

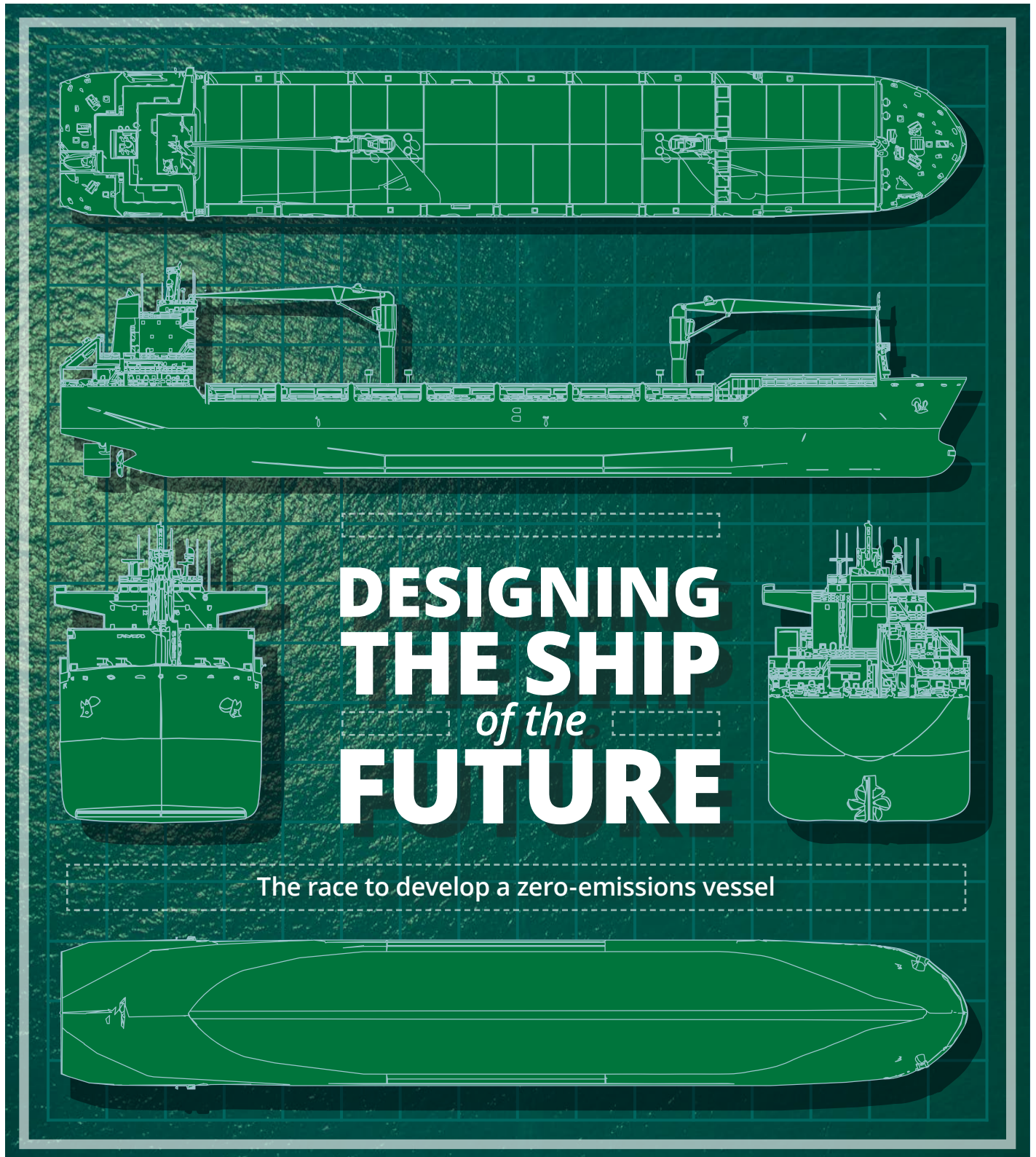
First published in 1891

March 2020

# DAILY CARGO NEWS

The voice of Australian shipping & maritime logistics

the **dcn**.com.au



**36** Agricultural trades  
surviving uncertainty

**42** State of play for  
NSW trade gateways

**48** Training and career  
development feature







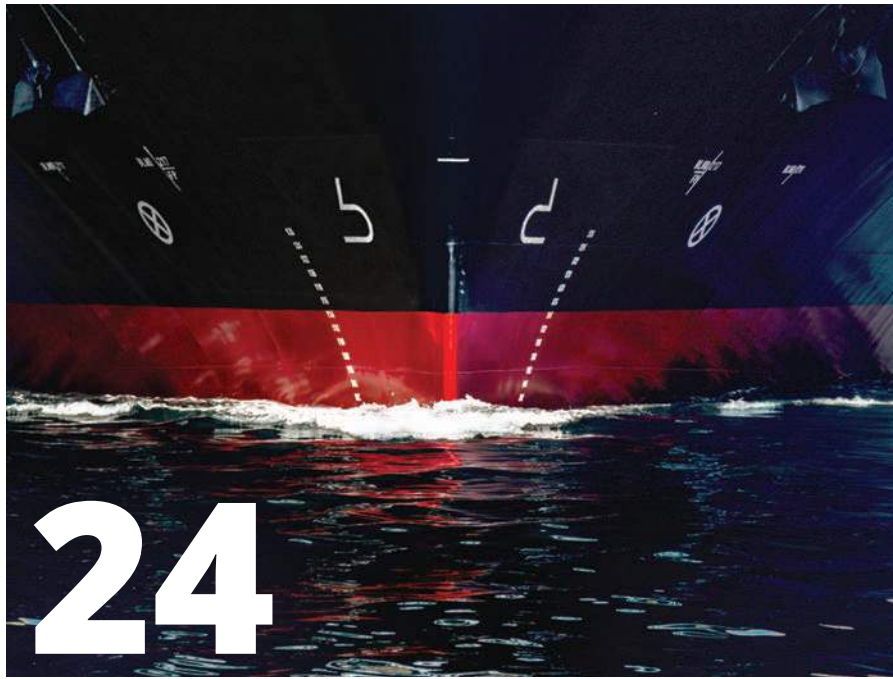
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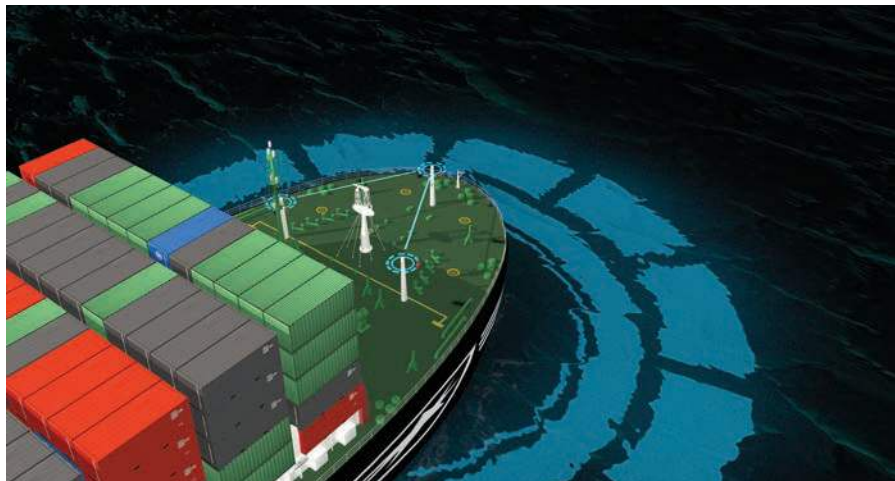
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# From the editor



Welcome to March and another edition of *Daily Cargo News*.

The news cycle has been dominated by the coronavirus of late. While much has been made of those passengers who have had the misfortune to be stuck onboard quarantined cruise ships, we would argue the bigger issue is one of trade, with the potential for a virus-driven economic slump in China (the world's second largest economy), with flow-on impacts for countries such as Australia.

Further analysis of this topic is contained in this edition.

While the world has been focused on the coronavirus, another global event has been taking place. It seems the IMO2020 sulphur cap introduction is progressing as expected, without any significant adverse outcomes experienced by shipowners and operators. But the sulphur cap is just the start of the IMO's ambitious agenda to achieve zero emissions as soon as possible this century.

Its target is to reduce greenhouse gas emissions by 50% by 2050 compared with 2008 levels. This has got the shipping fraternity racing to develop alternative propulsion and other emissions reduction technologies for the future fleet.

While the jury is out on which technologies will lead the race, in this edition, *DCN* speaks with some global shipping lines and technology proponents on the range of solutions being developed from synthetic fuels to renewable energy and ship design innovations.

On a final note, this edition also contains a summary of key developments within New South Wales. As the state with the largest economy in the Commonwealth, what happens in NSW is of crucial importance for the nation in terms of shipping.

Thanks for reading and we hope you enjoy this edition.

**David Sexton**  
Editor, *Daily Cargo News*

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# The seas are our oyster

Deputy Prime Minister, Michael McCormack, reflects upon Australia's contribution to international shipping and maritime

## THE RESOLVE OF AUSTRALIANS

has been fully tested this summer but, as always, in the worst of times we see the best of our nation. The ongoing drought, disastrous bushfires, floods in some areas and the threat of the novel coronavirus 2019 and its implications have taken their toll.

But our people are a resilient lot and they will get through these difficulties.

Collaboration between governments and industries, including maritime industries, will continue to be a vital part of our future responses and readiness.

At the same time, we must plan for future growth – and when it comes to growth and opportunity, Australia's shipping and maritime sectors are punching well above their weight. When shipping and maritime are cruising, this success benefits everyday Australians working on farms, running businesses, or consumers who count on shipping to deliver the goods they need, when they need them.

On 1 December 2019, Australia was successfully re-elected to Category B of the International Maritime Organization Council. This decision reflects our nation's

end of 2019 - and at the beginning of this new decade.

