more uniform bunker licensing scheme that will take environment, safety, quality and quantity. Moreover, we need to ensure that the conditions are right for more prompt adoption of changes required to beat the challenge of reaching the ambition of zero emissions from shipping.

IBIA is a vital part of this work as we are the voice of the international bunker industry, representing all aspect of the business. That voice has in recent years become even stronger due to active involvement and impact at the IMO and other authorities and business forums, granting all of our members the opportunity to be part of developing our industry and to have a say in the way we will cross the mountains ahead of us.

At IBIA we engage our members in various working groups - both on active tasks but also with a strong focus on strengthening networks across industry segments.

We consider the networking and co-developing part of the work in IBIA especially as essential for a successful journey toward the IMO's ambition of reaching zero emissions by 2050, while at the same time improving tomorrow's bunker business.

The fact is are that no company or organisation can solve all the challenges, overcome all obstacles or accommodate all changes on their own, but together we stand a good chance.

Today, we do not know what product will be used in 2050 to fuel seagoing transport, however, we do still expect that some sort of energy will be required to move goods around the world.

Needless to say, we do believe that IBIA also in the future will be playing an important and active role in getting the energy supplied in a fair, regulated, transparent, safe and environmentally friendly way.

With the many mountains of challenges that lie ahead of us, a united and strong branch organisation like IBIA is as relevant as ever before. If you and your company want to take part and influence the future of energy in shipping, I encourage you to engage in IBIA and in our future.



Henrik Zederkof
Chairman



Leading Bunker Supplier in the Indian Subcontinent



Quality



Quantity



OnTime Supplies



Competitive Prices

Discover Our Capabilities & Network

Axiom Global Oil & Gas Trading DMCC is a free zone company registered with DMCC, Dubai. Axiom Global's team consists of experienced and seasoned Trading, Bunker Marketing, Risk Management, Shipping & Operations personnel and have the track record of setting up the bunker supply chain in various major ports of the world namely, Colombo, Sri Lanka, Indian Ports like Mundra, Kandla, Goa, Chennai, Cochin & Haldia, Fujairah and Iraq in the Middle East and Suez Canal in the Egypt. With teams enriched experience of more than 20 years; professional approach; past track record and customer base of Shipping companies, bunker suppliers and bunker traders we are confident to add value in the current scenario of uncertainties in the bunker market with the advent of IMO 2020 guidelines effective 1st January 2020.



Bunkering



Ship Chartering



Risk Management



Barge Operations & Oil Blending Consultancy



Axiom Global

www.linkedin.com/company/axiom-global-oil-gas-trading-dmcc/
www.axiomglobaltrading.com



UNITED ARAB EMIRATES

Axiom Global Oil & Gas Trading DMCC
Office No. 2108, HD5 Towers, 21st Floor, Cluster-F, Jumeirah Lake Towers, Dubai, UAE.

+971 557255150 / +971 4 514 8790
info@axiomglobaltrading.com



INDIA

Axiom Global Oil & Gas Trading Private Limited
Building No. XI/275 | 142 Heavenly Plaza, Vazakkala, 7th Floor, Padamugal Erakulam, Kerala 682021

+91 9909018348 / +91 9874565566
axiomindia@axiomglobaltrading.com



SINGAPORE

Axiom Global Oil & Gas Trading Pte. Ltd.
11, Keng Chew Street, #02-11, Singapore 059608

info@axiomglobaltrading.com

PLUGGED IN

IBIA has made good use of life online. Even IMO meetings will be going online for the rest of 2020

The summer in the Northern hemisphere is over, and I hope many of you have enjoyed a good holiday away from your computer screens. Some of you will have resumed travel for pleasure and business, but the coronavirus continues to prevent normality. As of early September, the most stringent measures to prevent the virus from spreading were largely behind us, but travel restrictions keep changing due to new spikes in infection rates, and large gatherings remain a no-go.

At IBIA, we have found online video meetings a really useful way of connecting with our members all over the world to discuss pertinent issues. It's quite special when you get members from the Far East and the Americas, and everywhere in between, on the same call. It shows the value of the format and subjects we have chosen. The meetings are informal and held under the Chatham House rule to encourage frank and open discussion, with input from several subject experts. We have had excellent feedback from these meetings which are open to all IBIA members to actively participate and share your experiences, comments and questions. As a member association, we want to hear from you!

Our meeting in April focused on the practical and commercial impacts of the coronavirus. It was interesting to hear how our members had used a mix of old and new tools to get around issues caused by restrictions on human interactions during bunker deliveries. Methods used to share samples and documentation ranged from a bucket and rope to digital means. Ship and bunker barge crew found ways to manage when they weren't able to be physically present on the receiving ships and/or barges. These are valuable lessons for the future when we expect more digitalisation.

Already in April, we heard from our members that bunker supply volumes were decreasing rapidly in some ports, but holding up well elsewhere. Most expected demand to fall more during the second quarter and they were right.

June was a low point. There have been signs of recovery during July but moving forward, a lot will depend on Covid-19 infection rates and policies to curb it, and the success in finding more effective treatments, testing and, hopefully, a vaccine. We do not know yet the extent of damage done to the global economy and, consequently, shipping and demand for bunkers.

Since the Summer 2020 issue of World Bunkering went to print, IBIA has been invited to speak at several events. In June, I was a presenter and panellist on an APM webinar asking if Covid-19 has been a gamechanger for the scrubber industry. My key takeaway was that those who installed them prior to 1 January 2020 have done well, but the HSFO/VLSFO spread has been too low to spur new retrofits for some time. It may not recover, but we should all have learned by now that predictions can be blown out of the water by unexpected events. In August, I was a panellist at the Platts & IBIA Middle East Conference where we shared our thoughts on what's next for the bunker industry, focusing on the options and drivers for alternative fuels to decarbonise the shipping industry. In mid-September, I will speak at the 36th Asia Pacific Petroleum (APPEC 2020) virtual conference. In early October I am due to moderate SIBCON panel session on "Managing the Strategic and Operational Impact to Industry Post COVID-19" and in mid-October I will take part in an LQM webinar on "Women in Bunkers". This continues to be a male-dominated industry, even if less so since I joined Bunkerworld and started learning about this unique global sector in October 1997.

The pandemic has forced IMO to postpone its planned physical meetings in 2020. The organisation has been working hard to enable meetings to resume virtually; a real challenge when it has to accommodate hundreds of delegates in different time zones from all over the world. Usually, IMO meetings take place at its London HQ, with the committee plenary running from 9 am to 5:30 pm, while working groups often work much longer hours, all the while having the opportunity for informal negotiations during coffee and lunch breaks.

The online meetings will be very different, and much shorter. I do wonder how it will be possible to get through the hefty agenda of most IMO meetings, such as MEPC 74, which IBIA has submitted a paper to, within such restricted meeting hours. We will find out this autumn.

One recurring theme this year is the extent to which 2020 has defied expectations. The transition to the 0.50% sulphur limit has gone much more smoothly than expected, with some exceptions. Some have compared it to the "millennium bug" which caused a whole lot of panic in advance, but in the end, it was not a big deal. I think that does our industry a huge injustice. It took a lot of planning and preparation on both the supply side and the shipping side, without which the transition would have been a lot more painful and a lot more could have gone wrong. IBIA was among those who helped raise awareness of the potential pitfalls, and worked relentlessly to provide advice and guidance to the bunker and shipping industry cope with the change. We did this through publications, events, and contributions to the IMO's guidelines and regulatory framework.

The bunker industry has proven its resilience and ability to adapt in the face of both known challenges like IMO 2020, and unknown challenges like the coronavirus. It will serve us well on the road toward zero emissions. We will discuss all this and more at our Annual Convention in early November, where for the first time, IBIA will be honoured with a keynote speech by the IMO Secretary-General, Kitack Lim. Make sure you plug in for this truly global event.



Unni Einemo, Director IBIA
E: unni@ibia.net

OUR QUALITY IS PART OF YOUR ROUTE.

If you're crossing the Atlantic, supply your vessel at the ports of Lisbon, Setubal or Sines. Galp controls all the production process from refinery to supply, so you can count on quality fuels and lubricants.

Contact us to know the best solutions for your business.

+ 351 217 240 654 | + 351 217 240 952

bunkers@galp.com

galp.com

2020 IBIA EVENTS PROGRAMME

ONLINE 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
OCTOBER		
1, 6, 15, 20	1 day Bridging SS648:2019 Course	Singapore, Asia
13 - 14	2 days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
NOVEMBER		
3 - 5	IBIA Annual Convention 2020 - Going Global	Online at www.ibiaconvention.com
17 - 18	2 days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia
DECEMBER		
15 - 16	2 days Basic Bunkering Course (SS600:2014 & SS648:2019)	Singapore, Asia

2020 BUNKERING INDUSTRY EVENTS

OCTOBER		
1 - 2	ARACON	Online
6 - 9	SIBCON	Online
15	Women in Bunkers	Webinar
NOVEMBER		
4 - 6	2nd Annual Marine Fuels 360	Zhoushan, China

2021 BUNKERING INDUSTRY EVENTS

MARCH		
8 - 12	Maritime Week Las Palmas	Las Palmas, Spain
16 - 18	Asia Pacific Maritime 2021	Singapore, Asia
APRIL		
12 - 25	Seatrade Cruise Global	Miami, USA
20 - 21	Singapore Maritime Week	Singapore, Asia
MAY		
24 - 25	Maritime Week Americas	Panama
SEPTEMBER		
13 - 17	London International Shipping Week	London, UK
22 - 24	41st International Bunker Conference IBC	Oslo, Norway

*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



Global Sponsors	Strategic Partner	Exclusive Topic Sponsors	General Topic Sponsors
Exhibitors	Supporting Associations	Media Sponsors	

PHYSICAL EVENTS ON PAUSE

IBIA shows you how to take advantage of the new opportunities that are available and how you can actively get involved with the industry on an international level

Physical events are not on IBIA's agenda for the remainder of 2020. We had to adapt to the new normality and create a virtual environment for our members to make up for the physical events we have conducted for the industry over the last 25 years.

I feel lucky to be part of a team that enjoys trying new things and adapting fast to the new normality, the digitisation. We took a deep breath and figured out how to run successful virtual events, member meetings and bunker training courses in a few weeks.

Our series of **online member meetings** has so far proved a tremendous success. We have reached out to our members by putting together a series of virtual meetings with and for our members, encouraging open conversations and sharing concerns and experiences by conducting these meetings under the Chatham House Rule. Topics covered most recently have included: Covid-19:

Are markets improving as pandemic restrictions ease? Bunker supply and demand balance, Fuel quality: What's going on? Interpretation of sulphur test results, IMO sulphur verification procedures for MARPOL samples vs commercial practices.

Let's turn our attention to the IBIA Annual Convention 2020, 3-5 November. Now, more than ever, our attendees are looking for an inspiring mix of content and experience. From the recent upheaval of IMO 2020, the present-day disruptions of Covid-19, to a future demanding a complete rethink on marine energy; the shipping and bunker industries find themselves at arguably the most challenging point in their history. In response to this most critical of times, IBIA is delighted to announce that for 2020 its Annual Convention will take a completely new, innovative, and entirely online format. To be held over three days, this dynamic event will include a 3D virtual exhibition hall,

access to extensive in-depth on-demand content, and a series of both regional and globally-focused live panel discussions with audience participation.

The Convention will feature **Global and Regional panel discussions** where key industry players representing **bunker buyers and suppliers** will gather to discuss the latest developments and offer insight into what we can expect in the year ahead. **Credit Risk Panel:** The year started with the high-demand, high-price pressure of IMO 2020, and just months later saw a complete reversal due to collapsing oil prices and Covid-19 induced demand destruction. Get the global insights you need by joining industry heavyweights. **Legal, Compliance and Regulations Panel:** With the plethora of unexpected challenges the industry has faced this year, it is easy to forget it also saw the introduction of arguably the most significant piece of legislation it has ever seen: IMO 2020. But the legal ramifications of this are real.



Compliance is a must. And the new global sulphur cap is just the start of a raft of expected additional legislation.

Bunker Quality Panel: 2020 has perhaps been one of the most significant years for bunker quality thanks to the induction of an entirely new breed of fuel: VLSFO. With the shift to selling against sulphur content rather than viscosity, everything from buying to burning fuel has been new. This panel discussion will give you all the insights into what we can expect ahead. **Industry Future Outlook**

Panel: While most are rightly focused only on the challenges of today, the industry faces a period of significant change ahead. The journey to reduce industry emissions has begun, the need to move away from oil and fossil fuels is understood, and the introduction of more legislation governing operations seems inevitable. Join industry experts for the latest thinking on what we should expect in the months and years ahead.

Shipping Markets Panel: This year has been boom time for some shipping sectors, others have been completely decimated. Join industry experts during this panel discussion to discuss what has been the most unusual, and challenging of years.

We would like to warmly thank our sponsors and partners for their tremendous support!

To register for the IBIA Annual Convention 2020 visit www.ibiaconvention.com

IBIA Bunker Training Courses:

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, 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. The course is delivered in clear, understandable language. 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'. Questions will be sent to the teacher during the one-week access through the online platform and will be answered within three working days.

IBIA
INTERNATIONAL BUNKER INDUSTRY ASSOCIATION

Online Bunker Training Course

- BUNKER MARKET REGULATIONS & ENFORCEMENT
- UNDERSTANDING ISO 8217 & ISO 4259
- BEST PRACTICE FOR SUPPLIERS WITH VLSFO
- BEST PRACTICE FOR USERS WITH VLSFO
- ADAPTING TO A CHANGING MARKET
- COMPATIBILITY AND STABILITY
- SALES TERMS AND CONDITIONS
- QUANTITY MEASUREMENT
- SAMPLING
- FUEL QUALITY

IBIA'S BUNKER

AVAILABLE MODULES ARE:

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 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 timeframe for all these options.

Module 6 - Compatibility and 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 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 working 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.

Module 10 - Fuel quality: Fuel quality, its impact on storage, treatment and use in the engine.

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.

For more information and to book your course modules, visit: <https://www.eventora.com/en/Events/ibia-online-bunker-training-course>
IBIA will always find ways to educate, connect and 'meet' with its members. Stay tuned.

If you want to become a speaker or sponsor, or find out more about our events, you can contact me ANY time.

 [internationalBunkerIndustryAssociation/](https://www.facebook.com/internationalBunkerIndustryAssociation/)

 [ibiabunkers](https://www.instagram.com/ibiabunkers)

 <https://www.linkedin.com/company/ibia.net>

 [@IntBunkIndAssoc](https://twitter.com/IntBunkIndAssoc)

Website: ibia.net

Sofia Konstantopoulou,
Global Head,
Marketing & Events

Tel: +44(0)7531918914,

E: sofia.konstantopoulou@ibia.net



Sofia Konstantopoulou



Oil Marketing & Trading International

MARINE FUELS
in UAE

Office 2001, Saba Tower 1, JLT
DUBAI, UAE
Tel: 00971 4 4350500
Fax: 00971 4 4350505
E-mail: bunkers@oil-marketing.com

12 Kithiron Street, Alimos 17455
ATHENS, GREECE
Tel : +30 2109609860
Fax : +30 2109609861
E-mail: bunkers@oil-marketing.com
E-mail: jamaica@oil-marketing.com

8 Eu Tong Sen Street, #18-83 The Central
059818, SINGAPORE
Tel: 0065 6222 4028
Fax: 0065 6222 4027
E-mail: singapore@oil-marketing.com

WEB: WWW.OIL-MARKETING.COM



www.adioil.com

Are you looking for a leading Bunkering Company?

Quality Fuel Oils and Lubricants at reasonable rates!

Meeting your needs with absolute care by delivering the right Fuel Oils and Lubricants to ensure that you don't stop.

We supply Quality Bunker Fuel Products procured from IOCL, BPCL or HPCL and also provide Value Added Services to our local and international customers.



Head Office
39-1-26 Rangayya Naidu Street,
Kakinada
East Godavari District,
A.P, India. 533001
+91-884-2386461 / +91 9985095666
aditya@adioil.com

POSITIVITY IN A TIME OF CHANGE

IBIA Africa has more exposure to our global membership than ever before as new challenges have led to positive changes in how we communicate

Almost six months into a worldwide pandemic, so much has changed as we all adjust to the 'new normal' and different ways of operating. We acknowledge those who have had real struggles during this time as well as the difficulties in many futures still looking so uncertain. Who would have predicted, that over and above the challenge of IMO 2020, we as an industry would face Covid-19 and the effects thereof?

Within Africa, Covid-19 statistics have been varied with South Africa one of the hardest hit countries, and Nigeria also seeing a high infection rate. South Africa at the time of writing has opened up to a less stringent lockdown, the country sees a reduction in infection rates, and the borders will open up for international travel.

Port activity, meanwhile has been all but restored to full capacity in most of the major ports. Speaking to a local South African IBIA member, bunker volumes have been affected by the shutdown of refineries and the inflated price of imported fuel, however on a positive note the volumes were increasing and looked substantially more positive for August. Another member commented that it will take some time for recovery, but that offshore supply has been consistent in Algoa Bay. When looking to West Africa, Ghana has had no infections in some regions, but has suffered an increased number of cases in Accra. Nigeria has experienced a higher rate of infection in Lagos but expects to open borders and allow international travel from 29 August. Reports from our members in West Africa advise that whilst port activity has been severely affected, offshore bunkering has been maintained with only small drop offs in volumes.

Mauritius has maintained a low infection rate; however, this may change with borders opening for international travel at the end of August. With its geographical position, the island nation has maintained if not increased bunkering volumes during this time and has been positively placed as a competitive bunker hub.

Mauritius has been very much in the news recently due to the dry bulk carrier Wakashio which ran aground on 25 July off Pointe d'Esny, an ecologically sensitive area on the south-eastern coast of Mauritius and started leaking oil following severe weather conditions. An estimated 1,000 tonnes of bunker fuel leaked from the vessel, while around 3,000 tonnes were pumped off. At the time of writing, 50% of the fuel leaked had been retrieved. The vessel has broken up and salvage will be carried out in compliance with regulations.

IBIA has made huge strides in uniting and bringing together the bunker industry with a uniquely global approach. In the past we have seen many successful regional events, particularly here in Africa, but due to unprecedented changes, we have had to quickly review how we communicate and engage with our members. This has seen the launch of our IBIA ONLINE TRAINING PROGRAMME. This is a great opportunity to brush up on your knowledge and further develop your teams. Several of our members in Africa have already completed some of the modules. Feedback has been extremely positive, and we would encourage you to take a look.

We have, for the first time ever, announced a fully global IBIA Annual Convention, which will enable us to host delegates across all time zones. It will offer both global perspectives and regional panels to ensure that each region is adequately addressed with our inputs and insights. Please see more information in our Events Report from Sofia Konstantoupoulou on page 12.

We have also been able to host IBIA Member meetings which have had truly global attendance. We have hosted five of these meetings since lockdown, covering many aspects of the effect of Covid-19 on the bunker industry and the fuel market, as well as the ever-present question of sulphur testing. These meetings are held on a mostly monthly basis and we would hope to see you attending the next one!

Sadly, an explosion at an oil refinery in Cape Town, South Africa killed two people and injured six others on 2 July. The blast happened in the early hours of the morning and caused a fire to break out at the plant which is operated by a Glencore subsidiary. IBIA has extended heartfelt condolences to those affected. At the time of writing, the cause of the explosion was still not publicly known. Glencore purchased a 75% stake in Astron Energy in 2019. The Cape Town refinery was previously owned by Chevron.

We take this moment to warmly thank our Africa Membership for your support and continued dialogue in these challenging times.

Please review our newly launched IBIA website, I remain at your disposal for any questions and assistance you may need to navigate it and make full use of its features.

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

Tahra Sergeant
Regional Manager: Africa
SA Mobile +27 (0)79 990 7544
E: tahra.sergeant@ibia.net
S: [sergeant.tahra](https://www.linkedin.com/in/tahra-sergeant)
W: www.ibia.net



Tahra Sergeant

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.

INDIVIDUAL £250

- IBIA Board Member eligibility
- The right to 1 vote for Board Member Elections
- IBIA Working Group eligibility
- Free or discounted IBIA training courses/ conferences/seminars events/conventions
- Individual discounts on other industry events
- Subscription to World Bunkering magazine
- 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
- IBIA mediation and dispute resolution
- IBIA membership certificate

CORPORATE £1300

ALL THE BENEFITS OF INDIVIDUAL+

- Register up to two offices anywhere in the world
- The right to 2 votes for Board Member Elections
- 5 user registrations on the IBIA portal
- 2 subscriptions per office to World Bunkering magazine, sent to all registered offices
- Eligible to book up to 4 tables at the prestigious IBIA Annual Dinner
- Eligible to add further offices for a reduced fee of £500 per office

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

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

USEFUL INFORMATION

- 15% discount for 3 years membership, (Paid in one instalment) – Guarantee no membership price increases for the next 3 years.
- Unregistered offices will not get IBIA benefits



IBIA
INTERNATIONAL BUNKER INDUSTRY ASSOCIATION

If you are interested in becoming an IBIA member please contact ibia@ibia.net or visit www.ibia.net

RIDING THROUGH THE STORM

IBIA Asia has been able to resume training as Singapore eases the restrictions put in place to control the coronavirus

Singapore, the leading global bunkering hub where annual bunker sales have exceeded 45 million tonnes since 2015, was celebrating its 55th National Day on 9 August 2020. Because of the Covid-19 situation, the nation-state downscaled many celebratory events compared to every previous year since Independence Day in 1965. We still had our fireworks in 10 districts across the nation at 8 pm. Citizens were reminded of their close ties with the nation, and a shared strength, resilience and morale to ride through the storm by singing the Singapore National Anthem together at the same time but at different locations.

The IBIA Asia regional office of Asia is based in Singapore, which at the time of writing was in Phase 2 of the post Circuit Breaker announced by the Singapore Government to deal with the coronavirus. For this phase, the Singapore Government has advised default working should still be at home and using tele-communications unless there is a need for face to face training or accessing essential materials in office premises.

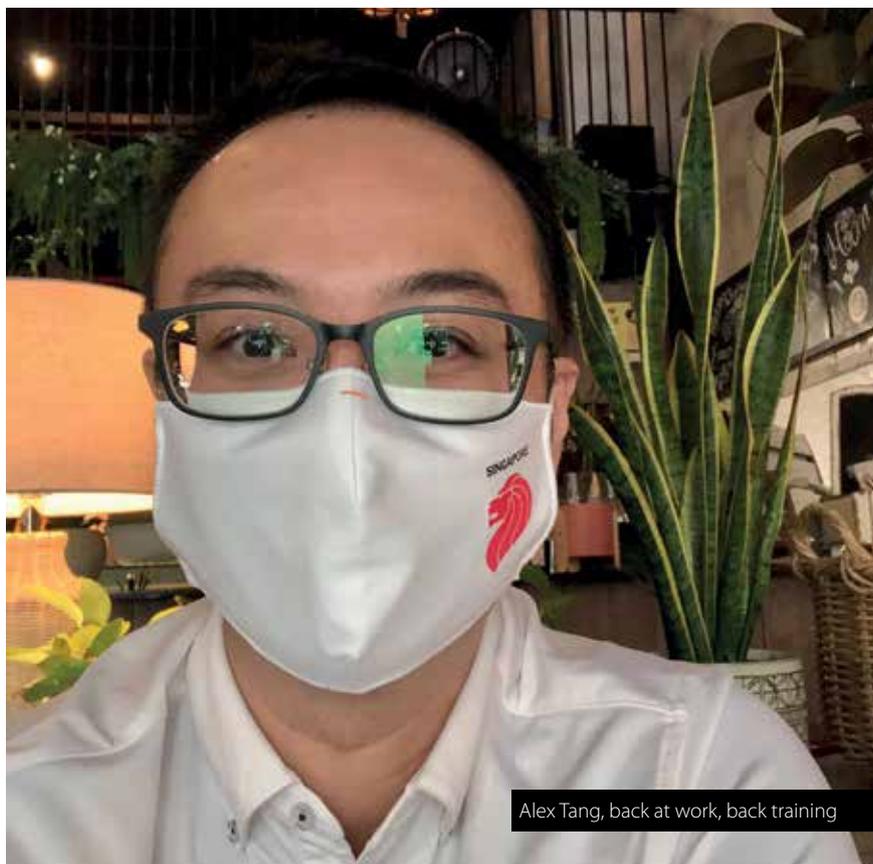
The rules in Singapore require masks to be worn at all times when outside the home, including in offices. Social distancing and safe entry management need to be strictly adhered to while the Covid-19 situation is still on going.

Training

The IBIA Asia office offers specialised 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 Bridging Training for approved Bunker Surveyors and Cargo Officers

During the Covid-19 Circuit Breaker period (April, May and June), we conducted "On line- Live" training with MPA approval for over 30 trainees to sustain the continuity of training.



