



# SHIPPING Network

The official magazine of the Institute of Chartered Shipbrokers

*Promoting professionalism in the shipping industry worldwide*

Issue 59 December 2019

## Sun sets on emissions

Cleaner shipping on the horizon



Battle beyond 2020 | Future fuel mix | Cargo reduction strategy | Shipping's vulnerability



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# Putting effective communication first

Chairman [Susan Oatway](#) explains why Our Word Our Bond is as relevant today as it ever was



**Susan  
Oatway**

I write this foreword after a day spent with student prize winners from the Institute's 2018/19 examinations sittings. It is, quite frankly, one of my favourite days of the year. It is a fantastic opportunity to congratulate all the students, feel humbled by their collective talents and inspire hope for the future of our Institute. Make no mistake, these young people are the rising stars and future leaders of our industry and as we enter the 100th anniversary of our Royal Charter, we have much to be hopeful about.

It was particularly satisfying at the awards to see branches from across the globe represented by prize winners. Our industry plays a crucial role in building global relationships. In order for our Institute – and indeed the wider industry – to survive it is imperative that we build connections that cross continents and cultures. The Institute has always been at the heart of any maritime network and one of the challenges for my chairmanship is to strengthen those global bonds and to improve the communication between branches, between head office and branches and between members within branches.

In this day and age communication is instant, we no longer have to be face-to-face when we can send a line on WhatsApp to check in with each other. This has led to something of a disconnect within our own network, we have lost the art of effective communication. I encourage open communication and sharing of best practice during my chairmanship and I will work with Head Office to make sure no member is left alone, that no question goes unanswered and that you all feel part of this great network. We are all members of the same Institute, whether you work at the quayside in Mombasa, an owner's office in Singapore, fix cargo out of Vancouver or indeed are to be found at a desk in Park Street, London. We should all be living by the simple rule Our Word Our Bond. Let me know if you need that extra connection, have a burning question, or just want to share how you network at your branch.

## BARGE BEGINNINGS

I started my maritime career helping out on my Dad's barge in my university holidays. In those days we carried sand from a riverside quarry on the River Trent. I remember several occasions arriving at Goole, filthy, tired and determined not to accept the mooring line thrown from the men on the quayside, which was only offered because I was a female. I had been practicing throwing our bow rope all the way and wanted them to accept it as they would have from any man in my position.

When I arrived at P&O Bulk Carriers – fresh out of University with my maths degree and no clue what I really wanted to do next – the CEO at the time asked me why I wanted to be in shipping because, in his words, "it was a man's world". I told him if the dockers in Goole accepted me, I was sure his boys in chartering could manage.



**Ms Oatway is spearheading an initiative to see all Fellows mentoring students**

Thirty years ago it was a man's world, especially in chartering and operations, but P&O Bulk Carriers to their credit not only took me on – the first female hired in that role – but also supported me through my Institute exams and gave me the same opportunities as those boys on the desk. I still count that team as friends and mentors and it is because of their support that I am here now.

In 2019, the maritime sector is there for everyone and it is up to us to encourage participation.

We all have a responsibility to invest in and support the next generation. Your company might not have the funds to put all its staff through the Professional Qualifying Examinations, but you, as a Member of the Institute, could offer some time to help by giving a revision lecture or mentoring a student.

Actually, let's just talk mentoring for a minute. This is another promise I'd like to make for my two years term. I would like to see all Fellows mentoring students. We are all busy, but I am sure we could all spare an hour sometime in the academic year to offer support, to check in on a student, perhaps answer a burning question that they have about Bills of Lading? If you can't answer that question – and let's be honest, we are not all lawyers – you likely know someone who can, right?

We are all global ambassadors for our Institute. We need to raise awareness and share our best practices to make this an Institute everyone wants to be a part of. So, let me know – who are you mentoring this year?

In finishing, I thank my predecessor Theo Coliandris for all his work for the Institute and welcome Glenn Murphy, my vice chairman, aboard. It's going to be a busy time, but we are stronger together and the Institute is worth that extra effort. I am hugely looking forward to the next two years and to working with you all to ensure that this Institute stands firm and is even more relevant by the time we come to celebrate the 200th anniversary of its Royal Charter. [SN](#)

Susan Oatway  
International chairman



## The far horizon

As this issue lands on your desk or doorstep the industry will be just weeks away from the January 1, 2020 deadline that marks the end of burning high sulphur fuel in the global fleet.

As the clock strikes midnight on December 31, the emissions of the worldwide fleet should fall off a cliff – notwithstanding the fact that many operators have been preparing for this landmark moment for months, and in some cases years.

But while the effect of the entry into force of the International Maritime Organization’s low sulphur content regulation will be immediate, the real impact on shipping will be a bit more of a slow burner. There are still so many unknowns to consider: will open loop scrubbers be vilified out of existence; how will engines cope with

exclusively burning low sulphur fuels; what will the future fuel mix be; and, most crucially, will there be enough low sulphur fuel available to keep the whole fleet running?

As we progress through 2020, we will find the answers to these questions ... and will likely come to the realisation that January 1, 2020 was just a way marker in a much longer journey, a journey that ends with zero emissions from shipping.

To meet the next round of environmental regulation, Zero Emission Vessels will need to enter into commercial operations within the next ten years. That, I would argue, presents a much greater challenge than meeting the low sulphur demands of January 1, 2020. **SN**

Carly Fields, FICS  
Editor

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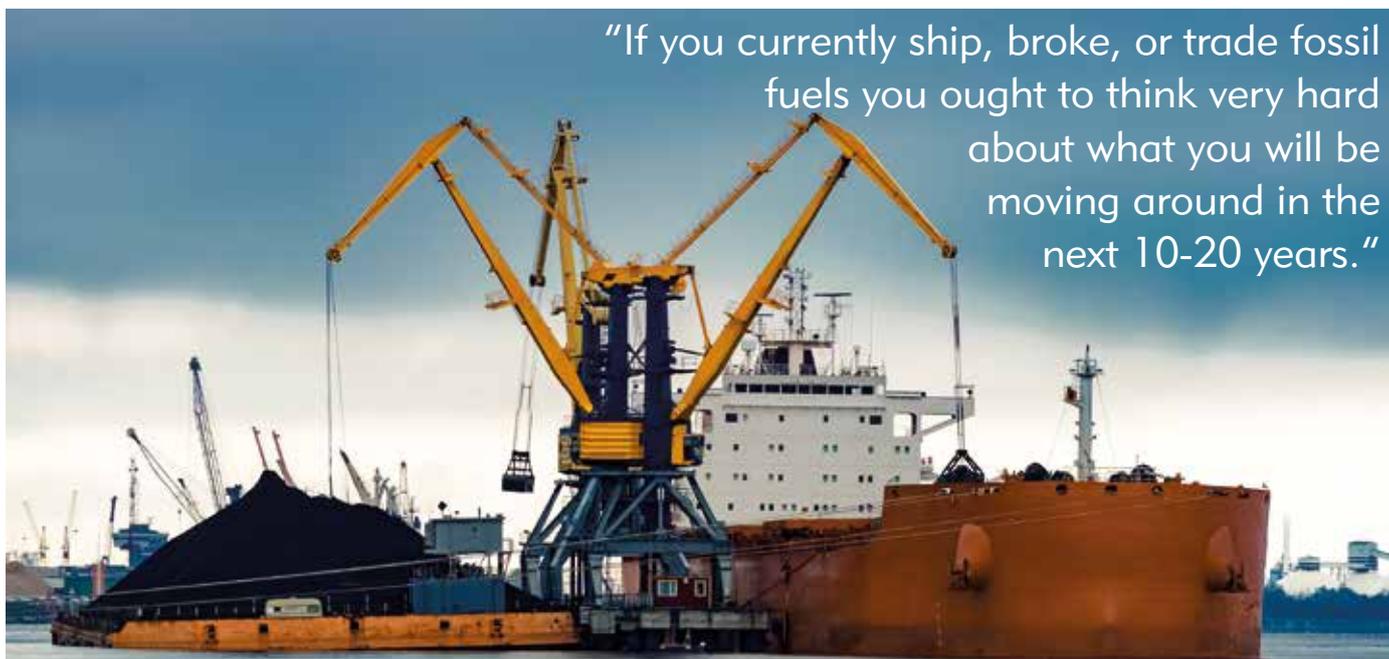
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"If you currently ship, broke, or trade fossil fuels you ought to think very hard about what you will be moving around in the next 10-20 years."



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*Shipping Network* is the official publication of the Institute of Chartered Shipbrokers and is printed by Cambrian Printers, [www.cambrian-printers.co.uk/](http://www.cambrian-printers.co.uk/).

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# Want to cut emissions? Move less cargo

Martin Stopford explains how the answer to reducing carbon output is right under our noses



Martin  
Stopford

The International Maritime Organisation (IMO) has mandated that the shipping industry must reduce total annual greenhouse gas (GHG) emissions by at least 50% by 2050 as compared with 2008.

If as an industry, we just keep growing we could easily be emitting 3bn tonnes of carbon into the atmosphere by 2050. Hence, doing nothing is not an option. And it is unrealistic to wait until 2050 for zero emissions ships to solve the problem. Shipbuilding dynamics mean it will take decades to build a new zero carbon fleet and anyway we do not know how well the new technology will work. We really must think of something radical to do before then if we are to meet the IMO's targets.

**Topic: Cargo**

**Key words: Tonne-miles; Emissions; Mitigation**

**Background info: In the debate on how best to reduce carbon emissions from shipping, one possible strategy is being overlooked**

As an industry, we are already making good progress by slowing down and fine tuning ships. As a result, carbon emissions have not increased much since 2007\*. We are also discussing zero carbon propulsion systems for ships. But there is a third strategy that does not currently feature in our 'route to zero' discussions: moving less cargo. This strategy is not just about ships. It is about ensuring that the world economy takes the steps needed to use sea transport more efficiently. The shipping industry should take the lead, but cargo interests must be partners if the strategy is to succeed. The urgent need for action is clear from the statistics. Sea trade has grown by 27% since the credit crisis in 2008. It was 8bn tonnes then, it's 12bn tonnes now. At this rate it could reach 30bn tonnes by 2050. We must work with the shippers to find ways to moderate this growth without damaging world economic development.

## 'MORE FOR LESS' STRATEGY

This approach to reducing emissions is not really about ship technology and operations. It is about using transport management and logistics to slow trade and minimise emissions. There are lots of ways to do this.

Today, almost 40% of the cargo we carry is fossil fuels. Given the public backlash against fossil fuels today, are we really going to carry twice or even three times as much fossil fuel cargo in 2050? I don't think so. If the world economy cuts back on their use, the fossil fuel trade could, for example, be substantially reduced by 2050. But this might require different ship types. The industry needs to plan for this so that it can manage the investment.



**A strong regulatory framework is needed to support innovation**

We moved 1.5bn tonnes of iron ore last year – that's about 200kg for every man, woman and child in the world. What about more recycling? In primitive societies they recycle every scrap of metal. In the developed world we should learn from this and think about more recycling. And of course, we must cut out trade which is not adding value.

We moved 2bn tonnes of containerised cargo last year – that's a massive amount of cargo. Do we really need all that movement of goods? Could we find ways to produce or manufacture locally? Could direct services bypass land distribution to cut the door to door carbon footprint?

To make this strategy work, decision makers in the transport chain must be informed about their carbon emissions. If we made our charterers aware of how much carbon will be emitted on the voyage when they fix the ship, they could explore new ways of reducing emissions. If every shipowner was able to say 'this shipment is \$14 per tonne and generates 4,500 tonnes of carbon' then perhaps you would start to find shipowners competing not just on freight rates but also on how much carbon their ships generate. It would become part of the cargo contract and that would incentivise everybody on the shipping side to invest in carbon efficient ships. It would also incentivise the cargo owners to choose the ship that offers the best deal both on price and carbon emissions. The same goes for consumers buying containerised products from many parts of the world.

So, while the IMO, through its committees, works tirelessly to refine the future vision, the shipping industry must work tirelessly to move less cargo! If you think this an outrageous proposition, let me put another way. The aim is to work towards a world economy which uses progressively less sea transport (and emissions) per unit of output. That, after all, is the secret of successful economic development – to produce more while using less resources. You know it makes sense.

\* The Third IMO GHG study gave CO<sub>2</sub> emissions as 885m tonnes in 2007 and 796m tonnes in 2012. My estimate for 2018 is 786m tonnes of carbon emissions. [SN](#)

Martin Stopford is an economist, non-executive president of Clarkson Research Services and director of MarEcon, [www.mlecs.com](http://www.mlecs.com).

# Rewriting the maritime rulebook

ABS' [Peter Fitzpatrick](#) asks if stricter environmental rules promote or deter innovation



Peter  
Fitzpatrick

It has become something of a cliché to observe that decarbonisation poses arguably the biggest challenge in shipping's history. It's also true to say that the challenge is probably bigger than the industry has yet understood.

It may further be the case that the industry could collectively achieve the IMO's 2030 carbon intensity reduction targets with a combination operational changes and lower emission fuels, but even this represents a major shift from current practice.

Getting to 2050 will require a completely different approach; there is no straight line to the 50% intensity reduction target and a proportion of the global fleet will need to be carbon neutral by 2030 if we are to achieve full neutrality by 2050.

● Topic: Investment

**I** Key words: 2050; Carbon neutrality; Regulation

**Background info:** The shipping industry needs robust regulation to support a safe and sustainable compliance process for the adoption of new technologies

That suggests that in the long run, the industry will have to be completely reconfigured, because the decarbonisation challenge requires a new approach to trade patterns, vessel designs, fuel supplies, scheduling and operations. It's even possible that some of today's shipping routes will no longer exist as the economic advantage shifts towards other transport modes.

So how do we achieve decarbonisation in a way that creates – as far as possible – a level playing field through regulation, but that also promotes investment in innovation? The answer depends in part on flipping the usual order of adoption – technology first, regulation second – and adding a third element, social pressures manifested through market measures.

This third driver is needed to help asset owners – as well as charterers and other stakeholders – capture the required return on investment. Even so, the scale of the well-to-wake sustainability challenge means that market measures require a regulatory framework to support them.

## TIMING ISSUES

As always, the billion-dollar question is when to make the necessary investments so as to encourage regulatory compliance with commercial upside.

The IMO took an important step in setting 2020 as the sulphur cap deadline, despite pressure to delay, and this is a good indication that the requirements for 2030 and 2050 will not be delayed.

Owners should feel more confident that they can invest in clean fuels and other new technologies, but in reality much depends on IMO's final strategy which will be published in 2023.

One suggestion in the industry at present is around whether there should be a CO<sub>2</sub> levy to raise the investment into R&D for decarbonisation. This is contentious to say the least, since market-based measures in an IMO context have previously run into opposition on a national level.

But it's clear that simply waiting for vendors to come up with products won't solve the problem; what is needed is a framework for sharing investment risk and the outcomes of that R&D.

This is where market measures come in, especially for those owners who take a proactive stance on emissions reduction and decarbonisation. Initiatives like the Poseidon Principles and the Getting to Zero coalition, reflect the fact that new pressures are being brought to bear, ones which the industry cannot ignore.

Owners evaluating when to invest will no longer be left to make the decisions by themselves; an increasing number of owner-charterer-financier partnerships will seek to share the risk and potential upside, moving beyond current commercial structures.

Environmental interest will overcome resistance to change and the countries and companies that lead will also drive others. The alternative; higher port dues or cargo taxes for ships, flags or cargoes that are 'non-performing' in environmental terms could increasingly make trade uncompetitive for those players, in turn encouraging consolidation.

Industry leaders are already taking steps to put themselves in a stronger competitive position by accelerating their decarbonisation efforts and some will move much faster than regulation, driven by their own social charters, internal governance and stakeholder influence.

Ultimately though, without regulation we will not be able to drive change on the scale necessary to meet the decarbonisation challenge. Working together with market measures, regulation will serve as an enabler for technology development and so create the platform for a truly sustainable shipping industry.

ABS believes the industry will need regulation to provide a compliance process that is technically proven, safe and commercially sustainable, one that encourages early adopters of new technologies; without it the regulatory risks will loom over shipowners as they prepare for the next 30 years. [SN](#) *Peter Fitzpatrick is vice president of strategic development at classification society American Bureau of Shipping, [www.eagle.org](#). To help shipowners understand the task ahead and assess their options for a transition to low carbon operations, ABS released its Low Carbon Shipping Outlook which defines technologies, operational efficiencies and alternative fuels and energy sources needed to reach 2030 and 2050 targets.*

# The battle beyond 2020

UCL's [Dr Tristan Smith](#) warns that emission mitigation measures will not stop on January 1, 2020



**Dr Tristan Smith**

The shipping sector is now just weeks from the January 1, 2020 deadline which will restrict the sulphur content of global marine fuels worldwide to 0.50% mass by mass. That January 1 deadline marks a pivotal point for the industry, as it strives to play its part in addressing climate change. But while the 2020 'vision' is now clearing, there are much greater climate-related moves that will play out over the coming decade and that must also be on today's shipping agendas.

Shipping as a sector has proved that it has a basic understanding of climate change, but it hasn't yet turned that into a commercial and in some cases a governmental response. The fact that 60 governments have now set a net zero carbon emission objective by 2050 should be a clear signpost for what is potentially to come for shipping beyond 2020.

● **Topic: Projections**

**I** **Key words: Confirmation bias; Strategy; Climate change**

**Background info: Too much of the shipping industry relies on outdated projections on decarbonisation**

For the first time in its history we have seen public shaming at the United Nations of companies and countries that are not doing enough to address carbon emissions. Shipping cannot hope to escape the spotlight that this casts. Yet, for too many ship operators the commercial focus is wholly centred on meeting the 2020 requirements and nothing beyond.

**“If you currently ship, broke, or trade fossil fuels you ought to think very hard about what you will be moving around in the next 10-20 years.”**



**Reaching a net zero carbon emission objective should be priority no.1**

It is widely understood that there is high level guidance for shipping for the road to zero: the IMO Initial Strategy on reducing greenhouse gas (GHG) emissions. But it is short on specifics, and there is little understanding of what the Strategy means commercially.

The Strategy requires that GHG emissions from international shipping peak as soon as possible and are reduced by at least 50% by 2050, compared to 2008 levels, while pursuing efforts towards phasing them out consistent with the Paris Agreement temperature goals.

Putting this into commercial terms, that 50% reduction by 2050 actually means an 85% carbon intensity reduction on a per ship basis. And because of trade growth ship operators will need to do a great deal more on an individual per ship basis to achieve the absolute reduction goal.