Australia has always been a significant maritime nation. Our nation has 60,000 kilometres of coastline, 12,000 islands and the third largest Exclusive Economic Zone in the world. We're the world's largest commodities exporter, leading in exports of iron ore, coal and bauxite, and we're the second largest exporter of liquefied natural gas. Some 99% of our international trade by volume is carried by sea and we're home to the largest bulk export port in the world (Port Hedland in Western Australia).

To put this in perspective, this means Australian ports handle nearly 1.6bn tonnes of cargo annually, more than 93% of which is international trade. We receive more than 28,440 visits per year from international ships and we have an active domestic coastal shipping task too, owing to our extensive coastline and the distance between our major coastal cities.

All this movement and trade means goods are constantly travelling through our waters – and this benefits not only the shipping and maritime sectors, but also producers and consumers all over the country.



Michael McCormack, Deputy Prime Minister, Minister for infrastructure

building efforts in the Asia-Pacific and Indian Ocean regions.

Australia also manages maritime activities in one of the larger IMO designated Particularly Sensitive Areas, the Great Barrier Reef Marine Park and the Torres Strait. The GBRMP covers 344,400km and is one of the best known and most complex natural systems on Earth, attracting millions of visitors each year.

Re-election to Category B affirms the positive impact of our maritime and shipping sectors both within our region and globally, and recognises our country as an international maritime leader. What's more, Australia is a foundation member of the IMO and has contributed as a Council member for more than 50 years. I think it's safe to say we'll be contributing strongly in the coming years.

I am heartened both by what we have achieved so far and by our strong position as a significant maritime nation in 2020. Australia's maritime and shipping sectors have a big task, but as is repeatedly shown, they always succeed in rising to the challenge. ■

## When it comes to growth and opportunity, Australia's shipping and maritime sectors are punching well above their weight

standing as a significant player in the global maritime industry. Category B of the IMO is made up of the 10 IMO Member States with the largest interest in international seaborne trade. As part of this group, Australia is looking to continue our work within the IMO, further contributing to the safety, security and environmental performance of international shipping.

It is worth reflecting on where Australia's maritime and shipping sectors stood at the

Australia's maritime activities also continue to benefit our wider region. For instance, Australia's search and rescue region covers more than 10% of the Earth's surface. In the 2018-19 period, we had 9672 maritime incidents reported and our search and rescue efforts saved 190 lives. We maintain networks of more than 11,000 aids to navigation, which include lighthouses, buoys, fog signals and day beacons. We also invest heavily in capacity-

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# News in brief

Full details at [thedcn.com.au](http://thedcn.com.au)

## Jim Wilson joins Shipping Australia

Former editor of *Lloyd's List DCN/Lloyd's List Australia*, Jim Wilson, has joined Shipping Australia as a policy and communications executive.

Mr Wilson comes to the role following a stint as the national correspondent for international trucking and logistics publication *FreightWaves*.

Before his arrival in Australia in 2010, he was employed by *Fairplay International Shipping Magazine* as its Singapore-based Asia Pacific editor and, prior to that, was the publication's Dubai-based Middle East correspondent.

He started his career as a maritime and logistics reporter with *Fairplay* about 15 years ago in the United Kingdom.

In his new role, Mr Wilson will provide policy advice and support to the Shipping Australia membership.

He is also to research and report on industry activities, help develop policies,

create and implement the communications plan, and write articles for publication in trade and other publications.

"I'm delighted to be joining the highly-regarded Shipping Australia team, which is the leading international commercial maritime policy and advisory membership organization in the country," Mr Wilson said.

"I'll be looking forward to getting stuck into policy and communications work and, of course, providing a good service to the Shipping Australia membership."

Shipping Australia CEO Rod Nairn said Mr Wilson was a strong appointment.

"Jim brings a wealth of experience with the shipping industry from his previous roles as a global and Australian maritime journalist," Mr Nairn said.

"He will be an asset to our advocacy for the international shipping industry in Australia."



Jim Wilson joins Shipping Australia



Gladstone Ports Corporation's indigenous affairs advisor Lee-Ann Dudley

## Gladstone backs Indigenous talent with bursary scheme

Gladstone Ports Corporation invested in 30 local students, seeking to support their educational pathways through the *Talent Today, Talent Tomorrow Bursary and Recognition* program.

Open to Aboriginal, Torres Strait Islander and Australian South Sea Islander students, the program acknowledges not only the academic achievements of secondary students, but also their participation, attitude and attendance towards their schooling.

Indigenous affairs advisor Lee-Ann Dudley said the program was designed to support the students' learning journey.

"Talent Today Talent Tomorrow has been a part of our Indigenous Affairs strategy since 2013," Ms Dudley said.

"Since then GPC has provided over \$91,000 in financial assistance to Aboriginal, Torres Strait Islander and Australian South Sea Islander students."

People, community and sustainability general manager Rowen Winsor said she was delighted to see the 30 students receive their awards, an increase of seven from the year before.

"We not only recognise the students, but also thank the parents, guardians and family members."





## PORT CYBER SECURITY FORUM ESTABLISHED

■ Experts in cyber security gathered in Melbourne to establish the Port Cyber Security Forum. More than 20 organisations attended the meeting on the invitation of the Port of Melbourne.

Speakers included Craig Searle, the co-founder of Australian cyber security consultancy Hivint, and Mark Grubey, Port of Melbourne information security manager.

"Companies and organisations attempting to mitigate the increasing cyber security threat in isolation are far less effective than operating with other like-minded organisations," said port CEO Brendan Bourke.

"The formation of the Port Cyber Security Forum is recognition by those who attended that a proactive approach to cyber security is more effective than coming together after a cyber security attack occurs."

Craig Searle's *threat intelligence* briefing began with a review of the threat landscape – who the attackers are and their motivation

Mark Grubey talked about how within organisations, what used to be seen as an IT problem is now recognised as a business risk affecting the whole organisation.

The next meeting is at the Joint Cybersecurity Centre in Melbourne in May.

## "Pollution debt" leads to Yang Ming ship arrest

The Federal Court Admiralty Marshall arrested and later released the Liberian-flagged vessel *YM Eternity* (IMO 9353280) at Port Botany in relation to an unpaid "pollution debt" from its sister ship *YM Efficiency*.

*YM Efficiency* famously lost 81 shipping containers off the coast of Newcastle in June 2018.

According to AMSA, the Federal Court Admiralty Marshall arrested the *YM Eternity* at Port Botany after AMSA petitioned the court to recover the outstanding debt.

Both *YM Eternity* and *YM Efficiency* are owned by a subsidiary of Taiwanese shipping company, Yang Ming Marine Transport Corp.

AMSA says Yang Ming has refused to pay

for the clean-up of the remaining pollution including the containers and their contents which are on the seafloor off Newcastle.

Some 60 containers have been identified, five containers have been recovered while a further 16 remain missing.

In December 2019, AMSA signed a contract with Ardent Oceania, to begin the clean-up operation for those 60 containers.

The contract is valued at \$15m.

Work begins in March and is expected to be completed within a month.

AMSA chief executive Mick Kinley said the arrest of *YM Eternity* showed AMSA would not allow international shipping companies to pollute our waters without consequence.

■ DP World parent company Port and Free Zone World moved to buy the 19.55% of DP World's shares traded on Nasdaq Dubai, thus returning the company to private ownership.

DPW is part owner of DP World Australia, one of two main stevedores in Sydney, Melbourne, Brisbane and Fremantle.

The acquisition move is expected to enable DP World to focus on its medium-to-long-term strategy of transforming from a global port operator to an infrastructure-led end-to-end logistics provider.

DP World group CFO Yuvraj Narayan, said the board concluded the disadvantages of maintaining a public listing outweighed the benefits.

"Delisting from Nasdaq Dubai is in the best interest of the company, enabling it to execute its medium to long-term strategy," Mr Narayan said.

"DP World is focused on the

transformation of the group and takes a long-term view of investment returns and value creation."

Group chairman Sultan Ahmed bin Sulayem said the global ports and logistics industry had been undergoing a significant transition.

"DP World must be able to continue responding effectively to this rapidly changing landscape and to invest in the future," he said.

"Returning to private ownership will free DP World from the demands of the public market for short term returns which are incompatible with this industry, and enable the company to focus on implementing our mid-to-long-term strategy to build the world's leading logistics provider, backed by our globe-spanning network of ports, economic zones, industrial parks, feeders, and inland transportation."

## DP World set to be bought out on Nasdaq Dubai



## NAME CHANGE FOR AG DEPARTMENT

The Commonwealth Department of Agriculture issued a statement confirming it no longer existed. Rather, the Department of Agriculture has become the Department of Agriculture, Water and the Environment (DAWE or AWE).

A notice was issued on the departmental website with particular relevance to importers and customs brokers of imported animals and cargo, transport companies, approved arrangement sites and treatment providers who deal with imported goods.

"The Department of Agriculture, Water and the Environment is an amalgamation of an important portfolio of work to better align functions and responsibilities, ensuring the department can deliver the government's broad environmental and agricultural agenda," the statement read.

"It will be business as usual and this change will not affect the regulatory functions performed by the department."

The website for the new department is [www.awe.gov.au](http://www.awe.gov.au)



## HMM AUSTRALIA JOINS SHIPPING AUSTRALIA

Shipping Australia has welcomed Hyundai Merchant Marine Australia as a full voting member.

HMM Australia is part of Korean logistics giant Hyundai Merchant Marine.

HMM is active in the container trades, operating more than 100 ships with a combined capacity of more than 394,000 TEU and is a member of The Alliance.

Shipping Australia chief executive Rod Nairn was delighted to have HMM on board.

"Hyundai Merchant Marine is a significant player in the world shipping scene with interests in almost all sectors of shipping including container, bulk, liquid and heavy lift," Mr Nairn said.

"This diversity provides strength and enhances our ability to represent all sectors of the international shipping industry."

HMM Australia managing director, Bryan An, said he was excited about their acceptance into Shipping Australia.