Alex Tang, back at work, back training

As we have now allowed to carry out face to face training, we have conducted three classes in July with 36 trainees. Moreover, we have fully recovered the training schedule by holding on average two to three classes weekly in August 2020.

b) Singapore Standard SS 600:2014+ SS648:2019- 2 Days Basic Training for new Bunker Surveyors and Cargo Officers

We have started the first intake, opening for registration on 26 and 27 August.

Courses have been 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.

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

**Alex Tang, CMarSci MIMarEST
Regional Manager: Asia
M: +65 88766491
E: regionalmanagerasia@ibia.net
W: www.ibia.net**



Alex Tang



SETTING STANDARDS: WHAT NEXT FOR ISO 8217?

Monique Vermeire chairs the committee in charge of reviewing the ISO 8217 marine fuel standard. In light of the changes associated with IMO 2020, that is a huge task. IBIA's Unni Einemo had the opportunity to ask her about it

As the convener of ISO TC28/SC4/WG6, Monique Vermeire has a hugely important and difficult role. She oversees input from a large and varied group of technical experts that review and draft revisions to ISO 8217, and its close relative ISO 8216. This process has always been challenging, and has become even more so with the entry into force of the 0.50% sulphur limit. The implications of this for marine fuel quality has seen pressure like never before on ISO to update the standard to reflect the quality changes associated with the shift from predominantly high sulphur fuel oil (HSFO) to fuel oils meeting the 0.50% sulphur limit, known as very low sulphur fuel oil (VLSFO).

UE: Already in 2017, the year the 6th edition of ISO 8217 was published, IMO requested ISO to “keep consistency between the ISO standard and implementation of the 0.50% sulphur limit”. It seems many people, including delegates to the IMO’s Marine Environment Protection Committee (MEPC) had a hard time understanding why we could not get a revised ISO 8217 standard before the 0.50% sulphur limit took effect. Could you explain why it wasn’t possible?

MV: The 6th edition of ISO 8217 was indeed published in March 2020. ISO has standardised procedures for revision and development of (new) standards. Initiating a revision of a standard involves the creation of a new work item proposal to be submitted to the technical committee to which the working group belongs, for voting which typically takes two months.

This does not mean that the WG sits and waits until the result of the voting is known; usually it starts the discussions already prior to the outcome of the voting. But even then, a typical revision of a standard takes three years which would have resulted in the revised standard only being available by mid-2020 at the earliest which would certainly have been too late as the new regulation entered into force 1 January 2020 requiring vessels to have the 0.50% sulphur fuels onboard prior to that date, unless the vessel had a scrubber.

Additionally, a revision of the standard is typically retrospective which means that we take into consideration the experiences /concerns from the industry on existing fuels on the market. In 2017, marine fuel with 0.50% S was barely available as refiners, fuel suppliers etc

were still assessing how to produce these fuels and no information on what typical characteristics could be was available, only a rough idea on potential blending components and potential consequences therefrom. Because of these main factors, it was chosen to develop a Publicly Available Specification (PAS), which involves less stages in the development process.

UE: Although it was premature to publish a new edition of ISO 8217, ISO developed a PAS (PAS 23263) in response to concerns about IMO 2020. How was it received? Do you think it met market expectations?

MV: Already prior to the publication of the PAS, it was clarified that all the specifications within ISO 8217 would apply to the 0.50% S max. fuels and that the VLSFOs could be ordered in the same way as HSFOs. This already took away a concern and was positively received by the industry. It was also stated in the PAS document itself. The potential VLSFO quality aspects that would eventually require more attention, both from a manufacturing and operational aspect, have been studied/addressed in the PAS or in documents referenced in the



PAS. As such, the PAS is considered a valuable document containing relevant information on the new fuels.

The terminology 'Publicly Available Specification' may have created the expectation that this document would be available for free and that it would contain a table with specifications as in ISO 8217. So, some may have been disappointed that this was not to be the case!

UE: Some suppliers now put only "VLSFO" on their BDN instead of describing the product with an ISO 8217 grade – what do you think about that? Is there any reason why they can't put an ISO 8217 grade on the BDN?

MV: VLSFO is the term typically used in the industry referring to the fuel having a sulphur content of 0.50% max. IMO requires the product name to be included on the BDN and the 2019 IMO guidelines for consistent implementation of the 0.50% S limit under MARPOL Annex VI (RESOLUTION MEPC.320(74)) also defines VLSFO. I recommend however the ISO 8217 grade of the fuel to be included on the BDN as it refers to other characteristics that might provide useful information for the vessel's crew on how to store, handle and use the product.

UE: We are not even a year into 2020 and we know that VLSFO fuel characteristics vary greatly. Do you see any major trends? Do you expect this variation in VLSFOs to continue?

MV: The working group did an initial review of testing data available up to end of January 2020 which showed that VLSFOs have a lower average density of approximately 940 kg/m³ and that a higher share of the supplied fuels have higher pour point, lower micro carbon residue and higher net specific energy. All indicative for the VLSFOs being more paraffinic in nature. Viscosity is the characteristic which varies probably most, but in general there is a trend to lower viscosity being supplied. Testing agencies are probably best placed to see whether there are any specific trends for different regions/ports.

UE: Do you already have enough VLSFO data and information to help determine what needs to be revised in the next ISO 8217 edition, or do you need longer to see how fuels evolve?

MV: Review of testing data is key for the current revision of the standard and we have experts from all major testing agencies participating in the working group and they have tested thousands of samples so far, so we will have a good basis to start the work from. Also, as new information/data becomes available during the development of the next edition of the standard, it can be considered as the development track of the standard is three years.

UE: ISO 8216 defines the detailed classification of marine fuels found in ISO 8217 and was last revised in 2017 with the addition of Distillate FAME (DF) grades in Table 1.

Can we expect any new grades in the next revision, or a different way of organising the fuels grades into Table 1 (distillate marine) and Table 2 (residual marine) grades?

MV: Categorisation of fuels is certainly included in our preliminary list of topics to be considered. It is however too premature to speculate on how exactly the fuels will be categorised. With the current edition of the standard for RM type fuels, 11 different grades can be ordered ranging from RMA10 to RMK700. For the VLSFOs, we see a wider variety in the viscosity within a certain fuel grade being supplied. As such, it is well possible that, because of the lack of a minimum viscosity requirement, a fuel is guaranteed to meet a certain grade e.g. RMG 380, whereas when considering only the viscosity it would maybe be an RMD 80. This may result in different handling of the fuel onboard being required. Less categories and defined ranges of specification limits may be a potential approach to respond to this.

UE: Stability and compatibility are particular concerns these days and it seems the current test methods are not always able to predict it. Can you tell us anything about how this might be addressed?

MV: Relevant information on stability and compatibility included in ISO/PAS 23263:2019 will be incorporated into the ISO 8217. Additional information on stability and compatibility testing is also available in other industry documents developed in the running up to 1 January 2020 such as the CIMAC Guideline- Marine fuel handling in connection to stability and compatibility and the Joint industry Guidance - The supply and use of 0.50%-sulphur marine fuel.

UE: Very variable cold flow properties appears to be another key trend. Is there anything on the cards such as new limits/ requirements regarding cold flow?

MV: In a response to fuel storage and handling problems experienced with some 0.10% S fuels introduced in 2015, the requirement to report the cloud point and CFPP for some distillate type fuels was included in the ISO 8217:2017 to ensure information of the fuel's cold flow behaviour was available to the vessel. When introducing new limits into a standard it requires careful evaluation of available test data as the limits shall be set in such a way that they do not impact fuel oil availability. The ability to store and handle a particular fuel depends on the ship's design and intended voyage. As such one fuel may eventually impose a challenge for one vessel whereas another vessel can handle the fuel without any problem.

Again, cold flow properties is a topic included in the list of items for discussion!

UE: CCAI is a calculated value intended to give an indication of a residual fuel's ignition quality. Is it still valid?

MV: So far there is no indication that CCAI, originally developed by Shell as a correlation between aromaticity and ignition performance of a residual fuel, is not valid for RM type VLSFOs.



UE: We have seen a request at the IMO to examine whether it is possible to include new parameters in ISO 8217 to try to identify whether certain fuels may be more prone to emit black carbon, which essentially boils down to a fuel's combustion behaviour. How can ISO respond to this?

MV: As mentioned above and as expected by the industry, 0.50% sulphur blends tend to be less aromatic and more paraffinic in nature than the HSFOs they have replaced. The general belief is that more aromatic fuels will emit more black carbon, though the formation of black carbon is a complex process and engine type, condition and operating profile are key contributing factors as well.

In 2010, CCAI was introduced in ISO 8217 to provide an indication of the ignition delay of the fuel and IP 541 offers another option, better known as FIA/FCA test, to evaluate the ignition and combustion profile of a fuel oil, although this test is not widely available and not really a test that can be done routinely and therefore typically performed when a vessel experiences serious problems that are suspected to be due to potential fuel ignition/combustion quality issues.

CCAI of the 0.50% sulphur blends is typically lower than for HSFOs indicative for shorter ignition delay and FIA/FCA analysis performed on VLSFOs with lower CCAI typically show higher estimated cetane number, earlier start of main combustion and higher rate of heat release for these fuels. The challenge will be to evaluate whether any of the existing fuel characteristics, already included in ISO 8217, can be used to provide an additional indication of the nature of the fuel and the black carbon formation potency.

UE: We have seen a lot of discussion about chemical contaminants in bunkers and we sometimes see calls for specific components to be included in ISO 8217 so it will be routinely tested for and a limit is set. Are there any new parameters under discussion for inclusion in the next revision?

MV: The presence, identification and impact on the fuel handling and performance of chemical contaminants/chemical substances in marine fuels is a much-debated topic, not only in the public press but also in the ISO working group. Testing the fuels and identification of potential chemical substances which are normally not found or were not found before in marine fuels is one aspect, determining the level at which an identified substance is potentially harmful is another aspect. A complicating factor is that some vessels can use a fuel that is found to contain particular chemical substance(s) without any problem, while another vessel experiences operational problems when using the same fuel.

Efforts are ongoing within the ISO working group to evaluate the feasibility to assess the performance of fuels found to contain chemical substances. Only when a chemical substance is proven to be the cause of a problem and the concentration at which the damage will occur know, can it be added as a specification to the standard.

UE: ISO 8217:2017 specifies the requirements for fuels for use in marine diesel engines and boilers, prior to conventional onboard treatment (settling, centrifuging, filtration) before use. Do you think there is sufficient understanding of the fact that the specification doesn't mean the fuel is "fit for use" as it is? And could we potentially see the creation of a new standard for "engine ready" fuels?

MV: I believe there is sufficient understanding of the fact that fuels as supplied need to be cleaned, however not all vessels operate the equipment at optimum level. As an example, centrifuges shall be operated at the correct operating temperature. Failing to do so may result in catfines and water not efficiently being removed from the fuel, resulting potentially in wear damage. I don't see a need to have a standard for "engine ready" fuels as vessels are built to treat the fuel onboard to a level so that OEM at engine inlet limits are met and not to receive fuels already cleaned up prior to delivery. Making fuels engine ready prior to delivery to the vessel would also impact the cost of the fuel. OEMs have their own at engine inlet fuel recommendations which are generally well-known throughout the industry.



Monique Vermeir

BUNKER CREDIT INITIATIVE

New offering introduces unsecured finance via digital platform

Digital bunker fuel and lubricant platform Bulugo has partnered with Whitehall Finance to offer bunker fuel and lubricant buyers up to US\$20 million external unsecured finance.

Bulugo notes in statement that the implementation of IMO 2020 at the beginning of the year, followed by the unprecedented disruption to the global economy, "has had a significant impact on the marine credit market". The platform says it has launched its "innovative credit solution" as "financing options are a key consideration when buying marine bunker fuel and lubricants".

Partnership Director Grant Norton, Bulugo, said: "Whilst the traditional bunker market has been ready for digital disruption for some time, we believe the reason why the pace of adoption has been so slow is partly due to the lack of substantive lines of credit offered to buyers via the digitisation route. Our exclusive partnership with Whitehall Finance will give Bulugo customers that option."

The scheme allows buyers to settle supplier invoices immediately while, Bulugo says, also optimising their own cash flow. Payment terms of up to 120 days are offered on a revolving credit account.

The finance is currently only available to UK-based operators but the intention is to expand internationally "over the coming months".

OW's auditors fined

Two auditors from accountancy firm Deloitte have been fined a total DKK 200,000 (US\$ 31,840) by the Danish Board of Auditors for their role in the audit of now bankrupt major bunker player OW Bunker before the company's listing in 2014, according to press reports.

The Nordic director of Deloitte, Anders Dons, said in a statement: "We are very pleased that the Board of Auditors rejects the part of the criticism that concerns whether OW Bunker's consolidated accounts for 2013 were correct."

The Danish Business Authority referred the case to the Audit Board in 2018. It issued a statement at the time, noting that it had reviewed the company's annual and consolidated financial statements for 2013. It said it had found that the auditors had failed to plan and perform audit procedures to counteract the risk that the Group's gross profit could be significantly affected by gains / losses on changes in oil prices, including net gains on oil derivatives that were not intended to hedge the risk in oil prices on stocks and contracts concluded.

New North Sea bunkering terminal

UK-based ports company Associated British Ports (ABP) says it has spent more than £250,000 (US\$329,000) building a new fuel bunkering facility at Lowestoft, aimed at supplying the UK Southern North Sea (SNS) energy sector.

In early August the tanker Thun Grace brought in the first batch of fuel for supply from Lowestoft.

The bunkering service is being provided by a partnership Peterson UK and GEOS Group, which sources marine gas oil directly from UK refineries to various ports around the UK.

John Shade, Peterson UK's Fuel Manager, said: "This new fuel bunkering facility provides operators from the oil and gas and offshore wind sectors with another reason to use Lowestoft as their port of choice, with capability and capacity now in place to service any vessel that comes into the port."

Construction of the new facility, which included the raising of bund walls, began in November 2019 and was completed on schedule by the local contractor Brooks and Wood.

New physical supplier in Israel

Island Petroleum, a subsidiary of Cyprus-based Island Oil (Holdings) Limited, is now operating a physical supply at Ashdod, Israel. It has deployed two bunker tankers to the port, the 2011-built, 6,352 DWT Olivia is supplying VLSFO and also <0.10% sulphur MGO at the anchorage and the 2011-built, 1,316 DWT Lerix is working in the port.



The Thun Grace arrives at the Port of Lowestoft. ©Turner Photography



DEFYING EXPECTATIONS

Most predictions for 2020 have been proven wrong according to market observations heard during IBIA member meetings, not just because of the coronavirus. Now, the pandemic is expected to cause a significant drop in global bunker demand, IBIA's Unni Einemo reports

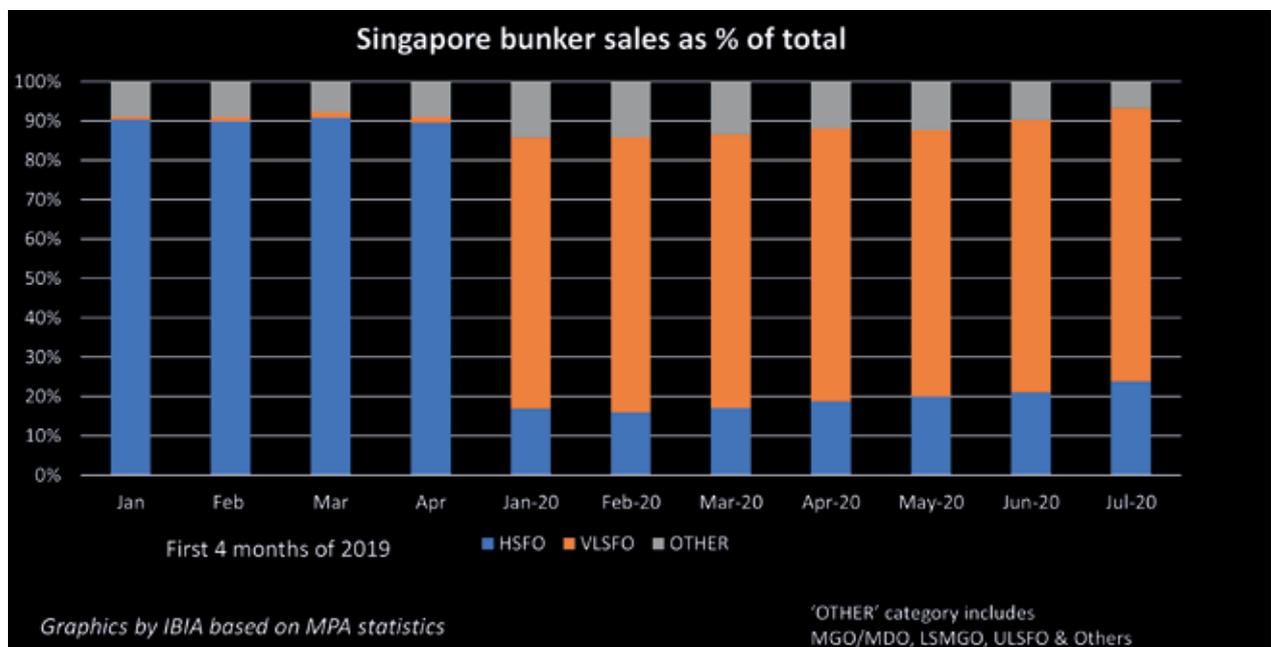
During 2019, especially the earlier part of the year, many market observers were convinced that three things would happen in 2020:

- Most shipowners and operators would initially prefer using marine gasoil (MGO) to comply with the 0.50% sulphur limit rather than very low sulphur fuel oil (VLSFO) blends.
- There would be shortages of VLSFO as refiners would not be able to change their production patterns in time to supply sufficient suitable blend components.

- There would be significant oversupply of high sulphur fuel oil (HSFO) which would make it very cheap compared to IMO 2020 compliant bunkers.

This trio of expectations has been proven mostly wrong. In addition, the shift to VLSFO has not led to an increase in fuel quality issues or claims, as many had predicted. In fact, overall quality has improved, though there are some concerns, which you can read about in the fuel quality feature in this issue of World Bunkering.

Already in the last few months of 2019, it became evident that both demand and supply was increasingly leaning toward VLSFO rather than MGO to comply with IMO 2020, and sales figures so far in 2020 have proven that VLSFO has largely been the fuel of choice. This can be clearly seen in the graph prepared by IBIA drawing on Maritime and Port Authority of Singapore (MPA) data, comparing percentages of HSFO, VLSFO and "OTHER" in Singapore, where the "OTHER" category include marine distillates, max 0.10% sulphur ultra-low sulphur fuel oil (ULSFO) and a tiny fraction of undefined 'Others' in the MPA bunker sales statistics.





The predictions for tight VLSFO availability and a big spread in the price between compliant VLSFO and HSFO (the Hi5 spread) was partially correct during December 2019 and January 2020, but from February onwards the Hi5 spread narrowed quickly. This was in large part due to the dramatic drop in oil prices driven by demand destruction related to Covid-19 at a time of crude oversupply, but also because market fundamentals did not live up to expectations.

It turned out that production of VLSFO has been, and continues to be, significant, and refineries have cut back HSFO output. Moreover, demand for HSFO as a commodity has been strong. It has been used by refineries as feedstock, especially in the US Gulf, and for power generation. Extra demand for power generation to satisfy air conditioning needs during the hot summer season in the Middle East Gulf has also kept HSFO prices firm relative to crude and VLSFO.

What has transpired in most markets in the past few months, and certainly globally, seems to be that supply of VLSFO has outstripped demand, causing intense competition among suppliers and, consequently, weak retail margins for VLSFO. This was one of the overall impressions during IBIA member meetings at the start of July, when some reported a significant VLSFO supply overhang, especially in Singapore.

Expectations were for supply of VLSFO to continue to be good in all major markets, with no shortages foreseen during 2020.

As for HSFO, we heard that there are no issues with sourcing it in key bunkering hubs like the US Gulf and Rotterdam, despite high demand from non-marine sectors. There is no oversupply, but enough to accommodate demand from ships equipped with scrubbers. Smaller ports generally do not stock HSFO for bunkering purposes.

Hi5 spread

One of the biggest surprises of 2020 has been the strength of HSFO prices relative to low sulphur fuel options, with the Hi5 spread dropping from well above \$300 per tonne in January to around \$50 in April,

without recovering much since then. This has undermined the economics of scrubbers and there are doubts about whether the Hi5 spread will increase to a level where more ships will install them.

A Hi5 spread of just \$50 would see payback time for new scrubber installations on some ship types increase to about 10 years. Payback time depends on the upfront investment cost and fuel consumption, which won't be the same for all ship types. For ships that already had scrubbers installed at the start of 2020, even with a \$50 differential some believe payback will be achieved within 5 years.

Predictions from those speaking during the IBIA member meeting were for the Hi5 spread to range from \$50-90 until the end of 2020, rising to maybe \$100 early next year.

Few believed it would go much above \$100 any time soon.

Demand from the scrubber-equipped fleet at present is estimated to account for anything from 10% to 20% of global bunker consumption. It may never go beyond that if the Hi5 spread remains low, which may be the case as refiners continue down the path of increased sophistication, such as installing hydrocracker units that allow them to use HSFO as feedstock to make higher value products.

Reducing HSFO output, which is essentially a low-value residual product stream, was already the global trend in the refining sector prior to 2020. The removal of one of the largest markets for HSFO due to the 0.50% sulphur limit for marine fuels has accelerated that trend.



IMO 2020 has accelerated the trend for refiners to reduce HSFO output ©iStock



Global bunker demand falling

IBIA members expect a significant drop in global bunker demand figures for 2020 due to the pandemic, but with geographic differences. Low prices appear to have kept bunker demand buoyant during April and May as buyers took the opportunity to fill up their tanks in a competitive market, but in June demand dropped significantly in several areas.

During an IBIA member meeting at the end of April, the pandemic had already caused demand to drop sharply in some bunker markets, but it was a mixed picture with large hubs in particular actually reporting stronger sales in March. The demand picture continues to be mixed, with some suppliers and ports doing better than others, but despite global bunker demand having been surprisingly resilient in the face of the global slow-down caused by Covid-19, several market experts told the IBIA members meetings in July that it was now having a wider negative impact.

Forecasts from the industry experts taking part in the IBIA meeting varied, ranging from a 7-8% drop in 2020 as a whole to a deeper 10-15% cut in bunker sales compared to 2019. After holding up quite well in the first half of 2020, the worsening of the global economy is expected to increasingly impact on demand for shipping, so global bunker demand could be down by around 15% year on year (YoY) as of June. Some predicted that demand would fail to pick up after the June fall meaning around 15% of global demand would be lost during the second half (H2) of 2020. Moreover, demand would likely remain subdued for the next two to three years.

That drop in demand is a result of reduced shipping activity as the impact of the pandemic takes its toll on global trade. Blank sailings have meant that many ship types have continued to burn fuel despite a global drop in cargo volumes.

As of June/July, that picture was changing.

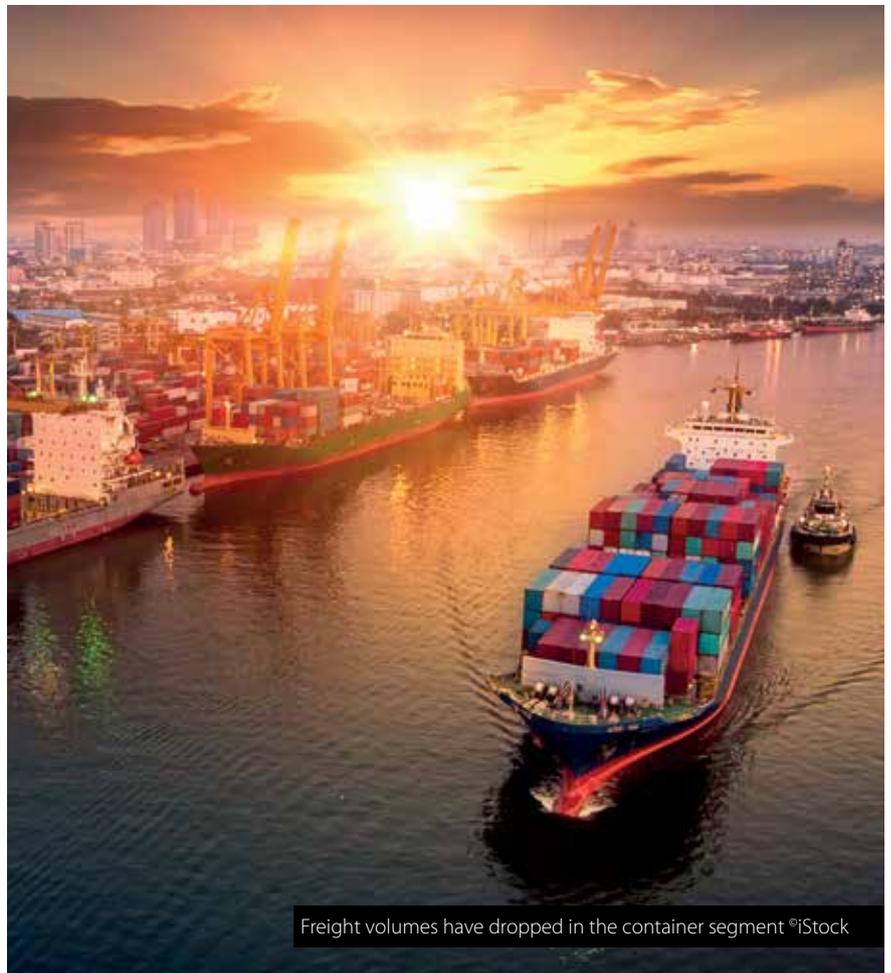
Freight volumes in the container segment were down by 15-20% by the end of June and this had now translated into rationalisation, with an estimated 30% or more vessels idle on trade lines. Cruise and passenger vessel activity was hit very hard already in March this year, and there has been only partial resumption of services in this segment. Tanker activity has also dropped recently with many vessels being used for storage rather than transport. We heard during the July meeting that around 250 tankers were lying idle around the coasts of the Netherlands, Belgium and the south of England. "Rumour has it you can walk from Singapore to Indonesia without your feet getting wet with the amount of ships lying in wait," we heard. All of this translates to reduced demand for bunkers.