Shipping's challenge is actually a very steep one even if it sounds quite mild at 50%. What it really means is that zero emissions solutions will need to enter into the fleet from about 2030. That's in ten years' time. Therefore, ships that are being built today will be competing against fundamentally different fuels and technologies within the first third of their economic life.

## CONFUSED SOURCES

One of the things that characterises the current sector landscape is cognitive dissonance, with many stakeholders (including governments) recognising at high level that something is/will be changing driven by avoidance of dangerous climate change, but not bringing this into the decisions they make today to align themselves to that future. One of the reasons for this dissonance is that there is a lot of confirmation bias going on in sector-specific publications. For example, many oil majors produce widely read energy scenario reports on an annual basis. Even in the most recent reports, they anticipate significant oil and gas use continuing and in many instances growing over the next three decades, with an aim of getting to zero by the end of the century. This is a narrative that belongs to the old '2°C world' and the government phrasing around that scenario. But this is old science. The latest Intergovernmental Panel on Climate Change report found that the world will face severe climate impacts even with 1.5°C of warming, and the effects get significantly worse with 2°C.

Unfortunately, many of the advisors in the commercial space parrot the outdated ideas of these oil majors. The justification that is often given for the fact these scenarios implicate high temperature futures is that these are scenarios built on "current policy", which may be true at detailed sector levels, but this is a poor excuse when unambiguous high-level commitments like the Paris Agreement and overall economy-wide targets exist. More often than not, industry developed thought leadership on decarbonisation doesn't come with any of the health warnings that the future projection is fundamentally opposed to certainly those 60 governments committed to net zero and probably the general trend and rate of change that is happening in the sector

Peak coal, if it hasn't already occurred, is imminent



today. If you are just skimming headlines and sector-specific literature to get a handle on these topics you'll likely be getting completely the wrong information about how fast things are changing.

### CHANGES IN DEMAND

In our forecasting we see coal rapidly seeping out of every economy, largely as a result of the wider political landscape. Peak coal if it hasn't already occurred as some suggest, is certainly imminent. Peak oil and peak gas are not far behind. If you currently ship, broke, or trade fossil fuels you ought to think very hard about what you will be moving around in the next 10-20 years.

Already in 2019 we have seen prices for some major future energy commodities, even without policy intervention, become closer to fossil fuels. If you put on top of that the government commitments made, we have a commercial situation where we can expect a lot of disruption imminently.

Environmentally focused changes are already causing disruption. For one example, look to the Poseidon Principles. These establish a framework for assessing and disclosing the climate alignment of ship finance portfolios. They set a benchmark for what it means to be a responsible bank in the maritime sector and provide actionable guidance on how to achieve this.

Some banks are already starting to use these as a motivator in financing conversations, even though its teeth have not really bitten yet and it has a long way to go to cause fundamental change. I expect chartering to go the same direction from next year. Just as financiers have said that they want to have a stake in the risk management of decarbonisation, the charterers are likely to do the same as they carry a lot of risks if the fleet is not ready in time.

### FINDING OPPORTUNITIES

There is without doubt much to think about if you are operating in the shipping world today and plan to continue to tomorrow. But while there are many

risks, there are also opportunities. For example, there are opportunities to be a charterer making significant savings to your competitors, or to be a shipowner getting higher rates or better utilisation than your competitors if your timing on certain fuel choices over coming years is good. And for anyone involved in the production, movement or retail of fuels for shipping, there's a forthcoming multi-trillion dollar market for future fuels.

To capitalise on the opportunities, shipping leaders need to break the challenge down into two different types of risks. One is technology: ask yourself, what do you need to specify for your assets; what will be your port and bunkering solution; what does your fleet and management team need to be thinking about from a technology perspective; and how will you manage this transition away from fossil fuels.

The second is policy. There are high level signals coming out of the IMO in its Initial Strategy and we know that there are ongoing discussions about methane slip, short term measures such as speed limits or goal-based standards, and mid- to long-term measures that incentivise reductions in carbon emissions. Ask yourself, how you imagine some of those policies and anticipate their likely impact on your business, rather than just waiting for them to enter into force. If you have any assets that you expect to be owning for a 10 or even a five-year lifespan you need to be thinking ahead.

What this means is that you need to find good data and information and independent sources – not just information from the oil majors. My personal advice is that you think in scenarios, which can help to then evaluate how different options or decisions perform in those scenarios and how best to manage foreseeable risks and opportunities. **SN**

*Dr Tristan Smith is a reader in energy and shipping at the Bartlett School of Environment, Energy & Resources at University College London's Energy Institute.*

**“Ships that are being built today will be competing against fundamentally different fuels and technologies within the first third of their economic life”**

# Nuclear a viable part of the future fuel mix

Could fusion energy be powering shipping by 2040? [Felicity Landon](#) finds out



Felicity Landon

Two words come to many people's minds at the mere mention of nuclear power – Chernobyl and Fukushima. But nuclear energy has come a long way since those horrific disasters and may even have a part to play in fuelling future shipping.

The nuclear energy buzzword of today is fusion, a proposed form of power generation that would generate electricity by using heat from nuclear fusion reactions.

**Topic: Fuel**

**Key words: Nuclear; Reaction; Propulsion**

**Background info: While a fusion-powered fleet is a long way off, it's an energy source that has great potential**

Russia has been using nuclear-powered icebreakers for years, and some of these vessels become passenger ships in the summer, cruising to the Arctic Circle. This year Russia's state nuclear agency launched the Ural, one of three new nuclear-powered icebreakers, the largest ever constructed.

Nuclear power offers a zero-emission solution, not emitting any SO<sub>x</sub>, NO<sub>x</sub>, CO<sub>2</sub> or particulates. However, the accepted nuclear technology in shipping has, to date, been fission. Fusion energy is a tougher technology to crack.

## ADDRESSING FUSION

At Saint Paul-lez-Durance in southern France, 35 nations are collaborating to build ITER, the world's largest tokamak, an experimental magnetic fusion device designed to prove the feasibility of fusion as a large-scale and carbon-free source of energy based on the same principle that powers the sun and stars. The prize – a source of safe, non-carbon emitting and virtually limitless energy – would certainly seem worth having.

ITER ('the way' in Latin) is said to be one of the most ambitious energy projects in the world. The idea for the international joint experiment in fusion was first launched in 1985 – since then, this experimental campaign has involved thousands of engineers and scientists. Components have been manufactured at factories across three continents, and major assembly is due to start next year.

"Fusion energy has the potential to completely disrupt power generation everywhere, not just for maritime," says Roger Adamson, chief executive of research and consultancy operation Futureautics. "If it does come to fruition, it will be very disruptive and very difficult to model. Like a lot of exponential technologies, probably it will seem as if nothing is happening for a long time. Then suddenly, before we know it, there will be the breakthrough and it will be everywhere. But from what I am picking up, there is a little way to go before that stage."

Futureautics has certainly looked into fusion when looking at fuels of the future, says Mr Adamson. He highlights Lockheed Martin's Skunk Works, which is moving ahead with its ambitious Compact Fusion Reactor (CFR) programme. The company says it is confident that the project can produce practical results which would transform how power is generated for both military and civilian purposes.

"In terms of CFR, we are probably looking at the mid 2020s before they will have anything that will be commercialised," he says. "They are saying that they can do it, and it will be very compact, but then they would need to scale up CFR so it could run a city or town. In the maritime context, you need a reasonable amount of power but you don't need the type of power to run a small city. So it might be that such a solution would sit comfortably on a deepsea commercial vessel where you are only looking at powering something the size of a street."



Credit: Lockheed Martin

**Lockheed Martin is pioneering a compact fusion reactor that could have applicability for shipping.**

The UK government has been talking about plans to upgrade a fusion research centre in Oxfordshire in order to create a commercially viable nuclear fusion reactor by 2040, to meet its commitment for Britain to be carbon neutral by the middle of the century.

And it seems that one by-product of the global anxiety over emissions is a growing public acceptance of nuclear as part of a green power mix.

In shipping, nuclear-powered ships are not new. As Vince Jenkins, Lloyd's Register global head of technology points out, the first nuclear powered ship was launched by the US Navy in 1955. Since then, numerous military and some civilian merchant vessels have used nuclear power.

One way or the other, it's going to be complex, he says. But the reward would be something "you literally switch on and it produces just the quantity of power you need in a very stable environment".

"When you talk about nuclear, everyone thinks about Chernobyl and Fukushima and everyone throws up their hands in horror – but fusion is completely different to fission. An explosion would not have the same consequences. It isn't like we haven't done nuclear on ships before, and fusion reactors should be a lot safer than that."

The key questions, he says, are how complex is it, how stable is it, how much maintenance does it need, and what about cost? And in particular – can you modularise it, so that if it needs to be maintained the relevant units can be removed and replaced on board? He believes that vessels need to be built with more standardised, modularised designs which could be better suited for this type of operation.

"If you solve fusion, then it is a technology that will get rapidly adopted because it is clean and, if it is compact, it should be more cost-effective."

## FAR HORIZON

What about by 2040? That, he says, depends. "If by 2025 we see viable compact reactor operations and they are stable, then yes, we will probably start to see the emergence of fusion energy in the maritime environment. Will it be on every vessel? No, certainly not."

A key point, he says, is what would be the reason for adopting CFR and why would it be useful for maritime. "We have to look at the changing market dynamics – regionalisation, decarbonisation, the great move to environmental sustainability and the rise of the circular economy, and at the maritime industry level, the push for autonomous ships. Some of these bigger trends are aligning and making CFR more relevant for shipping."

Vince Jenkins agrees that public opinion is changing when it comes to nuclear power. For example: "A major shipping operator recently said he was a bit of a cynic about nuclear power, but said that with former anti-nuclear non-governmental organisations all of a sudden starting to say nuclear is part of the renewable technology useful in combatting GHG, you have to start looking at it seriously – because opinions are changing."

**"Fusion energy has the potential to completely disrupt power generation everywhere, not just for maritime,"**  
*Roger Adamson, Futureonautics*

"People are beginning to see facts rather than myths," he continued. "Lloyd's Register isn't about promoting one technology over another – we are supporting clients with the technical aspects. But while [traditional] fuel is relatively cheap, you will not get development of these other technologies."

Some kind of financial incentive or taxation helps to drive such technologies forward, he says. "For example, the nuclear industry has always recognised that the waste from nuclear operations has to be dealt with. But the waste from fossil fuel just pours into the atmosphere. It is going to be expensive to drive that [nuclear] development, and you need to create some parity."

Additionally, he says, the traditional focus on capital expenditure and operational expenditure as two distinct and separate items would need to shift. The costs for a nuclear-powered ship would be far higher upfront, with fuel costs far cheaper. "So the maritime industry would have to move from pure capex/opex to look at total lifecycle costs, right the way through to decommissioning. That is a big change."

And then, of course, there is regulation. Legislation to support nuclear powered ships in global trade (as opposed to those staying within territorial or national waters) is far from comprehensive. Mutual acceptance across nations for regulatory implementation would be needed for the adoption of nuclear-powered ships to increase, says Mr Jenkins.

Futureonautics' Mr Adamson says that in his earlier research he put fusion energy down as a 'black swan' – "and I think it still is", he says. "It is absolutely fascinating to look at and it will be very exciting if they can manage to do it. It really is worth keeping an eye on this. It isn't moving particularly quickly at the moment – but if they can crack it, it will be a game changer. Whether that is powering electrical vehicles, aircraft or ships, it will become ubiquitous."

## 'Conquering one of the greatest frontiers'

The ITER project is a collaboration of 35 nations. Its members – China, the EU, India, Japan, Korea, Russia and the US – have combined resources "to conquer one of the greatest frontiers in science", reproducing on Earth the boundless energy that fuels the sun and the stars.

The ITER Tokamak has been designed to harness the energy of fusion to produce 500 MW of fusion power; to demonstrate the integrated operation of technologies for a fusion power plant; to achieve a deuterium-tritium plasma in which the reaction is sustained through internal heating; to test tritium breeding (the world supply of tritium, used with deuterium to fuel the fusion reaction, is not sufficient to cover the needs of future power plants); and to demonstrate the safety characteristics of a fusion device.

The energy produced inside a tokamak through the fusion of atoms is absorbed as heat in the walls of the vessel.

As with a conventional power plant, a fusion power plant will use this heat to produce steam and then electricity via turbines and generators. [SN](#)



The ITER project is a collaboration of 35 nations

Credit: ITER

# Discovering the road to low carbon shipping

The Ship Hybridisation project is taking hydrogen to the masses, explains Oostende's [Wim Stubbe](#)



Wim Stubbe

The IMO has stipulated an overall target to reduce the CO<sub>2</sub> emissions within the shipping world by 2030. Unfortunately, though, there are hardly any reliable low carbon technologies available that would allow the shipping sector to reach what are very ambitious targets. There is an added problem that knowledge of the effectiveness of alternative propulsion systems is low.

**Topic: Fuel**

**Key words: Hybridisation; Project; Europe**

**Background info: The ISHY project is piloting exciting new fuel sources for shipping**

Moreover, vessels have a long operational lifetime and the option of retrofitting is not often attractive. Further, the regulations and certification about the installation and the use of alternative fuel systems are far from functional and fuelling infrastructures in ports are hardly developed. Finally, the traditional oil companies are trying to oppose any change that might threaten their profit margins, allowing them to effectively finance the pollution of the planet.

Considering all these elements, 15 industrial, academic and public organisations from the UK, France, Netherlands and Flanders – the Flemish Region of Belgium – have put their

## Southampton meeting cements competencies

Partners and collaborators working on the ISHY project met at Solent University, UK, in September to update, discuss and share progress so far.

During the two-day event, guests were shown around Solent University's towing tank, advanced composites labs and new maritime simulation centre – all of which will play a key role in the project's success.

Dr Laurie Wright, sustainability expert and Solent lead for the project, said: "ISHY is an ambitious and exciting initiative that aims to demonstrate the viability and potential of hydrogen and hybrid systems to reduce greenhouse gas emissions from the maritime sector. Solent is proud to support the project and our partners with our world-leading maritime facilities and expertise in sustainability in maritime."

Oostende's Mr Stubbe added: "It's vital for the success of the project to regularly bring all of the partners together. This second meeting is the first time that the industry partners and the knowledge partners, like Solent University, can start to discuss and exchange the different technologies and related costs needed to install and develop hydrogen and hybrid shipping solutions."

The cross-borders collaboration will help the industry to lower carbon emissions.



ISHY partners got a bridge-side view of Solent University's new maritime simulation centre

Credit: Solent University

competences and their money together in order to create the ISHY project. ISHY stands for the Implementation of Ship Hybridisation and has been approved within the framework of the European Union's part-funded Interreg 2 seas program. The project has been introduced by the Port of Oostende, a hub for maritime innovation, and will run until 2022. The 15 partners are focusing on the realisation of different pilot projects, related to inland and coastal shipping, utilising different green technologies, with a strong focus on the introduction of green hydrogen into shipping.

The following pilot projects are being pursued:

- The construction or the retrofit of a Crew Transfer Vessel for offshore wind parks with hydrogen propulsion
- Retrofitting of a 4,400 dwt inland barge with a hydrogen-based propulsion system
- The construction of a new, 300 pax passenger vessel with a hydrogen propulsion system, to be used in natural sensitive areas
- The installation of a hybrid configuration in an inspection vessel
- The development of appropriate hydrogen bunker facilities within ports, considering the procedures for bunkering.

The introduction of hydrogen to the maritime world puts everyone on a steep learning curve and demands flexible thinking in order to provide cost effective and ecological results. Within the framework of this project, it is the aim to share the results of these pilots with shipowners, and other maritime actors. The biggest challenge of the project is to influence a traditional mindset, endemic in the shipping sector. But the presence of 43 observers shows that there is a clear interest in the project and thanks to the growth of renewable energy production, green hydrogen's availability will improve and it will become cheaper over time as its production and its offering grows. [SN](#)

Wim Stubbe is business development manager at the Port of Oostende, ISHY's lead partner. More information about this project can be received at: [wim.stubbe@portofoostende.be](mailto:wim.stubbe@portofoostende.be)

# Sailing into unchartered waters

There are still many marine fuel unknowns as 2020 looms ever closer. Drewry's [Simon Heaney](#) reports



Simon Heaney

IMO 2020 is already changing the landscape of the container market and could have a drastic effect on supply next year if things go wrong for carriers.

As the deadline for the new IMO 2020 low-sulphur fuel mandate draws nearer carriers are inevitably getting jittery about its overall impact. Are they in a position to deal with myriad of extra associated costs such as unrecoverable Bunker Adjustment Factors (BAFs), capital expenditure costs to install scrubbers and extra funding requirement for bunker credit, among others?

## Topic: Fuel

**I** Key words: Sulphur; IMO; Prices

**I** Background info: Drewry anticipates that the industry will have to cope with a \$11bn increase in fuel costs in 2020

The sense of unease has not been helped by the fact that no one really knows how much bigger the fuel bill will be. We now have a slightly better idea as since the summer some actual bunkering transactions in Asian ports have taken place, indicating a LSFO premium of approximately 30%, although because demand will intensify in November and December the early prices might not be a very reliable guide.

IMO 2020 has already exerted some influence on the container market's supply-demand balance this year by virtue of ships being withdrawn from active service to undergo exhaust scrubber retrofits. A side effect of the temporary removal of ships has been a spike in charter rates, which in turn has restricted demolition activity as owners saw an opportunity to squeeze more value out of aging units.

Drewry is currently forecasting that the new regulation will increase the industry's fuel bill in 2020 by approximately \$11bn, which is lower than previous estimates given the way the bunker market has developed. Therefore, to avoid heavy losses carriers simply must recover a higher percentage of the fuel cost than in the past (typically 50%). Our freight rate and profit forecasts assume lines will raise the level of fuel cost compensation, but if they don't they may be forced to take extreme action on the supply side. If carriers recover only 65% of the additional fuel bill (instead of 75% as we expected), then their profits will be hit by another \$1.1bn of net additional fuel costs.

**“The worst case scenario, when most shipping lines lose stacks of money and some potentially face bankruptcy, would actually be a far quicker route to rebalancing the market than the current plodding track”**

## REVIVING OLD STRATEGIES

Under this scenario it won't take long for carriers to dust off the decade-old playbook that was used to see them through the global financial crash. There will be much less focus by carriers on service quality and more on cost cutting. To protect cash flows carriers will consider a number of measures, including further slow steaming, more blank sailings, off-hiring of chartered vessels and possible inclusion of feeder calls into mothership service itineraries to save money on feeder costs.

Failure to recover more of the fuel cost is also likely to push more carriers/owners to either have more ships fitted with exhaust scrubbers to be able to continue running on the cheaper high-sulphur oil, and/or to ramp up demolitions.