"HMM has been a part of the Australian shipping landscape for over 25 years and we welcome the opportunity to contribute to the ongoing development of the Australian maritime industry as a full member of SAL," Mr An said.

HMM general manager Australia Len Phillips said the company was pushing a growth strategy through the membership of The Alliance and the delivery of new 23,000 TEU vessels.

Mr Nairn said Australia was "absolutely dependent" on international commercial shipping for economic prosperity.

"Hyundai Merchant Marine is doing their bit to support Australia and we are pleased to be able to support them by promoting sensible and sustainable shipping policies in Australia," he said.



Image supplied: VladSV



## Golf day donations exceed \$700,000

The annual Shipping Industry Golf Challenge has crashed through a significant financial milestone with the presentation of its annual donation to the Oncology Research Unit at Westmead Children's Hospital.

The \$38,500 donation from the 2019 golf day has taken the cumulative total donation to \$703,000 since the event made the hospital its sole beneficiary.

Major sponsors were AdaptaLift Hyster, The DCN, DP World, NSW Ports, Patrick, Port Authority NSW and Royal Wolf while Svitzer was the breakfast sponsor.

2019 hole sponsors were 1-Stop, AAT, Containerliners, Cummins, Hamburg Sud, Hapag Lloyd, Hutchison Ports, Integra Technical Services, JPC Reefers, Maersk, Maritime Super, MGL Logistics, Newcastle Stevedores, NortonWilson Lawyers, Qube, Seaway, Royal Wolf, Shipping Australia, Thermo King, Triton International, Wallenius Wilhelmsen.

The cheque for \$38,500 was presented to Westmead's Dr Geoff McCowage who has been a strong supporter of the event for many years.





Damaged containers  
onboard YM Efficiency

## Container stowage highlighted in report

The loss of 81 containers overboard from the container ship *YM Efficiency* in mid-2018 shows the importance of safe and effective container stowage planning, an ATSB investigation found.

Just after midnight on 1 June 2018, the *YM Efficiency* was steaming slowly into strong gales and rough seas off Newcastle, en route to Sydney, when, according to the ATSB, it suddenly rolled heavily, causing container stacks to collapse and topple.

Consequently 81 containers were lost overboard and a further 62 were damaged.

The ship sustained structural damage to its lashing bridges, superstructure, and accommodation ladder.

Debris from the lost containers subsequently washed ashore on the NSW coast.

At the time of the ATSB investigation report's finalisation, search efforts had

identified 66, with a few having washed ashore or close to shore. Five containers have been removed, and 15 containers are still to be found.

The ATSB investigation determined the forces generated during the sudden, heavy rolling placed excessive stresses on containers stowed aft of the ship's accommodation.

This resulted in the "structural failure" of containers and components of the lashing system.

"All potential causes for the sudden rolling were investigated, such as the possibility of an abnormal wave, but there was insufficient evidence to establish a definitive cause," the ATSB wrote.

"Further, the condition of the ship's lashing equipment was considered not to have contributed to the loss of containers."

However, the investigation found the weights and distribution of containers in the affected bays were such that calculated forces exceeded allowable force limits as defined in the ship's Cargo Securing Manual.

ATSB chief commissioner Greg Hood said the safe carriage of containers at sea depended on compliance with the ship's cargo securing manual.

"Checking stowage plans for compliance with the cargo securing manual requirements is increasingly achieved through loading computer systems," Mr Hood said.

"Notwithstanding the efficiency of computerised loading systems, the scale and pace of modern container ship operations puts significant pressure on ship's officers to check and amend or approve proposed stowage plans at a late stage."



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## Productivity growth “urgent priority”, says Chamber

■ Federal and state governments should make productivity growth an urgent priority, the Australian Chamber of Commerce said.

This followed the release of the Productivity Commission’s latest report into the living standards of Australians.

“The release of the Productivity Commission’s analysis is a major wakeup call to our federal and state governments,” ACCI chief economist Ross Lambie said.

“The message is clear, unless national action to lift Australia’s dismal productivity growth becomes a policy priority, we put at risk the living standards we are all accustomed to.

“What we need is policies which enhance the ability of businesses to invest, grow and employ - they will be critical to achieving this outcome.

“Prime areas for reform include ensuring our regulatory environment is fit for purpose and supporting the private sector in taking risks and investing in an increasingly uncertain and dynamic world.”

Dr Lambie said important initiatives were being pursued, such as scrapping “burdensome regulations”, supporting infrastructure and providing incentives for business to invest and employ staff, however further improvements were essential.

“ACCI has made a number of proposals to turbo-charge business investment, particularly in the SME quarter, such as an increase to the instant asset write off scheme,” he said.

“Longer term, we need to encourage political appetite for a review of the tax and transfer system to ensure Australia has a competitive tax system that encourages aspiration and entrepreneurship while at the same time providing adequate funding for social needs.”



## VIRUS FORCES RESCHEDULING OF SHANGHAI CONFERENCE

The Intermodal Asia conference, originally scheduled for March 2020, has been rescheduled for 14–16 July in Shanghai following the recent outbreak of coronavirus.

Group director Informa Markets, Rob Fisher, said after consultation with the China Container Industry Association, they had decided to reschedule this year’s event to ensure the safety of visitors, exhibitors and staff.

“By delaying Intermodal Asia, we are providing the container shipping and intermodal sectors time to recover from any setbacks experienced as a consequence of the outbreak and its effect on global trade,” Mr Fisher said.

CCIA president and CIMC vice president, Huang Tianhua, said the decision to postpone was the right one.

“It reflects the organiser’s responsible attitude towards the safety and health of its international exhibitors and visitors, but also reflects confidence in China’s ability to quickly overcome the outbreak,” he said.

“CIMC Group intends to continue fully supporting Intermodal Asia 2020. We also call on international container partners and industry leaders to join Intermodal Asia 2020 to showcase solutions and share knowledge and take this important opportunity to build business relationships.”

## Trucks the primary target for cargo theft

■ Trucks are the overwhelming target for global cargo thefts, the second annual BSI and TT Club Cargo Theft Report 2020 reveals.

According to the report, there has been overwhelming targeting of cargo trucks compared with all other modalities.

“The consistency of this trend year-on-year is also reflected in the 2019 data analysis of top commodities stolen; food and beverages representing 28% of all reported thefts in comparison with 19% in 2018,” a joint statement from TT Club and BSI noted.

The authors believe the report can play “a significant role” in educating supply chain professionals in the detailed risk of cargo theft around the world.

TT Club’s Mike Yarwood urged all those concerned about cargo security to read the report but identified one key trend.

“Thefts either of, or from road vehicles most frequently occurred while in transit, in rest areas or an unsecured parking location. These accounted for 60% of those thefts reported,” Mr Yarwood said.

“The median value of losses from these incidents ranges from \$100,000 in South America to just over \$11,000 in parts of Asia. We are particularly keen to draw attention to the dangers of such informal parking and encourage the provision of more secured truck stop facilities.”



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## Barge arrives to help with *KEA Trader* removal

A crane barge from the Shanghai Salvage Company has arrived in Nouméa, New Caledonia, as part of efforts to clean up the remnants of the *KEA TRADER* vessel.

*KEA TRADER* ran aground on Durand Reef off New Caledonia in July 2017.

The crane barge *CALI* arrived in Nouméa following a 35-day, 4,400NM voyage from its home port of Shanghai, towed by the offshore supply vessel *DE ZHOU*.

The pair were escorted for the second half of their journey by another SSC offshore work ship, the *HUA AO*.

Built in 2009, the *CALI* has been reconstructed following detailed engineering studies and model testing at the Shanghai Jiao Tong University into a semi-submersible crane barge.

A 126-metre long, 32-metre wide barge, the *CALI* arrived in Nouméa with a transit team of 30 personnel. It is equipped with an 800-tonne lifting capacity crane with a 25-metre reach that can operate at a shallow draft.

Following the *CALI*'s arrival, crew immediately began transferring equipment

to escort vessels. *CALI* is to remain at anchorage off Nouméa while the *DE ZHOU* and *HUA AO* sail to Durand Reef to complete preparations.

Removal operations on site are to start within the next few months. Steel recovered from the site is to be transferred to New Caledonia for recycling. TMC Marine are onsite as marine consultants.

The detailed wreck removal methodology for this project was approved at the end of 2019 and has been designed to meet the special characteristics of Durand Reef.

"Detailed studies and environmental analysis of the site, approval of work plans and a complete retrofitting of this specialist vessel have all taken time," a spokesman for Lomar Shipping said.

"However we are entering a final stage of removing the *KEA TRADER*, and are grateful for the diligence of the authorities and the co-operation and patience shown by everyone in New Caledonia.

"SSC has now the assets in place and the comprehensive plan to complete this challenging project."

## SIMON AYNLEY JOINS SPECTAINER BOARD

■ Spectainer, a provider of specialised container solutions, announced Simon Aynley had joined its board of directors effective 4 February.

Managing director Nicholas Press said they were "thrilled to announce Simon's appointment to the board".

"Simon brings with him decades of shipping and logistics experience. He also brings executive leadership from his many years holding senior management and board positions," Mr Press said.

Mr Aynley said he was excited to take on the new role.

"I firmly believe Spectainer's COLLAPSECON collapsible economic container technology has the potential to influence the global shipping and logistics industries, particularly in reducing the environmental impact and empty repositioning cost of containers," he said.

Mr Aynley brings with him extensive experience of the shipping industry including a tenure as managing director Australia/New Zealand for CMA CGM Group.