Mixed fortunes

The demand picture continues to be very mixed, with huge drop-offs reported by some ports and suppliers, while others have done relatively well and remained more optimistic for a rebound in sales after the June slow-down.

Singapore's bunker sales in June, despite dipping by 2.4% on May 2020 and down 2.3% YoY are still up in the first half of 2020 by 4.6%, rising from 23.7 million tonnes in H1, 2019 to 24.8 million tonnes in H1, 2020. The leading global bunkering hub saw a solid sales rebound in July to 4.16 million tonnes, which was a 7.2% YoY increase and up 8.6% from June 2020.

The key European bunkering port of Rotterdam enjoyed a 2.7% annual growth in bunker sales during the first quarter (Q1) of 2020, but volumes in Q2 slipped by 6% from Q1 to total 2.2 million cubic meters, according to official statistics.



Freight volumes have dropped in the container segment ©iStock

The fortunes of bunker suppliers in the Amsterdam-Rotterdam-Antwerp (ARA) region appears to have been a tale of two halves with independent suppliers in the region losing out big time to oil majors. One estimate put overall demand in the ARA down by 30% YoY as of early July, pegging the loss in turnover for independents at 60-70%, whereas some oil majors have seen both their market share and sales go up. While there aren't any statistics for the ARA region as a whole, it was suggested that less competitive prices and a disproportionate share of issues with fuel quality, in particular stability, in the ARA region has had a negative impact on business for independent suppliers there.

Bunker sales in North America has, in parts, suffered significantly. It was possibly down by as much as 20 to 30% by late April, in particular along the east coast,

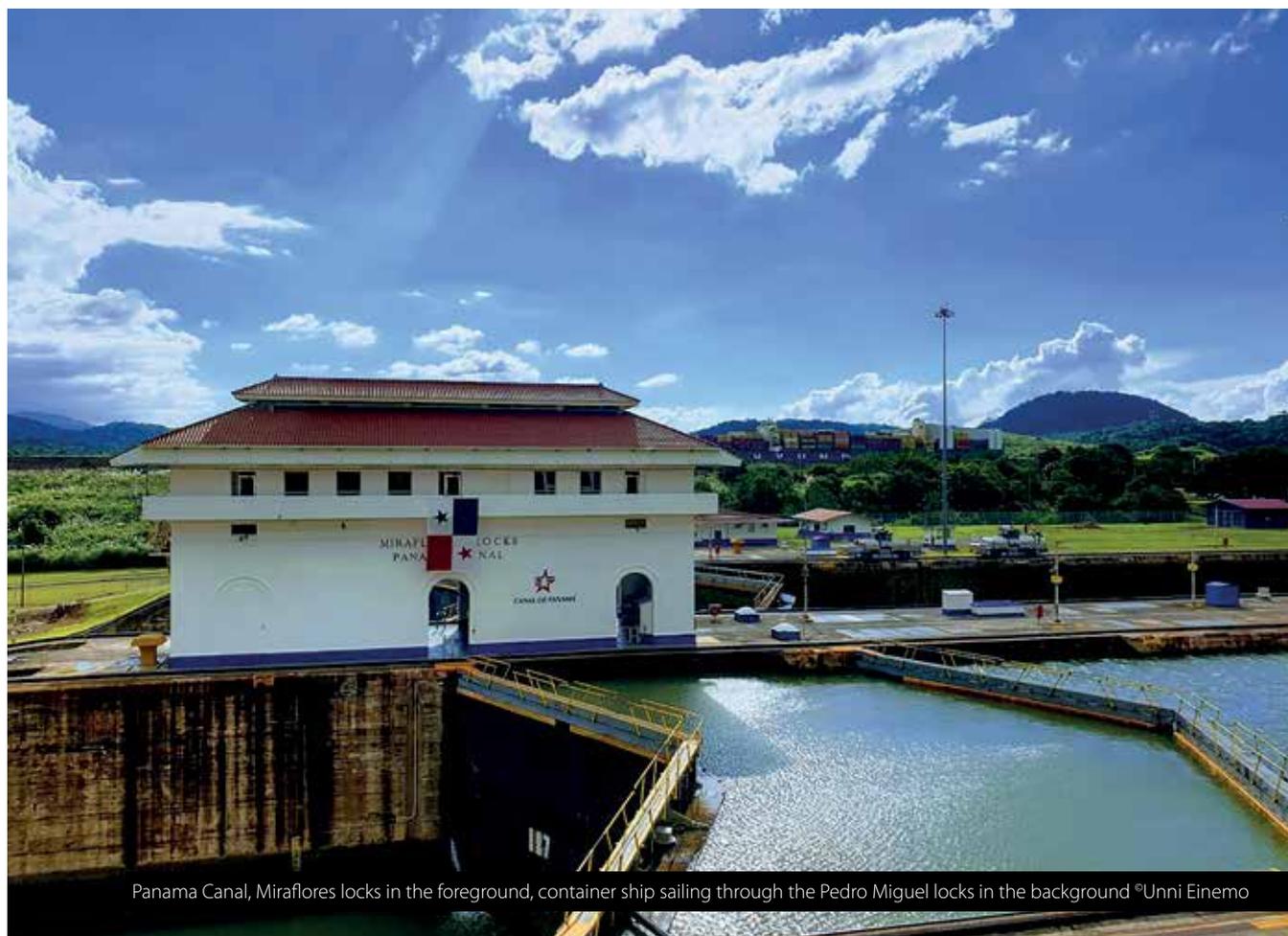
according to one estimate heard at an earlier IBIA member meeting. Bunker demand was holding up well in the US Gulf during Q1 and most of Q2, but as of June/July it was probably down by 30-35% compared to year earlier, according to a new estimate head during IBIA's July member meeting. The US Gulf region was said to have good availability of all major product types and generally good product quality.

Panama, which saw rising YoY sales in Q1 has seen bunkering volumes drop off during April, May and June with the biggest fall seen in June. Preliminary official figures for June put total bunker sales at 302,330 metric tonnes, indicating a 37% drop from the same month in 2019 and a 23% drop from May, when sales were 5% down from April's 415,137 tonnes (which was up by 2% compared to 2019).

The June drop-off in sales reported from almost all places came as crude and bunker prices were trending steadily higher after bottoming out at the end of April, which ended a streak of declining prices since early January.

As during the IBIA member meetings in April, there's some evidence to suggest that the bunker demand is gravitating towards the bigger bunkering ports and towards the largest bunker trading companies and oil majors. So, while major bunkering hubs like Singapore's YoY bunkering volumes have increased so far this year, other markets have seen bunkering volumes shrink.

Uncertainty about the outlook for global trade and the economic damage caused by the pandemic, combined with uncertainty about how long it will take before Covid-19 is under control, makes all forecasting difficult. But there is little doubt that the impact on the economy and world trade, and hence shipping activities, will be profound during 2020 and probably beyond.



Panama Canal, Miraflores locks in the foreground, container ship sailing through the Pedro Miguel locks in the background ©Unni Einemo

CARBON CAPTURE MOVES UP THE AGENDA

Japanese heavyweights back world's first small-scale marine CO₂ capture plant

Major shipowning group "K" Line plans to trial a small-scale, marine-use demonstration CO₂ capture plant on one of its ships as part of a research and development project in collaboration with Mitsubishi Shipbuilding and ClassNK.

The project is supported by Japan's Maritime Bureau of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) as part of its support for marine resources technology research and development.

The demonstration plant's design will be based on an existing land-based one and will be designed to capture a portion of a vessel's gas emissions. This project is intended to not only verify the efficacy of capturing and storing CO₂ from a vessel's gas emissions, but also the operability and safety of CO₂ capture facilities at sea. These demonstration tests are aimed at promoting the development of more compact equipment required in the marine environment along with the development of system requirements for stable continuous operation at sea.

The two-year project will begin in August 2020 with the launch of a hazard identification evaluation of the demonstration plant and deployment on vessels, with verification from ClassNK. Mitsubishi Shipbuilding will begin development and construction of a small-scale CO₂ capture demonstration plant and evaluation of system safety. In the middle of 2021. It will begin test operation of the demonstration plant at its factory, followed by deployment of the plant on "K" Line's thermal coal carrier Corona Utility, operated for Tohoku Electric Power. By the end of fiscal 2021, the project partners will start operating the demonstration plant on the vessel and measuring the system's performance under marine conditions.



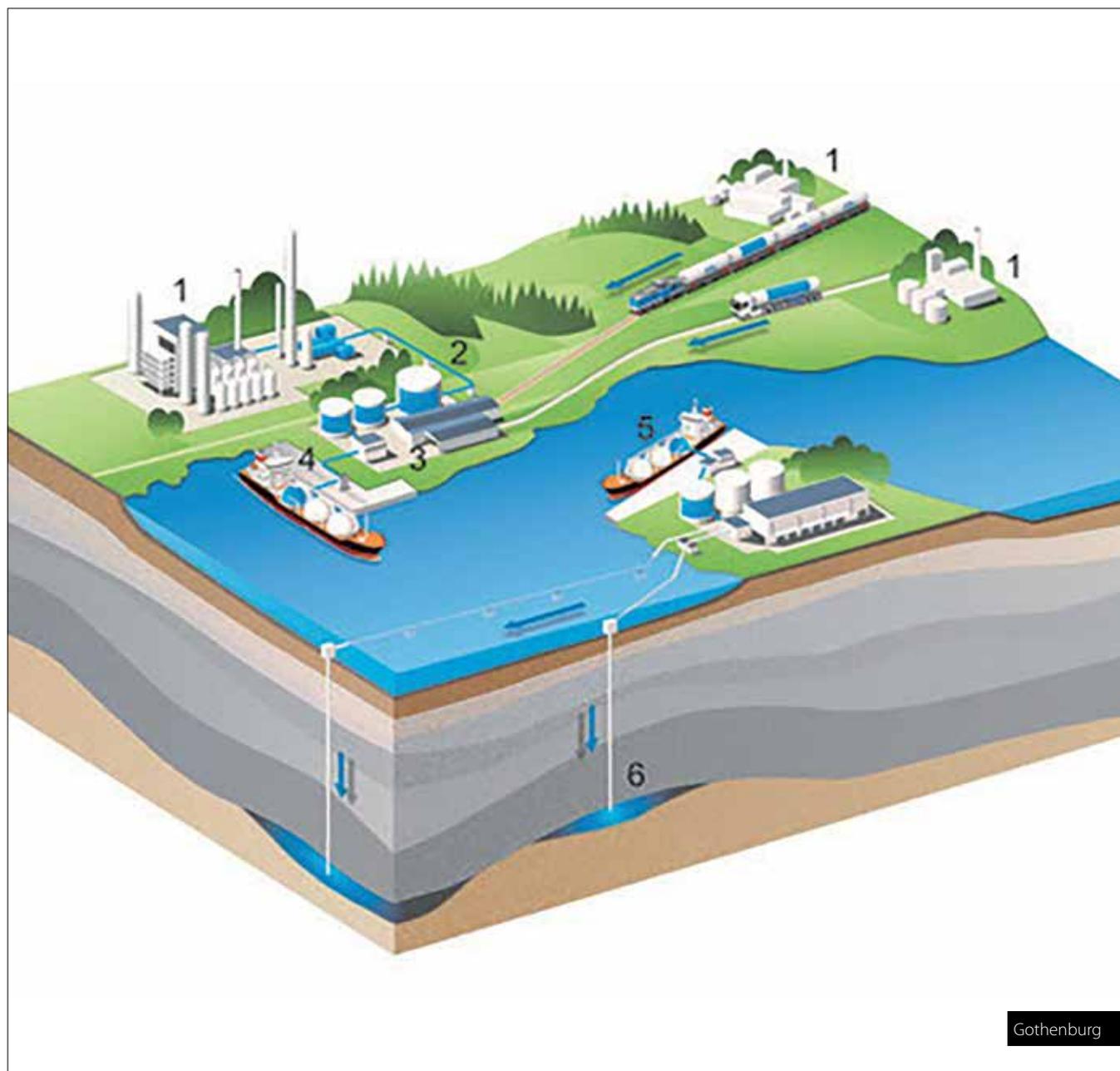
Small-scale CO₂ Capture demonstration Plant

The project is expected to provide insights into facilities design and technologies for capturing CO₂ emissions and achieving zero emissions on ships. Additionally, the captured CO₂ is expected to be recycled as a new CO₂ source for Enhanced Oil Recovery (EOR) processes or as raw material in synthetic fuel through methanation.

In a separate initiative, nine Japanese companies have established the Ship Carbon Recycling working group as part of the country's wider Carbon Capture & Re-use (CCR) Study Group. The companies in the working group are EX Research Institute, Hitachi Zosen Corporation, Japan Marine United Corporation, JFE Steel Corporation, JGC Corporation, Mitsui OSK Lines, ClassNK, Nippon Steel Corporation and Sanoyas Shipbuilding Corporation.

Meanwhile there has been a development that would be relevant were the shipping industry to take the carbon capture route. The Swedish port of Gothenburg has entered into a joint infrastructure project for the transport of liquefied carbon dioxide extracted using carbon capture storage (CCS) technology. The project – CinFraCap – is a collaborative venture between Göteborg Energi, Nordion Energi, Preem, St1, Renova, and Gothenburg Port Authority.

The Swedish Energy Agency has agreed to cover half the cost of funding a study, which is being conducted by the consulting company COWI. This study, which commenced in June with completion due in Q1 2021, focuses on the means of collecting captured carbon efficiently from each company, transporting it down to the port, intermediate storage prior to loading, securing of permits, risk identification, and presentation of a business model.



Gothenburg

Five “solutions to decarbonise”

Shell, Deloitte Netherlands and Deloitte UK have published a joint research report outlining industry perspectives on decarbonising the shipping sector. Titled *Decarbonising Shipping: All Hands on Deck*, the report sets out the views of senior shipping executives from across the sector and presents a road map of solutions to help the industry meet the International Maritime Organization’s (IMO) ambition to reduce carbon emissions.

The report recommends the following: scale up customer demand for

zero-emission shipping through charterer’s commitments such as long-term contracts and green procurement criteria; create a level playing field by aligning decarbonisation targets and timelines between the IMO and major local regulatory bodies; accelerate company partnering to develop a zero or low-emission fuel through joint research and development (R&D) across shipping; accelerate R&D by running end-to-end green pilot projects involving charterers, operators, owners and ports on specific routes and vessel types and increase

the reach of existing initiatives and implement independent coordination mechanisms to choreograph action and areas of responsibility.

In addition, operational efficiency, is identified as the foundation for the transition process, enabling reduced emissions from the current fleet through accelerated implementation of operational measures. This includes fuel and lubricant quality, digitalisation, and the use of data and smart navigation strategies.

'JUST IN TIME' GUIDANCE FROM IMO

A new IMO-backed publication aims to provide both port and shipping sectors with practical guidance on how to facilitate just in time (JIT) arrivals

IMO says in a statement that the guide has been developed by the Global Industry Alliance to support low carbon shipping (Low Carbon GIA), based on research and discussion amongst its membership. It documents the findings of a series of industry roundtables which brought together nearly 50 companies and organizations who are key stakeholders in the port call process.

The IMO adds: "Widely recognized as a means of increasing port efficiency and port call optimization, the successful implementation of JIT Arrivals can have a significant environmental impact through reduced GHG emissions from optimizing the ships speed to arrive just in time."

The concept is based on the ship maintaining an optimal operating speed, to arrive at the Pilot Boarding Place when the availability is assured of: 1. berth; 2. fairway; and 3. nautical services (pilots, tugs, linesmen).

JIT Arrivals also contribute to reduced time at anchorage and therefore reduced congestion in the port area. It is estimated that ships spend up to 9% of their time waiting at anchorage, which could be reduced through the implementation of JIT Arrivals.

Biofuel trials extended

After having announced their three-month biofuel trial, short sea shipowner UECC and the GoodShipping Program have now partnered with car manufacturer BMW Group to continue to test marine Bio Fuel-Oil (BFO) on UECC's ro-ros.



By covering the fuel premium for a biofuel volume corresponding to BMW Group's freight that will be shipped on the Autosky during the trial period, BMW Group will be able to claim a CO₂ emission reduction of 80 to 90% for these shipments, totalling more than 400 tonnes of carbon.

The first stem of cooking oil-based BFO from Goodfuels was delivered to the Autosky in March this year at Rotterdam. The ship is testing BFO on the route between Zeebrugge, Belgium and Santander, Spain.

©IMO



COLD IRONING EXTENDED IN CALIFORNIA

The California Air Resources Board (CARB) has approved a new regulation that will require most ships coming into a regulated California port to either use shore power or a CARB-approved control technology to reduce harmful emissions

An existing 2007 regulation already applies to container ships, reefers and cruise ships. The updated regulation comes into force in 2023 and will initially mandate stricter conditions on the three types of vessels already subject to control. Auto carriers will need to comply in 2025. Tankers docking at the Port of Los Angeles and the Port of Long Beach must also comply starting in 2025, while tankers in Northern California have until 2027.

According to a CARB statement, an alternative to shore power is capture-and-control technology that uses a 'bonnet' to cover a ship's exhaust stacks, which contains and treats harmful emissions.

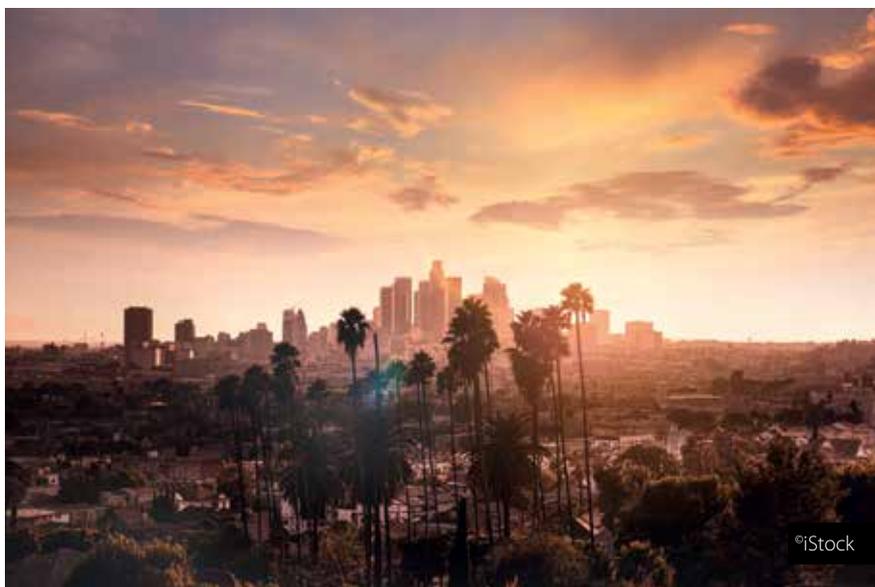
Spy in the sky returns to Great Belt

At the request of the Danish authorities, the European Maritime Safety Agency (EMSA) is again using its Remotely Piloted Aircraft System (RPAS) services to support the monitoring of ship emissions around the area of the Great Belt.

The RPAS will specifically measure ships' sulphur emissions to check compliance with EU rules governing the sulphur content of marine fuel. The limit in the area, which is within the Baltic emission control area, is 0.10% sulphur.

Measurements will be transmitted in real time to the EMSA RPAS Data Centre and to THETIS EU,

which will create alerts to be followed up by the competent authorities. The deployment of the RPAS from the Danish coast started on 6 July in support of the Danish Maritime Authority (DMA) and the Danish Environmental Protection Agency (DEPA), and is a continuation of previous services in 2018 and 2019.





GP Global started supplying at Jebel Ali in March but soon afterwards the company ran into headwinds. ©GP Global

WEATHERING THE STORM?

Major player World Fuel Services has brought in respectable results in the face of the worldwide Covid-19 turmoil, but GP Global took a battering

This year so far has clearly been exceptionally testing for all bunker industry players.

In that context World Fuel Services' (WFS) Q2 results are notably strong despite a headline 20% year on year decline in gross profit, to US\$213.9 million.

Bunkering is only a part of WFS' fuel supply portfolio but performed robustly, generating a gross profit of \$37.2 million, an increase of 2% year on year. A WFS statement says this profit growth was "principally related to improved performance in our core resale business, offset by significantly lower volume due to a decline in activity in connection with the pandemic".

The company's chairman and CEO, Michael Kasbar said: "The resilience of our diversified business model produced a respectable result for the quarter despite volumes across all of our operating segments being negatively impacted by the global shutdown due to the COVID-19 pandemic."

WFS noted that, beginning in the first quarter of 2020, the aviation, marine and land transportation industries,

along with global economic conditions generally, have been significantly impacted by the coronavirus pandemic. It said: "A large number of our customers in these industries have experienced substantial reductions in their operations, especially commercial airlines and cruise lines, which have been particularly impacted by the travel restrictions and stay-at-home orders. Customers in our marine and land segments have also been adversely affected by these restrictions, as well as the extended shutdown of various businesses in affected regions.

The Q2 result may have been relatively good but the company warns that the rest of the year is likely to be difficult. It notes: "While the COVID-19 pandemic and associated impacts on economic activity had a limited adverse effect on our results of operations and financial condition for the first quarter of 2020, we have since seen a sharp decline in demand and related sales as large sectors of the global economy have been adversely impacted by the crisis. Accordingly, our results of operations during the second quarter of 2020 were significantly impacted as a result of the effects of the pandemic.

Since the level of activity in our business and that of our customers has historically been driven by the level of economic activity globally, we generally expect these negative impacts to continue through the third quarter as the recent increases in COVID-19 cases have further delayed the reopening of various economies around the world."

In response to the current situation WFS is restructuring some of its activities and pushing ahead with cost reduction initiatives. This includes the sale in September of its Multi Service payment solutions business to Corsair Capital, a New York based private equity firm specializing in business and financial services for about \$350 million.

By contrast, UAE-based GP Global has had a less happy year so far. It started well enough. In March it announced the launch of its new bunkering operation at the port of Jebel Ali. Also in March, it launched a physical supply operation in Hamburg with a 1,500 dwt bunker barge. Several other announcements at around the same time highlighted how the company was extending its worldwide reach.



However, in late July the company issued a statement announcing it had “undertaken a financial restructuring exercise to combat the challenges that have arisen due to a global economic meltdown amid the ongoing C-19 pandemic”.

The statement also said: “While there are several rumours about the financial condition of our group floating around, we would like to reiterate to and assure our partner and stakeholders, that as a highly reputed organisation we are being targeted by vested interests who do not wish to see us succeed and grow higher and higher.