If events follow this path the supply-demand balance will look very different from our current forecast. The worst case scenario, when most shipping lines lose stacks of money and some potentially face bankruptcy, would actually be a far quicker route to rebalancing the market than the current plodding track. It would take a very brave carrier to want such a turn of events, but for those that could be sure of coming through the other side, after some initial pain the rewards would be far greater.

We believe that the chances are that low sulphur bunker prices will, after increasing in 2020, fall in 2021 and 2022, as the initial price premium decreases.

But there will be several major indirect repercussions from the switch to low-sulphur fuel regulations, namely:

- Shippers will pay a lot more attention and scrutiny to the Bunker Adjustment Factors than in the past.
- Smaller ships – which tend not to be equipped with scrubbers or with efficient engines – will be shunned by carriers even more than in the past.
- Some aggregate ship capacity will be cut (scrapped) and shipowners will incur capital losses on some of their now-obsolete vessels, built at a time when pollution regulations were lenient.
- Paradoxically, shipping lines with a high use of scrubbers (avoiding the extra cost of low-sulphur fuel) will be able to continue to buy a lot of high-sulphur fuel and will become more cost competitive and better insulated from low-sulphur price volatility than other shipping lines.

To assist shippers, forwarders and carriers who need to revise their bunker charges before and after the switch to low-sulphur fuel, Drewry started a publicly-available Low-sulphur Bunker Price Tracker, which will be updated every quarter and also in December, when many contracts will require data on the new fuel cost. [SN](#)

Simon Heaney is senior manager of container research at consultant Drewry, [www.drewry.co.uk](http://www.drewry.co.uk).

# Collective action needed to fulfil carbon ambitions

IMO must work in partnership with industry to reach greenhouse gas reduction goals, finds [Carly Fields](#)



Carly Fields

“Hugely ambitious” – that’s how many in the industry see the International Maritime Organisation’s (IMO) plans for carbon emission reduction from shipping. Even the United Nations’ body itself recognises the great challenge that it faces in addressing climate change through mitigation strategies.

IMO secretary general Kitack Lim went so far as to describe this as “probably one of the biggest and most significant periods in IMO’s history”, when he addressed London International Shipping Week (LISW) in September.

The IMO has made a major policy commitment for the reduction of greenhouse gas (GHG) emissions from ships that includes at least a 50% cut in emissions from the sector by 2050, compared with 2008.

**Topic: Regulator**  
**Key words: Oversight; Ambition; Targets**  
**Background info: Ambition is driving the IMO to greater heights on carbon reduction strategies**

“This is a really ambitious and really crucial vision to achieve in the future,” said Mr Lim, adding that the IMO’s GHG strategy has sent “a clear strategy to innovators”. However he conceded that the many actions taking place need to be accelerated if goals are to be achieved. “I urge all stakeholders, member States and industry to continue to work together towards decarbonisation of international shipping,” he said. There is, he continued “still room for conversations and for mutual understanding. We need more time to reduce the gap between IMO and the private sector.”

## BETTER TOGETHER

It’s this last aspect on the need for better communications and co-operation that has already proved to be a sticking point.

Speaking at a LISW event, Bob Sanguinetti, UK Chamber of Shipping chief executive, was confident that the improvements needed for the 2030 targets can be achieved through existing technology and optimising the way shipping does business. But it’s the more ambitious 2050 target that needs to see the industry working together.

“The technology is not there at the moment,” he said. “The real challenge is bringing together the R&D community, business, academics, innovators, industry, investors and government. It’s no mean achievement but it’s what is needed: collaboration and partnerships in a way that we have not seen before.”

Isabelle Rojon, a principal consultant at University Maritime Advisory Services (UMAS) focusing on the decarbonisation of shipping, called for urgent policy measures that maximise the operational efficiency of all ships. This, she said, can immediately kickstart emissions reduction and lower operating costs.

“We need policies that support and stimulate research development and deployment of these fuels, making a business case for them. This could be a carbon price whose revenues are then recycled back into the system.”

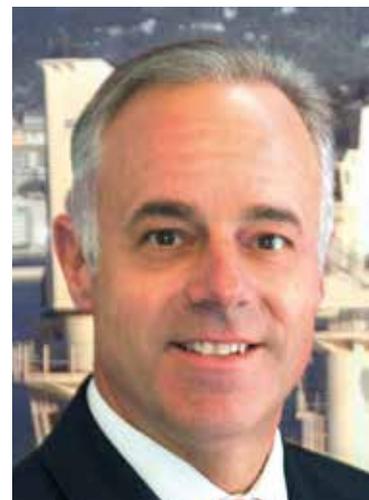
Ms Rojon also noted that the IMO needs to deliver a clear commitment on the timetable of shipping’s transition to zero carbon fuels so that all stakeholders know what they are working towards. “We need a systemic shift and for that to happen stakeholders across a wider maritime and energy system will need to join forces.” This is already starting to happen with a handful of industry leaders taking up the challenge while the IMO figures out its next move, but more of the private sector needs to take up the decarbonisation mantle.

## FAN CLUB

While the IMO may not be as fast moving as all desire, it still has its supporters. Lloyd’s Register chief executive Alastair Marsh, also speaking at LISW, described the UN organisation as “a big plus for the industry”. However, other factors at play deter acceptance of emissions mitigation moves. “Everyone has known about the 2020 date [sulphur limit on marine fuels] for years but it has run into inertia because there is an inevitable reluctance to incur the cost of investment [of abatement technologies] until everyone else is doing it,” he said. “Then by the time you are ready to incur that cost everyone else is doing it as well, so you run into capacity problems and resistance and you see variable interpretations among States.”



Kitack Lim



Bob Sanguinetti

The misalignment between technology and regulations is a further stumbling block, despite Mr Lim's claim of the IMO's GHG strategy sending a clear message to innovators.

American Bureau of Shipping chairman, president and chief executive Chris Wiernicki urged the IMO to get behind the technology: "They have to align the regulations to where the technology is going; regulations have to account for the change in technology. The message to regulators is that they play a very big role. They have to make sure that they are sensitive and tuned in."

Whatever the IMO's next move, the industry cannot afford to be complacent. Society's demand for strong action on climate change is becoming louder, packed with more urgency and truly going mainstream. "If we want to steer clear of consequences the next ten years are critical," said UMAS' Ms Rojon. "By 2030, global greenhouse emissions

need to reduce by 45% and to zero by 2050 at the latest. In order to reach the IMO's minimum target, shipping will need to transition to zero carbon fuels." If a ship has a lifetime of 20-30 years, this means that the first zero emission ships will need to be in the water by 2030 at the latest.

While this might be unsettling to some, futurist and humanist Gerd Leonhard urged the shipping sector to ultimately see decarbonisation as an opportunity: "A new economic logic based on sustainable capitalism is emerging – it is no longer the no.1 purpose of companies to make money. If you are smart you will decarbonise now." Expect to see emerging measures to adapt to climate change within five years, he added, such as the prohibition of cruise ships and the closing of cities to cars. First movers who successfully preempt the IMO's next carbon mitigation move will ultimately win in the war on GHG emissions. [SN](#)

## Future fuel debate still burning

Biofuels, electrofuels, or something that hasn't yet been thought of – shipping's future fuel of choice is still undecided.

With proponents and detractors for each future fuel suggestion, it's difficult to see a clear path forward.

Speaking at a LISW event, Professor Paul Ekins, professor of resources and environmental policy and director of the Institute for Sustainable Resources at University College London, talked down the potential for hydrogen use, saying that there would need to be "colossal innovation" for it to be a viable replacement fuel.

And while the sector may not yet be clear on the perfect fuel solution, he advised that the best emission is the non emission. "Net zero is the name of the game and if you invest in something now that will not be net zero by 2050 don't expect to make a profit and you shouldn't expect to get bailed out." That said, he conceded that there will likely be 'good faith' stranded assets, where ship operators made the best choice available to them at the time, but which later proved to be the wrong one. There will need to be compensation scheme for those assets, he said.

UMAS's Isabelle Rojon sees biofuels – such as ethanol and biodiesel – playing a minor part in shipping's zero carbon trajectory. "We think a likely solution is ammonia or

hydrogen used together with internal combustion machinery which would only require a slightly tweaked version of current engines. Some could even retrofitted." However, she noted that the industry needs to be sure that it doesn't just move the problem upstream – fuels will need to be produced from zero carbon renewable energy and sustainable sources.

Ms Rojon calculated that international shipping will need approximately 20-40 exajoules of electricity a year which is significantly less than the renewable energy production potential of, for example, Africa or South America. "It shows that countries with vast renewable energy potential could sell excess energy in the form of exajoules to the shipping sector," she said.

However, there is a catch. For the foreseeable future these fuels will be more expensive than fossil fuels and how much more expensive will be very dependent on production costs. For example, one study predicted that renewable hydrogen costs could plummet by up to 80% over the next decade, falling to as low as \$1.40 a kg in 2040 and to 80 cents by 2050. "But we cannot rely on the invisible hand of the market alone to close this price gap and drive the transition," Ms Rojon said. "Instead we need policy and co-ordinated action." [SN](#)



Gerd Leonhard



Alastair Marsh

# Mixed feeling on ammonia acceptance

Move over LNG, could ammonia be the latest fuel to ignite shipping propulsion, asks [Kate Jones](#)



Kate Jones

**A**mmonia: it's a colourless gas, commonly found in nature and produced by the human body. It's also something making big waves in the shipping industry as a seeming new energy source for ships. Classification society DNV GL even recently touted it as the "most promising fuel" for shipping to have a chance of realising emissions-reduction objectives in its Maritime Forecast to 2050 report.

**Topic: Fuel**

**Key words: Liquefied; Energy; Emissions**

**Background info: Another gas is threatening to knock the popularity of LNG as a potential marine fuel**

DNV GL notes that shipping's decarbonisation will need carbon-neutral fuels to replace fossil fuels. Ammonia fits the bill if it's produced in a green way. It has no carbon, it has a carbon-free process when it is synthesised from renewable sources of power and, as with hydrogen, it is capable of being generated from fossil fuels using green methods like carbon capture and storage (CCS) or renewable energy – both of which might influence its cost competitiveness.

The class society claims that a number of studies have pointed to ammonia as a possible shipping fuel and that the compound is the most promising carbon-neutral fuel option for newbuildings.

Despite fuelling internal combustion engines ashore for three quarters of a century, ammonia – when it comes to marine propulsion – is in the early stages of development. No ships presently use it, but ammonia-fuelled engines are being developed, and it is being looked at for use in fuel cells.

The Lord Adair Turner of Ecchinswell, chair of the Energy Transitions Commission (a group convened to help identify pathways for energy system change), told an audience at London International Shipping Week 2019 (LISW) that his organisation feels that ammonia engines are "a real possibility fairly soon". At the same event, Baroness Bryony Worthington, executive director for Europe at the Environmental Defense Fund (EDF), said that the International Maritime Organization's January 1, 2020 limit for sulphur in fuel oil used on ships running outside

designated emission control areas, of 0.5% mass by mass, means that people are becoming familiar with using ammonia on vessels.

"Ammonia is and has been a fuel that can be dropped in place into existing engines," she commented.

According to a report from the Baroness' organisation and engineering, environmental and strategic consultancy Ricardo, green ammonia is a technically-feasible solution for decarbonising international shipping: "Demand from shipping could unlock investment in the green ammonia supply chain, including low-carbon industry and renewable electricity," it claims. "This represents a unique opportunity for sustainable economic development and distribution of bunkering infrastructure around the world, especially for developing economies rich in renewable energy potential."

## FAR FROM SMOOTH SAILING

American Bureau of Shipping (ABS) says that if sufficient amounts of ammonia can be created using carbon-neutral technology, the compound possesses substantial potential to be a pathway towards achieving the IMO's greenhouse gas-reduction (GHG) goals for 2050.

However, the society explains that as a fuel, ammonia is not currently economically feasible for shipping. Large scale production is necessary, but it is hard and expensive to generate industrial-scale quantities of ammonia. The infrastructure, ABS says, exists for the fertilisation industry, but not marine.

There is also a price point and premium to consider. Energy Transitions Commission's Lord Turner predicts that ammonia engines will be pricier: "I think in shipping, we do have the problem that the zero-carbon solutions, as best we can tell, will be more expensive," he says. "Now, we should try and do the technological development to drive that down, but even if we put in very low prices for electricity ... to produce ammonia we still end up with ammonia fuel being more expensive than heavy fuel oil."

Ammonia has other issues too. Like with other alternative fuel technologies, the production and processing techniques for its use as fuel are not refined and are pricier than for heavy fuel oil. Also onboard equipment changes would need to happen in order for shipowners to be able to use it for propulsion of vessels. Furthermore, the fuel generates nitrogen, nitrogen oxides (NOx), unburned ammonia and water when used for internal combustion engines, and while its combustion might be free of carbon, managing the compound's by-products will constitute a significant environmental challenge. Selective catalytic reduction (SCR) systems or equivalent measures would be required to manage the NOx output from internal combustion engines running within the diesel cycle.

**"Demand from shipping could unlock investment in the green ammonia supply chain, including low-carbon industry and renewable electricity"**



Credit: C-Job Naval Architects

A project is underway to assess the technical feasibility and cost effectiveness of an ammonia tanker fuelled by its own cargo

Ammonia also vaporises quickly, with the vapour being flammable when the percentage in air is between 15% and 33.6%. Ammonia gas’ autoignition temperature of 630°C needs electrical equipment to be given a surface temperature rating of T1, and because of heat leakage through the insulation into the tanks, ammonia continuously evaporates and creates boil-off gas, which raises pressure if not maintained. Additionally, ammonia is capable of causing cracking in containment and fuel supply systems made of carbon manganese steel or nickel steel, and specialised sealants may therefore be needed.

**LOW MATURITY**

DNV GL says in another report, *Comparison of Alternative Marine Fuels*, states that current maturity is low and green ammonia is expensive, limiting the feasibility for use as an alternative fuel. Moreover, the lack of a bunkering infrastructure represents a barrier for use of ammonia as an alternative marine fuel and is likely to remain a barrier for some time while the market matures.

Costs for safety systems and mitigating measures, when considering the toxicity of ammonia, will also need to be considered. Although speaking at DNV GL’s Alternative Fuels Online Conference in September, Sebastiaan Bleuanus, general manager for research co-ordination and funding at Wärtsilä, noted that it is probably feasible to store ammonia in an LNG tank.

Turning back to DNV GL’s *Maritime Forecast to 2050* report, the class society offers an illustration of a “bridging philosophy” making alternative fuel use, including ammonia use, possible. This framework could ease the move from traditional and lower-carbon fuels to carbon-neutral alternatives within a vessel’s life, with limited investments and modifications along the way. The three pillars of the philosophy consist of fuel-flexible energy converters; fuel-flexible storage tanks and onboard systems; and fuel-flexible shoreside fuel infrastructure. Furthermore, having explained that facilitating a gradual phase-in of carbon-neutral fuels constitutes a potential means of speeding up their introduction, DNV GL claims that a liquefied petroleum gas-powered vessel could

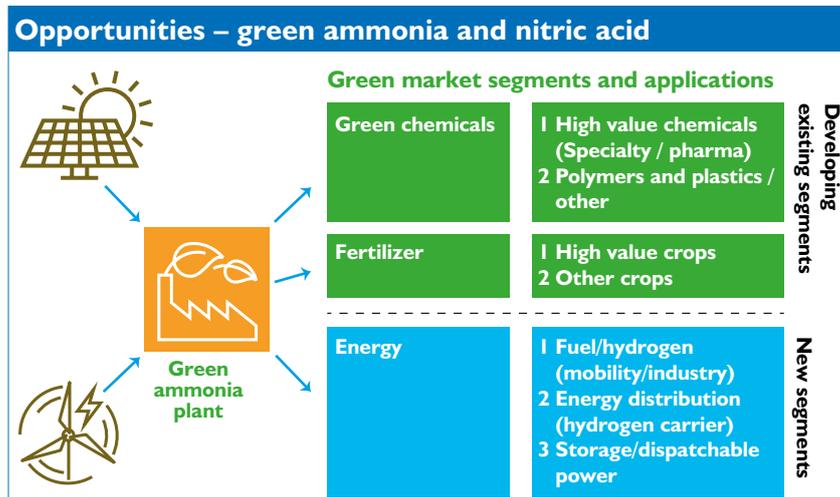
completely move to an alternative zero-carbon fuel like ammonia. However, this would need modification and/or rebuilding of storage arrangements, engines and fuel lines.

After discussing the pricier cost of ammonia engines at the LISW event, Lord Turner said that international policy co-ordination was needed to achieve a zero-carbon shipping scenario. He had previously called for co-ordination from ports to be providers of the fuel, giving ammonia as an example.

“In shipping ... this will only occur if there is some category of co-ordinated action – either a high carbon price or a fuel duty mandate, or regulations on ships,” he said, adding that fundamentally, there was a global co-ordination issue.

EDF says that the pathway to green ammonia’s deployment can start using diesel or dual-fuel engines in new and existing ships, technologies familiar to maritime.

“To make a success of this pathway, certainty for the marine industry in building and retrofitting such vessels – and certainty for a green ammonia supply industry to manufacture at scale – needs to be provided by strategic and policy measures adopted by the International Maritime Organization,” it claims. “This would allow green ammonia and vessels that can accommodate it to be introduced within the timescales required to achieve the International Maritime Organization’s decarbonisation targets, together with other zero and low-carbon alternatives.” [SN](#)



Credit: Yara

# Vulnerability of shipping and ports

Carly Fields hears why the sector needs to rethink its resilience to climate change



Carly Fields

When scientists and meteorological data experts speak of the “irrefutable” effects of climate change and the “vulnerability” of port infrastructure, shipping ought to sit up and pay attention.

The Met Office – the UK’s national weather service – spoke of both in a recent discussion about how climate change will cause sea levels to rise dramatically throughout the 21st century, regardless of mitigation efforts, and why adaptation strategies for offshore, maritime transport and port industries will be crucial in limiting the impacts of the changing climate on the global economy.

**Topic: Resilience**

**Keywords: Assets; Infrastructure; Flooding**

**Background info: Even the least severe sea rise predictions will see levels increase by about 70 cms in London by 2100**

In its *UKCP18 Science Overview Report* publication, the Met Office forecasts that if nothing is done to counter rising global temperatures (the so-called RCP8.5 scenario), sea level rise in Cardiff, Wales will be between 51 cms and 1.13 metres by 2100. In London, the forecast rise will be between 51 cm and 1.15 metres.

Speaking to *Shipping Network*, Albert Klein Tank, director of the Met Office Hadley Centre, explains that while that is very much at the “extreme end” of its projections, “it serves to show that within that timeframe we could see very significant levels of sea rise which would pose a fundamental threat to many sectors including ports and shipping without planning”.