Simon Aynley

## INDUSTRY EVENTS

2020	EVENT	
11 Mar	SAL NSW Shipping Industry Golf Day, Sydney	shippingaustralia.com.au/events
23-26 Mar	12th International Harbour Masters Congress, Hobart	www.globalportoperations.com
27-29 May	MIAL: 29th ASA AGM & Conference, Darwin	www.mial.com.au
29 May	AFIF 2020 National Conference, Sydney	www.afifconference2020.com.au

To notify DCN of events please email us at [editorial@paragonmedia.com.au](mailto:editorial@paragonmedia.com.au)





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# Growing Victorian exports

A roundtable in Melbourne provided an opportunity to thrash out some important topics for exporters, writes **Paul Zalai**

## FREIGHT & TRADE ALLIANCE AND

Australian Peak Shippers Association representatives attended the Ports Industry Roundtable on 30 January 2020 hosted by the Victorian Department of Transport. The meeting included an address by Melissa Horne, minister for ports and freight; policy recommendations to inform the Port of Melbourne Port Pricing and Access Review; an update on actions supporting the delivery of the Victorian government's freight plan titled *Delivering the Goods*; and an interactive question and answer session.

FTA/APSA was encouraged by the minister's comments acknowledging that pricing is hurting regional export cargo owners. Government representatives extended an opportunity for direct engagement in the development of policy to deliver the minister's repeated stated goal of "growing Victoria's exports".

## PORT OF MELBOURNE TARIFF

As outlined by Port of Melbourne CEO Brendan Bourke, the *Port Rail Transformation Project* is being funded by an increase in the tariff on full import containers of \$9.75 per TEU to take place "no earlier than 1 April 2020".

The minister expressed her support of the PRTP which is aimed at reducing truck movements and improving productivity. The announcement of the PRTP coincided with the PoM release of *Our Plan for Rail 2020* (as a core component of the Rail Access Strategy submitted to the state in 2019) and complements the PoM long-term growth objectives as outlined in its 2050 Port Development Strategy.

## COMMENTARY

FTA/APSA see merit in the PRTP in driving rail supply chain efficiency.

During the PoM consultation process, FTA/APSA raised concerns about the cross-subsidisation fee model with obvious "winners" and "losers" i.e imports cross-subsidising exports (which are exempt of any increase); all road users cross-subsidising rail users; and the fact that

initial benefits associated with the location of the on-dock rail will significantly benefit some stevedore operations over other - as one major importer member stated during the engagement process "why am I paying this significant fee only to fund operational benefits to my competitors?".

Rail access is still an issue for shippers, i.e not all exporters can access rail sidings to take advantage of this development, in particular in metropolitan areas where rail is often not a viable option. This port development needs to be part of a cohesive rail strategy that opens access to more shippers.

While a reduction in the fee structure is welcomed (now \$9.75 per TEU as against the originally estimated cost of \$15 per TEU), the FTA/APSA position to the PoM and Victorian government remains that any fee increase must now be offset elsewhere to maintain the port's competitiveness.

## INFRASTRUCTURE SURCHARGES

Preliminary findings and policy recommendations to inform the Port of Melbourne Port Pricing and Access Review (review) included:

- the need for setting of standards;
- "pricing transparency";
- improvements to landside access and performance;
- a phased approach to monitoring supply chain costs (including consideration of the findings of the current ACCC review of Part X of the Competition and Consumer Act 2010); and
- the potential to progress to mandatory standards via regulation.

## COMMENTARY

FTA/APSA sees merit in measures to improve landside access and performance.

FTA/APSA representatives clearly articulated that failure to regulate will continue facilitation of a "new normal" whereby entities such as stevedores and empty container parks will continue to collect significant revenue from the road and rail transport sectors rather than



**Paul Zalai**, director, Freight & Trade Alliance

negotiating pricing with their contracted shipping line clients.

While price monitoring may help in achieving "pricing transparency", FTA/APSA submit that market forces are best placed to determine a commercial outcome - this could only be achieved with regulation to prevent stevedores collecting revenue via infrastructure surcharges.

Shipping line representatives responded by stating that eliminating the infrastructure surcharges would force costs back to the lines which in turn may result in increased freight rates - FTA/APSA acknowledged this and reiterated this remained a preferred outcome in that it allowed cargo owners to negotiate price rather than being subject to an unregulated regime administered by stevedores with no available avenue to negotiate price.

## FINAL THOUGHTS

FTA/APSA sees a need for immediate policy and regulatory invention and does not see a need to await outcomes of the ACCC review - the likely repeal of Part X and an introduction of a Block Exemption regime will not affect existing stevedore practices of recovering costs via infrastructure surcharges. ■

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# Container management and regulatory compliance

The CBFCA recently produced a document on container management and regulatory compliance. Here are some excerpts, provided by Zoran Kostadinovski

## Why container X-ray is important and necessary

Container X-rays improve Australian Border Force capacity to detect prohibited goods, including illicit drugs and illegal firearms that may be illegally shipped in containers. They also help identify non-compliance with import and export requirements. The container selection process is not random. Selection is intelligence-driven and based on risk. Current Container Examination Facility operations indicate that the number of imported containers subject to x-ray examination totals to about 100,000 per year.

## Where are CEFs currently located?

ABF Container Examination Facilities are currently utilised in Melbourne, Sydney, Brisbane, Fremantle and Adelaide.

## Container selection/inspection process

ABF screens and risk assesses all import and export cargo and will select around 10% of loaded import containers for inspection. Empty containers and export cargo are inspected where there is an identified need to do so and of all these containers around 10% are subject to further examination based on the analysis of X-ray images.

## Timely reporting

Cargo must be reported to the ABF 48 hours prior to vessel arrival in most cases. Late reporting means the inspection process may commence late, take longer and this may result in additional storage and related costs from container terminal operator(s).



**Zoran Kostadinovski**, head of border and biosecurity, Customs Brokers and Forwarders Council of Australia

## Who is responsible for cargo reporting to the ABF?

The shipping company and sub manifest reporter is responsible for reporting the contents of each container. As container examination is intelligence driven, detailed information is critical to process outcomes.

## Storage charges

CTOs currently provide three days free storage for containers once they are declared available after discharge of the vessel. ABF endeavours to return all containers from the CEFs so they can be collected without the importer incurring storage charges, however, this is not always possible.

## Transportation logistics

While slot times can be booked in the CTO's vehicle booking system prior to the cargo being cleared by the ABF, it is a commercial reality this process is dependent upon booking container receipt slots in advance. Where slot bookings are made prior to border release to try and facilitate a speedy cargo turnaround, you become exposed to additional costs incurred from the cancellation of the slot time and subsequent cascading costs.

## Understanding challenges from freight logistics solution providers

Freight forwarders and customs brokers have no control over the compounding effects of the sea cargo logistics chain when CEF intervention occurs. This chain is complex and requires as far as possible integration of regulatory agencies, CTOs and all other parties involved in the cargo logistics delivery chain.

## What is the impact on your business?

If your container is subject to the CEF examination process you may experience delays in the delivery of your cargo which will impact on your business and incur additional logistic costs.

## LINKS WITHIN THE LOGISTICS CHAIN

- Predictability in border release
- Vehicle booking system slot times
- Transport and importer availability
- CTO operational patterns
- ABF operational patterns

It only takes one of these links to become out of step to disrupt the entire cargo logistics delivery chain process. Many of these issues are outside the control of, and are not the direct responsibility of, your logistics solution provider. As such additional costs involved are a result of government policy and CEF intervention and unfortunately will be to the importers account.

## Why you will be subject to added costs?

Delays gaining access to cargo, the possibility of extra storage and subsequent CTO and transportation charges could be incurred for the reasons explained in this column.

## What you can do

As the challenges involved with the CEF process have arisen from government policy there is little that can be done to avoid the issues detailed. You can however, take note of the possibility of ABF CEF intervention as part of your normal operations and liaise carefully with your logistics service provider who will continue to facilitate your cargo release.

## What happens if goods are damaged?

While ABF and their contracted service providers should exercise appropriate care for all cargo, it is good practice to ensure you have appropriate packing and insurance of goods. Any claims for damages, where there is evidence to suggest this has arisen as a result of the CEF activities should be directed to ABF in the first instance as to ABF or their sub contractor's liability. ■



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# PROFILE: Monika Lemajic

**Captain Patrick Walsh AFNI**, assistant secretary of the South East Australia Nautical Institute, speaks with project manager and former assistant dockmaster/dock technician **Monika Lemajic**

## MONIKA LEMAJIC IS CURRENTLY

working as a project manager and was previously an assistant dockmaster/dock technician. In addition to Monika's day job, she also has a Bachelor of Applied Science – Maritime Studies - University of Tasmania and recently completed an Executive MBA (The Blue MBA), Shipping & Logistics – Copenhagen Business School and was awarded a commendation by the Association of MBAs.

## How and why did you first get into the maritime industry?

In my final year of high school, I had no idea what I was going to do with my life. So, I made an appointment with the school careers councillor, she gave me a book that outlined all the possible jobs in Australia. I started flicking the ends of the book, fanning the sheets, I closed my eyes and said out loud "I am going to be a...." I put my finger down into the book, opened my eyes and saw that my finger had landed on *naval architect*. So, the next day, I enrolled in Advanced Diploma in Naval Architecture at TAFE and haven't looked back since.

## Which job roles have you found most fulfilling over your time in the industry?

My time as the dock naval architect/assistant dockmaster has been the most fulfilling. I really enjoyed the production environment and the hands-on aspects of the job. The job was quite varied; one day I could be doing stability calculations, the next day I could be dry docking a ship and the next day I could be with the ship's logistics team organising crane crews. I also always got a lot of satisfaction at undocking, if the ship was upright and in the calculated trim at floatation.

## Can you explain your position as project manager?

I carry out standard project management – planning, monitoring, etc. In my role I do project management for strategic change. I

work closely with the operations director, as most of the strategic alignment in production tends to stem from operational improvements.

## What do you enjoy most about this role?

I really enjoy the problem-solving portion of my role; I identify that there is opportunity for improvement, test it with analytics and then rely on my emotional intelligence and influencing skills to implement the change. I then re-test using analytics again. I like working on both sides of the equation - I like maths and I like talking to people, so it's a win-win for me.

## What do you think is the biggest challenge for women entering the shipping industry?

I think the challenge is the same for both men and women - understanding what opportunities are actually out there. I had never heard of naval architecture until

the day my finger landed on the page in the jobs book.