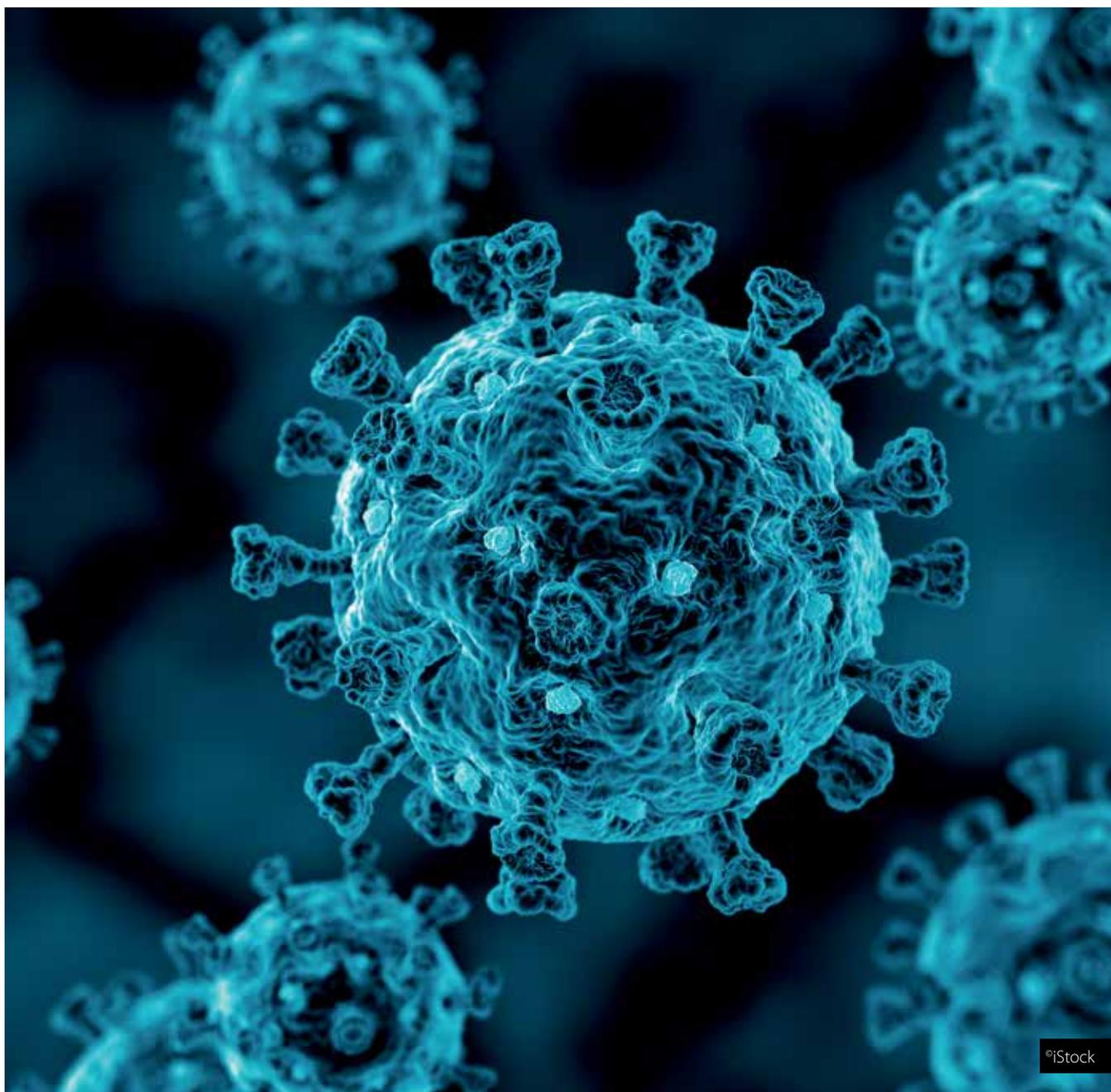
The group strongly and vehemently denies all such rumours and is being made a victim of blatant lies, by spreading of totally false and factually inaccurate information by these vested interests.”

In August allegations emerged of fraud by some of its employees in the UAE. Soon after the company appointed FTI Consulting’s Rod Sutton as its Chief Restructuring Officer and also hired UK-based financial restructuring specialist firm Quantuma.

In September there were signs that the company’s troubles were not over when it was reported that its 6,200 dwt tanker GP B3 had been arrested at Pipavav, India.

Meanwhile, on a more positive note, KPI Bridge Oil and OceanConnect Marine have announced that the two companies have formally completed a merger to create a new brand and entity, KPI OceanConnect.

The merger means the company now has a 170-strong team operating across 15 locations globally.



©iStock



West Coast ports have been hit by sliding box traffic and vessel cancellations. ©Roy Luck/cc-by

GRIM UP NORTH

Softening trade and a chaotic US pandemic response have hurt North American economics, and even fierce fuel sales competition in Houston doesn't stop the overall picture looking pretty gloomy right now, according to John Rickards

The US bunker sector has had to weather sharp falls in east-west international shipping as Covid-19 battered economies in Asia and Europe, the sweep of the pandemic across the US itself and the disastrously botched Federal response that followed, and the oil glut of late spring. It's no surprise that demand took a battering - and as, at the time of writing, the pandemic rages across the South, probably will for some time to come.

However, it's not a wholly bleak picture, and with one eye on the inevitable, eventual recovery, some suppliers are gently expanding their services. Houston-based GCC Bunkers announced in June that it was adding offshore supply in the Gulf of Mexico to its existing port offering via chartered tanker. Monjasa added another barge to its Houston operation in July, giving the company a total maximum monthly volume of around 40,000 mt in the port. And, looking even further ahead, Pilot LNG has filed regulatory applications to build an LNG bunkering terminal on Pelican Island in Galveston, the first such facility in the region. If approved - a decision is expected in 2021 - the terminal, including a new liquefaction plant, is slated to become operational in 2024.

"The proposed Galveston LNG Bunker Port would provide the necessary infrastructure to supply the growing market for LNG marine fuel," CEO Jonathan Cook said.

The Galveston-Houston-Texas City port complex is one of the main ports serving the Gulf's cruise industry, a sector leaning relatively heavily into gas bunkering.

It is perhaps worth noting that Houston/Galveston has been one of the few ports around the US to have maintained reasonably steady traffic levels despite the challenges of the current year. There has also been a little consolidation in Canada, with CANDEN Marine Fuel Services being absorbed by Glander International Bunkering to become its Montreal subsidiary and GIB's ninth office and its second in North America. The decision, GIB said, was strategically aimed at strengthening the company's global presence.

Glander's CEO Carsten Ladekjær said: "Glander International Bunkering has remained a strong business since its inception focusing on helping clients worldwide. With this expansion of our brand, we aim to combine our global leadership with CANDEN's local expertise. Our move into Canada is exciting and will complement our North American bunkering operations and services effectively."

Elza Adamyan, ex-CANDEN, now GIB, added: "Moving into Glander International Bunkering will position us even stronger to meet demands and provide even higher levels of service for our clients."

We are thrilled to integrate with Glander International Bunkering's global teams of experts and long-term vision".

GIB had enjoyed a strong year, with pre-tax profits up 75%, and at the time of releasing its annual report in June seemed happy with the shape of business going into the spring...

"This was an occasion where every bunkering company and its employees had to face the test of industry change and demonstrate their expertise and level of preparedness. Our people leaned in, and it is very satisfying to see the results of all the hard work," said Ladekjær.

... and sanguine but calm about the post-pandemic state of the industry.

"I would not be surprised if the coming year leads to more consolidation in the industry, with strong companies emerging even stronger," Ladekjær added. "With our sound financial foundation and strong organisation, we look forward to this with humility, but also optimism. We are prepared to face future challenges and remain ready to seize opportunities."

However, such moves are somewhat thin on the ground, and just weathering the pandemic and the economic fallout to follow it is occupying the industry's planning more than anything else, particularly in regions exposed especially sharply to the fortunes of individual shipping sectors.



Cruise operators are under a no-sail order in US waters due to run until the end of September - though member lines of the Cruise Lines International Association had all cancelled operations until September anyway. Carnival Corporation posted a second quarter loss of US\$2.4bn in June, Covid-19 having put the company's entire business effectively on hold from early March. Carnival is aiming to accelerate the intended sale of six of its current ships originally slated to go over the next few years as well as delaying delivery of several more to shore up the books, while vessel sailings even when they resume will be curtailed. Royal Caribbean is under similar pressure.

The cruise industry is a niche market for the North American bunker sector, concentrated in relatively few ports such as Miami, but vital in those locations. Vancouver, another such port, has reportedly seen a collapse in demand since May.

Miami-based World Fuel Services saw first quarter marine profits surge 68% on the back of higher margins for VLSFO, but was far more cautious about the ongoing impact of Covid-19 on the economy and working climate as a whole, warning "we have since seen a sharp decline in demand and related sales" for Q2, which would "more significantly" impact the company's bottom line.

"We posted solid results in the first quarter of the year despite the impact of the pandemic in the latter part of the quarter," said WFS' CFO Ira M. Birns. "We are laser-focused on further reducing expenses and prudently managing cash, while carefully navigating through what has certainly become a highly complex operating environment. In addition, we have continued to do all that we can to support our customers, suppliers, employees and their families during these difficult times."

That gloomier picture is reflected in the metrics of the more general vessel segments plying North American waters.

Container traffic has seen a sharp reduction in box traffic since the onset of the pandemic - not helped by further antagonism towards China by the US government, with May's year-to-date loaded container numbers provided by the National Retail Federation's Global Port Tracker, as reported by the Pacific Merchant Shipping Association, down 6% across the US and Canada, but most of the losses contained to the month before (down 15% on average).

"No one expected May's container trade numbers to be anything but awful. And, judging from the port TEU tallies posted so far, it looks like no one will be disappointed," the PMSA pithily observed. The country's third largest box port, Long Beach, reported much the same continuing into June, down 11% on 2019, meaning cancelled sailings as trade demand continued to be poor and an overall half-year drop of 7%. Reduced ship calls, though, are of most immediate concern to fuel suppliers.

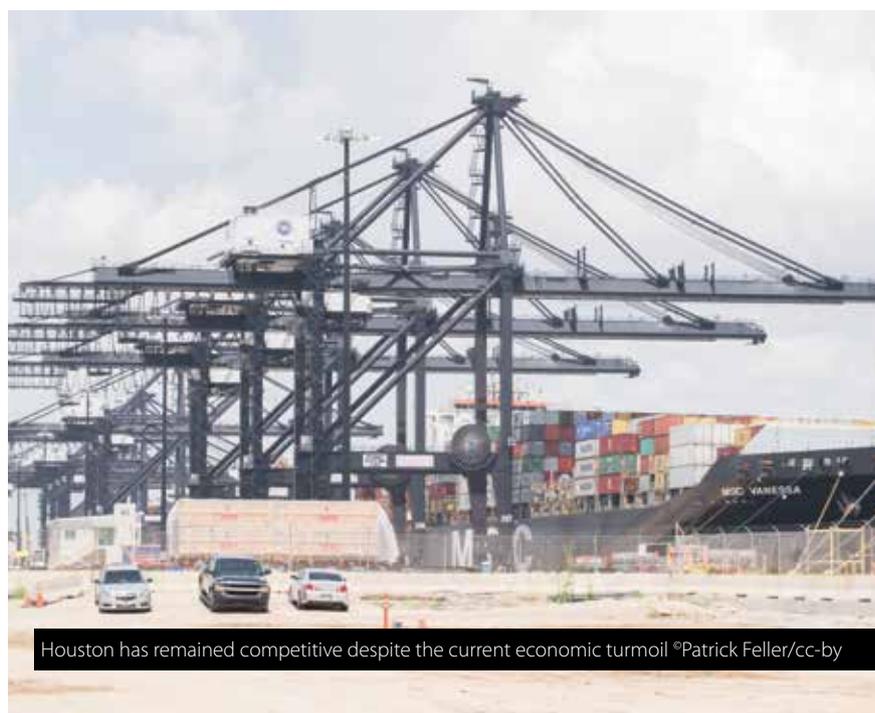
"Cancelled sailings continued to rise at a rapid rate in the second quarter as ocean carriers adjusted their voyages to a decline in demand for imports during the national Covid-19 outbreak," said Mario Cordero, executive director of the Port of Long Beach.

"The economic challenges may persist for some time, but the Port of Long Beach continues to invest in infrastructure projects that will meet the needs of our customers."

According to the port, the San Pedro Bay ports complex - Long Beach and L.A. combined - had 41 cancelled sailings in the first half of 2019. This year it was 104 - 37 of which were destined for the Port of Long Beach.

When the traffic figures were released in early July, the port said that cancelled sailings were projected to "significantly recede" as the traditional holiday peak shipping season ramps up during the third quarter. The San Pedro Bay ports anticipated five canceled voyages over the next three months. No blank sailings were reported by both ports during the same period last year.

However, projections of any kind in 2020 have proved difficult, and never more so than in the currently spiralling US pandemic, with California hit particularly badly at the time of writing. What shape the peak season for North American shipping might look like by Q3 is, frankly, anyone's guess.



Houston has remained competitive despite the current economic turmoil ©Patrick Feller/cc-by



Much of South America's refined output was low-sulphur anyway, which has been a boon to suppliers ©Mauricio Pingo

PROCEEDING WITH CAUTION

With the pandemic deeply entrenched in the continent and the full economic impact still biting, South America's main fuel producers aren't getting ahead of themselves, John Rickards reports

South America, and Brazil in particular, was always going to be a key producer of VLSFO as much of the region's crude is naturally lower in sulphur than elsewhere in the world. Nonetheless, with local export trade to China falling off a cliff in the early part of the year due to the Covid-19 and Petrobras, the main producer of the product, limiting output as a result during the early spring, it took a while to see fuel production in full flow again.

In July, with output at full speed, Petrobras announced that the Paulinia Refinery (Replan), in the state of Sao Paulo, had broken its monthly production record for 2020-compliant bunker fuel for two months in a row. In June, Replan produced 148,000 cubic metres, 20% higher than May's previous record of 123,000 cubic metres.

The company also reported that June saw the resumption of operations of a distillation unit and a catalytic cracking unit at Replan to meet increased market demand for refined products. With the return of these units to operation, the refinery will once again have the capacity to process 69,000 cubic metres of oil per day, the largest in Petrobras' refining arm. Petrobras exported 1.11 million tonnes of fuel oil in May, surpassing the previous record set in February 2020 by 10%.

The amount of fuel oil exported was 231% higher than the volume exported in May last year.

"The record in exports occurs in a challenging period of the world economy with reduced global demand for oil and oil products caused by the Covid-19 pandemic," the company said in a statement. "The strategy of diversifying the destinations of fuel oil exports has proved effective in capturing greater participation in the foreign market."

The statement went on: "The record achieved reflects the result of actions taken during the crisis to return production to the Exploration and Production [branch of the company] and to readjust refining loads by focusing on products that maximize the company's margin without putting pressure on inventories."

In its quarterly reports, written as Brazil became one of the countries worst affected by Covid-19, Petrobras went into more detail regarding its approach to weathering the oil glut and economic effects of the pandemic - and how it sees any future recovery.

"The recent creation of a logistics executive officer and the strengthening of marketing and sales activities were quickly reflected into a more aggressive stance in crude oil exports

- which in April reached a historical record of 1 million barrels per day - and fuel oil and bunker oil exports. Given the reduced level of variable costs in our E&P operations and the hedging strategy put in place, exports contribute to cash generation in the short term, partially offsetting the effect of the deep contraction in domestic fuel demand. This movement anticipates the preparation to thrive in a more competitive environment in the future."

"The growth in exports and the reduction in the refineries utilization factor contributed to avoid the build-up of excess inventory, one of the most serious problems that affect the oil industry today."

"In contrast to what happened in 2008-2009, we are predicting a slow recovery in global economic activity and, consequently, in demand for fuels. The nature of the shock is different, more powerful. The sudden loss of income is accelerating the financial leverage on families, companies and governments and the uncertainties associated with the lack of a vaccine, that may only be available in 2021, and the political and trade tensions between the US and China, a country that plays a critical role in the global supply chain also hinder the vigorous recovery of the global economy."



"In the specific case of oil, the execution of the production cuts promised by members of OPEC+ is quite uncertain given the long history of non-compliance and the temptation caused by the need to generate cash for some of its members. The behavioural changes generated during the social distancing phase and the governmental incentives to replace fossil fuels are other factors that lead us to have a more cautious view on the evolution of oil prices over the next few years."

Shipping is to some extent insulated from the consumer-end economic damage but Petrobras has to consider that three quarters of its domestic products sales are for road transport.

To the south, the second largest economy in South America has been hit hard by the pandemic lockdown. Argentina's government was, at the time of writing, trying to renegotiate a vast tranche of international debt. After two years of recession, the further crunching of its domestic economy caused by Covid-19 has left Argentina struggling to appease foreign creditors as the government ramps up spending to cover for Covid-19 relief measures. The prospects for a speedy end to the coronavirus emergency did not look good at the time of writing as the country's case rate spiralled and Buenos Aires was being hit particularly hard. Primary spending nearly doubled in May, to cover various assistance packages. Meanwhile economic and industrial activity sharply declined.

The effect of those economic struggles on the bunker sector are yet to be determined. However, as is the case elsewhere, it is likely a reduction in import/export traffic will eventually ripple down to fuel sales. According to the Argentinian Petroleum and Gas Institute, bunker sales in the first quarter of the year (Q2 figures had not yet been released at the time of writing) showed a boom in volumes, with sales up 70% year-on-year. In common with Brazil, locally-produced fuel tends to be low sulphur anyway, which could explain the sales surge. Colombia remained deep in the grip of pandemic lock down, with the country's Caribbean coast particularly badly affected. However, Ecopetrol, the national oil producer, is still looking to expand its fuel production capability across the coming years.

A new investment plan announced in July includes around US\$300 million in funding for the company's downstream segment, focusing primarily on ensuring the reliability and sustainability of the operation of the Barrancabermeja and Cartagena refineries, as well as continuing the company's fuel quality and waste water management programs.

"The joint throughput expected from the refineries for 2020 is ranging between 300 and 320 thousand barrels per day," the company said. "Looking at growth opportunities, the project to interconnect the original crude unit of the Cartagena refinery with the new refinery is expected to continue, with investments of \$60 million in 2020.

This project would increase the refinery's capacity to more than 200,000 barrels per day by 2022."

These measures are a post-Covid decision and while they represent a sharp reduction in its original plans, they're still a considerable investment.

The company said: "As a result of the solid financial results reported in 2019, Ecopetrol announced in November of last year an increase in its investment levels for 2020, to a range of between \$4.5 to \$5.5 billion (a plan set with an average Brent price of \$57 per barrel). The unprecedented crisis suffered during the first quarter of 2020, instigated by the simultaneous shocks to the supply (price war) and demand (Covid-19) of oil, resulted in an downward adjustment of the investment level to a range between \$2.5 and \$3 billion (with an expected average Brent price of between \$30 and \$40 per barrel). After a thorough review of the company's portfolio and the progression of its interventions, and with the gradual recovery of economic activity, the current outlook allows for an investment increase to a new estimated level of between \$3 billion and \$3.4 billion for 2020."

As with anything in 2020, how accurate such predictions will prove to be remains very much to be seen.



Petrobras has seen bunker demand rebound, but is guarded about the future ©Petrobras Press Agency



Terpel offers you the trust and tranquility that you deserve.

With an efficient, fast, neat and suitable operation, we assure the quality needed for Colombia and Panama's ports.

Contact us and know everything we have to offer in:

www.terpel.com
bunkers@terpel.com

SWITCH TO VLSFO SEES SHIFT IN OFF-SPEC CLAIMS

An IBIA online meeting highlighted issues that arose immediately after the implementation of the 0.50% sulphur limit while a survey by shipping industry bodies indicates the transition “has not been without problems”

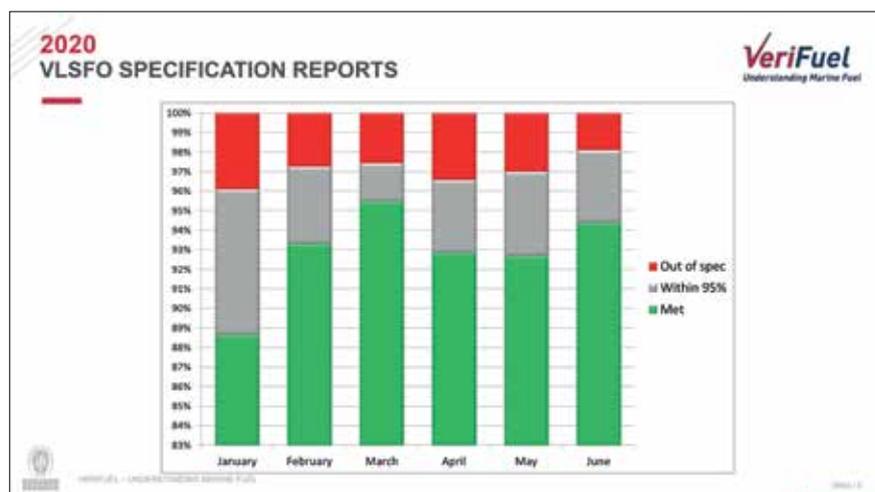
During the transition to IMO 2020 at the end of 2019, and in the early stages of 2020, many suppliers experienced a large number of claims after the ships’ own samples came back with a sulphur test result above the 0.50% sulphur limit. However, after January, it calmed down quickly in most areas, probably linked to the supply chain now being clean as HSFO residues would be flushed through bunker storage tanks and cargo tanks on bunker barges, as well as sampling points and samplers onboard receiving ships being cleaner.

This was one of the conclusions that emerged from an online meeting of IBIA members in August on the topic of sulphur verification. The developing trend can be seen in Bureau Veritas (BV) statistics presented at the meeting, see Illustration 1. In the first half on 2020 approximately half of all fuel tested by BV was VLSFO, see Illustration 2.

IBIA director Unni Einemo says: “It seems suppliers are by and large using 0.47% as their blend target in line with best practice for very low sulphur fuel oil (VLSFO), taking test precision into account. To be 95% certain that a VLSFO will never test above 0.50% sulphur, fuel producers need to use 0.47% as the blend target. There are, however, some areas where sulphur test results indicate that the blend target is closer to 0.50% and as a consequence more test results indicating that the limit may not have been met.

“During the meeting, we heard that test results for the second quarter (Q2) of 2020 indicated average sulphur content for VLSFO at 0.46%, while some have recently pegged the average at 0.47% sulphur. The 0.46% average was borne by out by the BV statistics, see Illustration 3.

“The Amsterdam-Rotterdam-Antwerp (ARA) region sticks out as particularly problematic. Looking at test results from this region for Q2 of 2020,

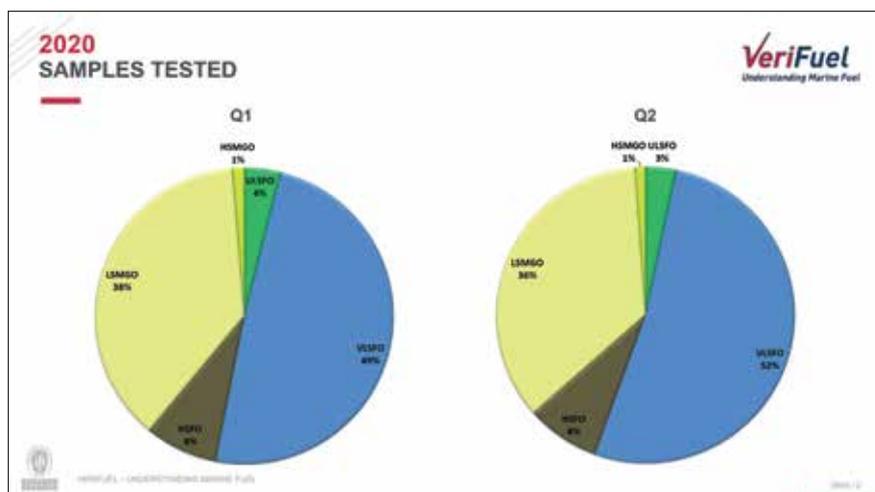


results from one testing agency showed a total of 6% of VLSFO samples as off-spec (testing outside the limit and 95% confidence). Of the 6% clear off-spec test results, 61% were for sulphur and 39% for sediment.”

Einemo adds that, globally (excluding ARA), test results from one testing agency showed a total of 2% of VLSFO samples as off-spec (testing outside the limit and 95% confidence) during Q2. Of this 2%, sulphur accounted for 38% of the off-spec results. The other two main off-specs were sediment (25%) and water (21%). Another testing agency found about 4% of all samples globally (including ARA) were off-spec for sulphur during Q1, falling to 2.5% in Q2.

She notes: “The prevalence of sulphur and sediment off-specs were in line with what we heard during the July member meetings. One of our speakers said sulphur still accounted for about a quarter of all the quality claims they see, and that typically you were two to three times more likely to see sulphur claims for bunkers lifted in the ARA region compared to other major bunkering hubs.

“We also had members pointing out differences between laboratories. It is a simple fact that test results can be expected to vary slightly in line with the precision (95% confidence limit) of the test method.