Even under the RCP2.6 scenario – one that represents a future in which the world aims for and is able to implement sizeable reductions in emissions of greenhouse gases – sea level rise by 2100 for both those capital cities could be as much as 70 cms.

“Even if we are successful in achieving the Paris Agreement targets of limiting global temperature rise to 1.5 or 2 degrees maximum we will still see London sea level rises of about 70 cm to the end of the century, which we have to prepare for,” says Professor Klein Tank. The low-lying coastal regions are most at risk, something that he describes as a “cruel irony”. Areas such as the Humber, the Thames and the Solent have historically been good for development of the ports sector precisely because of their underlying low-lying geography, with flat land and access to the sea. “But those are the areas that are most at risk of sea level rise.”

Resilience of coastal assets is being put under pressure by increased frequency of storm surges



## BEYOND SEA LEVEL RISE

While sea level rise in itself poses serious problems for under-protected port infrastructure, there are other threats lurking from climate change. Tidal and storm surges, increased coastal erosion and increased frequency of wind storms all hang over the shipping and port sector.

Port of London Authority’s James Trimmer explained how climate change hit the port authority “harder and sooner” than expected. “We hadn’t considered the climate change challenge before we did a risk assessment. We imagined that climate change would affect ports at the deep end,” he said. Then came the winter of 2013 when the PLA experienced not just a sheer peak of flow water but a peak that went on for months. “This brought home the unpredictable nature of these conditions,” said Mr Trimmer. “When we are considering extreme events we now know it’s something that we should consider more.”

Prof Klein Tank explains how observations are proving that the climate is changing, particularly with global scale temperature rise and changes in weather pattern.

“Looking at the climate projections we have for sea level rise, we know that sea levels are rising at a considerable rate. We know that there is long term concern about the future resilience of shipping and the ports sector to rising sea levels as a major impact of climate change.”

The Met Office is already seeing adaptation planning going on based on its projections, both in the UK and globally, which will increase resilience. The projections deliberately take a long-term view through to the end of the century so that measures can be taken now. But, says Prof Klein Tank, there are also short-term decisions to be made so it’s important that the Met Office provides the science for both.

And even if climate change is properly addressed and global temperatures do not increase significantly, sea level rise

is largely unstoppable. "We can provide estimates of sea level rise to 2300 because it is a very slow process," he says. "A lot of energy is contained in the ocean and it will continue to rise no matter what measures we take so there will continue to be sea level rise even after we have decreased our greenhouse gas in the atmosphere."

## HELPING OURSELVES

Shipping could do more to help improve the accuracy of forward modelling. There are historic meteorological observations from ships lying in archives around the world that if digitised could drastically improve the assessment and modelling of future climate change. Additionally, the increasing number of sensors on board ships could collect real-time data for future modelling.

"There's a rich association between the maritime sector and meteorology because a lot of our earliest information came from ships. Harvesting that rich heritage and paying gratitude for those observations that have come from mariners throughout history is an important part of who we are and will inevitably be an important part of our future."

Speaking at the Met Office event, Bent Erik Bjørkli, head of Kognifai Partner Program, Maritime at Kongsberg Digital, recognised the difficulties that the industry faces in sharing meteorological data. He noted that connectivity and cyber concerns have to-date restricted data sharing from ships. "We are trying to change this," he said. "In the short term we are trying to breakdown data silos and share that data so that the ship's system can receive the benefits of data."

Global ports are at risk of flooding because of climate change



**"We know that there is long term concern about the future resilience of shipping and the ports sector to rising sea levels as a major impact of climate change."**

Citizen science – where the general public collects and analyses data relating to the natural world – could also bring real improvements to the Met Office's next suite of weather forecasts, according to Met Office chief scientist, Professor Stephen Belcher. "I would hope that this is a message for shipowners," he said. "We really need to understand the impact of hazards on the maritime industry." [SN](#)

## Data, adaptation and interdependency

The Met Office identified the following key themes coming from its September 2019 event and roundtable workshop.

### 1) Improving access to and availability of data

A number of organisations within the ports, shipping and offshore sectors are undergoing digital transformations utilising connected technologies. This creates new opportunities for the use of weather information alongside asset and operational data in new and exciting ways to increase automation and improve efficiency. To fully realise this opportunity, industries need to explore new ways of sharing the huge amounts of valuable and available data. It was highlighted that it may take some time for the benefits of these technologies to be realised by smaller port and ship operators who may have ageing infrastructure and lack the deep pockets to fund technology investment.

### 2) Incentives for adaptation

Many of the commercial organisations represented at the event recognised the need to adapt to climate change, but expressed some scepticism about how this might be achieved given the economic constraints on their business which may prevent taking a very long-range view. During his presentation, James Trimmer, from the Port of London Authority (PLA), identified some ways through which this could be overcome. The PLA conducted a climate risk assessment as part

of a response to government for the Adaptation Reporting Power. The PLA was aware of some key weather and climate issues on the river such as sea-level rise, fog and wind; but until completion of its latest adaptation report it had not considered the risks associated with peak flow on navigation on the upper Thames. As a result, they established a warning system for the safety of rowers on the river, and this was almost immediately put to the test during sustained flood conditions in January and February 2014, resulting in an immediate benefit.

### 3) An interdependent approach

Baroness Brown of Cambridge identified the importance of interdependencies between industries and adaptation in her presentation, and this was echoed by participants during some of the following roundtable discussions. For example, the tidal surge that affected the east coast during December 2013 caused direct impacts such as closure and overtopping of some ports and harbours, and the diversion of many ships. However, some of the problems experienced by port and ship operators were secondary, caused by flooding of power stations or the inability of staff to get to work due to the associated windstorm and inland flooding of roads. It is only by putting those adaptation strategies in place that strengthen supporting value chains – as well as key coastal and offshore infrastructure – that maritime industries will be resilient. [SN](#)

# Complacency is simply not an option

MTS' [Andrew Wright](#) explains why we all need to take responsibility for the environment



**Andrew Wright**

I must be careful not to sound too hectoring. I remember a delightful teacher at the school where I used to work. She was passionate about the environment – and she was usually right. However, she had a way of lecturing the rest of us at the regular weekly staff meetings, and a tone of voice, which tended to encourage colleagues to go and use more paper, turn up their heating and rev up their car engines!



**Topic: Seafarers**

**Key words: Responsibility; Protection**

**Background info: Protecting the environment must be a priority, but not at the expense of seafarers' liberty**

At a time when the need to be “clean and green” is being thrust on us from every conceivable direction it is easy to react against it, to become complacent. However, even brief reflection underlines how great is the challenge we face and how short the time to address it. We have so far to go. Take the simple issue of plastic bags. In one country I visited recently, plastic bags were forced on me at every conceivable opportunity – even when I requested “no bag”. They were everywhere, lying on the streets, flying about with every puff of wind. “Ah yes”, said one of my local colleagues as one floated past our heads, “our national bird!” Complacency is not an option.

## MISSION POSSIBLE

I am sure I share with many other contributors to this issue an absolute commitment to the inescapable and urgent moral demands placed on us by environmental challenge. Surely there can be no greater issue for us to address, in shipping and beyond. I applaud the prominence this topic now has within our industry and the concrete steps that have been taken in recent years. These do not come without pain. After all, this is in one sense a war – to safeguard our habitat, to protect resources at a time of unprecedented and currently unsustainable global population levels, and to enable us to live in a proper harmony with our environment and at peace with each other.

It will be a war of many battles and will have many setbacks. It can only be won by working together and its success is threatened by the divisive tribalism which currently features so strongly across nations.

Our great global maritime industry, which often leads the way on common global action, and has strong international instruments of support and enforcement, must surely be at the forefront in these matters. It is exciting to see, as happens so often in conflict, the emergence of strong leadership and dynamic innovation in ocean protection and sustainable shipping.

Two weeks ago, I found myself at a shipping-related dinner sitting directly opposite a vigorous and outspoken climate change “denier”. “The biggest fraud ever perpetrated in human history,” he told me without qualification. Now, a note of humility here on my part. I am no scientist. Indeed, my last science report from school, aged 16 – and I still have a copy – reads “almost nothing goes in. Even less is retained. There is no hope!” Yes, I confess I am a rank amateur in these matters, but surely there is little room now left for doubt on the broad issue. I understand there are still uncertainties in elements of climate science. However, the overwhelming weight of conclusion from the world’s most distinguished and robust scientific bodies, working internationally and collaboratively with vast swathes of evidence, demonstrate the realities of global warming, its human influences and the swiftness and the seriousness of its predicted outcomes.

## FISHER EVIDENCE

To that we can add the evidence of our own experience, and not least that of seafarers and fishermen. One seafarer with over 40 years of service reflected with me recently on his own convictions of climate change based on what he had seen. “The sea is rougher now,” he told me, before launching into a detailed account. Fishermen will talk at length of the changes they are seeing in fish movements. Whatever one’s response to those particular observations, we are surely witnessing something dramatic around the world.

I have recently returned from Australia where catastrophic and



Credit: Mike Hoef; IMO, CC BY 2.0

**The environmental journey is a journey with human implications**

unprecedented drought is compromising livelihoods and communities. Many are in no doubt that this is climate change related.

Time is short in this matter. I started this article on the first day of the second round of London's "Extinction Rebellion" protests. I have just ridden my bike across London (yes, my bit for the environment on the daily commute) and can confirm that thousands of police are in place to respond to whatever the week may bring. Certainly, the global Extinction Rebellion phenomenon has caused some waves, injected a necessary tone of urgency and helped push climate change right up political agendas. So often those agendas are hijacked by economic and political issues perceived to be more urgent, by the innate short-termism of human interest (too few still recognise its likely impact on them) and by a democratic electoral cycle which often mitigates against difficult decisions by governments. The choices needed in relation to climate change will have real and unpopular impacts.

It is of note that it is often the young leading on climate protest. An older generation may never feel the full effects of temperature rise and yet are often the key decision-makers. The young are right to hold feet to the fire.

Climate change is of course only one, albeit the gravest, among abundant environmental challenges. If we care at all about the future of our planet, and indeed for our children, grandchildren and great grandchildren, these must surely take a place of absolute priority in our professional and personal lives.

### BRINGING IT HOME

At The Mission to Seafarers we have been a little too slow, I fear, to bring the environment to the heart of our thinking. In fact, our work, holistically faith-based as it is, is informed at its heart by the Anglican "five marks of mission". The last one of these commits us to "strive to safeguard the integrity of creation and sustain and renew the life of the earth". It is well put and might appropriately be adopted by any company or organisation.

We have begun assessing all this at our international Headquarters in London and it was on the agenda at our recent meeting of Regional Directors in Brisbane (to which we all flew, our detractors will be quick to say). Indeed, as I conclude this article, I am now with our East Asia team (yes, more flying!) and they have made this a focus for discussion. We have a great deal of work to do and many areas to cover.

Like many in shipping, we are a global organisation, with all the implications for air travel and its consequent toll on carbon emissions. We seek to minimise this and use video technology as much as possible. Can we make further cuts in travel? What criteria should we use? What should our offsetting policy be? Is our recycling working as well as it should? How can we further discourage the use of plastic in the office and in our port hospitality centres? How can we encourage our suppliers to shed unnecessary wrapping and bagging?



**Protesters challenge us to think differently about the environment**

Are we still too tolerant with paper? Could we move towards electric vehicles for our transport services in ports? What about our energy policies? The list goes on. Yes, we currently have plenty of black marks and a big agenda to address going forward.

And what about the wider maritime industry of which we are a part? Nobody who reads this publication needs reminding that the environment is at present probably the biggest global shipping industry conversation. Rightly so. Recent IMO commitments are broadly in line with the demands of the Paris Agreement. Reducing annual greenhouse gas emissions by at least 50% by 2050 compared to 2008 may not be fast enough for some but it is still a demanding target. Many in the shipping sector are feeling the squeeze from the growing raft of shipping related environmental regulation, not just on greenhouse emissions but on discharges, rubbish disposal and much more.

### SEAFARER IMPLICATIONS

In all this, my final comment, and you will not be surprised, is to highlight implications for seafarers. They are often the first to be affected by new regulation. Amid the ever-tightening environmental regime in which we work, a regime in which large fines and long prison sentences are real possibilities, seafarers can become victims. MARPOL, for example, has led to the criminalisation of some seafarers who may have unwittingly broken rules, or knowingly carried out the orders of others more senior, under pressure. CHIRP has addressed some of these issues and it is important that we all support seafarers in keeping up to date with rules, in having the courage to do what is right and in knowing how to take action when they see breaches or are asked to collude in them. Yes, there are moral imperatives here but there are also welfare implications which must be addressed in parallel.

Stay clean, stay green – We have no alternative. The implications reach deep into our personal and professional lives. We can be proud of much of the environmental journey on which the shipping industry has embarked. However, it is a journey with human implications, and we must make sure that we seek to keep everyone on board. **SN**

*The Revd Canon Andrew Wright is the secretary general of The Mission to Seafarers, [www.missiontoseafarers.org](http://www.missiontoseafarers.org).*

# The decade of decarbonisation

LR's [Alastair Marsh](#) explains why the maritime industry is responsible for shaping our future through decarbonisation



Alastair  
Marsh

The time is now for the shipping industry to act. For those of us present at September's Climate Week in New York, the message was crystal clear as our collective responsibility on sustainability and environmental stewardship was reinforced. From the headline grabbing, trailblazing Swedish teenager Greta Thunberg and her compelling call on the climate emergency to a raft of other tabled initiatives. These included the formal launch of the Sustainable Ocean Principles at the United Nations headquarters to more than 90 industry leaders signing up to the 'Getting to Zero Coalition', which is committed to making the International Maritime Organisation's (IMO) ambitious 2050 greenhouse gas (GHG) target a reality by getting commercially viable deep-sea Zero Emission Vessels (ZEVs) into operation by 2030.

● Topic: Commitment

**I** Key words: Shared responsibility; Decarbonisation; Fuel flexibility

Background info: Work on Zero Emission Vessels needs to start now and with cross-industry support

Shipping delivers 90% of world trade and remains by far the most efficient mode of transportation but many of us are acutely aware of shipping's contribution of GHG emissions, with the industry said to account for 2%-3% of GHG emissions yearly, equivalent to Germany's annual emissions output. The need for the maritime industry to decarbonise is in no doubt, and the first steps are being taken. The next decade is likely to be one of full-scale pilots and prototypes as we explore the options available to us.

**“It is still in the industry's hands to help shape what the decarbonised future could look like”**

ZEVs are technologically feasible in the next two years. The transition ahead may require that ships and their propulsion systems are adaptable, but this is dwarfed by the hurdles of getting the right zero-carbon fuel mix ready and the necessary supporting infrastructure in place. The greater challenge is the investment on land and within the energy sector to provide the fuel supply chain required to enable the operation of ZEVs cost effectively and reliably.

Clearly, the years ahead will require industry stakeholders to collaborate and build consensus across the board, not only with their existing partners but with fuel and propulsion technology companies, equipment manufacturers and energy developers from different sectors, so we can develop, de-risk, scale and commercialise zero-carbon fuels and ZEVs.

## SHARED GOALS

Organisations are already uniting their collective muscle to better understand what will be required during this decade of decarbonisation. Future zero-carbon fuel frontrunners have started to emerge – the potential of alcohol, biomethane and ammonia is being recognised. Our work on ZEV transition pathways indicates that there will be no outright winner. Instead, we will see a dominant fuel mix – shipowners will need to consider investing in fuel flexibility by designing zero-carbon ready ships that can run on one fuel today and potentially later be adapted to run on an alternate fuel. Future fuels are likely to be more expensive, making this transition more of an operational expenditure challenge than a capital expenditure one for shipowners.

In every industry there are leaders and followers – maritime is no exception. One can also imagine that a two-tier market could emerge composed of those wanting to move independently and those willing to fulfil their minimum obligations. We all recognise that shipping can be slow to act and that often inertia is only overcome with the wielding of the regulatory stick.

For now, it is still in the industry's hands to help shape what the decarbonised future could look like – a variety of operational and asset investment strategies aligned with decarbonisation trajectories for 2050 will need to be considered.

IMO, as the global standards setting authority for shipping, is still determining what it will implement to deliver on its Initial Strategy and drive industry to deliver on its goals. In April 2018, IMO laid down a vision that global shipping should strive to at least halve its GHG emissions by the middle of the century, even more if possible, compared with 2008 levels. It is currently considering concrete proposals for short-term measures which can be agreed before 2023 to start to reduce the carbon intensity of shipping before 2030 using existing IMO instruments, but is also expected to start to consider how it will encourage the uptake of low- and zero-carbon fuels.

Herein lies the opportunity – now is the time for all of us to show leadership and work collectively across the relevant stakeholders to shape the change needed to deliver the ambition for the middle of the century by enabling newbuild ships to be ZEVs before 2030. We are in a position where we can influence what's happening in the world, and in our industry. We will then be able to demonstrate to wider society that we can work together in a way that the industry has never done before – this is my hope for the industry and our future. This is truly about getting the right people onboard and agreeing action to deliver the change. [SN](#)

*Alastair Marsh is chief executive of Lloyd's Register.*

# Negotiating an impossible instruction

ITIC's [Andrew Jamieson](#) explains the perils of counter offers in a changing market



**Andrew  
Jamieson**

A recent claim involved a classic dilemma for shipbrokers responding to a “take it or leave it” firm offer.

When the market is moving, whether rising or falling, if one principal makes a firm offer it is important that the other party and their brokers do not overlook the potential effect of making a counteroffer.

The recipient may feel that while they definitely want to secure the business the current offer is not the best deal they can obtain. An instruction to the broker to “try to get an improvement but don’t lose the deal” however creates a legal pitfall.

The problem for the broker is that if a counter is made, however small the change to the terms proposed, the recipient may take the opportunity to decline to continue the negotiations and pursue alternative business elsewhere. The effect of the counteroffer is to terminate the original offer for all time. If the counter is not accepted, then it is not possible to go back and accept the earlier offer to create a binding fixture.

The danger of this type of “try to get an improvement but don’t lose the deal” instruction was apparent in a recent matter dealt with by ITIC.

Negotiations for a time charter had been ongoing for a number of days. The exchanges had been conducted through two brokers in the same company with one talking to the owner and the other with the charterer. As is now common there was a variety of methods of communication. Some messages were on Skype, some by email and the parties had a number of telephone calls. The charterer had requested a number of cargo options, but these had not been agreed. A main terms recap had been issued with a pro forma charter attached. There was then a two-day gap in the negotiations during which the owner had chased for charterer’s confirmation that the recap was accepted. The market started to go up, but the charterer did not respond promptly. Ultimately, and perhaps out of frustration, the owner sent a message giving the charterer ten minutes to confirm their acceptance.