## How do you think diversity in the industry can be improved?

Once a woman has entered the workforce, provide them with support in order to retain them. In the past, I have gone to managers about someone behaving in a derogatory manner towards me, they tend to shy away from the problem. I am not sure if it is uncomfortable for them or too hard for them to deal with. So, my advice to everyone reading this is don't ignore a situation that may be uncomfortable for you, the other person is living it every single day, so imagine what it is like for them. If you overhear someone degrading someone else who is different stop it and say it won't be tolerated. Speaking up is the only way change can happen. While it may be uncomfortable, we can't ignore.

## How can we promote maritime careers for women?

Give women a chance. Most of the time I think the barriers are because women are not necessarily given a chance. When I started working, there were 100 men in the engineering office and no women. When I started I was given a one-year contract, while the men had four-year contracts. This was in case I didn't "fit in" with the team. I have been with the same company for 13 years, so apparently, I do fit in after all. ■



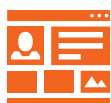
Monika Lemajic, project manager and former assistant dockmaster/dock technician



**Captain Patrick Walsh AFNI**, assistant secretary, South East Australia Nautical Institute



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# SIGHTS SET ON





# 2050

The ship of the future is essentially the ship that must be conceived now in order to produce vessels that will be compliant with emissions reduction targets in 2050. **Paula Wallace** takes a look at the technologies being developed

In 2018 the International Maritime Organization adopted a climate change strategy that calls for greenhouse gas emissions to be reduced by 50% by 2050 compared to 2008.

The *Maritime Forecast to 2050*, a part of DNV GL's Energy Transition Outlook, estimates that seaborne trade will grow by approximately 40% between 2008 and 2050.

To reach the 2050 GHG target, the emissions from any ship will have to be less than 30% of an average ship's emissions today.

According to DNV GL, the IMO target also implies that ships built in 2050 must emit considerably less than that to offset older ships with higher emissions that are still in operation.

If the volume of goods transported by sea increases 3% every year, the volume in 40 years will be 3.3 times today's volume. To cut total carbon emissions in half by 2050, the industry needs to reduce carbon emissions per tonne-mile by 85%.

One company that has its sights set firmly on 2050 is Japan's NYK-Line – it is targeting zero emissions within the next 30 years. It has designed the concept ship NYK Super Eco Ship 2030 as a milestone for 2030 – with MTI (NYK-Line's subsidiary technology institute), Elomatic (a marine consulting company in Finland), and Garroni Progetti S.r.l. (a ship designer in Italy) –

to make it clear what the company needs to develop technically in the long term.

NYK-Line's manager of media relations, Yuichi Suzuki, speaks to *Daily Cargo News* about how the company plans to achieve zero emissions in its shipping operations, which currently includes a liner trade business, car transportation, dry bulk and energy divisions (oil, petrol, chemical, LPG, LNG and offshore).

"The IMO aims to achieve zero emissions in the shipping industry as soon as possible in this century," Mr Suzuki says.

"To meet the IMO's 2050 target, zero (or nearly zero), emission technology needs to be established around 2030 at a level so that a large-sized oceangoing vessel can use it in an actual voyage, because a vessel's lifespan is usually for 20 to 30 years.

"There are various proposals for zero-emission vessel concepts, but none of them are adequate enough for deep-ocean voyages at this time," he says.

Thus, NYK-Line has joined the Getting to Zero Coalition and is working to commercialise a zero emission ship in 2030, as well as developing technologies associated with NYK-Line's zero emission ship concept Super Eco Ship 2050.

NYK-Line's GHG reduction target is to reduce emissions by 30% per tonne-kilometre by 2030 from a



## ABOUT NYK SUPER ECO SHIP 2050

### 1. HULL

The weight of the hull is reduced by optimisation through a dynamic, mathematical design that uses lightweight materials for the superstructure. In addition, computer-controlled devices, such as gyro stabilisers, are installed to provide active stability for the lightweight vessel hull. An air-lubrication system effectively reduces the frictional resistance between the vessel's bottom and the seawater by means of bubbles generated by supplying air to the vessel's bottom. And automatic hull cleaning during port stays prevents any negative impact on vessel efficiency. Finally, propulsion efficiency is increased by replacing conventional propellers with flapping foils that mimic the movements of dolphins.

### 2. ENERGY

The ship is powered by hydrogen fuel cells produced from renewable energy sources. Waste heat recovered from the fuel cells is also used. On long voyages, solar power can be utilised.

### 3. MAINTENANCE

Maintenance is managed through use of digital twins, a technology that realises physical conditions digitally and enables real-time analyses from land offices, accident prevention, and optimal maintenance.

### 4. PORT AND CARGO HANDLING

Optimisation of route planning is no longer a ship-level activity. It will be done at port and on a fleet level, which will enable just-in-time arrival throughout the supply chain. Automatic mooring and efficient ship-to-ship cargo handling will minimise port stays.

## NYK SUPER ECO SHIP 2050 VS CONVENTIONAL PCTC

	CONVENTIONAL VESSEL	SUPER ECO SHIP 2050
Length Overall	199.9 m	199.9 m
Breadth	35.6 m	49.0 m
Draft	9.0m	9.0m
Air Draft	45.6 m	31.0 m
Main Power (Fuel)	Diesel Engine (C heavy oil)	Fuel Cells (Hydrogen)
Renewable Energy	None	Solar Power

There are various proposals for zero-emission vessel concepts, but none of them are adequate enough for deep-ocean voyages at this time.

Yuichi Suzuki, NKY-Line

2015 base year, and 50% per tonne-kilometre by 2050 from the same base year.

The company's GHG reduction targets for 2030 and 2050 have received Science Based Targets certification. Measures to achieve the targets include introduction of next-generation LNG fuel, optimal operation of vessels, promotion of fuel-saving activities, and introduction of new energy-saving technologies to actual vessels.

"Approximately 90% of our CO<sub>2</sub> emissions come from the vessels we operate. NYK has been focusing on fuel conservation activities that directly links to CO<sub>2</sub> emission reduction.

"For example, improving operations of vessels at port, or during inclement weather actively visiting vessels.

"In addition of operational approaches, we also working to reduce CO<sub>2</sub> emissions through hardware initiatives such as an air-lubrication system and energy-saving technologies such as MT-FAST," Mr Suzuki says.

MT-FAST is a device that attaches multiple fins in front of the propeller to collect the lost energy that comes from rotational flow generated by propeller rotations, reducing fuel use by approximately 4%.

NYK-Line has a strong track record of meeting its targets. For example, the company's medium-term management plan *New Horizon 2010* announced in 2008 with the goal of reducing carbon emissions by 10% compared to FY 2006, achieved an 18.1% reduction.

## THE SUPER ECO SHIPS

NYK-Line is currently studying each technology that can be used on its Super Eco Ship series to determine how it can be used in actual onboard circumstances. Some of the technologies, such as the air lubrication system, have already been proven and can be installed onboard.

"The Super Eco Ship series is a concept ship, and once a technology is ready to use, we will try to install it onboard to see how it works," Mr Suzuki says.

NYK-Line's concept ship has been crafted as a 2050-model pure car and truck carrier. The power needed to operate the ship has been cut by 70% by remodeling the hull to decrease water friction, reducing the weight of the hull, introducing fuel cells for electric propulsion, and relying on other highly efficient propulsion devices.

Instead of fossil fuels, power for the ship would come from solar energy and hydrogen produced from renewable energy sources, all of which would lead to a reduction of carbon emissions by 100% and thus result in a zero-emission vessel.

Mr Suzuki confirms that the concept ship is designed as 7000 CEU, the sort of vessel the company is currently building.

"Comparing a current ship, which burns fuel oil, and Super Eco Ship 2050, the energy necessary is reduced to 41%, and 33% from the 41% is covered with hydrogen for fuel cell," Mr Suzuki says.

"Although it is difficult to show a clear timeline of the development, we will try to use each elemental technology when it is ready up to year 2050.



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## CMA CGM TO INVEST IN "FLOATING SMART GRID"

■ Shipping company CMA CGM has joined forces with the world's first hydrogen-powered vessel, *Energy Observer*, to speed up the development of innovative environmental solutions.

CMA CGM and *Energy Observer* R&D experts will pool their expertise and knowledge and it is expected to lead to industrialisation of new concrete energy solutions tested onboard this "floating smart grid".

*Energy Observer*, formerly a legendary race boat, is now an experimental platform for tomorrow's energy sources, which is undertaking a round-the-world-trip.

The partnership aims to experiment, test and develop energy solutions based on hydrogen, solar, tidal and wind power.

Hydrogen is a limitless energy source that generates up to four times more energy than coal, three times more than diesel. The green hydrogen used by *Energy Observer* is made from seawater using onboard renewable sources of electricity (solar, wind and hydropower). Producing and burning hydrogen does not result in any greenhouse gas or fine particle emissions.

CMA CGM will also create the Energy Observer Village will be made from containers converted and transported by CMA CGM with the large-scale operational support from its network around the world. It will travel the globe, presenting the latest technological innovations to the largest possible number of people and raising awareness about ecological transition issues among all audiences.

Tanya Saadé Zeenny, executive officer of the CMA CGM Group, said, "Our partnership will mobilise all of CMA CGM's know-how. Our teams of engineers and R&D experts are already working and our network around the world will be strongly mobilised to ensure the logistical support of *Energy Observer*'s worldwide ports of call".

Victorien Erussard, *Energy Observer*'s founder and captain, said, "With CMA CGM's huge experience in the shipping industry, our respective engineers and our technology partners, we have every chance of achieving our goals, which are ambitious but increasingly realistic.

"We are all driven by the same passion for technology and the desire to develop alternative energy solutions.

"The sea is something we can all share, and it is time to share our skills in order to protect the ocean, our favourite environment.

"We are delighted to be joining the 500-plus vessels in the CMA CGM fleet."