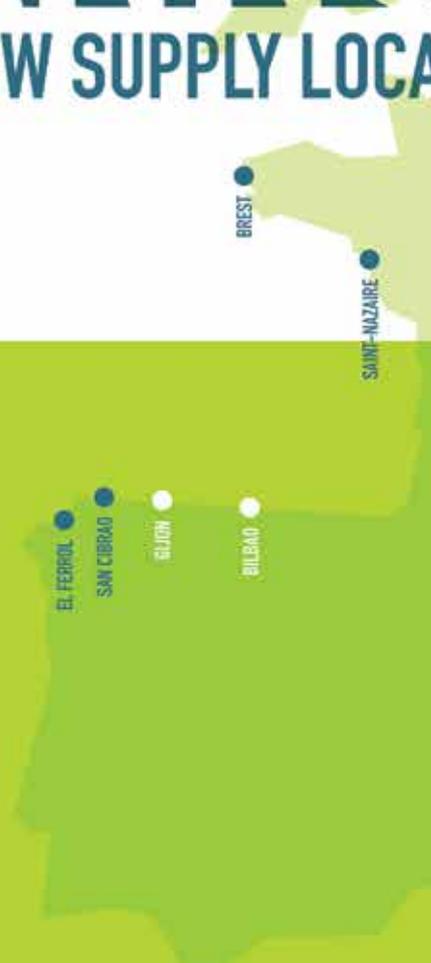
OILCHART

ARE

PLEASED TO ANNOUNCE

2 NEW SUPPLY LOCATIONS

GIJON & BILBAO



Working in partnership with Marinoil, Oilchart are pleased to announce the expansion of their physical network to the ports of Gijon and Bilbao. Supplies can be made by both vessel and truck offering the full range of fuel grades including: MGO, ULSFO, VLSFO and HSFO.

This expansion already compliments the current Spanish supply ports of El Ferrol, and San Ciprian. This along with the longstanding supply hubs of In port and offshore locations in North and West France, UK, North Sea, Irish Sea, Netherlands, Belgium, Germany and Norway.

For further information please contact one of the team on the below details.



UK offshore@oilchart.com
T +44 (0) 208 7473611
www.oilchart-offshore.com



Belgium Info@oilchart.com
T +32 3 232 52 34
www.oilchart.com



However, it was noted that one laboratory typically reported more sulphur off-specs than others. The importance of using laboratories that are ISO 17025 accredited to ensure the test results are reliable was also highlighted.

“With sulphur testing generally indicating good levels of compliance so far, some speculated that this may be due to the relatively low cost of low sulphur blend components during much of this year. They warned that it could become a bigger problem again if/when the price of low-sulphur blend components goes up and suppliers try to improve their profit margins by blending closer to the 0.50% sulphur limit.”

Meanwhile BIMCO, International Chamber of Shipping (ICS), INTERCARGO and INTERTANKO have published the results of an industry survey aimed at getting an overview of how the industry has experienced the transition to using compliant low-sulphur fuel oil.

The survey was launched on 24 February 2020 and ended on 6 May 2020, and the main focus of the survey was on problematic properties of the IMO 2020 compliant fuel oil that can lead to issues.

According to a statement the intention of the survey was to conduct a wider industry survey, circulated to all members of BIMCO, ICS, INTERCARGO and INTERTANKO, rather than to collect data on a case-specific basis when a ship was faced with fuel quality and/or safety issues related to the fuel quality. Since the survey was addressed to individuals (including fleet managers, vessel managers and technical superintendents) and not companies nor specific ships, the questions had to be formulated in a more generic way. Respondents were guided to answer the questions to the best of their knowledge based on their personal experience with the ships, for which they are responsible.

“Consequently,” the shipping bodies caution, “the distribution frequency of answers cannot be considered to represent the frequency of problems in the world fleet. However, it does give an indication of where the challenges may have been for the shipping industry on a global basis since 1 January 2020.”

“The survey gives us valuable insight into the magnitude and nature of problems encountered by the industry in the transition to using low-sulphur fuel oil. The industry had widespread experience with how to manage heavy fuel oil, and the survey provides insight into which parameters of the new fuel types are posing the biggest challenges for onboard fuel management,” says Christian Bækmark Schiølborg, Manager, Marine Environment at BIMCO.

The survey focuses on potential problems such as increased sludge discharge, clogging of fuel pipes, preheaters, fuel separators and fuel filters, fuel pumps getting stuck, problems with fuel injection and poor ignition of fuel oil. It also focuses on other issues regarding incomplete combustion, wax appearance and increased wear and tear of cylinder liners. These are problems that may lead to loss of propulsion and/or black out.

The survey indicates global challenges with fuel characteristics and limits being off specifications most frequently when it comes to total sediment, aluminium plus silicon, pour point, ash, flash point, acid number and viscosity.

It also indicates that most common operational problems experienced have been increased sludge deposits and wax appearance after switching to the compliant fuel oils with a sulphur content not exceeding 0.50%.

Lastly, and reflecting IBIA members' experiences, the survey indicates that when commercial fuel oil samples are tested after bunkering, sulphur

content is among the most frequent parameters to be indicated as off specifications and consequently, an indication of potential non-compliance with MARPOL annex VI.

Einemo adds: “One of the good news stories of IMO 2020 is that the shift from ships using HSFO to mainly VLSFO blends in order to meet the 0.50% sulphur limit is that the overall impact on bunker fuel quality has been positive, and certainly not nearly as bad as the many pessimistic forecast from several quarters. The disputed parameters have changed, however, from mainly density and viscosity to mainly sulphur and TSP (total sediment potential).

“Discussions about fuel quality trends during IBIA member meetings at the start of July, which included input from bunker consumers, heard that suppliers are generally delivering fit-for-purpose, good quality VLSFO with overall better quality than the HSFO it has replaced. The number of quality claims during H1 2020 compared to the first six months of 2019 has generally not increased, and some have actually reported a sharp decline in the number of claims.”

Einemo concludes: “The biggest concern is to get a handle on fuel stability, We have heard that in a minority of cases, VLSFOs have been falling apart when ships try to use them and end up overwhelming purifiers with asphaltenic sludge, despite passing the sediment tests used to indicate fuel stability. On the flip-side, some fuels that tested off-spec for sediments could be used without incident. There is clearly a need for ships, suppliers and fuel testing agencies to work together and share information to try to get to the root of this.”

VLSFO HOW DO THEY LOOK?

VeriFuel
Understanding Marine Fuel

Parameter	VLSFO (Jan-Aug 2020)			HS HFO (Jan-Aug 2020)
	Average	Min	Max	Average
Visc@50°C (cSt)	106.2	2.239	678.6	295.4
Dens@15°C (kg/m³)	934.7	828.6	998.3	982.0
Sulphur (% m/m)	0.46	0.05	2.87	2.78
Sediments (% m/m)	0.03	<0.01	Unfilterable	0.04
MCR (% m/m)	5.31	<0.10	16.35	13.45
Pour Point (°C)	78%*	<-33	39	98.2%*
Al+Si (mg/kg)	18	<1	121	24
Ash (% m/m)	0.020	<0.010	0.104	0.041

* Number of samples with PP = 21°C

MarineFuels
Global Solutions

Navigating 2020 and beyond



Your preferred
worldwide bunker
supplier

marinefuels.total.com



TOTAL

Committed to Better Energy



TOTAL MARINE FUELS GLOBAL SOLUTIONS

A trustworthy and reliable supplier

Total Marine Fuels Global Solutions (TMFGS) is Total's dedicated business unit in charge of worldwide bunkering activities. It is the single point of contact for a full spectrum of innovative and efficient marine fuels solutions, operating worldwide bunkering activities since the 1980's. Our headquarters are located in Singapore, with satellite offices in Paris and Geneva. In-house experts come from various backgrounds to provide technical support, multi-energy offers and custom-made solutions for our customers 24/7, 365 days a year.

An integrated business model for a full spectrum of solutions

As a physical supplier of conventional fuel oils and marine liquefied natural gas, we are continually innovating and developing new products and services in order to comply with the upcoming environmental regulations. Leveraging our Group's integrated business model to bring our customers value-added services and quality products, we work in close cooperation with other Total branches such as Refining & Chemicals and Trading & Shipping to develop Very Low Sulfur Fuel Oil; and with Gas, Renewables & Power to develop LNG as a marine fuel.

Total has always been closely involved in the entire natural gas and LNG supply chain, from extraction, transportation,

liquefaction and shipping, to regasification, marketing and trading. By adding expertise in bunkering and shipping, TMFGS has become one of the leading global LNG bunker suppliers, capable of offering customised logistics solutions as well as technical support to its customers.

LNG as a marine fuel has gained positive momentum as the global shipping industry looks to adapt to stricter emissions standards. LNG as a marine fuel generates almost zero sulfur, zero particulates and contributes to a reduction of up to 85% of Nitrogen and around 20% of Greenhouse Gas (GHG) emissions. Today, it represents an available and competitive solution that contributes to the International Maritime Organization's (IMO) long-term strategy of reducing emissions from ships by 50% by 2050.

Driving change to zero emissions

To ensure the development of LNG as a marine fuel, TMFGS has taken positions in major bunkering hubs with the chartering of two LNG bunker vessels of 18,600-cbm capacity each, one to be based in Rotterdam and the other in Marseilles. An agreement with Singapore's Pavilion Energy is also in place to jointly develop an LNG bunker supply chain that includes the shared use of a 12,000-cbm newly built bunkering vessel. Other LNG bunkering projects are under review, in Oman and China in particular.

We continue to work closely with our customers to develop clean marine fuels that support their low carbon strategies in line with shipping industry's roadmap. This includes marine LNG, and also alternative fuels such as marine biofuels.

To further support the maritime industry's decarbonisation goals, Total recently announced its involvement in the Getting to Zero Coalition in order to get commercially viable deep-sea zero-emission vessels powered by zero-emission fuels into operation by 2030. Total is also one of 11 major international companies that has joined the Coalition For The Energy Of The Future to collectively accelerate the energy transition in transport and logistics. Leveraging our technical expertise, TMFGS aims to contribute to both Coalitions' focus areas.

All these initiatives reflect the Group's new climate ambition to get to net zero by 2050, together with society, for its global operations. It also reinforces our commitment to support our customers in their emissions reductions, so we can act together on their energy demand transition.

www.marinefuels.total.com



HOW IS THE RUSSIAN BUNKER MARKET FARING?

Olga Bogacheva asks Yana Sheremetyeva, Senior reporter, Russian Fuel Oil, Argus Media, how the market has changed in the first half of 2020

O **B:** The coronavirus pandemic has certainly become the most challenging event of the current year and the main factor influencing all businesses in all sectors. The situation is even more difficult for the bunkering industry. Since January 1, 2020, there has been a global sulphur limit of 0.50%. How has the transition changed the Russian market?

YS: Despite the expectations and warnings regarding possible acute shortages of new low-sulphur product (VLSFO) in the Russian bunker market, this did not happen. Russian producers launched new products as quickly as possible to comply with the new international rules. So the transition to the new fuel was smooth. In general, I can say that back in December last year, almost all shipowners switched to VLSFO in all seaports of Russia, and high-sulphur product (HSFO-380) was in demand only from vessels equipped with scrubbers, but they only accounted for about 5% to 7% of total bunkers supplied.

OB: What has happened to volumes and prices? Russia is a huge country with a long coastline located in different climatic zones and in different markets. It is clear that the situation will vary from, port to port.

What is happening in the regions? What is affecting prices in around the regions?

YS: In the first half of 2020 the Russian bunker market experienced two shocks, as you rightly noted. They were a weakening of business activity due to the Covid-19 pandemic and the collapse of world oil and oil products prices.

Of course, Russia is a large state in which there are many regions and each region works in its own way.

The largest one, Primorsky Krai, was the first to feel the impact of global trends. Ports in the region were affected by the Covid-19 pandemic due to a sharp decline in economic activity from Chinese and Korean vessels. According to the state port control information system, the number of bunker calls to Russian ports in the Far East decreased by 10% to 12% for the first half of 2020.

This decrease in activity led to a fall in the prices for VLSFO in this region. During January - June fuel oil prices fell by US\$345 per tonne, to \$300 per tonne. A slight increase in prices was observed only at the end of May and June when activity resumed in the world market.

In the Black Sea ports, as in Primorsky Krai, demand was mainly for low-sulphur fuel oil.

Prices for this product fell by an average of \$275 to \$240-260 per tonne over the six months. The most intensive reduction in fuel oil prices in the region was observed in March after the collapse of oil and oil product prices globally after the breakup of the OPEC+ agreement to cut crude oil production. Nevertheless, trading activity in the Black Sea ports remained lively due to a large discount compared to the prices in the ports of the Mediterranean. Over the entire period, the average difference in prices for VLSFO in Novorossiysk compared to Istanbul was around \$120 to \$125 per tonne.

There was limited demand for high-sulphur fuel oil (HSFO-380) in the Black Sea region. According to traders only about six to eight scrubber fitted ships a month are being supplied.

Moving to the northern region, the Baltic ports, the main fuel oil for bunkering at the beginning of 2020 was ultra-low-sulphur fuel (ULSFO). This was because the Baltic region is in a SECA zone, where there is a 0.10% sulphur content limit.



But in March, shipowners began to buy VLSFO, which in the Baltic ports is on average \$35-40 pmt cheaper than the ULSFO.

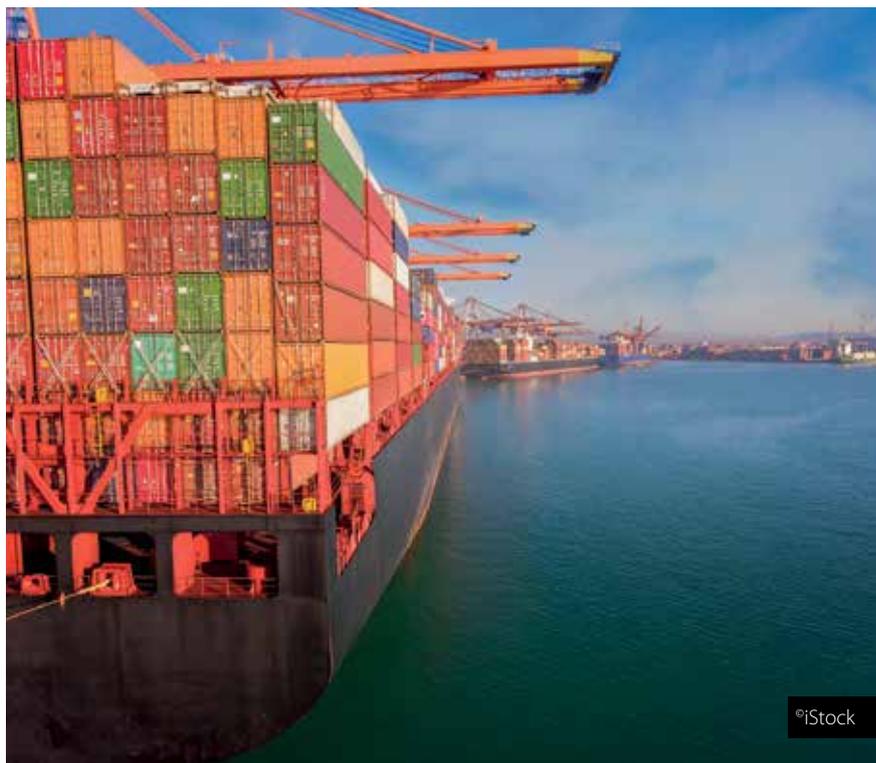
The cost of low-sulphur fuel oil in the Baltic ports decreased, following prices in the ports of North-Western Europe. The price VLSFO slid 50% over the first six months of 2020 to \$247.50 per tonne.

The demand for VLSFO from foreign vessels in the Baltic ports during January to June 2020 was rather sluggish due to the insignificant difference between prices in Russian ports and in Europe.

In Russia's northern ports, Murmansk and Arkhangelsk, MGO remained the main fuel purchased. Deliveries of VLSFO only started in February. Interest in MGO bunkering in these ports was low as prices were high compared to North-West Europe. During January to March, the cost of MGO often exceeded the price level in Rotterdam, although at the end of 2019 fuel at the Russian ports was \$65 per tonne less. Suppliers were in no hurry to reduce prices, explaining that the high prices were due to the cost of delivering the product from the refineries to the ports. However, MGO prices in Murmansk and Arkhangelsk fell because of the decline in world fuel prices. Over six months MGO in these ports fell by \$185 to \$350 per tonne.

OB: On the threshold of 2020, there was a lot of doubt about the quality and quantity of low-sulphur fuel. Would it meet the needs of the shipowners, would there be sufficient supplies to meet the market demand? Share your views with us. Has everything worked out well and what are the prospects for future?

YS: Of course, it is quite difficult to assess the quantity of low-sulphur fuel oil, but in general I can say that we see no shortage of this product in the Russian bunker market. Producers in all regions of Russia began the transition to VLSFO in November last year. So, in January, when new rules entered into force, producers and traders did not experience any difficulties with a lack of VLSFO.



Regarding the quality of this product, we can say that now in all regions VLSFO is now delivered in two ways. So-called 'factory fuel' is delivered ready-made from the refinery while 'blended' fuel is mixed at the tank farm in a particular region.

Both types of product fully comply with international standards. In conclusion, I can say that the transition to the new fuel oil in the Russian bunker market has been completed.



Yana Sheremetyeva

RUSSIA BANS MARINE FUEL IMPORTS

The Russian Government has banned the import of diesel, marine and some other types of fuel until 1 October 2020, according to the business daily Kommersant

The ban has been imposed because imported fuel has been cheaper than Russian supplies since March 2020, when oil prices dropped after the collapse of the OPEC+ deal. At that time, prices in the Russian domestic market declined less sharply, because Russian oil companies must pay a tax according to a damper mechanism designed by the government to stabilise prices within the domestic oil market. By April these charges accounted for 40% of the price of fuel in Russia

Imported fuel is not subjected to the damper payments, and the import duty is only 5%. So it became profitable for Russian customers to import fuel from Belarus, and also Norway, South Korea and China. It was initially thought imports could be needed as some experts had predicted a shortage of Russian-produced low-sulphur fuel but this has turned out not to be the case.

Tatneft Oil's ULSFO

The TANECO refinery at Nizhnekamsk has started producing ULSFO with hydrotreated heavy coking gas oil as its main component. The refinery can produce 750,000 tonnes ULSFO a year. It supplies ports in the north-western and southern regions of Russia.

RN-Bunker supplies new tanker

Rosneft Bunker, a subsidiary of Rosneft Oil Company, has supplied the first bunkers for the Aframax tanker newbuilding Vladimir Monomakh, after she was launched as the Zvezda shipyard in May 2020.

The stem comprised 300 tonnes of 0.50% sulphur limit compliant fuel. The fuel was produced at Rosneft's Komsomolsk oil refinery. The ship has hybrid fuel oil/LNG machinery.



First Russian electric passenger ship

Russia's first electric catamaran was commissioned on 27 June at St. Petersburg's river passenger terminal. The Ecovolt was designed by Morsvyazavtomatika NPC. The catamaran can accommodate up to 60 passengers and has a cruising speed of up to 7 knots and a maximum of 15 knots. She can operate for up to 10 hours before recharging. Serial production of catamarans will be carried out at the company's own shipyard in the Leningrad Region.

Morsvyazavtomatika has already designed and started production of three models: Cityvolt, a single-deck single hull river boat, Ecocruiser, a high-speed catamaran of the river-sea class, and Ecovolt, a two-deck river catamaran.

Lake Baikal bunker tanker

A multi-functional environmentally friendly vessel, the Georgy Moskalev, has been specially designed and built to operate on Lake Baikal Lake. It combines bunkering and environmental services capabilities.

The vessel is designed for waste collection and the processing of oily and waste waters. She is able to accept both liquid and solid waste, as well as sewage and oil products from other vessels for purification and further discharge. Simultaneously the serviced vessel can be supplied with fuel and lubricants.

The tanker has a double bottom and double sides around the cargo tanks and processing plants.

A tough year

The annual general meeting of the Russian Association of Marine and River Bunker Suppliers was held on 20 June. For the first time in the organisation's history, the event was held online.

The reports of the Council Chairman and the President described an unprecedented year and the busiest so far for the Association. Vitaly Kovalev was re-elected as the Association's president and Vladimir Sergeev as Chairman of the Council.



In the 12 months to June 2020 the Association, represented by the Chairman of the Council, took an active part in the preparation of administrative reform, the so called 'regulatory guillotine'. Its purpose is to analyse all existing regulations and eliminate those that are outdated, redundant and hindering business development.

The current reform is not the first but all previous attempts to improve business conditions, despite being formally implemented, did not bring any significant changes. However, this time the economic reformers have provided a mechanism that gives the business community a decisive vote and thus guarantees its control over what is happening.

Vladimir Sergeev, the Association's representative, is a member of two specialised working groups under the Government of the Russian Federation. In principle these bodies should be effective tools and participation in them should be sufficient to protect the interests of the bunker industry at the highest level.

However, it soon became clear that representatives of the Ministry of Transport of Russia are not in favour of really radical reforms.

The proposed new quasi water transport regulatory structure and lists of industrial regulations to be abolished and reissued by January 1, 2021, were essentially intended to preserve the current structure.

In addition, the Ministry of Transport insisted on removing the state port control from the 'regulatory guillotine', arguing that it is carried out by 'non-state bodies', and therefore is not subjected to the new reforms. But in fact, according to expert estimates, the state port control accounts for at least 80% of the mandatory requirements for water transport.

The Association, in cooperation with other industry associations, categorically opposed this approach, presenting a fundamentally different detailed position corresponding to the principles of the 'regulatory guillotine'.

This point of view was eventually supported by the Russian Government. Unfortunately, due to the change of the Prime Minister and the Government, the ideologists of the reform have moved to other jobs, and the officials who took their positions need time to understand the details.

During the reporting period, the Association continued efforts to solve another problem and force Rosmorrechflot's Marine Rescue Service to set fair prices for oil spill prevention services.

Unfortunately, although the situation is clear cut, the process has been going on for more than three and a half years and still hasn't been resolved. The Association, in cooperation with the Federal Anti-monopoly Service (FAS), has taken the issue to three rounds of judicial reviews. In each its position prevailed. Three times the Marine Rescue Service (MRS) and its head were fined, but so far, all efforts to force them to comply with the legal orders of the courts and the FAS have been unsuccessful.

Moreover, some ports have begun to practice other schemes that threaten the operations of independent bunker companies. For example, in August 2019, the southern branches of MRS followed the instructions of their Central office and officially notified the bunker companies of the unilateral termination of contracts with them, which automatically meant stopping business.

The Association will continue to do everything in its power to force MRS to comply with a ruling made by FAS in March 2016.

The Association, in cooperation with the Ministry of Energy of the Russian Federation, managed to amend the Customs Union regulations that would have implemented the IMO 0.50% sulphur limit in Russian internal waters from 1 January 2020.

As a result, marine fuel with a sulphur content higher than 0.50% can be used within the Eurasian Economic Union (EEU) until 2024.

Another result of Association's activities in the past year has been the cancellation of a Sea Port Administration requiring bunkering companies to provide samples of marine fuel after each bunkering operation for analysis by specialised accredited laboratories with subsequent submission of the results to the port captain. This initiative was promptly blocked as soon as the Association became aware of it.

In April this year, the Association joined the Operational Headquarters for supporting the Russian fleet during the Covid-19 pandemic, organised by the Ministry of Transport of Russia. Within this body, the Association responded to information coming from companies and on the basis of the general challenging situation. The main problems included difficulties in changing crews in Kaliningrad, Murmansk and Krasnodar, the introduction of a moratorium on conducting any training during the pandemic, and the postponement of ship inspections in the Maritime and River registers. In general, the Association managed to achieve positive solutions in all cases.

The Association continued its work in the Section of Sea and River Transport of the Duma Expert Council and in the Working Group on improving legislation regulating sea and river transport, created at the initiative of the Association. As a result, consideration of its amendments to legislation on oil spill response and state environmental expertise has been included in the Duma's work plan.





GAZPROMNEFT MARINE BUNKER

a subsidiary of Gazprom Neft, was established in 2007 to provide year-round supplies of marine fuel and oils for sea and river vessels

The company's share in the Russian bunkering market at the end of 2019 was 16% with total sales of marine fuel reaching more than 3 million tonnes.

Gazpromneft Marine Bunker currently has seven regional offices in Kaliningrad, Arkhangelsk, Murmansk, St. Petersburg, Novorossiysk, Yaroslavl and Azov, – and six subsidiary companies: Gazpromneft Shipping – managing the Company's own fleet comprised of ten bunkering vessels, four ARC7 class oil tankers transporting oil from Novoportovskoye oilfield and two icebreakers - they are designed to perform operational activities including icebreaking tanker support, mooring and loading operations, vessel towing, fire fighting, and oil-spill response and lifesaving operations; Gazpromneft Marine Bunker Balkan S.A. – bunkering in the Black Sea port of Constanta; AS Baltic Marine Bunker – operating the Baltic Sea port of Tallinn; Gazpromneft Terminal SPb – operating the bunker terminal in St. Petersburg; Novorosneftservice - storage and transshipment of marine fuel owned by Gazpromneft Marine Bunker on Black Sea; Novorossiysk Petrotransshipment Complex - storage and transshipment of marine fuel in the port of Novorossiysk.