## FIXTURE CONFUSION

The charterer spoke to “their broker” and subsequently sent that broker a message that read “if you have to confirm it, but try to get coal at least”. The second part of the message was referring to the range of permitted cargoes that the charterer had originally wanted. The two brokers stayed on the telephone to each other while they conducted exchanges with their respective principals. At the owner’s request the owner’s broker had confirmed the charterer’s position in writing as “please allow coal otherwise c/p is accepted in full”. The owners finally responded that charterers counter was declined and as such both parties were free of any commitment.



An instruction to the broker to ‘try to get an improvement but don’t lose the deal’ creates a legal pitfall

The charterer responded by claiming that there was a fixture as they had accepted the owner’s offer and that had been transmitted to the owner’s broker. The meaning of the message sent by the owner’s broker, specifically within the context of the telephone calls, was an issue. The legal position is that to create a contract the acceptance of an offer must be a full and unqualified acceptance of the offer.

The charterer also held the brokers responsible saying that they had given clear instructions to conclude the fixture and if this had not been done the brokers were liable for negligence. The charterer alleged that the rise in the market meant that they had lost a considerable sum as a result of losing the fixture.

As is usual in these situations each individual’s genuine recollection of telephone conversations was slightly different. The charterer’s Skype message did amount to a clear instruction to try to get a wider range of permitted cargoes, but it was also clear that if this was not possible they wanted the fixture as presented by owners. The brokers had tried to give effect to that position, but it was clear that countering, especially in a rising market, was not without risk. If that risk had been discussed between the brokers and the charterers at the outset then the situation between them would not have arisen.

It is inevitable that, other than outright acceptance, any stance taken in response to a firm offer carries some risk that the other party will walk away and the negotiations will fail. Brokers live on their negotiating skills and an appreciation of what will or will not work.

The situation had the potential to become a long and hotly contested dispute and the matter was resolved commercially. Whatever the legal position had turned out to be this is not the type of conversation a broker wants to have with their principal. Winning the argument can mean losing the client. **SN**  
Andrew Jamieson is claims director at ITIC. For more information on ITIC’s services visit [www.itic-insure.com](http://www.itic-insure.com).

# Importance of leading by example

Carly Fields reports from the Institute's inaugural shipping conference on Maritime Leadership



Carly Fields

Strong and effective leadership is not something that should be taken for granted. Indeed, in tumultuous times, effective leadership is the lynchpin to survival. And given the current general state of the shipping industry, good leadership is more important than ever and is the reason why the Institute chose a leadership theme for its inaugural conference, which took place at the International Maritime Organization in London in October.

Katerina Stathopoulou, executive director at Investments and Finance, spoke about the importance of people in shipping, reminding the audience that shipping is "first and foremost a human-capital intensive industry". Shipping builds people and people build the business, she said.

Renata Frolova-Hammer, board member at IKEA and founder of Sustainable Business Models Design, described what leadership meant to her: "Leadership for me is looking out for the interest of stakeholders through focus, creating energy that helps people to move mountains and moving mountains with people you respect." She urged shipping companies to put focus and purpose before strategy. "Leadership is focusing on the right kind of energy to push people into action. Leadership is about working with people you respect." Ms Frolova-Hammer added that it takes courage and self-insight to challenge one's own bias, to not be afraid to be wrong and to not be afraid to take the lead if it all goes wrong.

For University of Hull's Dr Thomas Hoyland, leadership can be something that is overly romanticised, when the focus should simply be on building positive relationships and remembering that people are humans. "Leadership is fundamentally a negotiated experience," he said.

Representing the London-based Chartered Institute of Personnel and Development (CIPD), Wilson Wong, head of insight and futures, explained that the CIPD is developing a model of 'purposeful leadership' founded on a clear moral self,



University of Hull's Dr Thomas Hoyland conceded that leadership can sometimes be "overly romanticised"

a vision and a commitment to stakeholders. This translates into clear policies, clear role modelling, an organisation with a culture of learning and training and a culture that takes care of its employees.

Using Pacific Basin Shipping as a case study, the company's director of human resources, PB Subbiah said that the ship owner and operator employs a system where it doesn't focus on rules. "Our culture is very much at the core of what we do, we care very deeply about it. We don't have forced fun and we allow people to be, making them feel trusted, wanted and cared for. This has allowed our company to thrive and we have an insane retention rate."

Mr Subbiah argued against overcomplicated human resources, metricising HR processes and grading scales in appraisals. "It's about conversations to us," he said. "As long as our behaviour and feelings are driven by our subconsciousness we will get the best out of people. [SN](#)

## MBA's 'invaluable' for shipping

MBA's, or Master of Business Administration degrees, have attracted criticism in the past for their manipulation as a 'badge of honour', but the University of Hull's Dr Thomas Hoyland, believes they still have much to offer if properly embraced.

Dr Hoyland, a lecturer in human resource management and organisational behaviour at the University, has seen first-hand how invaluable an MBA can be to individuals and to companies supporting employees through their studies.

"MBAs empower students and embed CSR into processes," he said. "They give an opportunity for people to challenge assumptions and are an opportunity for us to come up for air

to start to think about some of these things that we had in our head at our desks, but we were too busy to act on."

He said that companies do need to take responsibility for making the most of positive change offered by MBA-encouraged thinking. "It's useless to send someone out to do an MBA and then invite them back to an unchanged organisation as they will revert back. The narrative needs to be changed at the organisation as well."

The Institute and University of Hull have joined forces to offer an executive MBA programme in Maritime Leadership in London and international locations from 2020. [SN](#)

# Maritime: WTO's "problem" sector

It never bodes well to hear a sector covered by the World Trade Organization (WTO) as a "problem" area. Even more concerning is when that criticism is directed to the maritime transport sector.

Speaking at the Institute's Maritime Leadership and the Near Horizon conference, Ruosi Zhang, counsellor in the Trade in Services Division of the Geneva-based WTO Secretariat, explained why the maritime sector urgently needs to address its trading rule disparities.

"We have in total 12 big sectors according to our classification and 160 sub-sectors," she said. "The only sector that has failed negotiations is maritime transport. That failure means legal uncertainty." What this failure means is that the world's trading legal system does not fully apply to the maritime sector so countries can deviate from this trading system with no consequence. Maritime transport, therefore, remains in "legal limbo", Ms Zhang said.

**"If we really want to have something meaningful for business in maritime transport we need leadership in maritime transport negotiations"**

She argued that it is time for a new maritime chapter in trade agreements as the current trade rules for the sector are inadequate. "WTO is a rule-based system and WTO services trade rules are more than relevant for maritime transport," she said. Those services trade rules relate to market entry, including restrictions on cabotage; measures related to movement of natural persons; other discriminatory measures, such as tariffs and taxes; competition related measures; and transparency and other regulatory measures, such as customs procedures.



WTO's Ruosi Zhang explained trading rule disparities

"This is really something that is serious for maritime transport. It's a problem in our trading system," Ms Zhang said. Of the WTO's 164 members, only 62 have included a commitment on maritime transport services. "It's really shocking if you compare maritime to other sectors," said Ms Zhang. "If we really want to have something meaningful for business in maritime transport we need leadership in maritime transport negotiations."

But she appreciates that the WTO faces challenges: it is much bigger than in the past and it has become more difficult to bind members to agreements. Therefore, the WTO has been pursuing plurilateral agreements in a bid to bind a smaller number of members in trade agreements. Plurilateral is a multi-national legal or trade agreement between more than two countries, but not a great many, which would be multilateral agreement.

"Plurilateral is there for like-minded members to negotiate and it is easier for them to reach a compromise and then expand that to the membership," said Ms Zhang. **SN**

## Transport the backbone of trade

Just because there is no specific United Nations' Sustainable Development Goal (SDG) for transport does not mean that it is not important, Hassiba Benamara, UNCTAD economic affairs officer, told the audience at the Institute's conference.

In fact, the position is "quite the reverse", she said. "Transportation plays a key role in the realisation of many SDGs."

UNCTAD estimates that over 80% of global trade is carried by sea – maritime is, she said, the "backbone of trade". But there are a number of persistent issues that are being closely monitored by UNCTAD. These are: 'slowbalisation', protectionism and trade policy risks, liner shipping market consolidation, technology and innovation, China's Belt and Road Initiative, the environmental sustainability imperative, and geopolitical risks and tensions.

Taking each in turn, Ms Benamara discussed how each are impacting the sector. First up was slowbalisation: "We have heard a lot about the changing trade to GDP ratio, regionalisation of trade flows and south-south trade," she said.

Under protectionism and trade policy risks, Ms Benamara noted that East Asia has suffered most from the loss from tariffs. Then, because of liner shipping market consolidations, 75% of the global containership fleet will be owned by only seven top-tier companies by 2021, compared with 37% in 2005. "This is a concern for UNCTAD if it raises the shipping rates for developing countries," she said.

For technology and innovation, UNCTAD sees "a lot of hurdles" holding back progression, while China's Belt & Road initiative represents "a major reordering of global trade infrastructure".

Meanwhile, the environment is expected to remain a key topic as shipping moves towards zero carbon.

Lastly, Ms Benamara expected that geopolitical risks and tensions will definitely bring "disruption to supply chains".

In response to these challenges, UNCTAD has noted a rise in collaboration and partnerships in the sector and while competition is still there, there are more co-operative agreements springing up in shipping and in ports and terminals. **SN**



“In the future, brokers will be more like actuaries. They won’t do admin, payments and so on as that will be done by technology.”

*Claes Westman, lead risk advisor, AP Moller-Maersk*

“The autonomous ship is something that makes sense in the right environment, but the smart ship is something that owners’ favour at the moment.”

*Jens-Uwe Schröder-Hinrichs, vice-president (Academic Affairs) of the World Maritime University*

“Lower growth in the future is what most forecasters fear. It is the principle downside risk that any international organisation that is putting forecasts out believes is there, and the view is that it’s getting worse, rather than better.”

*Vicky Pryce, CEBR Board member*

“It used to be ‘join the merchant navy and you will see the world’. Now it is ‘join the merchant navy and your ship will see the world, but you will stay on board’.”

*Jagmeet Makkar, director of SkillsPlus*

Ade McCormack noted that the power axis is shifting from the employer to the talent



## Get prepared for the new shipping world

Digital Readiness Institute founder Ade McCormack opened his presentation at the Institute’s conference with the question: Will the uncertainty and volatility that we are experiencing today only get worse?

In answering, he explained that the business of being in business in the digital age is the business of creating new business models. Shipping companies can no longer rely on how business has been traditionally conducted. This is undoubtedly a hard pill for many long-established and traditional shipping companies to swallow.

Mr McCormack explained that in the new world of talent, the power axis is moving from the employer to the talent. “Essentially, the idea of a handful of people holding all the power is dead.”

Strategy is also dead, he continued. Instead, shipping companies need to be thinking about situational awareness. “Increasingly, the direction you take your organisation in is totally dependent on the talent you have around you.” The problem as he sees it is that in the gig-economy shipping workers need to be both talent and leader. “If you are a manager, it’s game over.”

He also advised that shipping adopt a new attitude to risk and throw out the notion that the only path to success is to avoid failure. “If you are not taking chances you are not taking risks and in effect you are dying,” he said.

Speaking on the same panel, Mauro Sacchi, director of business development at Wärtsilä, explained that where once Wärtsilä was a pure equipment manufacturer, its strategy changed in 2016 when it acquired other marine companies to steer it in new digitally-enabled directions.

Explaining why data sharing and digitalisation are paramount, Mr Sacchi said: “If my business today is making money because my data is not available to my competitors then my days are numbered. This is not about talking more simply, this is about talking differently.”

Mr McCormack concluded by explaining that the industry is moving into an unknowable future and encouraged companies in the sector to ask themselves how many experiments they have got running at the moment. Likely no shipping companies can come close to the hundreds of thousands of experiments that Facebook will be running at any one time, he said. [SN](#)

## Insurance makeover urgently needed

The marine insurance industry is in dire need of modernisation to address widespread inefficiencies.

A lack of investment has meant that even some of the major insurers are working off systems that are 20-30 years old.

The upshot of this is that “London’s differentiation is under challenge”, according to Nick Roscoe, chief operating officer of insurance focused technology enabler Concirrus.

“There is a desperate need for change,” he said at the Institute’s conference. “There is an opportunity for efficiency but a reluctancy among the people.” Concirrus is combining data and analytics to plug gaps in information to get a more holistic view of insurance risk.

Claes Westman, lead risk advisor at AP Moller-Maersk, gave an owner’s viewpoint of the outdated working model of the insurance industry: “It’s difficult to track and decide what to do with insurance for assets, especially if we work on Excel sheets – and that’s how it has been done in the industry.”

A value is put on each of AP Moller-Maersk’s 900 vessels in March every year and that value is not expected to change for the next 15 months. “It’s not very satisfying to know that this system does not work. And 40% of our premiums goes on admin costs for underwriters. This is not right, something needs to be done,” he said.

Looking to the future, Mr Roscoe predicted there will be two types of underwriter: those that embrace the digital opportunity and those that will cease to exist. “I do believe above all that we are at a tipping point,” he said. “Insurance has reached a point where it is less and less about what happened and is more about who you are and what you are doing – it is becoming more of a present act.”

Last year, AP Moller-Maersk contributed to the development of a blockchain pilot for its marine hull portfolio. Insurwave, built by a joint venture between EY and Guardtime, leverages blockchain and distributed ledger technologies to allow it to support more than half a million automated ledger transactions and help manage risk for more than 1,000 commercial vessels in its the first year.

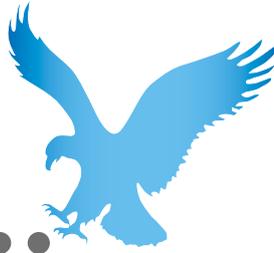
“We put information into the system, it goes to brokers and into underwriters – everyone has the information,” said Mr Westman. **SN**



**Claes Westman gave an owner’s viewpoint of the outdated working model of the insurance industry**

**Delegates attending the Institute’s Maritime Leadership conference at the IMO took advantage of the networking opportunities and asked questions of the panels**

# Legal Eagles...



Do you have a burning legal question for the HFW Shipping Network team? Email [legaleagles@ics.org.uk](mailto:legaleagles@ics.org.uk) for them to answer your question in the next issue of *Shipping Network*. Questions should be of a general nature and not specific to a particular live issue.

## HFW's crack team of specialist shipping lawyers answer your legal questions



**Guy Main**



I am a broker and I have seen a lot of articles about IMO2020 in the shipping press. What in summary is IMO2020 and how will it impact my clients?



**Alessio Sbraga**



IMO2020 is the shorthand for the impending sulphur emissions regulations of MARPOL Annex VI. IMO2020 has two key regulatory elements: (i) a sulphur cap of 0.50% sulphur content in any fuel used on board ships, from January 1, 2020 onwards; and (ii) a carriage ban, prohibiting the carriage of fuel of more than 0.50% sulphur content on ships for use in fuel tanks, from March 1, 2020 onwards.



**Joseph Malpas**

IMO2020 applies to any trades involving ships calling at MARPOL contracting states, and any ships which fly the flag of a MARPOL contracting state. Consequently, IMO2020 is, in effect, a global sulphur cap (although limited exceptions exist, and there are still Emissions Control Areas where sulphur content is limited at 0.10%).

There are two main options for complying with IMO2020. One, is using compliant fuels, such as very low sulphur fuel oil (VLSFO) with sulphur content below 0.50%, or MGO, or "alternate fuels" that are at least as effective, such as liquefied natural gas. Another option is to use "alternative abatement technologies", such as exhaust gas cleaning systems (EGCS, or scrubbers), which again need to be at least as effective as burning compliant fuel.



**Daniel Rainer**

While there have been calls for a short period of "permitted noncompliance" to enable main stakeholders to adjust to the new regulations, this was rejected by the IMO. Compliance with the regulations is therefore mandatory from the deadlines set.

IMO2020 has numerous commercial, practical and legal implications which impact all commercial parties in the physical transport chain. For example:

**1. Contractual issues.** To deal with the increased risk, responsibility and costs involved with IMO2020, new terms will need to be agreed in transport contracts. For example, it is key that parties to time charterparties negotiate clear clauses and review associated bunker clauses to ensure an appropriate allocation of risk and responsibility to meet the sulphur cap and carriage ban. There is much scope for disputes to arise both pre- and post-2020 in respect of all types of charterparties, contracts of affreightment, Forward Freight Agreements, bunker supply contracts and sale and purchase agreements.

**2. VLSFO availability/price.** While it is predicted that VLSFO may be available in sufficient quantities at major bunkering ports, the position in respect of smaller/remote ports is unclear, presenting serious problems for tramp-bulk trades. VLSFO is also likely to be very expensive compared with high-sulphur fuel, and disputes will arise as to who covers this additional cost.

**3. EGCS.** These throw up many issues, including how to manage the time investment required to install an EGCS, who bears the cost of installation, and the cost of maintenance and responsibility for breakdown. There are also restrictions on the use of "open loop" EGCS in certain parts of the world, (most recently announced) in the Panama Canal, and this could lead to disputes.

**4. Fuel quality/fuel management issues.** There is currently no uniformity in the quality and characteristics of VLSFO: new fuels will have varying formulations and characteristics. There is also limited clear guidance on how to manage new fuels coming onto the market increasing the risk of compatibility and stability issues between fuel stems. These issues are likely to lead to disputes over bunker quality/suitability, possible damage to vessel machinery and equipment, and at worst, major casualties. This will impact most commercial contracts, in particular, charterparties and bunker supply contracts.

**5. Insurance.** There could be coverage problems with the vessel's P&I, FD&D and hull insurance in the event of non-compliance with IMO2020, depending on the circumstances. It also raises issues under charterers' damage to hull and loss of hire insurance coverage.

In order to best protect your clients against all the issues involved with IMO 2020, careful consideration of their rights and obligations under existing and future contracts is required, and you should advise them to seek legal advice as necessary. **SN**

*While every care has been taken to ensure the accuracy of this information at the time of publication, the information is intended as guidance only. It should not be considered as legal advice.*





I am a ship owner and am concerned about recent high profile detentions of vessels at the orders of government authorities, often seemingly for political reasons. If one of my ships is detained in this way, what are my options?



The detention of a ship, even for a few days, can have enormous cost consequences. In an ideal scenario, if release cannot be secured immediately, a ship owner will put up security in exchange for the release of the ship. The security is usually in the form of a letter of undertaking from the ship's P&I club, and allows the ship to trade freely while the parties progress the dispute.