*Energy Observer*

The potential CO<sub>2</sub> reduction in the bio component of these fuels could reach 80-90%, which we will monitor and confirm over time.

**Bud Darr, MSC**

"Basic technology already exists but requires some improvement, such as energy efficiency or so on, and we of course need strong collaboration with vendors," he says.

The concept of a propulsion system is electric driven, and NYK-Line has selected hydrogen fuel cells for its Super Eco Ship 2050, but it is studying the use of ammonia and other technologies.

The company has been open about the development of its concept ship and technological advances to date. Mr Suzuki explains, "This kind of great challenge cannot be achieved only by ourselves. We need strong support from the industry. Therefore, we understand it is important to widely show to the industry where we are aiming to go".

### FUTURE OF LNG

NYK-Line is also investing in vessels fuelled by liquefied natural gas. It announced in December that, together with Mitsui OSK Lines, it had entered an agreement with Kyushu Electric Power Co. to deploy the world's first LNG-fuelled large coal carriers.

The use of LNG fuel is expected to virtually eliminate sulfur oxides emission and reduce approximately 80% of nitrogen oxides emission, as well as 30% of carbon dioxide emission, in comparison with traditional marine fuels.

The keel was also laid recently by Japan's Shin Kurushima Toyohashi Shipbuilding for the world's largest LNG-fuelled PCTC to be delivered to NYK-Line. The LNG-fuelled car carrier will begin service later this year.

"Some have suggested that liquefied natural gas demand will reach 20-30% of total marine fuel demand in 2040," Mr Suzuki says.

"We think that will not directly link to an increase volume of LNG marine transport because there are other transportation methods for natural gas such as pipelines that may offset additional LNG fuel demand," Mr Suzuki says.

"However, we think that an increase in LNG fuel demand will have a positive impact in general on the LNG transportation business considering that the aggregate LNG demand including 'LNG as fuel' is correlated with LNG vessel demand and both are expected to increase to a certain extent."

### SHIPPING WITH FAT

Mediterranean Shipping Company (MSC) recently announced that the company has started to use biofuel





NYK's *Auto Eco* is equipped with dual-fuel engines that can use either liquefied natural gas or heavy fuel oil and marine gas oil

in its vessels calling in Rotterdam, the Netherlands.

Following successful trials with biofuel blends last year, MSC has decided to continue bunkering responsibly sourced biofuel blends on a routine basis.

Overall, MSC's fleet improvement program has resulted in a 13% reduction in CO<sub>2</sub> emissions per transport work in 2015-18.

The measure of CO<sub>2</sub> emissions per transport work is an intensity measure: grams of CO<sub>2</sub> emissions to move one tonne of cargo, one nautical mile. The figure of 13% relates to MSC's Energy Efficiency Operational Indicator.

The company also completed a massive retrofit program in its existing fleet with the installation of exhaust gas cleaning systems to reduce emissions of sulphur oxides and other pollutants. In its compliance strategy, MSC will combine the use of ECGS, conventional low-sulphur fuel and biofuels.

In addition, the next generation of 23,000+ TEU newbuilds – led by *MSC Gülsün*, the largest container ship in the world – has introduced a new class of sustainable container shipping, with the lowest carbon footprint by design, at 7.49 grams of CO<sub>2</sub> emissions to move one tonne of cargo, one nautical mile.

Bud Darr, executive vice president, maritime policy and government affairs, MSC Group, says, "The great challenge which remains for container shipping this century is how to decarbonise and meet the UN IMO's future emissions goals beyond 2030".

"While we are fully supporting these more distant targets, this will not be achievable without some major breakthroughs in fuel and propulsion technologies," he says.

MSC is actively studying the potential of new alternative fuel sources. The company is engaging with potential vendors to investigate solutions related to biofuel blends, hydrogen fuel cells, complementary

battery power and, possibly, wind and solar, as part of a long road of discovery in relation to future policy goals.

The biofuel trials were completed with a minimal 10% blend fuel and following further trials the company is now using much higher 30% blends.

"We are pleased to see these trials completed successfully and look forward to now using biofuel on our vessels as a routine matter.

"When using such blended fuel, we can expect an estimated 15-20% reduction in absolute CO<sub>2</sub> emissions," Mr Darr says.

"The potential CO<sub>2</sub> reduction in the bio component of these fuels could reach 80-90%, which we will monitor and confirm over time."

A new "eco-friendly biofuel" is also central to shipping giant Hapag-Lloyd's efforts to reduce its carbon emissions.

One of the shipping line's vessels, the *Montreal Express*, recently refuelled in Rotterdam with a new "B20" biofuel.



NYK's Super Eco Ship 2030 concept ship





**Lex Nijsen**, vice president and head of four-stroke marine sales, MAN Energy Solutions

This fuel consists of 80% low-sulphur fuel oil and 20% biodiesel based on cooking oils and fats that previously had been used in the food service and catering industry.

The biodiesel reportedly generates up to 90% less carbon emissions than conventional fuels.

Jörg Erdmann, senior director sustainability management at Hapag-Lloyd, says, "By the end of this year, we want to have reduced our specific CO<sub>2</sub> emissions by 50% compared to the reference year 2008".

"Biofuels like B20 can help us reach this target. This is because, in addition to having a low sulphur content, the fuel also emits less climate-damaging CO<sub>2</sub> during combustion," he says.

Hapag-Lloyd plans to use the test run with the *Montreal Express*, which operates between Europe and Canada, to gain experience and information on the properties of the fuel in real-world use.

#### THE AMMONIA SOLUTION

A new project aims to design an oil tanker that can be fuelled with ammonia and whose technology can be adapted to other types of ships.

The project brings together engine maker MAN Energy Solutions, shipbuilder Samsung Heavy Industries, ship classification society Lloyd's Register and maritime energy services company MISC Berhad.

High costs and potential safety issues have meant that future fuels such as ammonia have been slow to advance. But MAN is confident it can make the engine ready for ships to be delivered from 2024.

"We have engaged in a number of joint industry development projects with various partners to investigate the feasibility of ammonia as a marine fuel with a particular focus on safe operation," vice president and head of four-stroke marine sales at MAN Energy Solutions, Lex Nijsen, tells DCN.

"We're especially interested in ship propulsion and how we can help customers to come up with the best solution which fits their usage".

MAN Energy Solutions sees hydrogen as a key to unlocking a lower emissions profile for the global shipping industry.

"From renewable energy that is available you can turn that into hydrogen and from hydrogen you can produce gas or liquefy it... you need dedicated ships that can run on hydrogen as a fuel.

"From hydrogen you can produce synthetic methane or crude oil or ammonia.

"If you just take synthetic methane, you mix it with fossil fuels... so if you're purely looking for a reduction in carbon emission you can reduce your emissions, if you mix 25% synthetic energy into existing fuel source, you reduce CO<sub>2</sub> emissions by up to 40%," Mr Nijsen says.

MAN has partnered with Wessels Marine GmbH to showcase this technology using the 2017-retrofitted *Wes Amelie*, a 1036 TEU feeder container ship. It will use liquefied synthetic natural gas produced from renewable electrical energy as drop-in fuel.

To demonstrate that synthetic natural gas can successfully be used as shipping fuel, 20 of the 120 tonnes of LNG that the *Wes Amelie* typically uses per round trip will be replaced by climate-neutral synthetic natural gas. As a result, CO<sub>2</sub> emissions are expected to decline by 56 tonnes for this trip.

Automotive manufacturer Audi's power-to-gas facility in Werlte (Germany), where a liquefaction plant is currently under construction, will provide the synthetic natural gas generated by wind energy that is 100% climate-neutral. The synthetic natural gas trip will take place after the completion of the liquefaction plant in the second quarter of 2020.

"We see the future will develop in that direction," Mr Nijsen says. ■

The *Wes Amelie*, a 1036 TEU feeder container ship, will demonstrate the use liquefied synthetic natural gas produced from renewable electrical energy as drop-in fuel



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Hull cleans by HullWiper are performed alongside and at inner/outer anchorage with no restrictions

# Cleaning up its act

New hull cleaning services are offering ship owners more choice when it comes to increasing hydrodynamic performance and protecting the environment. By Paula Wallace

**W**inners of the environment category at last year's DCN Australian Shipping & Maritime Industry Awards, HullWiper is making an impact in Australia with its unique remotely operated vehicle that cleans the hulls of vessels.

The company's mission is to provide an efficient and safe cleaning service with minimal impact on the marine environment. It uses innovative ROV technology to replace traditional diver and brush methodology to mitigate the risk to the ecosystem, hull coatings and human life.

HullWiper collects marine fouling removed from hulls, rather than polluting local port water and risking the spread of harmful invasive species. Captured residues are pumped into a filter unit and then deposited into dedicated drums onshore, which are collected by a locally-approved environmental waste disposal company.

HullWiper's managing director Simon Doran tells *Daily Cargo News*, "As more and more countries, led by New Zealand, have introduced ever more stringent hull cleaning restrictions and regulations, Australia became the obvious choice for last call options going to New Zealand and to protect Australian waterways".

HullWiper sprays adjustable high-pressure seawater jets directly onto a ship's hull at a very high velocity to dislodge waste materials, without using scrubbing, harsh chemicals or abrasive materials required for traditional methods.

Fuel cost savings can be in the order of US\$1m per year for cruise ships, with the associated reduction in carbon emissions. And, deterioration of hull and propeller performance between dry-docking accounts for approximately US\$20-30bn in costs.

The company is constantly looking at further innovations for its ROV platform.

"We are also looking at potential DFT Gauge applications and other supporting technology to enhance the services we offer," Mr Doran says.

The strategic focus of HullWiper this year will be around increasing market awareness that there is a safe and environmentally-friendly hull cleaning option available.

"The time for inexpensive services with inflated prices is over as a hull cleaning standard will come into play," Mr Doran says.

"The demand for fuel efficiency has always been with us - after all, it is a vessel's single largest operating expense.