Gazpromneft Marine Bunker operates in main sea ports of Russia (Nakhodka, Vostochny, Posyet, Zarubino, Kozmino,

Sakhalin, Novorossiysk, Tuapse, Kavkaz port, Taman, Sochi, St Petersburg, Ust-Luga, Primorsk, Kaliningrad, Baltiysk, Murmansk, Arkhangelsk) as well as river ports (St. Petersburg, Azov, Yaroslavl, Sheksna, Nizhny Novgorod, Cherepovets, Kazan, Samara, Volgograd, Astrakhan, Olya port, Rostov-on-Don, Ust-Kut, Nizhnekamsk, Tomsk, Novosibirsk) and international ports including Tallinn (Estonia), Riga (Latvia), and Constanta (Romania).

Part of Gazpromneft Marine Bunker's strategy is to create its own terminal network in the major sea and river ports.

Gazpromneft Marine Bunker has more than 200 customers, most of them are international companies. Most of major Russia's river and marine shipping companies are Gazpromneft Marine Bunker's customers as well.

The Company has an ISO 9001:2015 compliance certificate, issued in December 2018 for the 'Sale of Petroleum Products in the Bunkering Market'. The certificate confirms high quality of Gazpromneft Marine Bunker's services.





Trinidadian refining remains a political hot potato, but Ventrin has seen strong trade ©Staatsolie

CRUISE CONTROL

The change to VLSFO may have gone well, but the Caribbean's fuel suppliers now have to contend with a lack of cruise clients and reduced trade, John Rickards reports

Going into 2020 - a distant, simpler age I'm sure we all look back on with great nostalgia - there were question-marks over IMO 2020-compliant fuel availability across the Caribbean. Local refining and storage are of mixed capacity and capability, and most fuel testing is based in a handful of labs. However, the changeover went off largely without a hitch.

Looking back on the first six months of VLSFO supply in the main bunker hub of Jamaica, national oil company Petrojam said this summer that the switch had been a success.

Petrojam's general manager Winston Watson said: "We have been in preparation mode (for this switchover) for close to two years and so the transition was relatively smooth, with very few glitches. We had a plan in place to be able to produce the material from the refinery and in fact started the production and sale of this product in mid-December well before the deadline."

Watson added that despite the challenges anticipated by power company Jamaica Public Service's conversion to LNG and changes in the quality requirements for the bunker market, Petrojam had recalibrated its business model to ensure continued supply reliability and commercial viability, with strict controls ensuring fuel was on-spec. "So far, we have received commendations from all of our bunker customers on the high quality of the product," he said.

"It's been more than six months into our supplying this new grade of fuel and we are quite pleased with the level of sales we have been realizing; and despite Covid-19, we do anticipate that these will increase as time progresses."

Of course, we're now in 2020 and while readily available IMO 2020 compliant fuel is normal, many other things currently aren't thanks to Covid-19. And in terms of shipping economics, one of the Caribbean's main sources of shipping traffic, if not always fuel sales, is currently on hold with the shutdown of the US cruise industry since March. This situation is clearly set to continue for some time to come.

Carnival, which used a swathe of its fleet in late April to repatriate crew stuck abroad by no-fly restrictions, had originally planned to resume sailings from August 1. That would be a week after the planned end of a US Centers for Disease Control no-sail order due to expire on July 24, as the early impact of the virus in its first US centres ebbed and the federal government pushed ahead with calls to "reopen" the economy. But as that reopening quickly led to a disastrous resurgence, particularly in cruise-heavy states like Florida, Carnival decided in June to push back that resumption through September 30 - a decision reinforced in July when the CDC extended its no-sail order to the end of September over concerns about cruise vessels' skeleton crews following virus safety protocols.

Delays to completion of the LNG-powered Mardi Gras and to the drydocking in Spain of the Carnival Radiance mean changes and cancellations even then, with reduced and juggled itineraries running all the way into May 2021 at least.

"We continue to assess the impact of the Covid-19 pandemic on global commerce, public health and our cruise operations. In addition to our current pause in service, there have been many other unintended consequences, including shipyard, dry dock and ship delivery delays, and related changes to our deployment plans for our fleet," said Christine Duffy, president of Carnival Cruise Line.

"While we had hoped to make up construction time on Mardi Gras over the summer, it's clear we will need extra time to complete this magnificent ship. We share our guests' disappointment and appreciate their patience as we work through this unprecedented time in our business and the lives of so many people. We remain committed to working with government, public health and industry officials to support the response to the pandemic and to return to operations when the time is right."

Royal Caribbean has made similar decisions, while Princess Cruises has cancelled all non-Australian sailings, including its Caribbean itinerary, until mid-December. All told, the chances of a steady stream of cruise vessels showing up at Caribbean nations any time soon seem remote.



And there's certainly no reason to think that most island states - which have generally managed the pandemic with minimal infections - would want tourists arriving from the US until the disease is under control, despite their heavy reliance on tourism.

The Bahamas had originally reopened to American visitors at the start of July, albeit with the provision that arrivals had to test negative for Covid-19. But less than three weeks later, with cases in Florida ballooning out of control, the island nation announced it would once again be barred to commercial flights and passenger shipping from the US. The Bahamian government, at the same time, put Grand Bahama itself on two weeks of total lockdown, restricting even internal intra-island traffic, following a return of virus cases after two months without any at all, most based on residents returning from abroad.

Following a spike in cases, the US Virgin Islands put a restriction in place on workers at the Limetree Bay refinery, banning new contractors and restricting those currently staying in the facility's living quarters to the site until further notice.

Trinidad and Tobago has remained largely closed, like most Caribbean islands. It is possible, however, that the country's mothballed former Petrotrin refinery in Pointe-a-Pierre, which up until the company's bankruptcy a couple of years ago was the centre of the country's bunkering business (albeit one dogged by sometimes unreliable infrastructure), could be in line for a return to operations. There is a caveat: at the time of writing, the country was in the middle of elections, and promises made during an election campaign don't always come to fruition.

In July, incumbent prime minister Keith Rowley announced that the government would be signing a US\$700 million deal "in the coming days to take over the defunct facility with the Oilfield Workers Trade Union, whose subsidiary had won the bidding purchase for the refinery and its fuel trading arm (the company having been split into four parts after bankruptcy).

"It is the intention of the government of Trinidad and Tobago, in the coming days, to sign off with the OWTU on the beginning of the way back for the Petrotrin refinery, known today as Guaracara, as soon as the OWTU is ready to commit itself to what I said here in this statement today, and provide its commitment by its signature," he said at the launch of a land distribution programme to enable ex-Petrotrin workers to build homes.

"And, when that would have been done, the people of Trinidad and Tobago would have solved yet another one of its major problems. This government did not have the luxury of postponing this outcome. The outcome has not been without pain. It has not been without acrimony."

His chief rival in the election, opposition leader Kamla Persad-Bissessar, has also promised to reopen the refinery and redevelop Port Lisas. She has been damning of the government's handling of Petrotrin, describing breaking it up after bankruptcy as a "recipe for disaster" and saying that the government's "disastrous mismanagement of the energy sector has therefore deliberately destroyed the economic livelihoods of thousands of families".

The government's OWTU announcement - and the timing of it so close to voting - has certainly drawn criticism. It remains to be seen in which form, and when, the one-time hub of Trinidad's domestic fuel production industry will rise again. The main bunker operator on the island remains Ventrin, owned by Suriname's national oil company Staatsolie - though Bunker One expanded to Trinidad in May, moving a tanker there as part of an overall Caribbean expansion. Last fiscal year, Staatsolie (which doesn't break down its figures to say how much is supplied by Ventrin) sold approximately 487,000 tonnes of HFO produced at its Suriname refinery, switching to VLSFO in November. "With the initial average spread of more than US\$ 25/bbl, this proved to be most essential for Staatsolie in Q4 2019. With the introduction of our own VLSFO we were able to capture and expand on the international bunker market which had a positive effect on our sales margins," the company said in a statement.

It added: "[VLSFO supply is] providing us not only high margins, but also generating international recognition, customer loyalty, larger market share and an increase in bunker fuel sales from November 2019 forward."

It remains to be seen how 2020 pans out for Staatsolie and other bunker providers in the region. It looks likely that it will be quieter than usual.



Aside from an armada ferrying stranded crew home, the Caribbean has faced months without cruise sailings "Carnival Cruise Line



PureteQ

THE SCRUBBER MAKER

We make scrubber systems for shipowners who want to save money by continuing use of HFO with scrubber while retaining a greener profile than those who use expensive compliant fuel. All scrubber systems come with state-of-the-art intuitive control systems with full remote accessibility. In times like these it is very convenient to get 24/7 remote on-line support/guidance to ship crews from our professional marine engineers. Our systems feature the lowest OPEX in the business and are easy to install. We guide the shipowner and other stakeholders through the process from order to sea-trial and approval. Once approved, PureteQ PureServ is able to quote a service agreement for any scrubber system for safeguarding MARPOL compliance as well as operational performance.

WWW.PURETEQ.COM

STILL OPTIMISTIC ABOUT SCRUBBERS

Anders Skipdal, CEO of scrubber manufacturer PureteQ, explained to David Hughes why he was confident the downturn in demand for scrubbers would be temporary

DH: What is your assessment of the scrubber market at present, in view of the Covid-19 crisis and the oil price drop and the consequent decreased differential between VLSFO and HSFO. Are owners still willing to invest in scrubbers? Do you think scrubbers will regain their former strong competitive advantage over VLSFO?

AS: It is correct that the economic case for scrubbers is weaker at present due to the turmoil in the world and subsequent imbalance of oil production versus world consumption. The economic viability of installing scrubbers does however very much depend on the time horizon you use.

From a purely short-term financial perspective the business case is currently weaker. This is however also influenced by the fact that total cost of installation (scrubber equipment scope, yard work, naval architect and off hire cost) have increased. When you evaluate the total cost of installation over a period of time, you will discover that it has increased dramatically during the past three years.

The cost of the equipment supplied by the scrubber manufactures has decreased. In 2017 the equipment from scrubber suppliers would comprise approximately 50% of the total cost of installation, but today this is merely 30% of the total cost of installation.

What has changed is a dramatic increase in shipyard costs, due to shipowners competing for yard space, and the increased number off-hire days, due to yards being overbooked and having a hard time finding qualified yard workers. In normal market conditions the cost of the yard installation as well as the number of off-hire days will decrease.

Today we receive only a fraction of the number of orders compared to previous years, leading up to January 2020. I am sure that our colleagues in the business are seeing the same picture.



Scrubbers clean exhaust gases ©iStock



I do not think that this is caused by shipowners losing their appetite for scrubbers, because like us, they know that the price difference will not remain at current levels once oil production and consumption is aligned. The pay-back time of a capesize in today's market is somewhere between two and three years, which is quite attractive if you ask me, but previously it has been down to less than one year. I think it is only natural that the shipowners prioritise survival over investment in environmental abatement equipment. They need liquidity short term and are uncertain on the long-term influence of the 'black swan' [Covid-19, a completely unexpected and catastrophic event].

While we are waiting for the world to return to some kind of normality, we as scrubber manufacturers are committed to redesigning our systems to streamline installation of our products at the yard, thus attempting to reduce the total cost of installation. We even include more effort and risk to ourselves at no additional cost to the shipowner to reach this goal. In PureteQ we have since day one been able to install the scrubber systems on capes in 15 days from arrival to departure without any preparation work being done ahead of arrival, but it very much depends on the yard and the shipowner's representation there.

From an environmental and safety perspective, the case for fitting a scrubber is stronger than ever. The press is awash with articles on how shipping companies are going to lower their CO₂ emissions and there has been quite a bit of news about emissions into the atmosphere and how poor air quality and poor health in general (e.g. obesity) increases the risk of suffering a much greater impact when contracting Covid-19. The new IMO 2020 fuels have proven to be problematic and there are allegations of increased emissions. At least ships with scrubbers will now have a much lower CO₂ footprint, as much as 15% lower and they will not suffer from poor fuel quality or the possibility of emitting more black carbon. In fact, the science indicates that in port ships will be 'cleaner' than competitors using an IMO 2020 compliant fuel. So shipowners that have already chosen the scrubber path has chosen wisely.. they have a lower carbon footprint, lower emissions, use more reliable fuels, and have a lower daily fuel cost.

DH: Some owners have been sounding warnings about the high maintenance effort required to keep scrubbers operational. Is that fair comment on some equipment?

AS: Like you, I have followed the ongoing debate on social media and maritime publications. I recently read an article where one shipowner, Stamatis Tsantanis from Seenergy Maritime Holdings, mentioned, without details, that a high level of maintenance is required to keep scrubbers operational. He also said that Seenergy had chosen their scrubber supplier and yards carefully to ensure that the yard and supplier and installation all went smoothly. He has enjoyed the financial support of his charterers so that the scrubber installations were successful and had minimal impact in terms of lost revenue during off-hire period.

Our experience from retrofit projects in China and in Europe is that the quality of installations, in general, has been influenced by the overheated market conditions. Furthermore, we have witnessed a number of instances at Chinese shipyards where the off-hire period grew from the agreed 20 days to more than 60 days due to lack of manpower. This led to not only higher total installation costs but also to higher repair/maintenance costs and even the duplication of work already performed once the ship has left the yard. Of course, once the installation errors have been rectified maintenance cost returns to normal.

PureteQ has estimated the spare part consumption including a service contract over a 10-year period from sea-trial/approval of the scrubber system. For smaller ships it is US\$6 per tonne of fuel consumed and for large ships with high fuel consumption it is US\$2 to 3 per tonne of fuel consumed. I think that is a quite fair price, and the work load on the crew is maybe 1 hour per day as an average and double that for a fully hybrid solution. It is in fact in line with land-based installations and so is what should be expected. Some scrubber systems from other makers may have higher maintenance requirements.

Most of our clients have chosen a 24/7 digital remote assistance as part of their service contract, to be on the safe side when facing issues or new crews lack training.

In my opinion exhaust gas aftertreatment systems will become ubiquitous throughout the merchant marine over next years and the learning curve for all stakeholders will lead to a reduced maintenance workload and even smarter and more digitalised systems.

Scrubbers for smaller vessels

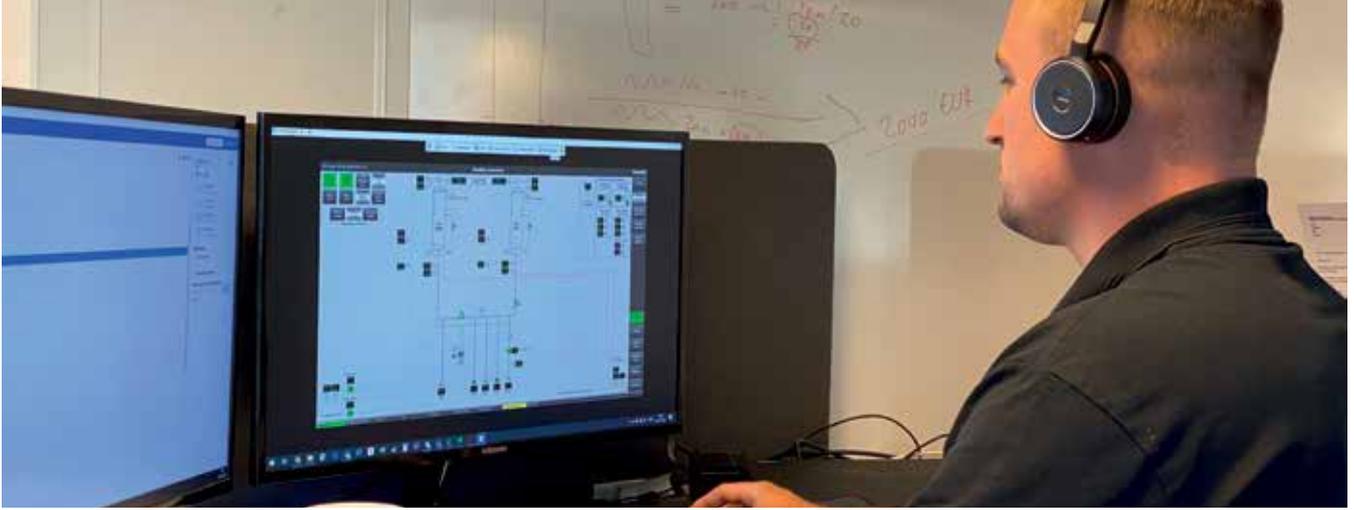
Scrubber manufacturer Alfa Laval PureSOx Express says that, for smaller vessels such as handymax bulkers and product tankers, the cost of installing a scrubber for SOx compliance has sometimes outweighed the benefits.

To cater to this potential market the company has launched an open-loop scrubber system, PureSOx Express, as a fully enclosed module. Prefabricated and preconfigured, the system is designed for up to 75 tonnes of exhaust gas per hour and engine power up to 10 MW. This makes it suitable for vessels of 40,000–65,000 dwt, which typically include bulkers and product tankers.

Alfa Laval's Sales Director, Exhaust Gas Cleaning, Steven Pieters, says that the system can be lifted on board and connected without a specialised scrubber team, which means less work at the shipyard and an installation time of just 10 to 14 days.



Anders Skipdal



PURETEQ THE SCRUBBER MAKER

Uninterrupted service and support in a disrupted world

PureteQ has been very fast at embracing digitalization on their scrubber systems. Using standard windows software enabled them to develop a scrubber system that was smaller and more energy efficient than other scrubber systems on the market at that time.

Some of the bigger scrubber suppliers were discussing what protocols to use, but PureteQ decided to keep it an open protocol to ease the integration towards other digital systems aboard the ships. After all, the data belongs to the shipowner and not to the maker. Furthermore, the data should be easy and safe to access from remote location in case it was not possible to attend the vessel physically. PureteQ also decided to increase the logging of data, so that it could be used to analyze behavior in detail and correct any errors. Not only errors pertaining to the scrubber system and the parts that PureteQ delivers but include the entire integration of the systems. This would allow for PureteQ engineers to assist crews in trouble shooting and replacement of parts as well as predict need for maintenance activity, thus reducing the OPEX on the system.

Like everyone else in the business, PureteQ has been faced with instances of substandard components and installation quality from otherwise reputed suppliers, but thanks to the digitalization of systems, these faulty components have quickly been identified and new components sent to the ships for replacement. Due to travel restrictions sea trials of newly retrofitted scrubber systems have been accomplished with only crew and surveyor on board. PureteQ marine engineers were granted remote access to analyze real-time data from the scrubber control system, advise crew and change settings as appropriate.

The number of ships sailing with PureteQ scrubbers are rapidly increasing and so are the number of marine engineers in the PureteQ PureServ, which is the service department in PureteQ. Once approved, PureteQ PureServ is able to quote a service agreement for any scrubber system for safeguarding MARPOL compliance as well as operational performance.

As crews are often replaced, frequent training of new crew is necessary. To safeguard the MARPOL compliance as well as reliability of system performance, PureteQ conducts remote surveillance of scrubber systems for many shipowners.

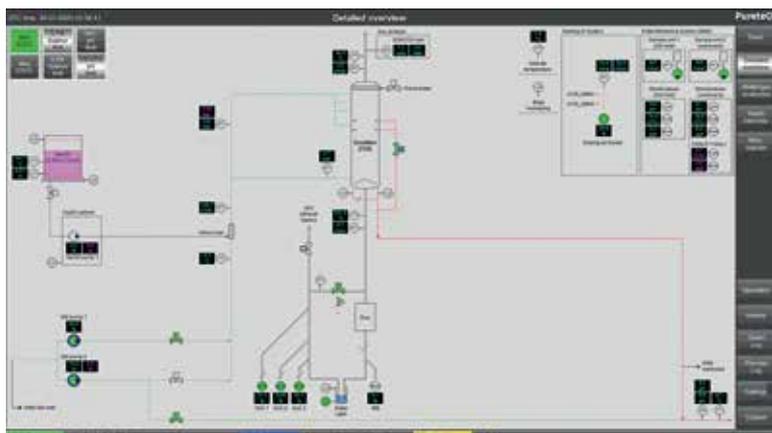
The frequency varies from logging on once a month to weekly check of systems performance and real-time compliance data. In some instances, they assist in Flag State reporting and reporting to US Coast Guard. Soon, these features will be integrated in the control systems to ease the work for the crew. Recently PureteQ engineers had a case where the ship manager changed crew and did not have time to train or make handover to the new crew. Furthermore, the ship did not have time to take on compliant fuel. Shortly after departure the ship experienced a shutdown of the scrubber system due to an error in the ship's management system rendering the ship out of compliance. The Master called PureteQ PureServ 24/7 service desk, which quickly located the error and performed online training in maintenance and operation of the scrubber system, so that the ship could continue its journey.

By now PureteQ has proven the reliability and safety of conducting remote support to those clients that have made internet connections available.



PureteQ's vision is clear, they will continue to go that extra mile for their clients: "Now and in the future, PureteQ as EGCS manufacturer has the responsibility to support our clients to the best of our abilities and under any given situation." Anders Skibdal further underlines:

"We have learned the value of making good use of digitalization for our clients, who require safe, reliable and fast support at a fair price. After all, it is much cheaper to receive remote support to ship crews than having to dispatch service engineers to the ship".



Contact info:

Anders Skibdal,
CEO
+ 45 4017 1400
anders@pureteq.com

Michael Mouritzen,
Sales
+41 4014 4481
mim@pureteq.com

Allan Graff,
Sales
+ 45 4014 4439
alg@pureteq.com



WORLD Advertising

BUNKERING

THE OFFICIAL MAGAZINE OF IBIA

IBIA
INTERNATIONAL BUNKER INDUSTRY ASSOCIATION

FULL PAGE	DOUBLE PAGE SPREAD	HALF PAGE HORIZONTAL
HALF PAGE VERT.	QUARTER PAGE	THIRD OF A PAGE

EDITORIAL SYNOPSIS
All prices subject to VAT at standard rate

COPY REQUIREMENTS
Adverts required as high resolution PDF
E-mail to ibia@constructivemedia.co.uk

ANYTHING SUPPLIED OTHER THAN THE ABOVE MAY INCUR A PRODUCTION CHARGE

PRODUCTION SERVICE
Our production department can offer you a full service in the preparation of your advertisement at very competitive prices.
Telephone: +44 (0) 1495 740050

New advertisement opportunities and discounts for IBIA members!
please contact Alex Corboude for details - alex@worldbunkering.net

World Bunkering AUTUMN 2020

55



SEA-LNG FIGHTS ITS CORNER

The pro-LNG lobby group has issued a report asserting that LNG provides the only clear pathway for the shipping industry's decarbonisation

SEA-LNG has published a report which claims LNG as a marine fuel is the only viable option for shipping to both improve air quality and GHG performance. It argues that LNG-fuelled vessels are "zero-emissions on the water today as they offer a clear route to IMO 2050 thanks to carbon-free liquefied bio-methane which can be easily adopted by LNG-fuelled vessels and LNG infrastructure".

The report comes as environmental groups make clear their opposition to the development of LNG bunkering infrastructure. At the same time, other ways forward, from carbon capture to the rapid development of ammonia or hydrogen as fuel, are being promoted by various organisations.

SEA-LNG chairman Peter Keller comments that "waiting for a utopian solution risks locking the maritime industry into the highly polluting conventional oil-based marine fuels for years, if not decades, to come".

The report offers an insight into the state of play regarding LNG as a marine fuel. It also highlights the "promising role" modern dual-fuel engines could play to accelerate decarbonisation while countering points made by critics concerning methane slip.

SGMF's docking guidelines

The Society for Marine Gas as a Fuel (SGMF) has published new guidance on work practices for maintenance, repair and dry-dock operations for ships that use gas as fuel to help ensure the safe maintenance of gas-fuelled ships.

SGMF says that shipping companies that use gas as a marine fuel will need to be prepared for when their gas-fuelled ships undergo routine maintenance in dry dock. While cargo is normally removed from a vessel as part of the drydocking process, sometimes fuel is not.

For ships using gas fuel, such as LNG, a rigorous approach must be undertaken to maintain safety, SGMF cautions. Gas as a Marine Fuel: Work Practices for Maintenance, Repair and Dry-Dock Operations details techniques and precautions that can be applied to minimise the hazards of LNG/gaseous fuels – in many cases, allowing the use of traditional maintenance techniques. Where this is not possible, the guidance discusses alternative methods.

The guidance also offers a risk assessment approach and covers all aspects of LNG fuel management while preparing for the docking and during the docking process. It provides the required details and direction for ship owners to select pre-qualified shipyards.

SMGF adds that local, national and international regulatory authorities can also all draw upon, or refer to, the philosophy, methodology and content of the publication when it comes to the maintenance of gas fuelled ships. Shipyards can also use the guidance to prepare and be LNG ready. Although this guidance will give the majority of detail required, SGMF advises that ship owners, operators and managers fully understand the implications of having LNG onboard and appoint an LNG specialist within the fleet and the yard.