In many circumstances, however, this simple process may be unworkable through no fault of the ship owner. For example, the ship may be seized by local authorities pursuant to a political dispute, or local interests may refuse to accept a letter of undertaking. In more serious cases, the cargo on board the ship might be confiscated, and the crew subject to criminal proceedings and imprisonment.

Ship owners may consider the scope of war risks cover that they have in place, which could cover detention or seizure of a ship. English law war risk policies underwritten in London will commonly incorporate the Institute War and Strikes Clauses (Hulls – Time) 1.10.83 (the Institute War Clauses), although non-English law policies, such as the Nordic Marine Insurance Plan, are also common.

The Institute War Clauses may allow recovery for the loss of a detained ship where (i) there is a covered loss under the policy; (ii) the loss deprived the owner of the use of the ship for a continuous period specified in the policy; and (iii) the detention is not subject to an exclusion under the policy (*The B ATLANTIC* [2018] UKSC 26).

The Institute War Clauses cover “capture seizure arrest restraint or detainment, and the consequences thereof or any attempt thereat” (Clause 1) where the detention is for a “continuous period of 12 months” (Clause 3), although many policies amend this to six months. This is a nuanced area of law – case law has established that these detentions must arise out of political or executive acts which are not in the ordinary course of trading.

### EXTRA CONSIDERATIONS

Policy exclusions can add a new layer of complexity. For example, Clause 4.1.6 of the Institute War Clauses excludes losses arising from “the operation of ordinary judicial process, failure to provide security or to pay any fine or penalty or any financial cause”. In some jurisdictions a local court could be heavily influenced by a government authority or other local interest, and so it can be difficult at times to establish whether a judicial process is “ordinary” or whether the detention is truly



political in nature. Case law has also held that this exclusion would not apply where a ship owner has been asked to provide unreasonable security (*The ALIZA GLACIAL* [2002] 2 Lloyd's Rep 421). It is therefore important to carefully document all steps taken to recover the detained ship, and to notify the war risk insurers immediately upon an incident arising.

Often, the first step in such a detention incident would be to identify the true reason why the ship has been detained. This might not be obvious, particularly if there is a political aspect to the detention. Engaging streetwise local practitioners, such as lawyers, or leveraging off diplomatic contacts, can help establish communications with local interests, and determine the motive for the detention.

The next step is to consider the best solution to the detention. If the dispute is commercial, local counsel may be able to secure the release of the ship in local or federal courts. Where a detention is politically motivated, however, litigation could close lines of communication and cause the situation to deteriorate. Often this will have an international, not just a local, dimension and will involve international diplomatic pressure, including the threat of using the international courts.

In all cases, we recommend a ship owner consult with professionals in the maritime sector who can often be best placed to understand the local and international dynamics and guide an owner to the right solution. **SN**

*While every care has been taken to ensure the accuracy of this information at the time of publication, the information is intended as guidance only. It should not be considered as legal advice. The articles were written by Alessio Sbraga, Joseph Malpas, Daniel Rainer and Guy Main. Alessio is a partner, Joseph and Dan are associates, and Guy is a senior manager (partner equivalent) at HFW, a sector-focused law firm specialising in shipping, aviation, commodities, construction, energy and insurance. All are in the shipping department in HFW's London office. Guy is also a Fellow of the Institute and, before joining HFW, he spent 18 years as a shipbroker.*

# Manufactured fear and marketing hype?



S&P Global's [Sam Eckett](#) explains why shipping could learn much from the Y2K bug 'crisis'



Sam Eckett

At the Piraeus Shipbrokers' Dinner in June, a red-faced shipowner at my table leaned precariously across his wife's sirloin, and asked if I wanted to hear a joke.

"Why will the Y2K bug be so funny next year?" he asked, splashing little droplets of Malbec across her plate and napkin. She frowned.

"I don't know," I said. "Why?"

"Because hindsight is 20/20!" he roared, and sat back laughing.

As jokes go, I thought it was a bit of a disaster, but I understood why he made it. Three of the shipbrokers who visited our table that night had compared IMO 2020 to the Y2K bug – that both were global hysterias, destined to fizzle out to nothing.

The IMO's January sulphur cap surfaced in most conversations that night at Piraeus, just as it has with the shipping market all year. Many people – at least in June – seemed to think that the 0.5% mass-by-mass ruling would be relatively straightforward to implement, and those three shipbrokers weren't the first to compare IMO 2020 with the Y2K glitch that threatened computer systems at the end of the last millennium.

In April, the Financial Times wrote: "To the uninitiated, it sounds as if IMO 2020 could become a giant 'Y2K computer bug' bust: manufactured fear and marketing hype." In May, Bloomberg published the headline, "IMO 2020 may be shipping's Y2K moment". Splash 24/7 called the sulphur cap: "Shipping's Y2K bug".

But ever since that joke in June I've been turning the comparison over in my mind. While there are clear and important differences between the two events, shipping companies might remember some lessons from 1999 – with all the benefits of hindsight – as they crash into the sulphur-cap compliant marketplace like an iceberg on January 1.

## Y2K FOR BEGINNERS

First, a quick refresher on Y2K: Computer programmers in the 1960s had used two-digit codes to denote the year – 1985 was written as 85, for example – and when the date switched over to 2000, experts widely feared that a) computer programs all over the world would think it was the year 1900, and, b) the consequences would range from exploding microwaves to global nuclear war.

Neither actually happened, but the fact that neither microwaves nor cities exploded as the clock ticked over to midnight wasn't as simple as often remembered. Y2K ended up being largely benign due to the unprecedented preparation for it across both the private and public sectors.

In fact, according to the New York Times, American businesses and government spent a combined \$100bn to get ready for Y2K problems. One of these projects – a joint missile-detection taskforce between the US and Russia – actually did help NORAD identify three Russian Scud missiles as short-range before the military could raise an inter-continental alert.

"We have confirmed with the Defense Department that this incident was not Y2K-related," said US undersecretary for state Thomas Pickering shortly after the missiles were spotted screaming into Grozny. "The missiles were not strategic but short-range – that is, under the 500 kilometre-range definition for strategic," he told reporters at Washington's Y2K command centre.

That is to say, the ballistic missiles were real, deadly, and on-target but don't worry – it was not the Y2K bug to blame.

## BE PREPARED

If IMO 2020's impacts are to be as muted as those of Y2K, it will be due to the similarly methodical, forensic, and expensive preparation by companies throughout the world's global shipping hubs.

Take scrubbers, for instance. Broadly speaking, the cost of fitting an open-loop scrubber on a newbuild very large crude carrier (VLCC) is around \$2.5m-\$3.0m, while retrofitting a scrubber costs about \$4m-\$4.5m.

S&P Global Platts Analytics' latest estimates are:

- 2,400 ships will have scrubbers installed on January 1, 2020
- Around 3,500 installations will have taken place by December 2020
- There will be more than 4,500 scrubbers installed across the fleet by December 2021

Of the 79 VLCCs currently on order, 54 of them will come with scrubbers already fitted on board. Back-of-the-napkin arithmetic gives a total cost to the industry of between \$6bn and \$11bn on scrubber installations alone, never mind



The 441,585 dwt *Oceania* is serving as floating storage for very low sulphur fuel oil

Credit: Euronew

the opportunity cost of dry-docking the ships, or the countless lost hours of shipbrokers' labour spent forecasting high-sulphur crack spreads in kitchenettes and lobster bars around the world.

And what of low-sulphur fuels? At last count, about sixteen VLCCs were floating off the coast of Singapore, each brimming with 260,000 metric tonnes of 0.5% sulphur fuel oil (VLSFO) – in total, enough to supply the entire local market until March 2020. Even one of the few remaining ultra large crude carriers – the elusive 441,585 dwt *Oceania* – has been recruited to serve as floating storage in Malacca in advance of January 1.

That's between \$2.4bn and \$2.5bn-worth of VLSFO floating in tankers, produced by refineries that have themselves invested hoards of capital on converting their high-sulphur production and storage capacities for compliance ahead of 2020.



S&P Global Platts Analytics estimates that 2,400 ships will have scrubbers installed by January 1, 2020. Credit: Value Maritime

## WHAT ABOUT MEDMAR?

With all the chaos surrounding IMO 2020, it's worth pointing out that not all the problems facing the market can be blamed on the sulphur cap boogeyman. Remember that while Y2K didn't launch those Russian rockets into Chechnya, it didn't make any difference to the people they were aimed at – in 2003, the UN called Grozny the "most destroyed city on Earth".

Let's take the 'explosion' that sunk Medmar. The august 50-year-old dry bulk ship operator collapsed at the beginning of October, shocking the industry. Medmar ceased all operations, having been unable (among other things) to hedge its exposure to market volatility from the East Coast of South America.

"We Medmar, as head charterers of the above subject vessel," the company wrote to a shipowner in October, "regret to inform you that, due to matters beyond our control, we are unable to continue to perform our obligations under the above dated charterparty, including but not limited to the payment of any further hires."

Medmar was, at the time, reported to have booked several soybean cargoes to the Far East before Q3's sudden spike in South Atlantic time charter rates across the supramax to kamsarmax vessel range. Largely due to the US-China Trade War, between July 1 and September 1, the S&P Global Platts freight assessments on Santos to Qingdao, 60,000 tonne and 50,000 tonne grains cargoes leaped 73% and 78% respectively – enough to catch out even the most seasoned industry players.

And with further spikes and troughs undoubtedly ahead – whether caused by IMO 2020, or trade wars, or whatever – principals may look to minimise their exposure through increased financial hedging to prevent their own company being the next headline.

## ON THE HORIZON

The Y2K bug wasn't the end of glitch-based computer date crises, just as IMO 2020 isn't the end of shipping's environmental hurdles. For instance, in almost all Unix-based programs the last time that can be represented is 03:14:07am on Tuesday, January 19, 2038 – precisely one billion seconds after January 1, 1970. After that time, the system will wrap around to December 13, 1901 at 20:45:52, almost always causing total failure of whatever program is running.

The bug – known as the 2038 Problem, or Y2038 – threatens some Android phones, various medical devices, and even some vehicles' anti-lock braking systems. It's also, curiously, what broke the view count on the South Korean artist Psy's Gangnam Style music video on YouTube back in 2014.

Neither is IMO 2020 the end of the environmental initiatives facing global shipping this century. The deadline for the IMO's Ships' Ballast Water and Sediments convention is September 2022, and the IMO's Marine Environment Protection Committee has set a long-term goal of reducing greenhouse gas emissions by 50% from 2008 levels by 2050.

Neither has yet been properly addressed by the wider industry yet, though Maersk has taken some critical early steps. If there's one lesson to learn from Y2K, it's that early action can pay unexpected dividends.

## DON'T LOOK BACK IN ANGER

Y2K had some surprising benefits. At a conference at MIT in 2002, NYU's Professor Rae Zimmerman told the audience that after 9/11, "redundancies developed in anticipation of a Y2K glitch that never came" across New York City "helped the city's transportation and telecommunications sectors provide an impressive level of service in the wake of the enormous devastation."

Perhaps the intensive, widespread preparation we've seen this year for IMO 2020 will lend unforeseen advantages to the market as it slouches towards the emissions goals of 2050. Many market participants will certainly be hoping that the industry will look back on the sulphur cap as a mere 'global hysteria' while their ships steam onwards, having steered narrowly around the 2020 iceberg.

"The great liability of the engineer," wrote Herbert Hoover in 1951, "[is that] he cannot bury his mistakes in the grave like the doctors." And, unfortunately for shipowners, not all their mistakes sink to a sightless grave at the bottom of the Atlantic. **SN**

*Sam Eckett is associate editor for shipping at S&P Global Platts. He leads the company's Atlantic supramax and handysize coverage, and assesses time charter and voyage rates on grains, ferrous scrap metal, and petroleum coke exports. Sam can be contacted at samuel.eckett@spglobal.com.*

# Coffee time...

Weird and wonderful facts about one of the shipping industry's staple commodities. This month, we take a closer look at coffee



Coffee **dates back to 800 a.d.** Legend has it that 9th century goat herders noticed the effect caffeine had on their goats, who appeared to “dance” after eating the fruit of the coffea plant. A local monk then made a drink with the produce and found that it kept him awake at night, thus the original cup of coffee was born



**Finland is home to the biggest coffee lovers**  
The average adult Finn consumes 27.5 pounds of coffee each year, compared with 11 pounds consumed by their American counterparts

Coffee beans are technically **seeds**



### Top 5 coffee producers

- BRAZIL**
- VIETNAM**
- COLOMBIA**
- INDONESIA**
- ETHIOPIA**



### Top 5 coffee consumers

- UNITED STATES**
- GERMANY**
- ITALY**
- JAPAN**
- FRANCE**

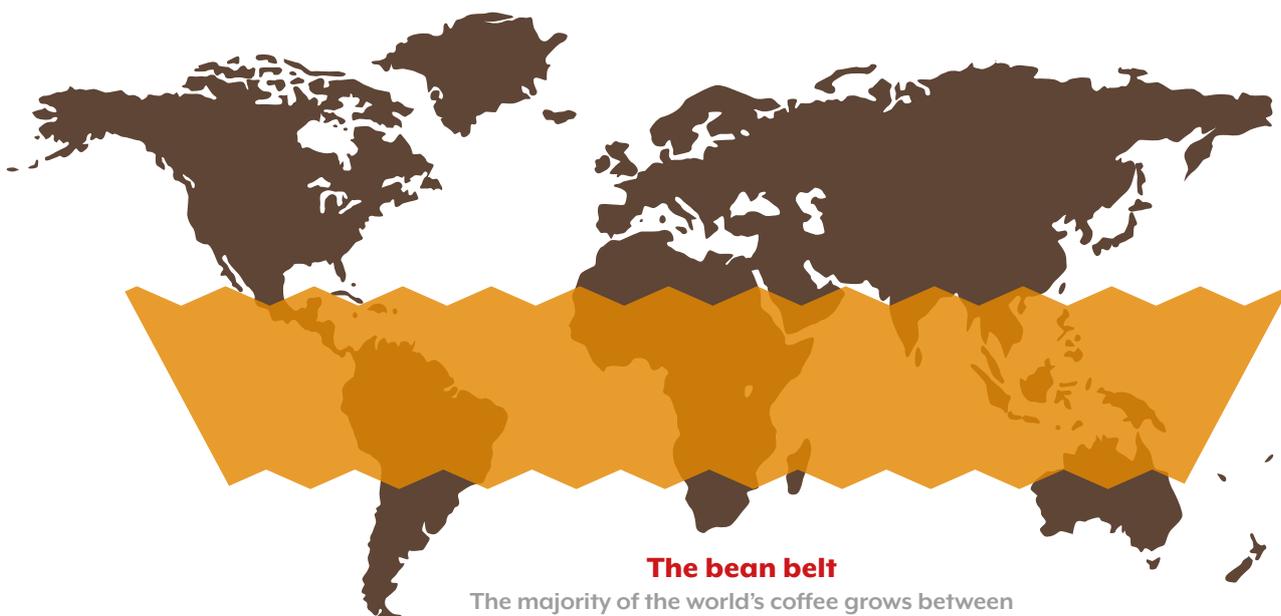


**The world's most expensive coffee can cost more than \$600 a pound**

One of the most coveted varieties comes from the faeces of an Asian palm civet. The cat-like creature eats fruit including coffee cherries, but is unable to digest the beans. The excreted seeds produce a smooth, less acidic brew called kopi luwak, but the means of production has drawn criticism from animal welfare activists



**A cup of black coffee has only one calorie**



**The bean belt**

The majority of the world's coffee grows between the tropics of **Cancer and Capricorn**



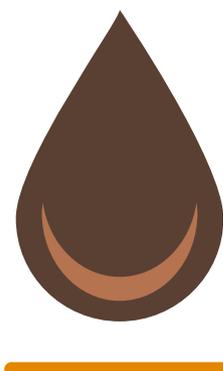
**Commonly used beans**

**ARABICA**

Mildly aromatic  
Naturally less caffeine  
Grown at altitudes above 800m  
70% of all coffee beans grown

**ROBUSTA**

Bitter tasting  
Has twice the caffeine  
Grown at lower altitudes  
Used for everyday instant coffees



**\$1,000**

The average American spends more than **\$1,000** on coffee each year



**Multiple people have tried to ban coffee**

Back in 1511, leaders in Mecca believed it stimulated radical thinking and outlawed the drink. Some 16th century Italian clergymen also tried to ban coffee because they believed it to be "satanic." However, Pope Clement VII loved coffee so much that he lifted the ban and had coffee baptized in 1600.

In the 18th century, the Swedish government made both coffee and coffee paraphernalia (including cups and dishes) illegal for its supposed ties to rebellious sentiment

**Coffee could one day fuel your car**

Researchers have had great success in converting coffee into biodiesel and used grounds work just as well



**You can overdose on coffee**

However, you would need to drink about 30 cups in a very short period to get close to a lethal dose of caffeine



Prize winners and dignitaries come together

# 'Gritty determination' pays off for students

This year's international prizegiving ceremony celebrates the best performers. [Carly Fields](#) reports



Carly Fields

This year's cohort of international prize winners took to the stage at London's prestigious Trinity House in October to celebrate their outstanding achievements in the 2018/19 examinations.

With prize winners flying in from Kenya, Mauritius, Portugal, Greece, India, Singapore, Hong Kong, Italy, Ukraine, Cyprus and South Africa, the buzz in the Grade I listed building overlooking the Tower of London was international in tone.

Behind the building's imposing neo-classical façade, prize winners, their families and distinguished guests were received in Trinity House's glorious courtroom for networking and a drinks reception, before moving into the Library for the award ceremony itself.

Opening the ceremony, The Lord Mountevans, president of the Institute, said he was "immensely proud" of the achievements of this year's prize winners. "It takes gritty determination to study – mostly after working hours when colleagues have gone home. To continue with your studies and to sit the examinations is just magnificent," he said. "We look forward to you upholding the high standards of the Institute and you becoming members and joining a truly great professional worldwide organisation."

The UK's shipping minister Nusrat Ghani took time away from her parliamentary duties to also address the prize winners and to award the prizes. Ms Ghani commented on the wealth of nationalities represented in the room and emphasised the importance of building global relationships in the maritime industry. This, she said, enables "trade between countries, which provides prosperity and job opportunities."

She described the prize winners as global ambassadors and thanked the Institute for training the next generation of maritime industry leaders. "I know that the work of the Institute is often conducted in a rather understated manner," she said. "But



*"The Institute's achievements mean it is a great force for good within the maritime industry and I thank them for that."  
Nusrat Ghani, UK shipping minister*

## Networking benefits

Roshin M Abraham, winner of the Cory Brothers Award for the student gaining the highest marks in Port Agency in the Professional Qualifying Examinations and sitting in a UK centre, sat six of his qualifying examinations in the 2017/18 sitting, alongside studying for his MBA. He sat his final and ultimately prize-winning exam for Port Agency in the 2018/19 session.