"But the low sulphur fuel restrictions implemented this year and the rising fuel price is really focusing peoples' minds on what this issue, and what can be done about it," he says.

Any form of hull cleaning will achieve initial savings, regardless of the method used. However, when using water as the cleaning medium, the periods between cleaning are extended creating further savings. It is also less abrasive, so the in-service lifetime of the hull coating can also be extended.

"The fact that HullWiper's ROV has no restrictions, can operate 24/7 and in most weather conditions is a huge positive when vessels have a tight timeline to keep," Mr Doran says.



HullWiper is currently working in major ports around the world. Its Australian operations are based in Brisbane, with hull cleaning services offered at Bundaberg, Gladstone and Townsville.

Hull cleans are performed alongside and at inner/outer anchorage with no restrictions, although the latter is weather dependent.

#### FIRST FOR PNG AND MELANESIA

Pacific Towing (PacTow) launched its long-awaited hull cleaning service in December. The service is performed near its headquarters in the sheltered inner anchorage of Port Moresby's Fairfax Harbour.

General manager Neil Papenfus says, "PacTow's investment in hull cleaning technology will be highly valued by our existing shipping company clients and will undoubtedly generate new clients as well".

Mr Papenfus reports that most shipping companies in the region currently have the service performed thousands of kilometres away in Australia or New Zealand.

A PNG-based hull cleaning service means that clients will save tens of thousands of dollars in fuel and downtime associated with having vessels out of service. It also means that additional and much needed revenue will be brought in to PNG. Furthermore, the 100% nationalised PacTow commercial dive team who perform the service have all received valuable and highly specialised training, further building their skill sets.

Mr Papenfus says shipping companies will save additional money by having hull cleaning performed by PacTow because the service is done underwater as opposed to vessels being dry docked.

"Dry dock cleaning performed by international providers takes longer and costs more" he says.

A diversity of vessels including container ships and cruise liners up to 250m in length can be serviced by the PacTow hull cleaning team. The servicing of larger vessels is planned for 2021. The time taken to clean a hull varies, ranging from one to four days. Service duration depends on such factors as hull size and shape, as well as the extent of marine fouling build-up

(i.e. relatively minor through to 100% coverage) and type of fouling. Whether the vessel is heavily loaded or already discharged also impacts how quickly the service can be performed because 'load status' impacts how high or low a vessel sits in the water.

Commercial dive manager, Ricky Leka stresses that "hull cleaning is a high-risk, technically-challenging and physically-demanding service to perform."

PacTow's entire eight-member dive team participates in any single hull clean. Mr Leka explains how his divers work in pairs on a two-hourly rotation to literally drag, manoeuvre and correctly position the hull cleaning machinery (i.e. a series of high-precision, rotating brushes and suction mechanisms) around the surface of the hull.

"The divers are in constant motion, their legs are always moving and they're applying continuous force with their upper bodies" notes Leka "this is why the two-hourly rotations are so necessary."

A dive supervisor and technical assistant, as well as standby divers and machine operators are in close proximity on PacTow's *Vanilla* a bespoke dive support vessel recently upgraded specifically to enable the new hull cleaning service.

PacTow imported environmentally responsible hull cleaning technology from Denmark. The dive, technical and engineering teams worked collaboratively to improve the effectiveness of the technology as well as refine its environmental credentials.

Mr Leka explains how the original technology was hydro driven but proved ineffective on barnacles, leading the PacTow engineers and technicians to convert it to hydraulics. The new improved technology was pilot tested and further refined on PacTow's fleet of tugs with resounding success. ■



Pacific Towing's commercial dive team



Pacific Towing diver at work in Port Moresby's Fairfax Harbour



HullWiper's cleaning system is remotely operated

# SEA-LNG's view from the bridge

Industry group SEA-LNG has issued a review of the uptake of liquefied natural gas as a marine fuel during 2019 and its outlook for continued expansion in 2020, writes chairman **Peter Keller**

**N**ow that we have passed 1st January 2020, the much anticipated global sulphur cap is finally a reality.

The importance of this clean air initiative for global health is widely agreed and should not be under emphasised. Likewise, the critical role that LNG can play in clean air and global health initiatives must not be forgotten or trivialised.

This time last year I said 2019 would be the year of acceleration for LNG, and it was. With increasing orders for LNG-fuelled vessels and LNG bunker vessels, together with expanding infrastructure shoreside to provide the critical last-mile delivery of LNG to ships; LNG as a marine fuel remains *the* economic and environmental choice. Increasingly too, LNG is seen as *the* transition fuel to a net-zero carbon future.

While we anticipate LNG as marine fuel will evolve into bio or synthetic methane, the LNG safety and operational guidelines, as well as infrastructure, will act as best practice for the adoption of alternative fuels over the longer term.

As attention now turns to the carbon emissions reduction targets for 2030 and 2050, we must recognise that, in 2020, we are well down the road from the 2008 baseline and there must be a pragmatic chronology to achieving a more sustainable, decarbonised future.

The global deep sea fleet consists of more than 60,000 vessels with an average life expectancy well in excess of 25 years. This fleet, that fuels the economy - upon which we all depend - cannot be turned around overnight. This is precisely why there is increasing recognition and acceptance that LNG as a marine fuel must play a central role in transitioning to a zero carbon industry. LNG is the only commercially viable fuel widely available today.

This process has already been started by many leaders in our industry but must be embraced globally by the broader ship-owning community. By starting to move now to LNG we reduce carbon emissions immediately

and build a strong foundation for future reductions using liquefied biomethane and liquefied synthetic methane as the technology continues to mature.

Underpinned by LNG's compelling emissions and investment credentials, 2019 has seen unprecedented and remarkable uptake across many sectors of the deep sea fleet, as we anticipated this time last year.

Perhaps more importantly, the infrastructure to support LNG as a marine fuel has grown significantly. It can now be delivered to vessels in some 93 ports with a further 54 ports in the process of facilitating LNG bunkering investments and operations. This begins to answer the "chicken or egg" dilemma as both new LNG-powered vessels are being ordered and major ports around the world are developing infrastructure to service this growing fleet. This process will continue and accelerate as the real benefits of LNG as a marine fuel continue to be demonstrated for forward-thinking vessel owners and operators.

Our overview of market growth demonstrates continued momentum behind LNG as a marine fuel and is in line with the growing recognition that LNG is the only safe, available, competitive fuel that:

- provides clean air benefits which exceed those demanded by the IMO's 2020 mandate;
- meets the IMO's 2030 emissions targets when combined with Energy Efficiency Design Index improvements to ship design, and;
- presents a viable pathway to the IMO's 2050 carbon reduction targets through the use of liquid bio methane and liquid synthetic methane products.

Further illustrated in the review is the considerable growth of the global LNG-fuelled fleet in operation and on order - up 22% and 50% respectively from January 2019 - and the worldwide expansion and development of LNG bunkering infrastructure along key trade lanes.

From a well-developed LNG bulk infrastructure already well placed and aligned to supply the world's major shipping lanes, dramatic progress has been made on a global scale. DNV GL forecasts for 2050 show up to 41% of marine fuel being LNG.

In early 2019 there were just six bunkering vessels around the world. As of February 2020 there are 12 in operation with a further 27 on order and/or undergoing commissioning. ■





# PROUD T ACT

## #NATURALGAS

CMA CGM ACQUIRES THE 1ST LNG POWERED CONTAINER SHIP IN THE WORLD

## #NORTHERNROUTE

CMA CGM WILL NOT BE TAKING THE NORTHERN SEA ROUTE







Livestock carrier *Gudali Express*

Keith Michael Taylor



# Agricultural export

## AN UNCERTAIN BUSINESS

Janine Hill talks to primary producers and our trade gateways about the outlook for the year ahead and likely volumes moving through Australian ports

Live animal exports have performed strongly for Australia over the past 12 months but the outlook for the next year could be dependent upon the weather. Specifically, how much rain falls on drought-ridden regions is likely to affect the availability of feed, stock numbers, and in turn, the headcount through Australian ports.

Meat and Livestock Australia says the national sheep flock is estimated to be at its lowest level in more than a century as farmers struggle with the hot, dry conditions and lack of feed.

Conversely, good rains in the north of Australia may prompt cattle restocking and reduce the number available for export.

The livestock export trade is described as a key economic indicator by the Australian Livestock Exporters Council, which puts the value of the trade at \$2bn, of which live cattle are worth about \$1.35bn.

According to MLA figures, live cattle exports were up 19% to 1.298m head from 1.089m in 2018 and not far short of the 2015 record of 1.313m.

Live sheep exports, although down on five years ago, were up on last year to 1.118m head, with exports down a third to Kuwait but up by more than 250% to Malaysia.

Mark Harvey-Sutton, CEO of the ALEC, says it has been an “excellent” year for the industry, with high demand for cattle.

“That demand has come from our usual trade partner, Indonesia, but there’s growing demand from Vietnam, our second major market,” Mr Harvey-Sutton tells *Daily Cargo News*.

About half of the live cattle shipped overseas – 675,900 – went to Indonesia last year, according to MLA figures.

The number of head shipped to Vietnam increased by about 32% to about 266,800.

Mr Harvey-Sutton says the demand for protein is growing in line with the Vietnamese economy.

“It’s basically a reflection of their growing economy. Australia is seen as a provider of high-quality cattle that meet that market’s needs,” he says.

### ROOM FOR CAUTION

Although the figures could not be more positive, Mr Sutton says the outlook is dependent upon rains during the wet season.

A good wet season could lead beef cattle producers to restock their properties, which would mean fewer head for sale.

Mr Harvey-Sutton says while that may mean good prices for those that do sell, it could also negatively impact on demand for Australian cattle, especially if accompanied by a change in the Australian dollar.

The summer rains have so far made little difference, he says.

"At the moment, we're still seeing numbers going through. Supply is continuing.

"There was some speculation about that supply becoming tighter. I would have expected that at the end of the year... but we haven't seen that."