Mark Bell, General Manager, SGMF says: "I am really proud to see that yet another unique and much needed publication has been compiled by SGMF, drawn together by our expert members under the guidance of David Haynes, Principal Safety Advisor to SGMF. As more and more ships start to use gas fuels, the industry is now equipped with the reference document to ensure the safe maintenance and drydocking of gas-fuelled ships. My thanks to David and all of the individuals and member organisations who have contributed to this milestone publication."

A BRIGHT FUTURE FOR LNG

Alexandre Tocatlian, Head of Product Lines at GTT, explains to David Hughes why the major French LNG engineering specialist is confident gas will play a major part in the decarbonisation of shipping

D **H: GTT has great experience in the LNG sector. Could you please outline what you see as the most important item on recent and current projects which include Jacques Saadé gas test, support for the first bunkering operation in Rotterdam of the Gas Agility, and the training programme provided by GTT.**

AT: The most important thing for a ship owner starting his journey towards using LNG as fuel is to work with experienced and reliable partners. LNG propulsion, in particular the tank and fuel gas handling system (FGHS), is very different from conventional propulsion in terms of design, safety and operation. Working with reliable partners ensures that most interfaces will be covered; particularly interfaces between the LNG tank and FGHS and interfaces between the LNG fuelled ship and her LNG bunkering ship(s). For the Jacques Saadé, the first 23K TEU dual fuel ULCV (Ultra Large Container Vessel) ordered by CMA-CGM, the cooperation between HZ, GTT, WGS and WIN-GD is a guarantee for both owner and shipyard that the project remains on track, facing and solving problems together.

Training and support through the whole vessel lifetime are also critical aspects for the owners. This is why GTT delivers a dedicated LNG fuel training program to the crews of the CMA-CGM fleet and why the GTT operations department will assist both the Jacques Saadé and the Gas Agility at the same time during their first bunkering operations. GTT will also provide a 24/7 emergency response service. GTT also delivers a digital package that will help CMA-CGM optimise ship performance in the day-to-day operations.

DH: SEA-LNG has issued a report claiming LNG is currently the only viable pathway fuel towards decarbonisation. Do you agree?

AT: Yes, I agree. An LNG-fuelled vessel ordered now is already compliant with the 2030 objectives without any add-on. The same LNG-fuelled vessel will be compliant with 2040 and 2050 objectives when you add a percentage of bio-LNG or synthetic LNG and/or energy efficiency devices. As written in the report, there is a big difference between deep-sea and short-sea shipping. Deep-sea shipping requires dense and compact fuel solutions, otherwise the ships will end up carrying more fuel than their valuable cargo.

For shipping, I believe that ammonia will also be a part of the 2050 equation. It has a relatively poor energy density (ammonia needs twice the volume of LNG for a given range) but this should be solved with larger tanks. But this limits its application to vessels where it will not jeopardize the cargo capacity. However, the safety issues (high toxicity), the engine and FGHS development, and the non-existing infrastructure for synthetic NH₃ means ammonia will not be ready as a fuel for at least a decade. Global warming cannot wait for another decade when a solution such as LNG is already available.

DH: Critics of LNG argue that it is not worth investing in expensive LNG infrastructure which will soon be obsolete. What is GTT's response to that?

AT: Our response is quite simple. We are living incredible years in terms of LNG infrastructure development, which is the guarantee of LNG competitiveness in the long term.

LNG is progressively replacing more polluting fuels in the energy sector. LNG will also replace more polluting fuels in the shipping industry. Actually, the question was already answered some years ago, with massive investments in LNG bunkering infrastructure. As a result, there will be more than 20 'big' LNG bunkering vessels with bunker capacities from 5,000 to 20,000 m³ by the end of 2022!

DH: Do you believe the issue of methane slip is being adequately addressed with regard to the use of LNG in the shipping sector?

AT: The LNG fuel industry takes this issue extremely seriously. Shipowners have read the related environmental reports. As a result, they are very cautious and question us carefully when investigating the LNG fuel solution. There is a clear focus on the engine's methane emissions. Whatever the type and injection pressure, the engine makers have developed solutions to decrease the methane slip dramatically.



Alexandre Tocatlian



On GTT's side, our tank insulation design is so efficient that, during the ship's daily operations there is no waste of CH₄, neither through methane leak nor unnecessary burning. In addition, we optimise procedures to cut emissions during gas trials and commissioning/ decommissioning of the LNG tanks. Similar efforts to curb methane slip have also taken place throughout the entire value chain from production to storage.

DH: How much of the marine fuel market does GTT expect LNG to take by the end of the current decade?

AT: This is a difficult question. Currently the main advantage of LNG for ship-owners and charterers is a lower OPEX (bunker price) and a better image,

which is still not always seen as being a priority. A substantial uptake of LNG as a marine fuel will require a stronger message and greater incentives/ penalties from regulatory bodies. However, we see more and more proposals where LNG as fuel is the base case and not just an option. In a reasonable scenario, we expect LNG to be one of the top three fuels used in the marine sector with a clear lead in the large and very large deep-sea vessel sector. If you look at the projections, this is a general view shared by the professionals within the sector. For example, DNV-GL forecasts that LNG will power about 20% of the merchant fleet by 2030.

DH: Will synthetic LNG become a replacement for fossil LNG?

AT: All solutions that reduce the overall carbon content of LNG will be of interest, as long as they are cost effective and actually available as fuel. As with other fuels produced from hydrogen (synthetic fuel oil, ammonia), synthetic LNG can be considered carbon free only if produced from green hydrogen. So it will depend on the availability of green hydrogen in large quantities. Combined with bio-LNG, which has the advantage of being able to capture methane that would otherwise be emitted to the atmosphere, these two fuels blended with fossil LNG would enable the industry to attain 2050 compliance. Hence, the future will be most probably a mixture of these three solutions.



Construction of The Jacques Saadé, biggest LNG fuelled container vessel

STEAMING INTO COMPLIANCE

New system provides back up to keep VLSFO temperature above pour point

Seaspan Ship Management has ordered integrated steam boiler plants, comprising oil-fired steam production, waste heat recovery, advanced control and connectivity elements, from Alfa Laval Aalborg for eight of its container ships.

Prior to the IMO global sulphur cap's entry into force, Seaspan Ship Management made the decision to work with sulphur-compliant fuels on its container vessels. Like most container vessels, however, the Seaspan owned vessels have only a single oil-fired boiler and a waste heat recovery boiler on board. This provides no redundancy, which is problematic when using sulphur-compliant fuels.

"The composition of low-sulphur fuels was uncertain when we first decided for them, but it quickly became clear that high paraffin content would be an issue," says Arvin Dsouza, Fleet Manager at Seaspan Ship Management. "To avoid wax formation, the fuel temperature has to stay above the pour point at all times. But the existing boiler solution on [our] vessels can't guarantee the required steam capacity as these vessels do not have heating coils in all the designated fuel oil tanks and rely on a shifter system."

To secure a sufficient and reliable supply of steam, including full steam plant redundancy, Alfa Laval is rebuilding the ships' existing oil-fired boilers and installing an additional new boiler one each vessel. This will allow fuel heating by means of steam coils in all tanks. Both the fired boilers and the waste heat recovery boiler will be interconnected through the Alfa Laval Touch Control system, creating a single steam solution.

New collaboration on discharge monitoring

Water quality monitoring technology firm Rivertrace's SMARTSAFE ORB bilge overboard security system monitoring equipment and marine risk prevention firm Prevention at Sea's electronic Oil Record Book software application are being combined.

The bringing together of the two systems through an application programming interface (API) created by digital technology provider Intellore, will allow data collected by Rivertrace's SMARTSAFE ORB to be automatically entered into the certified Electronic Oil Record Book, the Prevention at Sea e-ORB, removing the need for manual entries.

The resulting SMARTSAFE e-ORB has been developed under a newly formed joint venture SENSEAS, in which both companies are exclusively working together to develop sensor technology with maritime software to provide the industry with a smarter, simpler way to improve processes and recording data.

Weather routing service

Electronic navigation company NAVTOR has launched its NavStation 5.3 which features weather and Optimum Ship Routing from private weather service company Weathernews Inc (WNI).

NavStation brings together information navigators need for decision making and passage planning. It is based on electronic navigational charts (ENCs) with further data, including Admiralty Digital Publications, Admiralty Electronic Nautical Publications, NavArea warnings, environmental regulations and security alerts, layered over the charts for operational awareness.

NAVTOR says that having OSR within NavStation and NAVTOR's connected e-Navigation ecosystem allows for greater data sharing between vessels, fleets and onshore management teams. It adds: "This means companies can now monitor optimum routes, assess fuel savings and implement improvements business-wide based on greater data insight."

Hybrid power for fish carrier

Technology group ABB claims that the live fish carrier newbuilding Færøysund is set to become one of the most environmentally friendly vessels of its kind. She will be the first live fish carrier to feature an ABB hybrid power and propulsion solution with integral energy storage.

The 77 metre long diesel-electric vessel is being built at the Aas Mek shipyard in Vestnes, Norway, for Nova Sea Service, one of Norway's largest producers of Atlantic farmed salmon.

Onboard batteries will enable 'peak shaving' when the ship is operating at high loads, optimizing the energy management and reducing fuel consumption and CO₂ emissions. Stored energy will also be critical for fish life support, acting as a reserve, if required, in the event of power outage or blackout. In environmentally sensitive areas, stored energy, supported by clean shore power connected via ABB technology, will enable emission-free operation.





Metcore's Coriolis mass master meter enables actual in-field testing of the duty meter. It is highly efficient and maintains measurement traceability

MAINTAINING AND MEASURING THE BUNKERING EDGE WITH MASS FLOWMETERS

Darrick Pang, Managing Director at mass flow meter specialist Metcore, explains why the Singapore bunkering industry continues to trust in the use of this technology

Shipowners continue to regard Singapore as one of their preferred destinations, demonstrated by recent Maritime and Port Authority of Singapore (MPA) data showing bunker sales growing approximately 5% year on year to 12.7 million tonnes in the first quarter of 2020.

Developing Singapore's leading position has been possible due to the initiatives of local pioneers who introduced and adopted standardised bunker delivery procedures in the early 1990s. These procedures have been crucial for supporting further growth of Singapore's bunkering industry, while maintaining its title as the world's largest bunkering port.

The Singapore mandate for the use of mass flow metering (MFM) systems to measure bunker fuel at Singapore port from 2017 builds upon the foundation laid down by our pioneers. It is clear MFM bunkering technology provides both bunker buyers and suppliers better quantity assurance of bunker fuel delivered.

Following the Singapore example, MFM systems for bunkering have been accepted globally by bunker stakeholders, according to a recent study conducted by the Singapore Standards Development Partner – the Singapore Chemical Industry Committee.

In Singapore the use of MFM systems for bunkering has now entered into the next development phase for maintaining measurement integrity. We are currently focusing on the physical maintenance and measurement performance verification aspects of the MFM system to ensure measurement consistency.

Challenges of maintaining metrological control of bunkering MFM systems for continuous usage

There are two important verifications that are considered critical for maintenance of mass flow meter measurement integrity.

Zero verification is performed more frequently to check on the zero drift, especially when there is a change of bunker fuel grade.

The other verification is to test mass flow meter accuracy drift during dynamic flow. This is conducted by either sending it for calibration, or via in-field testing by using a Coriolis mass master meter to ascertain meter compliance with its established requirements and maintain measurement traceability to the International System (SI) unit of kilogram.

Mass flow meter in-field testing is commonly performed annually or more frequently, depending on the measurement criticality of the application. Furthermore, through years of usage in the harsh marine environment, the performance of the mass flow meter will naturally and gradually deteriorate. With the analysis of the measured data, the verification frequency can be adjusted to ascertain the bunkering MFM system's performance.

The periodic dismantling of the mass flow meter for water re-calibration has left the bunkering market longing for a more economical and practical approach to ensure continuous compliance and metrological control of the MFM bunkering system.



When Technical Reference (TR) 48 was introduced, it indicated the need for meter calibration once every three years from the date of approval. This requirement serves to support the local bunkering industry as it aims to align MFM dismantling with the bunker tanker's docking schedule.

Metcore's newly acquired Coriolis mass master meter is poised to enable a traceable and metrological robust method for MFM system re-validation. With its introduction, verification can now be performed on-site without removing the mass flow meter. It will contribute to time and cost savings while ensuring continued trust among stakeholders.

Coriolis Mass Master Meter – A Solution to Current MFM Verification Needs

At present, Singapore employs annual re-validation using a 'meter in, meter out' approach which requires the support of another operational bunker tanker – with an operational MFM system – as the test platform. This approach, however, has not always been well received by the industry due to the practical constraints and the additional financial burden.

Alternatively, the Coriolis mass master meter provides obvious direct mass measurement traceability while enabling high efficiency testing.

For the first Coriolis mass master meter system, Metcore worked closely with major meter manufacturer Endress+Hauser on the design to enable accurate testing over the wide range of bunker fuel viscosity and flow profile seen from IMO 2020 compliant fuels. To achieve a high level of traceability and to fulfil legal requirements, it has undergone extensive calibrations using both water and specific fuel oil types.

Measurement results from the calibrations are further validated by NMI Certin BV of The Netherlands which functions as OIML's appointed Issuing Authority for dynamic measuring system for liquids other than water.

Achieving stable flow conditions during verification on a reliable test platform is critical.

Hence, the Metcore Coriolis mass master meter testing system utilises the in-situ testing concept in combination with actual bunker fuel operating condition.

Having the test platform located on a fixed and stable base (i.e. a terminal or port berth) is better than carrying it out on floating platforms (i.e. on launches or bunker vessel) which typically introduce more uncertainty factors into the test and measurement environment.

Metcore's Coriolis mass master meter, additionally, has received the support of various Singapore terminal and port handlers which permit bunker vessels to undergo re-validation operations alongside the mass master meter set-up at berth.

Retrofitted with measuring devices such as a flow computer, process sensors, communication cables, and supporting equipment for lifting and connection provision, the entire Coriolis mass master meter testing system can be programmed for automated operations to facilitate the analysis of recorded test data as a further step to avoid uncertainties from manual recording.

The associated devices and equipment have been evaluated and certified to the appropriate internationally recognised standards and practices for their intended use in direct mass measurement of bunker fuel and other applicable hydrocarbon liquids.

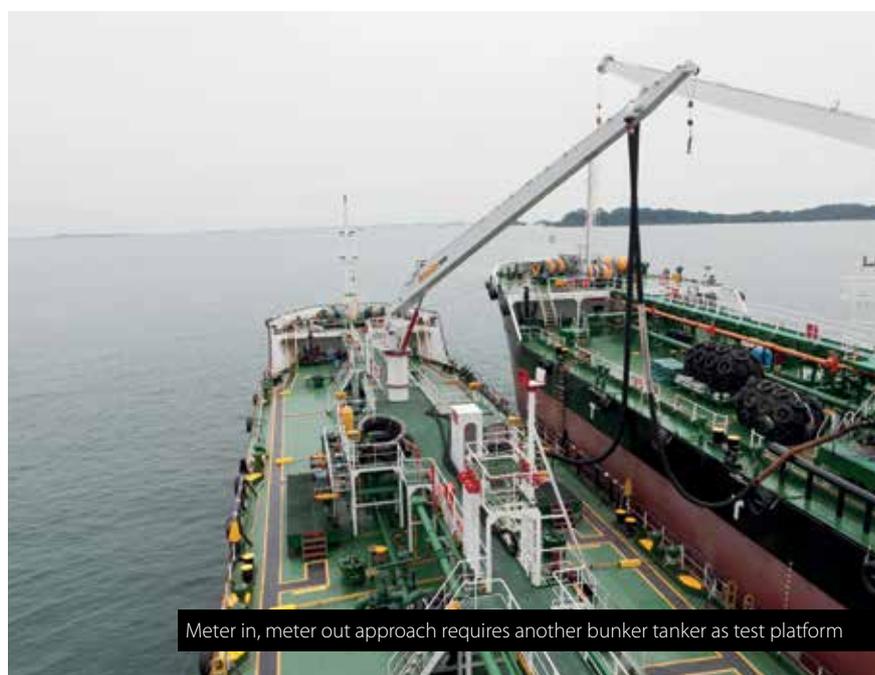
Combining actual test experiences into operational standards to benefit all

To further reinforce the mass master meter verification concept, testing bodies and bunker stakeholders will soon develop a new standard on meter verification using mass master flow meters. The development of this standard is anticipated to pave the way for a more viable metrological and traceable approach towards supporting bunker tanker operators and the shipping industry alike.

Having a standard for meter verification through the use of mass master meters reinforces the requirements of validating a custody duty meter's performance periodically as stipulated in the relevant Singapore bunkering standard.

Metcore's Coriolis mass master meter is expected to revolutionise meter verification in the bunkering industry, in turn supporting other applications utilising mass flow meter technology for measurement in Singapore.

For further information, visit our website – www.metcore.com.sg



Meter in, meter out approach requires another bunker tanker as test platform



BOUNCING BACK

The Far East was the first region to suffer the effects of Covid-19 as it spread from Wuhan, China. Some countries, including Indonesia, are still struggling with coronavirus but in general there is move to a 'new normal'

China boosts bonded bunker sales

Despite a near total lockdown of the country's port in the early months of 2020, China's total fuel oil export totalled 5.4 million tonnes in the first five months of this year, up about 30% from the same period last year.

Until this year, bunker sales have been relatively modest given the size of its international trade, at under 12 million tonnes annually. The government is, however, intent on changing that. According to reports, Chinese refineries can now produce more 18 million tonnes of IMO 2020 compliant very low sulphur fuel oil a year. Vice president Zhang Tong has been quoted as saying the country was self-sufficient in VLSFO.

Increased VLSFO production was stimulated by a value added tax rebate that was applied to fuel oil in February this year.

According to Sublime China Information (SCI), the Zhoushan Municipal People's Government is the only regional authority to licence bunker suppliers serving internationally trading ships. SCI says that, in recent years, the Zhoushan Municipal Government has effectively boosted the development of Zhoushan's bunker supply business by improving facilities construction, reducing bunker supply costs, improving service efficiency, standardizing operation and management, and strengthening cooperation between governments and enterprises.

In 2019, the bonded bunker sales volume at Zhoushan Port was 4.1 million tonnes, making up 37% of the national total. In the first half of 2020, the bonded bunker sales volume at Zhoushan Port was around 2 million tonnes, up nearly 7% from the same period last year. However, its share of national sales dropped to 28%, indicating other ports were also boosting sales.

Meanwhile in another move that strengthens China's position with the international bunker market, VLSFO futures were launched at the Shanghai International Energy Exchange in June. As Platts noted: "With few competitors, the contract stands a fair chance to grow into an Asian benchmark for shipping fuel, said traders and brokers, especially as about 20 Chinese refineries are freshly equipped to produce the low-sulphur fuel. The contract could also further Beijing's ambition to build a bunkering hub in eastern China's Zhoushan port to challenge Singapore for the multi-billion dollar shipping fuel market."

Shortly after the launch, the Exchange named 15 Chinese companies as VLSFO futures market makers. At about the same time it announced the approval of four testing companies to oversee physical deliveries: China Certification and Inspection Group Inspection Co, SGS-CSTC Standards Technical Services Co, Shanghai Orient Intertek Testing Services Co and Technical Center for Industrial Products and Raw Materials Inspection and Testing of Shanghai Customs.

Singapore claws back volumes

Since February Singapore has had to cope with the implications of being a global bunker and crew change hub during a global pandemic.

Singapore's bunker sales reached 50.6 million tonnes in 2017 but declined in both 2018 and 2019, at 49.8 and 47.5 million tonnes respectively.

However, the Maritime and Port Authority of Singapore (MPA) figures show a slight increase in year-on-year sales every month during the first seven of this year, with the exception of June, which was down marginally.

While Covid-19 was the main challenge to keeping bunker supply services operating normally, the local industry was also hit by a major scandal when Hin Leong Trading, an oil trader founded by one of Singapore's richest men, Lim Oon Kuin, filed for bankruptcy protection in April with debts of almost US\$4 billion.

A Singapore court appointed two locally-based executives of international accountants Ernst & Young as interim judicial managers of Hin Leong's associated company Ocean Tankers, whose fleet of some 100 vessels includes nine bunker barges.

While the Covid-19 pandemic has been the primary global issue of the year, the MPA has been signalling that current challenges have not forced it to take its eye off long term goals.



MPA issued a statement in August saying that decarbonisation continued to be a high priority on Maritime Singapore's agenda.

The MPA has supported the establishment by the Singapore Maritime Foundation of an International Advisory Panel on Maritime Decarbonisation (IAP). Chaired by Andreas Sohlen-Pao, Chairman of the Singapore Maritime Foundation, and co-chaired by Wong Weng Sun, Chairman of the Board and Governing Council of the Singapore Maritime Institute, the IAP will discuss pathways to maritime decarbonisation, policies that could help accelerate the transition, and proposed actions to be taken by Maritime Singapore.

South Korea imposes ECAs

South Korea has established SOx emission control areas (ECAs) around its major ports, mandating the use of fuels with no more than 0.10% sulphur content as of 1 September, 2020. Initially this applies to anchored or moored vessels, but from 1 January 2022, ships will be required to use fuels with no more than 0.10% sulphur when navigating within the ECAs. Non-compliance is punishable by imprisonment for up to one year or by a fine of up to 10 million won (US\$8,500).

The ECAs are in and around Incheon (including Kyongin), Pyeongtaek-Dangjin ports area, Yeosu and Gwangyang (including Hadong) ports area, Busan and Ulsan port area.

Scrubbers are being allowed as an alternative means of compliance and no restrictions on washwater from open-loop systems have been reported. Ships will be required to have a written fuel changeover procedure and keep accurate records in the engine room logbook.

Indonesia struggles with Covid-19

As of early September, official figures for the total number of Covid-19 infections nationwide reported since the start of the outbreak was over 200,000 with a death toll approaching 8,500. But there was widespread belief that there was significant under-reporting.

In a sign that the global community viewed the situation as out of control, some 60 countries had banned Indonesians from entering.

Nevertheless, the country's bunker industry is managing to keep going, but a major development was delayed by several months due to Covid-19. Kassim Gokal, Sulawesi Bunker Terminal's (SBT) commercial director told World Bunkering that the terminal project was temporarily halted as the local airport in Palu closed and surveyors could not attend to complete their work. The situation had improved by late August and all surveys had been completed, and the terminal's storage barge had been approved by the relevant authorities.

He added: "We expect our first cargo of Exxon Mobil B30 Diesel Oil to be received by us on 6 September and we will start to market and supply this Bio Diesel mainly to local Indonesian-flag vessels in the Palu and Makassar Strait area as per our initial plan of operations."

On the wider scene, Gokal added: "In general, bunker volumes are down in line with economic activity but the government is trying to open up in a measured way bearing in mind the health situation, which remain the focus of attention. The MGO/diesel market is also closely related to industrial activity and investment in new factories and ore smelters is still coming in to Indonesia, mainly ex China."

Japan's first LNG bunker tanker

Japan's first LNG bunker vessel was launched at Kawasaki Heavy Industries' Sakaide Works in May.

She is scheduled to be delivered at the end of September 2020 and will be the first such vessel to be operated in Japan. The vessel will be based at JERA's Kawagoe Thermal Power Station and commence ship-to-ship LNG bunkering business for LNG-fuelled vessels.

In 2018 "K" Line, JERA, Toyota Tsusho and NYK Line jointly established the Central LNG Shipping Japan Corporation (CLS), which owns the LBV and ordered its building, and the Central LNG Marine Fuel Japan Corporation (CLMF), which will promote the LNG bunkering business in the Chubu region of Japan.



Japans first LNG bunker vessel



Recommended
by



91%

Logic Vision

IMPROVE YOUR BUSINESS WITH OUR SPECIAL SOFTWARE SOLUTION FOR BUNKERING

Bunkering is a different world altogether. Logic Vision created the module known as FuelVision 365 with this in mind. This module is based on Microsoft Dynamics 365, the integrated ERP solution from Microsoft and specially designed for companies seeking one solution. More than 2,7 million users in over 195 countries work with this powerful solution. It provides support in all aspects of business management, financial management, business intelligence, inventory management, sales and marketing etc.

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, is easy to understand and to report. With nomination functionality, commission registration, credit checks, Letter of Credit 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 the bunker-world.

Contact us! Call +31 184 677 588 www.LogicVision.nl

FUELVISION365

Powered by Microsoft

- CONTRACT MANAGEMENT
- PURCHASING & SALES
- BACK-TO-BACK MANAGEMENT
- PRICE MANAGEMENT
- INVENTORY MANAGEMENT
- EXCISE MANAGEMENT
- DIGITAL FILES
- REPORTS
- FINANCIALS



MICROSOFT DYNAMICS 365
BUSINESS CENTRAL

MACHINE LEARNING SYSTEM SAVES FUEL

New technology "saves 250,000 tonnes of CO₂ emissions in a year"

Researchers from the UK's University of Southampton and Shell Shipping and Maritime have developed a digital dashboard that helps ships' masters respond to changing sea conditions.