Speaking to *Shipping Network*, Roshin said: "Winning this award is a nice way to recognise the effort you put in and this ceremony is a great way to network with the Institute."

Quick off the mark, Roshin has already applied and been accepted as a member of the Institute. "I like the network that being a member opens up," he says. "It allows me to keep up-to-date with experts



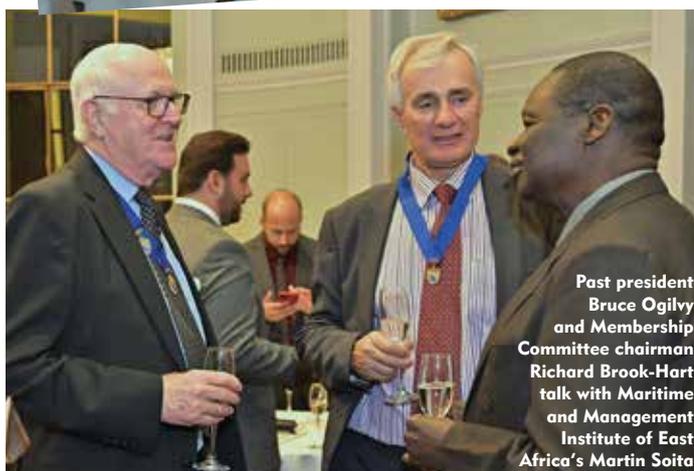
in shipping and to meet people from all sides of shipping." **SN**



The Lord Mountevans congratulates prize winners



Guests network before the ceremony



Past president Bruce Ogilvy and Membership Committee chairman Richard Brook-Hart talk with Maritime and Management Institute of East Africa's Martin Soita



Prize winners were welcomed in the prestigious Trinity House

during my time as minister I have become increasingly impressed by its incredible value, both to the UK and the global maritime industry."

Ms Ghani paid particular homage to Institute director Julie Lithgow, describing her as "inspirational". "The Institute's achievements mean it is a great force for good within the maritime industry and I thank them for that."

In her speech, Ms Lithgow directed special

thanks to the army of examiners, assessors and tutors who devote their time to maintain the educational foundation of the Institute. "They say that every organisation is as good as the people working in it," she said. "This is even more true when these people are volunteers. Our membership is our strength."

Ms Lithgow reminded the guests of an African proverb, which notes: 'If you want to go fast, go alone. If you want to go far, go with others'.

## 'Shell-shocked' at prize

Benjamin Zahavi, winner of the Global Tanker Chartering Award for the student gaining the highest marks in the Foundation Diploma in Tanker Chartering, admits to being "shell-shocked" at winning a prize. "To be honest in my head I just wanted a 50% pass," he confides to *Shipping Network*.

On results day, he received a call from Head Office to advise him of his prize and he said he couldn't believe it. His work colleagues were particularly proud of him: "As I was sitting at my desk, one by one my colleagues came by and shook my hand," he recalls.

Benjamin praised the teaching of the Institute's London School of Shipping (LSS) which he found "extremely helpful". He had originally pursued TutorShip distance learning but found he was lacking motivation to self-study. That changed when



he heard about the evening classes offered by LSS, where he could attend face-to-face classes and ask direct questions on topics he didn't understand. **SN**

**Director Julie Lithgow thanked the team of volunteers that support the Institute in her speech**



After the presentation ceremony, a special award was made to Norman Lopez, Australia and New Zealand Branch education officer, for his dedication to the Institute. Mr Lopez was presented with the Ted Renshaw Award, an accolade for tutors and examiners who embody the spirit and ethos of Ted's unstinting enthusiasm and positivity. Ms Lithgow explained that Mr Lopez's wisdom, patience and guidance are valued by all who have had the privilege to work or volunteer alongside him.

Then chairman Theo Coliandris reflected on the continued variety in shipping in his speech, with every day offering a new challenge. "For many here today you are embarking on a journey in an industry that will engulf your whole being and hopefully there will never be a dull moment."

He added that while the format of examinations and the number of the Institute's subjects has changed much since he qualified in 1977, he remains convinced that the standard of Institute education has stayed consistent. **SN**



**Australia & New Zealand Branch's Norman Lopez (left) was presented with a special award for his dedication to the Institute**



**Prize winner Maria Constantinidou (second from left) and guests**



“We look forward to you upholding the high standards of the Institute and you becoming members and joining a truly great professional worldwide organisation.”  
*The Lord Mountevans,  
 Institute president*



Nisreen Tajbhai accepts her prize from UK shipping minister Nusrat Ghani (left), and Susan Oatway (right), then Institute international vice chairman

## Paying homage to a supportive tutor

For Nisreen Tajbhai, from Mombasa, Kenya, and winner of the Matthew Good Memorial Award for the student gaining the highest marks in Foundation Diploma in Liner Trades, her diploma is just the first step on her professional learning ladder.

Having won the award, Nisreen tells *Shipping Network* that she plans to continue studying to gain her Advanced Diploma in Port Agency and then work towards her Professional Qualifying Examinations.

“It’s an honour to be part of the Institute,” she

says. “I feel really good, great and really happy – I think I chose the right career!”

Nisreen paid particular homage to her tutor Martin, who accompanied her to the prizegiving ceremony. “He has been very supportive and has helped with resources. We can always ask questions to him if we don’t understand something.”

Nisreen’s journey to prize giving was supported by the Institute’s Education Trust Fund, which covered the cost of her air fare to travel to the UK. “I could not have come over without their support,” she said. **SN**



Caring for seafarers  
around the world



## Could your company support our work around the world?

There are many ways in which your company can work with the Mission to provide welfare support to crews. We will work with you to create a partnership which meets your business and social responsibility objectives, whilst making a difference to the lives of seafarers and their families.

### Ways to partner with us

- Support welfare in ports
- Support our worldwide work
- Develop a commercial partnership
- Sponsor us
- Employee challenges
- Make us your charity of the year
- Payroll giving

For more information, contact:

**Maurizio Borgatti, Head of Corporate Partnerships**

t: +44 (0)207 246 2980

e: [Maurizio.Borgatti@missiontoseafarers.org](mailto:Maurizio.Borgatti@missiontoseafarers.org)

## Diverse cohort for China development programme

This year's Institute Classical Shipping Development Program, hosted in Shanghai August 31-September 2, welcomed 18 candidates from 15 companies.

Participants came from a number of firms including Maersk Line, COSCO SHIPPING, Sinopec (Hong Kong), China Merchants Energy Shipping, Ningbo Marine, Eurochart S.A, Pacific Gas, Eastern Ocean Transportation, New Yangtze, Fortune Ocean, and Chinaland.

All attendees completed the programme and were awarded with a certificate jointly issued by the Institute and the Professional Qualification Authority of the Ministry of Transport in the People's Republic of China.

Susan Oatway (then international vice chair) delivered her fourth lecture to the participants covering shipping business and dry cargo chartering. Dr Fan Wei, vice president of Skuld, presented on charterparties and damages, insurance, law and unsafe ports. Shipping experts Ji Wen Yuan, chairman of Seamaster, and Nicola Mason, vice president and head of Skuld Hong Kong, also shared their experience with attendees.



Students came from a diverse range of careers

A networking and open day was included in the programme and welcomed some potential students who were keen to know more about the path to the Institute's recognised shipping qualifications.

The different backgrounds and work experience of the attendees of the training course gave participants exposure to the different cultures and experiences that a shipping practitioner can face in their career. **SN**

## Taiwan training programme progressing well

The Institute's Training Programme launched in Taipei in March 2014 has reached its 11th semester and is running with three courses.

Marine Insurance is presented by Dang-Ren Xu, consultant, Chung Kuo Insurance company; Ship Operation and Management is jointly presented by Prof Chih-Ching Chang FICS (Hon), Dept of Shipping & Transportation Management, National Taiwan Ocean University, former chairman Taiwan International Ports Corporation (TIPC), and Dr Arthur Cheng-Hung Hsieh FICS (Hon), president, Sincere Industrial Corp and Sincere Steamship Corp; and Logistics and Multi-modal Transport is presented by Alan Chang, former general manager, OOCL Logistics (Taiwan)

Co Ltd and former president, Taiwan International Ports Logistics Co Ltd.

The lecturers are shipping professionals, both well-established and known in the industry, so participants benefit from their experience and knowledge.

The Training Programme is a joint initiative of Prof Chih-Ching Chang FICS (Hon), Dr Arthur Cheng-Hung Hsieh FICS (Hon) and Yiu-Kei Chan FICS (Life), Hong Kong Branch former chairman, in co-operation with TIPC.

The programme has been growing semester on semester, so watch this space!

For further information please email Yuching Chen at TIPC: [yuching@twport.com.tw](mailto:yuching@twport.com.tw). **SN**

## Unwavering support of tutors

### Bibi Motala, international prize-winner in the 2019 exam sitting, shares her Institute journey

My career in the shipping industry began in 2014 when I joined the Durban office of the shipping, ports and logistics practice at Edward Nathan Sonnenbergs, the largest law firm in Africa. In the same year, my journey with the Institute began when I registered for the Understanding Shipping course, which I then completed the following year.

As a newbie to this fascinating industry, the course provided an excellent overview of commercial shipping and left me eager to study further. I thereafter set my sights on the Professional Qualifying Examination (PQE) course and registered for Introduction to Shipping and Shipping Business, which I completed in 2018, and Economics of Sea Transport and International Trade, which I completed in 2019. While the courses were challenging at times, I thoroughly enjoyed them, and in particular, Shipping Business.

It was also a great honour to be awarded the prize for highest marks in Introduction to Shipping as well as the AFRIMARI award for the candidate obtaining the highest marks in Shipping Business, sitting in an African centre. I am presently preparing to write Legal Principles in Shipping Business in the upcoming November examinations and thereafter intend to register for Marine Insurance, Shipping Law and Shipping Finance, and hope to complete my PQE in 2020.

My experience with the Institute has been invaluable and has equipped me with skills and knowledge which I use daily as a maritime attorney. The support received from the local office in Durban and the various tutors has been unwavering and, in particular, the annual exam Prep weekend, is an event I look forward to both academically and socially.

I am eager to see what lies ahead on my journey with the Institute and would readily encourage other professionals within the industry to begin their studies with the Institute. **SN**

# Creating a talent pool for an invisible industry

The Institute has partnered with Stockton Riverside College to introduce the first phase of a dedicated shipping school to the region.

Bringing together employers, industry experts and educators, the North East Shipping School (NESS) will help to demystify the sector, putting it firmly on the radar of those considering their future careers.

By developing a future skilled workforce, the school, which is the Institute's first in the UK outside of London, aims to help tackle both current and future skills gaps.

Nikki Sayer, chair of the North East of England Branch of the Institute and Customs Manager at Casper Shipping, said: "The whole journey of products coming from the other side of the world is invisible to people and shipping is a massive part of that. We want to open people's eyes to the vast opportunities that are out there and offer accessible training for those starting out and also those progressing in their careers."

With global trade high on the UK's agenda, the potential for an increased demand in skills is clear.

PD Ports' chief executive, Frans Calje, said: "Every business needs good people and at PD Ports we invest heavily to support the ongoing learning and development of our people.

"With over 95% of all UK imports arriving in the country on a ship, it's easy to see how the maritime industry is critical to the UK economy and society generally yet it lacks visibility, in particular, among young people. Our aim through the North East School of Shipping is to raise visibility of the abundance of opportunities and variety of roles available, making it a career of choice for the next generation in the Tees Valley."

Welcoming the Shipping School to the region, Tees Valley Mayor, Ben Houchen, said: "Teesside is a trading region, we always have been and always will be. As Britain once again looks outwards to the rest of the world with an independent trade policy, ports like Teesport are going to be even more important to our local economy than they are now.



L-R: Matt Lane, a new student from Casper Shipping; Jan Ingram, SRC; Rob Marshall, NESS Tutor; Nikki Sayer, chair of the North East of England Branch; Matthew Crust, a current student from GAC; and Michael Duffy, SRC

"This, coupled with the exciting prospect of Teesport and the South Tees Development Corporation site becoming one of the UK's first free ports, means we need to make sure our young people have the skills needed to take advantage of the new job opportunities created around the port.

"By locating the new Shipping School here in the Tees Valley it means our young people can develop the right skills safe in the knowledge that what they are learning is exactly what they need to get on and develop a career."

Based on the London School of Shipping model, the North East Shipping School will provide a range of courses to those starting out in the shipping industry, delivered by Stockton Riverside College.

Michael Duffey, Stockton Riverside College's head of department for Construction and Professional Services, said: "The College has been working closely with industry employers and experts for several years to provide training opportunities and raise awareness of the logistics industry, resulting in the Tees Valley Logistics Academy. The introduction of the Shipping School with the Institute of Chartered Shipbrokers seemed like a natural progression in our mission to raise awareness and help to plug future skills gaps." **SN**



## Gillian Clark steps up

At the recent North East of England Branch committee meeting, chair Nikki Sayer presented Gillian Clark with the medal for office of vice chair.

Gillian has kindly stepped into the post after previous vice chair Paul Olvhoj resigned due to relocation out of the area.

Gillian has been a committee member for several years and the Branch wishes her every success as an Officer of the Branch. **SN**

## Key Ghana strategy review role

The West Africa Branch is proud to have been invited to contribute to a review of Ghana's draft National Integrated Maritime Strategy (NIMS) by the Ghanaian National Security Council secretariat.

Institute branch chair Gertrude Adwoa Ohene-Asienim was invited as a project consultant in conjunction with some members of the National Maritime Security Technical Working Group, which is made up of 18 agencies with varied and complementing mandates within the maritime domain.

Consultants from some key institutions including Ghana Maritime Authority, the Centre for Maritime Law and Security Africa, and Masser Afrique were also present for the meeting.

During the review meeting, Ms Ohene-Asienim made a substantive case on why technology and innovation should be guiding principles for the NIMS.

The Institute's West Africa Branch supports Ghana's bid to push for a comprehensive strategy to better serve its citizens and its maritime domain.



West Africa Branch supports Ghana's strategy goals

The Branch is putting measures in place to support this great initiative by providing the requisite maritime education and training tools necessary for capacity building in the region. **SN**

## Turkey covers sulphur content ruling

The Institute's Turkey Development Branch organised a successful event in August in co-ordination with Institute Recognised Partner Maritime Training & Education Center, known as Martred.

The event kicked off with a fascinating presentation from marine consultant Capt Behzat Esinduy, who shared valuable information about the IMO's 2020 sulphur limit in marine fuels regulation.

Capt Esinduy's presentation was followed by speeches from Bozidar Ljubisaljevic and Bengi Yuceer, regional marine practice leader TMEA region and head of claims respectively at Howden – Dubai. Their presentation covered the contractual considerations of the sulphur limit and the implications for insurance. Presentations were followed by lively Q&A sessions.

The event attracted maritime professionals from different walks of the maritime industry. **SN**



Howden's Bozidar Ljubisaljevic discussed the legal implications of the IMO 2020 sulphur ruling

## Ship owner visit supports knowledge building

Students of the Institute's Greece Branch visited Danaos Shipping in October to learn about the company and the liner market in which it operates.

Students had the chance to attend a very interesting and engaging session delivered by the senior management of the company, and to explore the organisational structure and the commercial functions of Danaos, one of the world's largest containership charter owners.



Students learnt about Danaos' operations

### 'KNOW US BETTER' INSTITUTE PARTY

In October, the Greece Branch organised the first 'To know us better' party of this academic year to welcome the new cohort of students at Shakespeare in Love restaurant, Piraeus, Greece.

The event was attended by over 120 Institute students, who had the opportunity to meet with each other and network with Institute tutors and members in an energetic atmosphere.

The Branch gives its thanks to Danaos' Iraklis Prokopakis, senior vice-president, treasurer and chief operating officer; Capt Elias Ladas, DPA, HR and training manager; and Filippos Prokopakis, commercial manager, for welcoming the students and for their enlightening presentations. **SN**

## Head Office welcomes international visitors

In October we were delighted to receive a visit from one of our members. Giovanni Folaranni Esan MICS from the West Africa Branch – Nigeria Chapter visited Head Office for a chat and to hear the news about the Institute's Executive MBA programme, launched with the University of Hull and starting next spring.

Giovanni's visit followed a visit in September from the chair of the Nigeria Chapter, Tami Adu FICS.

It is always great for the Head Office team to meet members and students, so if you are in London please do come along. [SN](#)



Giovanni Folaranni Esan found out more about the Institute's Executive MBA programme

## Female focus for World Maritime Day



Women took centre stage at the Pakistan Branch's event

The Pakistan Branch themed its World Maritime Day 2019 proceedings on 'Empowering women in the maritime community'.

With the support of Karachi Port Trust, the full day seminar opened with a welcome from Capt Anwar Shah, ex-director general and additional secretary of the Ministry of Ports & Shipping. Capt Shah was followed by a keynote address from Capt SMA Mahmoodi, chairman of the Nautical Institute's Pakistan Branch, vice chairman of CILT-Pakistan and honorary secretary of the Institute's Pakistan Branch.

A technical session chaired by Capt Khalid Humail, chief executive of Oceanic Group, included papers from Zawiah

Majid, vice chairperson WiLAT Global Southeast Asia and chairperson, WiLAT, Malaysia; Capt Abdul Aziz, secretary general, IKMAL – Malaysia; Nasreen Haq, chairperson WiLAT Pakistan; Ayesha Masood, executive director, SeaCare Pakistan; and Muhammad Ali Khan, team leader of YP's CILT Pakistan.

The closing session was chaired by Sardar Yasin Malik, patron of CILT, Pakistan.

A number of recommendations on the theme stemmed from the seminar, including:

- Participation of women in the maritime sector be viewed as a core element in the development of the maritime industry and the economy as a whole.
- Recruitment of a female lecturer at the Pakistan Marine Academy to encourage women into the sector.
- Collection of data by academia with the support of the maritime industry on women working in the maritime sector.
- Introduction of a new subject in schools to change mindsets and break the cultural and traditional barriers of gender inequality.
- Provision of scholarships from the IMO for women studying in institutes in Pakistan.
- Encouragement of women who have excelled in the maritime industry to be recognised and presented as role models to encourage others join the profession.

The celebration was attended by the maritime community alongside port Customs officials and representatives from the Ministry of Maritime Affairs. [SN](#)

## ANZ shipping course series continues

The Australia/New Zealand Branch held its seventh Bespoke Commercial Shipping Practice Course at the Port of Brisbane in October and welcomed 13 attendees from mining companies, soft commodity traders, surveyors, ships agents and shipowners.

Course director Nigel D'Souza FICS produced his usual virtuoso performance and was ably assisted by course co-ordinator Nick Vann FICS and the Branch's education officer Norman Lopez FICS.

The Branch was encouraged by the positive feedback from those attending the course and plans to run the course again in Australia or New Zealand in 2020. [SN](#)



Feedback from course participants was positive

## Youngest Branch welcomed to Institute family

On October 31, the Netherlands Branch became the 26th branch of the Institute with a launch party worthy of its standing in the local community. The event was generously supported by Friday & Co Shipbrokers.

At the event, Netherlands Branch chairman Austin Dooley thanked those who had helped the committee on their journey so far.



Membership Committee chairman Richard Brook-Hart (left) presents a commemorative shield to Jeroen Visser (centre) and Austin Dooley (right)

Robert Hill, head of membership at the Institute, addressed the obligations of being a member of the Institute and the responsibilities of a branch. He referred to minutes from the inaugural Institute meeting in 1911 to remind the committee of their purpose and objectives: "To consider all questions affecting the interests of persons engaged in the business of shipbrokers or on other trades, businesses or commercial interests connected therewith, and to take such action as may be necessary to promote all such interests."

Richard Brook-Hart, chairman of the Membership Committee, gave an inspiring speech including some life lessons he has picked up over his 50 years in business. He advised those present to "have integrity"; and not to be as concerned with "your reputation as much as with your character".

The Branch was then toasted by all in attendance and the celebrations continued with lively discussion and debate late into the evening.

Although the Netherlands is the Institute's youngest branch, its local members have a wealth of experience, a combination which is key for a dynamic and modern branch. The local team has worked incredibly hard to get to this point and their enthusiasm has never wavered.

The Netherlands Branch committee would be delighted to hear from members, with words of advice or encouragement. The Branch committee can be contacted on [netherlands@ics.org.uk](mailto:netherlands@ics.org.uk). **SN**



Austin Dooley, Netherlands Branch chairman, addresses the gathering with some of the committee

## Joint event raises gender awareness

The Ceylon Association of Shipping Agents (CASA) and the Institute's Sri Lanka Branch joined forces to organise the Maritime & Supply Chain International Conference in September in celebration of World Maritime Day.

The conference was the first maritime and supply chain conference to be endorsed by the Ministry of Ports & Shipping and Southern Development and Sri Lanka Ports Authority.

Following the 'Empowering women in the maritime community' theme, the conference was an opportunity to raise awareness of the importance of gender equality, in line with the United Nations' Sustainable Development Goals.

Ports & Shipping and Southern Development Minister Sagala Rathnayake was the chief guest at the conference. Theo Coliandris (then Institute international chairman) also attended and in his address to the audience he explained the importance of maritime education and knowledge sharing in facing today's industry challenges. CASA chairman Iqram Cuttilan thanked the Institute for its partnership in organising the conference.

The conference agenda covered five key areas: Navigating through challenging times; Ports in the region – do they complement or compete; Disruptions in the supply chain; Sustainability & diversity; and the changing energy mix and implications of that for the shipping industry. Each session closed with a panel discussion and lively debate. **SN**



Delegates thronged to the event

## Record turnout for Annual General Meeting

The Institute held its AGM in October in London and also gave members the opportunity to join the meeting online. Forty members attended the meeting in person and online making it the largest attendance at an AGM for some years.

After questions and discussions, the annual statement of accounts was accepted and the AGM confirmed the composition of Controlling Council 2019/20. It also re-elected haysmacintyre as auditors. The Institute president thanked the Bulgaria Branch for proposing a change in auditors at the AGM in 2017 as it is good governance to do so regularly.

The proposed changes to the Royal Charter and byelaws, which had been circulated prior to the meeting, were also discussed. There was an in-depth discussion regarding the authority of the AGM to approve new drafts of the byelaws. The three proposed changes related to Controlling Council decisions that predate the current byelaw review project, and had been prioritised by Executive Council for this AGM ahead of the full byelaw review.

It was clarified that the AGM is the only body that can approve changes to these documents, and must have a three-quarters majority of Members present. There was a general agreement that the proposed changes were overdue, and the discussion related to procedure rather than the material impact of the changes.

A vote was taken and was passed with over a three-quarters majority. The two documents will now be formally submitted to the Privy Council for their review.

As the annual accounts are now being distributed to members prior to the meeting, it was requested that questions for the AGM should also be submitted in advance so the required supporting information can be prepared.

The president thanked the outgoing chairman and made a small presentation. Alan Marsh FICS thanked the president for presiding over the longest Institute AGM for many years, and for his ongoing leadership.

Minutes of the AGM are available on the Institute's website. [SN](#)

## LISW seminar tackles finance questions

London Branch hosted its usual London International Shipping Week (LISW) seminar in September, an event that is fast becoming an eagerly anticipated fixture in the packed LISW calendar.

Moderated by Susan Oatway (then international Institute vice chair) the seminar posed the question 'Where is the money coming from' for international shipping finance.

Ms Oatway was joined on the rostrum by Prof Nikos Nomikos, professor of shipping finance at Cass Business School; Nicholas M Petrakakos, managing director of real assets group at StormHarbourSecurities; Dipak Karki, managing director of DK2 Seaport; Nikos Benetis, group director of H&M services and financial institution advisory services at London Offshore Consultants; and Mark Williams, managing director of Shipping Strategy.

Mr Williams highlighted that the combination of the decline of traditional sources of financing, greater oversight from rating



agencies, the rise of state capitalism, the introduction of the Poseidon Principles and optimisation had led to "finance for the few".

Mr Benetis asked the audience how the industry could optimise risk management using both new technology and industry knowledge, while Mr Petrakakos urged participants to "try to retain flexibility via structuring the deal in a manner that works regardless of the market environment". [SN](#)

## South Africa Prep pairs education and networking

The Institute's South Africa Branch held a very successful Prep Weekend just outside of Durban with students attending from all corners of the country – Port Elizabeth, Northern Cape, Namibia and Johannesburg. The revision weekend served its purpose well, allowing students to network and bond while preparing for exams.

It was held over Saturday and Sunday with the only complaint from students being that it was too short. This will be taken on board for the next one.

Meanwhile, the Branch vice-chairman and manager enjoyed a visit from a member of the East Africa Branch of the Institute, Silvester Kututa of Kenya. It was a good opportunity to meet Silvester and it proved useful in discussing similarities and differences between the branches. An undertaking was given to liaise more closely in a bid to learn from and help each other where possible.

In a student support move, the Branch has set up WhatsApp groups between students and tutors for free discussion of concerns or topics not understood. [SN](#)



The students only complaint was that the Prep weekend was too short

# Manila kicks off global Open Days

Open Days were held in 15 locations right across the world, reports [Matt Gilbert](#)



**Matt Gilbert**

This year has seen many international branches open their doors to invite existing and prospective students to get a taste of what the Institute has to offer. Open Days provide an important local focal point within the calendar of the Institute's promotional activity and all branches, teaching centres and partners are urged to participate, with guidance and support from Head Office.

This year, the Institute's Open Day programme started early with the first held in Manila on May 30 following a course on 'A practical approach to commercial shipping' organised by Magsaysay Learning Resources Inc (MLRI).

The event was possible thanks to the leadership of Alexander Querol, president of MLRI, with the assistance of Mae T Bereña, deputy head of operations; Murrieza Rondera, program supervisor; Princess Zaira V Gonzales, sales and marketing supervisor; and the team at MLRI.

Leif Ollivierre MICS attended on behalf of the Institute together with YK Chan FICS from Hong Kong as Institute Ambassador. Capt Norman Lopez FICS from the Australia/New Zealand Branch also attended as a member of Education and Training Committee.

The guests asked many questions about the Institute and the programmes available and left the event with a keen interest in the Institute's Professional Qualifications.

On the Humber, in the UK, an Open Day was held at Ahlmark Shipping in Hull. Danny Carmichael FICS from Ahlmark Shipping, Nick Allen FICS from Rix Shipping, Paul Holland from New Holland Dock and Mike Johnston MICS from RMS Ports came along to open the doors of the Humber Branch to existing and prospective students.

A few new young faces turned up and those attending the event felt encouraged about starting their studies with the Institute after meeting with Fellows and Members of the branch, who as ever offered their support in preparations for the exams.

In India, an Open Day event was successfully hosted by the Institute's East India Branch chairman Ravee S Titte, FICS, who explained the Institute, education, exams, membership procedures and the benefits of professional qualifications to prospective

**"Open days provide an important local focal point within the calendar of the Institute's promotional activity"**



**Manila**



**East India Branch**

students who had expressed an interest in enrolling.

In the Middle East, the local Branch organised its Open Day in Dubai and welcomed 70 prospective students and seven tutors at its event. Ali Canani, treasurer of the Branch introduced the event to the audience. This was followed by the presentation of a case study on the 'Importance of Professional Knowledge' from Krishna Prasad, vice president of the Branch.

The case study highlighted the importance of professional knowledge in day to day business.

The seminar was followed by a presentation of the Institute's activities, details of Institute examinations and an explanation of the Middle East Student Support programme by Ravi Shankar, general secretary of the Branch.

The next Institute Open Day is scheduled for Wednesday February 5. Please get in touch with your local colleagues to see how you can get involved. [SN](#)



**Middle East Branch**

# Setting the foundations for professional learning

Barbara Fletcher reflects on the life of a true Institute gentleman

I first got to know Harry Lorkin in the late 1980s when I was lecturing for the Institute's Professional Qualifying Examinations, having initially been involved in the setting up of TutorShip and the original intensive exam preparation weekend, PREP.

Following staff problems delivering the TutorShip distance learning course Harry, the incoming chairman, invited me to join the Institute as the director of Education. Harry was determined to ensure that the Institute was fit for purpose as the flagship for standards in shore-based shipping business as our Bye-Laws demand. This resulted in him giving the necessary leadership and support for me to develop a new modular education syllabus and examinations and supporting courses. It is a tribute to Harry that this system has stood the test of time.

After finishing his term as chairman, Harry continued his work at the Institute on the education programme and driving it forward in the company of his former colleague John Barclay. Harry was well aware of the need for financial sustainability having previously seen the Institute through difficult times. Furthermore he recognised the need to ensure the role and work of the Institute actively encompassed the needs of our growing international membership. He was able to build on his own international experience to promote the establishment

of an international network of branches and training schemes.

He and I travelled widely to both established and emerging shipping centres, his knowledge and easy camaraderie were invaluable, but his request that we always 'put elbows on table' for breakfast could be tiresome when a few more minutes in bed were required!

He was the epitome of the English gentleman, well groomed in his jacket and tie and always appearing very upright and 'professional'. Harry's willingness and commitment to travel extensively was remarkable, although he always said his appetite stayed on the ground when the plane took off and his intense longing for a proper cup of tea when away was legendary.

The Institute and my personal debt to Harry is enormous, he was a considerate and encouraging chairman, a loyal colleague and an interesting and supportive travelling companion. I enjoyed working with him and know that without his dedicated input, foresight and sometimes pedantic eye for detail I could not have achieved what I did as director of the Institute.

Harry Lorkin was truly an Institute man through and through and he was instrumental in providing a firm basis for those who followed him to further shipping business education worldwide. [SN](#)

## Hays Group broker leaves his legacy

It is with great sadness that *Shipping Network* reports the death of Court Assistant Emeritus Peter David Thatcher Roberts who died September 22, aged 85.

Peter Roberts was born in 1934 and was educated at Alley's School Dulwich before training as a Merchant Navy Cadet at the King Edward VII Nautical College. He spent seven years at sea where he gained his First Mate's Certificate and served on tankers, cargo vessels and passenger ships. He left the sea to become a shipbroker, initially with Leinster & Co before joining the Hays

Group where he remained for twenty-four years. He also served in the Royal Naval Reserve for eight years and was a Member of the Institute.

Peter was admitted to the Freedom of the Company on October 21, 1982 and the Livery on November 10, 1982, having already received the Freedom of the City in 1971. He was appointed an Assistant to the Court on April 27, 1995 and was made Emeritus in 2007. Peter Roberts was Master of the Company of Watermen and Lightermen of the River Thames in 1993. [SN](#)

## Branch mourns loss of steel guru



The North East of England Branch would like to pay tribute to Geoff Fletcher who died recently aged 79.

He started his working life at Constantine Shipping Co in 1957 where he had to provide his own bicycle to deliver mail to ships.

In the early sixties, Geoff joined BISC (Ore) at its agency office in Middlesbrough where he learnt about the UK steel industry and the

needs of owners and charterers. He was promoted to the Head Office in London and made good progress in the steel shipping world until he returned to Teesside to become general manager of Teesside Warehousing some years later.

Geoff was a longstanding member of the Institute for fifty years and was chairman of the Teesside Branch in 2002-2003. He also was actively involved with the Tees Shipping Association and national freight organisations.

His knowledge of ship owners and vessel names was second to none and he regularly contributed to shipping websites under the pseudonym 'shipbroker'. [SN](#)



# Calendar

Cape Kaliakra, Bulgaria

## JANUARY EVENTS

### 16 January

Bulgaria Branch  
Annual Networking  
Meeting  
Varna

### January (date tbc)

Singapore Branch  
Panel discussion 'Port  
Voyage Stage'  
Singapore

## FEBRUARY EVENTS

### 5 February

Global Open Day

### 10 February

Deadline to request  
exceptional exam centres  
for the May 2020 exams

### 20 February

East Anglia Branch  
Seminar 'China's  
Seaborn Trade'  
Ipswich

### 27 February

November 2019  
examination results  
published

## MARCH EVENTS

### 2 March

London & South East  
Branch  
JIM Lecture onboard  
HQS Wellington  
London

### 26 March

Executive Council video  
meeting



# The Secret Broker

## A sense of perspective

I met up with an old friend last weekend, who, after a long and illustrious career in the Army, is about to retire on a full, gold-plated, non-contributory pension at the grand old age of 55. I don't begrudge him a penny. For all the stresses and strains of shipbroking nobody has actively tried to kill me. Granted a client did once produce a gun over dinner, but to be fair he was only illustrating a point and not actually pointing it at me. As you can imagine, the neighbouring tables didn't stop for coffee or desserts.

For all the slings and arrows of the profession, physical threats to your wellbeing in shipbroking are often limited to what you are unwise enough to ingest in the course of entertaining duties. Possibly the most dangerous thing you can do in this business is tell a Greek taxi driver that you are late for a flight. Those guys love a challenge.

Last week I made the near fatal mistake of intimating to the driver that time was tight to catch the Aegean flight back to Heathrow. Having given the encouragement, rather like an injudicious email, it proved very difficult to retract. His reckless indifference to life, limb and traffic regulations lasted a full twenty minutes before, having shot through a red-lighted crossroad, he grinned sheepishly in the rear-view mirror and accepted that there were flights with other airlines.

Whatever the stresses of shipbroking it's important to keep a sense of perspective. We have all had that moment when our

version of events has been challenged and we hurriedly retrace the email paper trail, check the WhatsApp messages, look at the texts and try to decipher our day books, piecing together whether or not we have failed in the first duty of a shipbroker – to accurately record what has been agreed.

Until we have the daisy chain of decisions pieced together, it is easy to feel a cold hand gripping our hearts and the anaconda-coiling of our stomachs. Usually we can point to the instruction. And if we can't, in most cases the parties can be induced to negotiate a bit longer. Occasionally they won't and occasionally, very occasionally, the broker is in the crosshairs. But these are metaphoric cross-hairs. Grim threats are made but during a career spanning a few decades I can count on the fingers of one hand the times that any colleague of mine has ever been asked to make a statement to the club and, touching wood here, I have never seen a colleague sued.

This is often difficult for the less-experienced broker to grasp, but with luck, today's tribulations are mere anecdotes for the Christmas party. While it may be difficult to keep your head while all around you unsympathetic managers are screaming blue murder, do try to remember to treat those imposters Triumph and Disaster equally the same. And good managers for their part, should be like dunnage, spreading the intense pressure of the event over the wider span of their experience. **SN**



# the stern

## CONTAINERS FOR 'CREW'

There are many ways to transform shipping containers to give them a second lease of life. We've seen art installations, mobile libraries, portable restaurants, and even houses. But film crew accommodation is a new one on us.

*The Stern* hears that the crew on the new James Bond film, *Bond 25*, have been sleeping in containers because there were not enough hotel rooms available in the Scottish Highlands where they were filming.

A 'container hotel' to house a crew of around 300 people was built at Aviemore in the Cairngorms National Park, Scotland.

British company Snoozebox created the hotel, converting each container into accommodation for two beds and a bathroom.

However, it seems that the container conversion doesn't suit everyone: Bond star Daniel Craig has chosen to stay in a five-star resort nearby instead. With stifling heat, midges due to the close proximity of the



containers to the woods and no windows, one could see why the container hotel might be less attractive than the luxury resort. **SN**

## SAVOURIES WORTH TRAVELLING FOR

If you've ever travelled on a luxury cruise ship, you'll know that culinary delights make up a staple of the high sea experience. A typical cruise requires as much as 60 tonnes of food-stuffs, including the finest wine, oysters, caviar and Kobe beef. Reportedly, on an average 10-night cruise, passengers and crew will eat as many as 35,000 meals or more. Those could include as much as 120 lbs of lobster and 630 litres of ice cream.

But when a luxury cruise ship docked at the Port of Tyne, UK, in August, the Captain had a very specific stock in mind to add to the food fare: Greggs Sausage Rolls, Vegan Sausage Rolls and North East favourite – Stottie Cake, a type of bread that originated in North East England. Greggs is the largest bakery chain in the UK and is headquartered in North Tyneside, near Newcastle upon Tyne and the Port of Tyne.

The ship's cruise director made the initial contact with Greggs, leading the Captain to place a bulk order for the ship's 700 passengers who were visiting as part of a 10-day culinary and cultural tour of Northern Europe.

Norwegian Captain Johannes Tysse of the *Azamara*, said: "On



our cruise of Northern Europe passengers will enjoy amazing dining experiences including visits to Bruges and Amsterdam. Our UK crew told us that a visit to Newcastle wouldn't be complete without a taste of Greggs as a culinary 'must-try', and that for European travellers it joins the echelons of British food icons alongside Fish & Chips, Afternoon Tea and the Sunday Roast. We were all very impressed and even got a cheer." **SN**

## SHIPPING SPEAK

“Currently there is 1,150 companies on AngelList trying to innovate shipping – digitising the supply chain is as inevitable as digitising the media”

**Gerd Leonhard, futurist and humanist**

“Why are we talking about diversity when we are going to Mars? It takes a step forward to encourage and embrace change – everybody has a responsibility on this.”

**Sadan Kaptanoglu, HI Kaptanoglu Shipping, BIMCO**

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