The Just Add Water (JAWS), app interprets draught and trim to optimise the amount of fuel and power needed in any given situation.

A new machine learning model was introduced through the partners' Centre for Maritime Futures, which is working on digital and technological advances for safer, cleaner and more efficient shipping.

Engineers trialled the system on a fleet of more than 12 300-metre-long LNG carriers for 12 months, cumulatively recording the saving of 250,000 tonnes of CO₂ emissions, equivalent to a fuel saving of US\$90 million.

The new modelling technique was developed by postgraduate research student Amy Parkes during her PhD in the Maritime Engineering research group, where her time has been divided between Southampton and Shell.

"LNG carriers have a large surface area so wind, waves and current can make a huge difference to the amount of power required in a journey," Parkes says. "Shell collects an enormous amount of data from these vessels and this app is designed to monitor and adapt to these variables to save power without changing the ship's overall speed."

Early versions of the app calculated heat maps using an averaging system before Parkes automated and advanced the process using modelling techniques optimised during her PhD research.

"Through machine learning, it is now possible to analyse data from previous deployments and predict upcoming ones based on past settings, creating a process that is much more user friendly,"

she says. "This is only possible because of the ability to gather more accurate data at a much faster rate. Once the technology has developed further, we intend for the dashboard to monitor the ship state alongside weather conditions and make adjustments autonomously."

Full scale ammonia engine test

Technology group Wärtsilä has announced that it will carry out "the world's first long term, full-scale, testing of ammonia as a fuel in a marine four-stroke combustion engine". The testing is being undertaken "in close customer cooperation with Knutsen OAS Shipping AS and Repsol, as well as with the Sustainable Energy Catapult Centre" and is being funded by a NOK20 million (US\$2.2 million) grant from the Norwegian Research Council through the country's DEMO 2000 programme.

Tina Bru, Norwegian Minister of Petroleum and Energy, said: "This is a great example that illustrates the importance of dedicated petroleum R&D. This DEMO 2000 project is another steppingstone for reaching our ambitious climate targets and it is also aligned with our recently published hydrogen strategy. We need to develop and use new technologies that reduce emissions. We are very happy to support development work that can lead to increased use of ammonia as a fuel in shipping and in the offshore sector."

Know-how from this project will also provide important input to the development of regulations for the use of ammonia and other low-carbon fuels."

Egil Hystad, General Manager, Market Innovation at Wärtsilä Marine Business said: "Ammonia storage and supply systems will be designed and developed for maximum personal safety, and in parallel with the Fuel Gas Handling System under development as part of the EU project ShipFC. This project is coordinated by NCE Maritime CleanTech, and it involves an ammonia driven fuel cell which will be tested on the Eidesvik Offshore supply vessel, Viking Energy."

Fuel efficiency system on the cloud

Norwegian ship operator Eidesvik Offshore has signed with Yxney Maritime for the use of its Maress energy efficiency software.

The Maress system enables the user to closely follow the efficiency performance of single vessels and a whole fleet. Yxney says: "In addition to creating a solid foundation for deciding what fuel saving initiatives to deploy, the system enables evaluation of direct savings from initiatives such as the installation of a battery system on a vessel."



LNG carrier ©University of Southampton

BUNKER CONVENTION

“NO LONGER FIT FOR PURPOSE”

The Wakashio casualty raises issues regarding compensation limits, according to law firm Clyde & Co

Following the recent oil spill incident offshore of Pointe d'Esny, south of Mauritius, Martin Hall, Partner and Head of Marine Casualty at global law firm Clyde & Co has highlighted issues surrounding compensation limits.

A Clyde & Co briefing note on the topic notes that the oil spill occurred after the bulk carrier *Wakashio* ran aground on a coral reef on 25 July 2020. The ship began to leak fuel oil in the following weeks and broke apart in mid-August. Mauritius declared a state of environmental emergency after some 1,000 tonnes of fuel had leaked into the surrounding waters.

Commenting on the potential cost of the clean-up efforts and compensation claims, Martin Hall says: "As the ship is not a laden tanker, any compensation claims seem likely to be dealt with under the 2001 Bunker Convention. This provides for mandatory third-party insurance cover, and allows claims of third parties for clean-up expenses and other losses caused by pollution from bunkers to be made directly against the insurers. However, owners may be entitled to limit liability in accordance with the Convention for Limitation of Liability for Maritime Claims 1976, or as amended. Compensation is based on the gross tonnage of the vessel, which in this case appears to be 101,932 gt, and which would entail a cap of around US\$18 million" if Mauritius has only enacted the 1976 Limitation Convention."

Hall explains that any prospects of breaking this limit seems unlikely: "The only means of breaking the limit in the likely event that claims exceed the limitation fund under the 1976 Limitation Convention would be to prove that the owner is personally responsible for the loss, and that they either acted with the intention to cause the loss or that they acted recklessly and with knowledge that the loss would probably result.

"Although the Bunker Convention 2001 only came into force in 2008, this terrible incident shows that it is already time for Governments of Coastal States to urgently consider the applicable limits and enact the updated limits under the updated 1996 Protocol to the Limitation Convention to ensure compensation claims are properly covered."

Tankers used for storage – the legal issues

At least one large tanker company has invested in floating storage to ensure its fleet has access to high quality 2020-compliant VLSFO and in general there would appear to an increase in the use of tankers for storage.

Law firm Reed Smith has issued guidance on the implications of using tankers for floating storage

The firm's Sally-Ann Underhill and Peter Glover comment: "In recent years, international oil markets have witnessed collapsing oil prices as a result of an excess in supply and a corresponding decrease in demand as consumer behaviour switches slowly away from a dependency on oil. Oil refineries and storage facilities are near or at capacity. The absence of terminal and tank farm capacity has generated renewed global interest in and a growing demand for oil tankers to be used as floating storage. This increase in demand for floating storage is being reflected in daily hire rates, with VLCC rates being pushed from averages closer to \$100,000 to reportedly in excess of \$300,000 a day, according to industry sources."

The firm's guidance asserts: "While no doubt compounded by the COVID-19 outbreak and the resultant uncertainties it has generated for international trade,

the current macroeconomic climate means that there will be potentially very long periods during which tankers will be used as floating storage. Given that most charterparties do not contain storage clauses, or have clauses which are legally or practically deficient when considering long-term storage, owners and charterers alike are presented with an array of issues that need to be carefully considered and the risk allocated to avoid legally significant and potentially expensive consequences. Any failure to do so may result in legal implications which could be far-reaching.

Reed Smith's briefing note covers a number of legal issues that may arise under a charterparty or bill of lading contract, where owners accept charterers' requests to employ their tankers as floating storage. The discussion is intended to highlight the various issues. But Reed Smith stresses that the terms of individual charterparties, together with the factual circumstances, will determine the scope of consideration required in each case.

The paper can be found at: <https://www.reedsmith.com/en/perspectives/2020/05/use-of-tankers-as-floating-storage-arising-legal-issues>



VIVCORE ENERGY SOLUTIONS



Established in the year 2014, Vivcore Energy Solutions is a local investment supported by industry specialist in the field of Shipping & Logistics, Engineering and Finance.

VIVCORE emerged from the business expansion concept of diversification strongly linked to the renowned Maldivian Hotelier "Cyprea" which manifests a philosophy depicting a precedent through establishment of industry standard and business innovations with the modern art of technology in their endeavours.

Our principle focus is placed on establishing a distribution network and manage supply chain that is efficient and economical. In applying state of the art inventory management system in fuel storage and handling, an unequalled service is assured with continuous standardization programs.

Our primary goal is to increase the supply chain value through reduced operational cost, a combination of leading technology in planning and engineering processes which provides leading efficiencies in the field.

VIVCORE is built upon the basic principle of good governance and ethical standards, with the obligations are to our shareholders, employees and the community to conduct the business based on ethics. As a company we take on many challenges, but our ultimate success and worth is measured not only by its financial success but by its principles and integrity which is constantly re-evaluated every day with every decision and interaction.

Our business was initiated with the objective of creating cost effective and efficient fishing in Maldives by providing an integrated service to the fishermen of the Maldives, through which they are able to access a one stop shopping service, thereby reducing cost of fuel, which is a major operational cost for the Maldivian fishermen.

We place paramount attention to detail while establishing infrastructure for the storage and delivery of fuel in our service line.

In addition to cater for the ardent requirement to meet the need of the fishing vessels, this service also contributes to the progressive effort made to facilitate an effective power generation system to sustain a food processing facility that caters to the everyday need of a global food supply chain. This is further strengthened by the quality management system that enables reliability and consistency in our services.

Taking into account existing geographical challenges in regard to supply logistics to resort hotels and effect of oil prices against cost of energy production, our team decided to embark on a venture that will provide energy solutions. After successful operationalization in supplying fuel to approximately 60% of the hand-line fishing vessels operating in the Maldives and achieving a reputation for total quality service, we now offer our fuel delivery services and expertise to prestigious Maldivian Resorts.

We have established an efficient distribution service network in the Maldives, consisting of routine supply to luxurious cruise liners and food processing facilities in the region. The growth in the arrival of luxurious super yachts to the Maldives has been a key milestone in transforming our distribution capacity that enabled us to reach to the furthest northern and southern region of the Maldives. The demand in relation to the economic development deriving through sustained growth in tourism and related service sectors have facilitated the distribution and delivery with efficient resources.

Further fortifying our service offering, we expanded into the bunker industry providing bunker services to cruise vessels is the most sensitive bunker operation since these international luxury cruisers require a standard operating procedure from the bunker service provider to comply.

These vessels cannot afford any interruption due to a wrong specification of fuel similar to that of a resort island and hence lot of attention is given to assure quality control in the service.

At present **VIVCORE is the only company trading in Marine Gas Oil 10 ppm in the Maldives which is a premium grade of Gas Oil.**

We believe that reputation and trust are fundamental in an oil distribution service in order to sustain customer confidence. We have built a reputation for reliability among various sectors of the country for rendering fuel delivery service.

VIVCORE will strive and stride in every step of the way, irrespective of the challenges that may come across, to provide an energy solution that is environmentally and economically sustainable.

Head office
H. Coconut Villa
3rd Floor
Ameeru Ahmed Magu
Male', 20030
Maldives
Phone: +960 9550157
Fax: +960 3323523
Email: info@vivcoenergy.com
Web: www.vivcoenergy.com

"To provide an energy solution that is environmentally and economically sustainable."





FuelVision365 BY LOGIC VISION



**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?

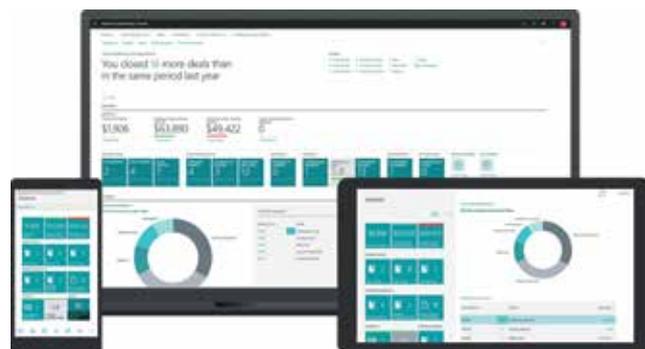
We believe that the future offers many opportunities.

Our 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:

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





PROVIDING THE BEST SERVICES



Big enough to be powerful, small enough to be agile

Our aim, at Bunkeroil, is to offer our clients a truly competitive advantage by providing the best services in terms of maritime transport, delivery & sale of oil products and the relationship between shipowners and port operations.

We offer bespoke solutions with a high added value when it comes to operational flexibility and financial conditions.

Since the company was founded in Livorno in 1980, our history has always been marked by constant growth and focus on the quality of our products and services, as well as on client satisfaction. This has made us one of the key players in bunker and marine lubricants sale, both nationally and in the Mediterranean.

From the port of Livorno, our marine fuel and lubricant distribution operation began to expand into all Italian ports, in order to meet the diverse needs of our clients in an increasingly comprehensive way.

From the outset, our shipping activity in the transportation of petroleum products in the Mediterranean has run alongside the Bunker service, and in the early 2000s we upgraded our fleet.

During the same period, we launched the Clearing and Shipping Agency service in the port of Livorno,

whilst our international expansion in the lubricant sector began in the second half of the 2000s. Today, we cover all of the world's main ports as bunker and lubricant traders, of course with a greater focus on the Mediterranean Sea.

In 2018 we launched a constantly stocked lubricants storage service as leading ExxonMobil Distributors for local market in the territories of Italy and Malta.

The cornerstones of our work.

Being a supplier is not enough, and that is why we strive to form partnerships with our clients, through:

- the best products in terms of quality;
- maximum operational flexibility;
- problem solving;
- bespoke financial solutions.

With years of experience in the industry, we have developed a well-established network that enables us to respond to client requests promptly. We offer our clients:

- availability of the product or equivalent alternatives;
- 24/7 service;
- the most competitive price on the market, thanks to our greater purchasing power.

BUNKEROIL CONTACTS:

Address: Via Pietro Paleocapa 11, 57123, Livorno, ITALY.

Phone: + 39 0586 219214

Bunker enquiries: bunker@bunkeroil.it

Lubricant enquires: lubricant@bunkeroil.it

Please visit: www.bunkeroil.it

Follow us on LinkedIn: Bunkeroil



CORPORATE

Charterer
Marnix Van de Voorde
ELAFLEX HIBY
GmbH & Co. KG
 Europe

Service
Patrick Velten
ELAFLEX HIBY ASIA
PACIFIC PTE. LTD.
 Asia

Service
Siraj Salbiah
Endress+Hauser (S.E.A)
Pte Ltdl
 Asia

Bunker, Broker
Sophie Dolan
Peninsula Petroleum
(Brokers) Ltd
 Europe

Service
Tim Wilson
Lloyd'S Register GMT
Limited
 Europe

INDIVIDUAL

Surveyor
Engin Omer Mertoglu
Its Caleb Brett Deniz
Survey AS
 Europe

Shipowner
Orhan Kursun
OMH Kursun Denizcilik
Petrol
 Europe

Financial
Edward Wood
VesselsValue
 Europe

Trader
Nandprasad
Shiwsaakar
Millennium Maritime
Services Pte Ltd
 Asia

Supplier
Ravi Shankar Pandey
Universal Marine
Surveying &
Consultancy
 Asia

Service
Larry Rumbol
Spectro | Jet-Care
 Europe

Service, Port
Seng Eng Teoh
Mogas Flow Lab
Private Limited
 Asia

Shipowner, Ship Manager
Valentios Valentis
Pyxis Maritime Corp.
 Europe

Service
Andy Merris
Andy Merris
 Middle East

ONLINE IBIA BUNKER TRAINING COURSE

IBIA runs a series of **online training courses** to inform the members of our industry and help them to understand **international regulations**, and provide 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.

Module 1: Bunker Market Regulations and Enforcement

Module 2: Understanding ISO 8217 and ISO 4259

Module 3: Best practice for suppliers with VLSFO

Module 4: Best practices for users with VLSFO

Module 5: Adapting to a changing market

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

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

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

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

Module 10: Fuel quality – Fuel quality, its impact on storage, treatment and use in the engine.

For more information: <https://www.eventora.com/en/Events/ibia-online-bunker-training-course>

**15 - 16 SEPTEMBER, 13 - 14 OCTOBER
17 - 18 NOVEMBER, 15 - 16 DECEMBER 2020**

SINGAPORE, ASIA
2 days Basic IBIA Bunkering Course
(SS600:2014 & SS648:2019)

Course Objectives

- To provide participants the basic knowledge of the bunker industry and processes in accordance to SS600:2014 – Code of Practice for Bunkering, plus SS648:2019 in Singapore.
- Technical and Operating Principles of the Mass Flow Meters
- System Integrity, Sealing Requirements and Processes
- Personal Safety Awareness, Personal Protective Equipment (PPE) and Safe Boarding
- Dispute Resolution
- Workshop exercises and Case Studies

Course Outline

- Background of the bunkering industry
- Development of SS600:2014 & SS648:2019
- Pre-delivery checks and documentation in a bunkering operation
- Delivery procedure and documentation whilst bunkering is in progress
- Post-delivery checks and documentation
- Resolution of disputes
- Standards for Port Limit Bunker Tankers
- Workshop: Exercises on the calculation of bunker quantity delivered
- Mass Flow Metering System as per SS648:2019

Suitable for those seeking MPA endorsement to work as Bunker Cargo Officers as well as all other members of the bunker industry seeking to increase their knowledge including members from the bunker suppliers, bunker craft operators, management staff, bunker traders, shipping agents, bunker surveyors as well as any interested participants looking to have a better understanding of the bunkering processes in the Port of Singapore. (Minimum entry requirements apply)

**8, 9, 22, 29 SEPTEMBER
1, 6, 15, 20 OCTOBER 2020**

SINGAPORE, ASIA
1-day Bridging SS648:2019 Course

Course Objectives

- To provide participants the knowledge of the bunker industry and processes in accordance to SS648:2019 – Code of Practice for Bunkering in Mass Flow Metering in Singapore
- System Integrity, Sealing Requirements and Processes
- Personal Safety Awareness, Personal Protective Equipment (PPE) and Safe Boarding
- Dispute Resolution
- Workshop exercises and Case Studies

Course Outline

- Development and changes of SS648:2019 from TR48:2015
- Pre-delivery checks and documentation in a bunkering operation
- Delivery procedure and documentation whilst bunkering is in progress
- Post-delivery checks and documentation
- Resolution of disputes
- Standards for Port Limit Bunker Tankers

Suitable for current MPA endorsed Bunker Cargo Officers and Bunker Surveyors in Singapore.

For information: Please contact our Singapore Office:
regionalmanagerasia@ibia.net



1 - 2 OCTOBER 2020 **ARACON** **ONLINE**

ARACON 2020 will look at how the ARA market and the wider shipping and bunker industry can retrench, regroup and recover from the economic shocks caused by Covid-19. It will debate the impact of IMO 2020, from an operational, commercial and legal point of view. It will also look at how the industry is responding to the next wave of changes – including digitalisation and the marine energy transition.

For more information:
<https://www.bunkerevents.com/events/aracon-2020>

6 - 9 OCTOBER 2020 **SIBCON 2020** **ONLINE**

“Powering Fuels of the Future, Driving towards Decarbonisation”, SIBCON 2020 will centre stage strategic views on responsible shipping, fuel mix and compliance scenarios, emerging fuels and bunkering 2030 and beyond. The conference opens with a Guest of Honour and keynote speeches, and key decision makers across the community will converge in Singapore to outline market potential, growth segments, and strategies to operate in the current environment.

Organised by the Maritime and Port Authority of Singapore, the world's largest and most influential bunkering event was attended by 2000 attendees in 2018.

For more information, please visit
<https://www.sibconsingapore.gov.sg/>

15 OCTOBER 2020 **WOMEN IN BUNKERS** **WEBINAR**

As part of LQM's ongoing webinar series, Women in Bunkers is the discussion for this webinar. Ours is widely considered to be a male dominated industry. What makes this industry less appealing to women? What can be done to improve gender equality ratios in the bunker and shipping industry? LQM is teaming up with some senior female industry figures as well as a recruitment firm to examine the issues.

For more information: <https://www.lqm.com/webinars/>

21 - 22 OCTOBER 2020 **MARITIME WEEK AMERICAS** **ONLINE**

Maritime Week Americas 2020 returns with a week of key maritime events, including the MWA Conference plus top-level training and other specialist training. With over 200 delegates expected from over 30 countries, MWA remains a popular bunkering conference in the Americas.

For more information:
<https://www.petrosport.com/events/mwa2020-virtual>

3 - 5 NOVEMBER 2020 **IBIA ANNUAL CONVENTION 2020 – GOING GLOBAL** **ONLINE**

The IBIA Annual Convention 2020 will be transformed into a virtual Convention with a fully inclusive global focus. This will be a unique and exciting opportunity for the bunker industry, our sponsors, attendees, speakers and partners to engage, network, exchange views, knowledge and vital industry information globally.

For more information and updates visit the IBIA website: <https://www.ibiaconvention.com/>

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

4 - 6 NOVEMBER 2020
2ND ANNUAL MARINE FUELS 360
ZHOUSHAN, CHINA

The Investment Promotion Bureau of Zhoushan is aggressively developing the Zhejiang Free Trade Zone (FTZ). Linked to this is the development of marine logistics at the Ningbo-Zhoushan port which handled 21.6 million TEU of cargo, making it the fifth largest port in the world.

As such, Port of Zhoushan has undertaken a conscious effort to develop policy and attract investment into its marine fuel industry, and related infrastructure, thereby leading to new collaboration opportunities. After a stellar success in 2019, the 2nd Annual Marine Fuels 360 Conference in China will spell out the detail and enable new business partnerships in this fast-emerging marine fuel market.

For more information:

<https://www.informaconnect.com.sg/event/marine-fuels-360/>

16 - 18 MARCH 2022
ASIA PACIFIC MARITIME 2020
SINGAPORE, ASIA

APM dedicates one day for industry thought leaders to discuss and debate pressing topics such as digital disruption and the various dynamics impacting businesses, IMO 2020 Sulphur Compliance, Green Shipping, Cyber Security and Decarbonisation of Fuel and Standardization of Digital Codes.

For more information:

<https://www.apmaritime.com/en-gb/APM-Conference.html>

17 - 21 FEBRUARY 2021
EUROPEAN SHIPPING WEEK
BRUSSELS, BELGIUM

The third European Shipping Week will feature an array of events with high-profile keynote speakers from the world of shipping and the European institutions.

For more information: <https://europeanshippingweek.eu/>

6 - 10 JUNE 2022
POSIDONIA
ATHENS, GREECE

Posidonia, the international shipping exhibition, has long been established as one of the major calendar events of the shipping industry, and Posidonia 2018 attracted the most influential personalities from the Greek and international shipping community and major companies and organisations active in all sectors of the shipping industry. The international exhibition Posidonia first took place in 1969 and has been taking place every two years ever since.

For more information: <https://posidonia-events.com/>

8 - 12 MARCH 2021
MARITIME WEEK LAS PALMAS
LAS PALMAS, SPAIN

The Port of Las Palmas and its key Government and Industry stakeholders have joined forces with Petrosport 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.petrosport.com/events/mwlp-2020>

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

WORLD BUNKERING

WINTER 2020... NOW OPEN FOR BOOKINGS

WINTER 2020

SPECIAL FEATURES:

New Fuels

The focus this year has been on complying with the 0.50% sulphur limit, largely by using compliant VLSFO. But the development of alternative fuels continues apace as pressure mounts to move towards zero carbon.

Fuel Additives

The widespread use of VLSFO has raised a range of potential problems, from instability to bacterial contamination. Additive manufacturers have responded with new products. We take a look.

IBIA Convention

The coronavirus pandemic means for the first time ever IBIA is holding an online virtual convention. We report what was said and who was 'there'.

GEOGRAPHICAL FOCUS:

Northern Europe

We investigated how Northern Europe's bunker sector fared during the Covid-19 pandemic. While coping with coronavirus has been top priority for the bunkering industry, we also look at political developments, and especially moves to bring shipping within the EU Emissions Trading System.

Middle East

Our annual round-up of the bunkering sector in a region that has once again experienced significant political instability at the same time as having to cope with Covid-19. In addition the bunker sector has had to adjust to the demand for VLSFO.

Regular Features

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



Algeciras • Amsterdam • Antwerp • Athens • Barcelona • Ceuta • Copenhagen
Geneva • Gibraltar • Houston • Las Palmas • London • Los Angeles • Malaga
Malta • Monaco • Montevideo • Nakhodka • New Orleans • Panama
Rotterdam • Shanghai • Singapore • Tenerife • Tokyo

WE KEEP THE GLOBAL FLEET MOVING...

Peninsula are the global leaders in marine energy solutions: service, storage and supply.

We control the entire supply chain to ensure Peninsula remains the model example of quality.

With 25 years' experience and operations in all major shipping and oil hubs, we're the largest physical supplier in our main ports providing the most comprehensive regional marine solutions.

Our reputation for transparency and low risk tolerance compliments our physical supply base, global reselling capabilities, storage, technical expertise, fleet management, yachting services & lubricants.

Contact us

+350 200 52641

Bunkers@peninsulapetroleum.com

www.peninsulapetroleum.com

Global leaders in marine energy solutions

 **Peninsula**
Petroleum

Our fuel – it's your confidence and safety at sea.
Gazpromneft Marine Bunker provides a year-round supply
of marine fuel according to international standards.

EXPANDING OPPORTUNITIES



Marine Bunker

www.marinebunker.gazprom-neft.ru