Adding another layer of uncertainty is the impact bushfires may have on the availability of feed and again, stock numbers, which Mr Harvey says "remains to be seen".

### ACTIVITY IN THE TOP END

Darwin remains the top port for live cattle exports, followed by Townsville, which experienced a 41% growth in numbers last year.

About 397,300 head of live cattle – a 7% increase – were exported from the Port of Darwin last year on some 133 vessels.

## STOUSH OVER PORT ACCESS CONTINUES FOR GRAIN GROWERS

■ The Wheat Port Code of Conduct continues to be an area of "push and shove" for the Australian Competition and Consumer Authority and grain handler Viterra.

The ACCC's latest bulk grains monitoring report found that grain growers were concerned about the fairness and transparency of access to Australian ports, especially at facilities operated by Viterra and CBH.

Since 2016-17, Viterra, CBH and GrainCorp have loaded 91% of Australia's bulk grain exports.

Viterra closed 17 upcountry sites last year and 11 the year before in the pursuit of supply-chain efficiencies, leaving growers upset that they would have to bear transport costs to more central storage facilities.

The ACCC's bulk grains report found that grain growers and exporters were concerned about the fairness and quality of upcountry storage and access to ports, and their ability to negotiate terms of access.

The report reiterated the Commission's support for amendments to the Wheat Port Code to ensure that exporters have fair and transparent access to port terminal services.

These amendments were first proposed by the ACCC in December 2017 and supported by the Department of Agriculture's Wheat Port Code Review report in October 2018.

An ACCC proposal to extend the Code to include upcountry facilities was not supported by the Review Taskforce.

Viterra has since applied for exemption from the Wheat Port Code.

Viterra regional director, Australia and New Zealand, Tim Krause, in a podcast outlining the company's position, says the Code was brought in to assist in the transition from a single wheat desk to deregulation but is now unnecessary.

"Our position is that now is the time for full deregulation. We simply don't see the need for the code anymore," Mr Krause says.

Mr Krause says Viterra has six ports in South Australia that are subject to the Code while another five, and soon to be six, ports in the state are exempt.

Competition specialist Doctor Chris Pleatsikas says on the same podcast that exempting Viterra from the Code would create a level playing field across all ports in South Australia, "consistent with what happens in the rest of the world".

"It would reduce supply chain costs, increase efficiencies across the supply chain. It would help encourage long-term investment, it would promote greater economies of scale, improved efficiencies, greater flexibility and the operation of Viterra's ports," Dr Pleatsikas says.

"The purchase of grain is going to remain competitive. Eliminating regulation of Viterra's ports is going to increase the efficiency of the system. It will promote the most efficient participants in the industry and increase profits throughout the industry," he says.

"That will ultimately redound to the benefit of growers who will end up getting higher prices for their grain."

The Viterra application for exemption resulted in mixed submissions.

The Pastoralists and Graziers Association of Western Australia has supported Viterra's application, saying it has always supported deregulation of wheat exports.

However, GrainGrowers, which boasts 17,000 members throughout Australia, believes Viterra needs to better explain why the Code places an unfair burden on it.

GrainGrowers points out that if all post-terminal service providers were granted exemptions "due to the hindrances of needing to comply with Parts 3 to 6 of the Code, GrainGrowers would question the effectiveness of the Code."

The Viterra application is still being assessed and the government is yet to release a response to the Wheat Port Code review.



[illegible]

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Animal welfare initiatives are said to have reduced the mortality rate in live sheep exports



Australia's live cattle exports are booming

Peter Dummett, general manager of port development at the Port of Darwin, says 350,000-400,000 head have been consistently exported from Darwin for the past six years but drought has had an impact.

"We have recently seen a significant increase in cattle numbers being exported through Townsville as a result of destocking because of the drought in Queensland," Mr Dummett says.

"Should the recent rainfalls in central Queensland continue, we would expect that producers would need to restock which may put pressure on the numbers that are available for export."

A massive 229,000 head of live cattle were exported from Townsville in the second half of 2019, leaving the port just 12,000 short of breaking its annual record of 305,000.

The six-monthly figure has Townsville port development manager Maria James feeling positive about this year.

"I would not expect that to be doubled but I would say we're tracking to a record," Ms James says.

"International demand is still high but particularly from Vietnam. We have seen a surge there from some of the bigger months."

Live cattle exports through Port Alma, near Rockhampton, have also increased as central Queensland exporters look to lower their supply chain costs.

#### POSITIVE STEP

On top of the weather, the International Maritime Organisation's new sulphur fuel limit, which came into effect on 1 January, has been predicted to affect live exports.

It has been suggested that the decrease in the sulphur limit from 3.5% to 0.5%, would raise fuel costs or see older vessels scrapped because of the cost of retrofitting "scrubbers" to exhausts.

The IMO has described the transition so far as relatively smooth and noted that low sulphur fuel prices have stabilised after an initial jump.

West Australian livestock consultant Craig Walker says older vessels used in livestock transport are already under pressure from animal welfare initiatives, such as single tier deck limits, and he believes the sulphur limit will contribute to them being phased out.

"I think it's going to be a positive step towards better transport of livestock," he says.

Mr Walker says it could be 18 months before major changes are seen, although he expects analysis to take place when the moratorium on live animal shipments kicks in for the northern hemisphere summer at the end of May.

#### ANNUAL MORATORIUM

The annual three-to-four month break suspension in trade has proven costly for the sheep industry.

A report by Mecardo for LiveCorp and MLA estimated the moratorium cost \$83.6m in 2018 and \$65.8m last year.

However, the moratorium was credited with reducing the mortality rate by half, combined with reduced densities and the use of observers.

LiveCorp CEO Sam Brown says it is clear the future of the industry depends on getting animal welfare right, a fact which has been accepted at port level as well.

Darwin Port's Access Policy allows for priority berthing of cattle ships if it is considered that animal welfare may become an issue with a shipment.

Townsville has two berths for cattle vessels and widening of its channel will ensure that vessels can pass if necessary.

Ms James said strong attention was paid to not exceeding limits during loading.

"We're in it for the long haul. We want live cattle to be a sustainable, long term option for producers," Ms James says.

"We follow all the procedures. We're very strict about animal welfare and our partners understand how important that is." ■



# Farm in a box

**K**nown as indoor farming, the vertical growing system established by Sprout Stack in 2016 is leading the charge in urban and sustainable agriculture.

The company has created a system housed in a re-purposed shipping container that could provide a solution to the weather volatility and urbanisation that is disrupting agriculture.

The Sydney-based containers produce large volumes of leafy greens and herbs in a climate-controlled environment. These include lettuce, purple radish, kale and garnishes, such as lemon balm and celery leaves.

"It's all about having fresh produce grown locally in an urban environment where everyone is living," says Sprout Stack's co-founder Michael Harder.

Put simply, Sprout Stack is a hydroponic farm inside a shipping container. The containers are also portable, to reduce food miles and carbon footprint.

Sprout Stack says its type of farming provides an organic harvest without pesticides or GMOs, all year round, with optimal freshness, taste, and nutrition.

Indoor farming isn't new but Sprout Stack is adding an innovative approach with products such as its 'living salad range.

"A living salad is a salad that's still alive when you buy it, so it reduces wastage because it stays living until you take it home.

"Everything is built from scratch, from design and construction through to the electrical automation of the whole container," Mr Harder says, adding that new LED lighting has improved efficiency of the system.

Lighting in the containers is designed to optimise plant growth in vertical stacks, where sensors constantly measure temperature, humidity and carbon dioxide levels which can be adjusted as needed.

Because there are no birds, pests or fungus, the system avoids the use of herbicides or pesticides.

Instead of soil, Sprout Stack uses the husk byproduct

Paula Wallace looks at a form of farming that also provides another life for old shipping containers

of commercial coconut production to hydroponically grow its salad greens.

Sprout Stack claims the containers have the potential to produce two acres of fresh, sustainable produce and use around 100 times less land and water. One shipping container can produce 2500 head of lettuce a week, which is a rate about 30% faster than traditional agriculture.

By 2050, 70% of the world's population will be living in an urban area and we will also need to produce 70% more food to feed that population.

Sprout Stack is on track to ship its first container farm to Melbourne in 2021.

The company also has its sights set on the growing market for fresh greens in south-east Asia, where the larger cities don't necessarily have disposable land to grow their own food. ■



Sprout Stack's shipping container farms can produce 2500 head of lettuce a week



The containers produce large volumes of leafy greens and herbs in a climate-controlled environment

## RE-PURPOSING SHIPPING CONTAINERS

■ Rough estimates suggest there are around 14 million ex-service containers in the world, split between storage containers sitting on people's land, shipper-owned containers being used for one-off export shipments and containers that might have been converted for other uses.

Re-using old shipping containers has recently become a worldwide architectural trend.

With the right insulation, technical smarts and modifications, disused shipping containers have been turned into houses, hotels, storage units, restaurants, food trucks, schools, libraries, and now vertical gardens.

Some benefits of re-purposing shipping containers include:

- environmental friendliness – aside from the benefits of re-using materials overall, re-using a container could help to save about 3500 kilograms of steel.
- time and cost-effectiveness - they are very affordable, can be adapted for re-use quickly and can easily be moved if needed.
- structural durability - containers are very durable, since they are designed to endure rough and unpredictable weather conditions and are much more resilient against earthquakes than conventional structures.



# FORGING AHEAD

**R**ail is proving a tremendous advantage for Port Botany and the state of New South Wales as it strives to manage surging throughput in both containerised and non-containerised freight.

As Sydney's premier container port, Port Botany is the jewel in the crown so far as logistics is concerned and is one of the most crucial pieces of infrastructure in the Australian Commonwealth.

In an interview with *Daily Cargo News*, NSW Ports' chief executive Marika Calfas speaks about the future of both Ports Botany and Port Kembla, two vital facilities that come under her purview.

In answering a general question about the nature of trade, she says there is reason for confidence, albeit noting some immediate-term challenges.

These "challenging conditions for trade", she notes, include drought, weaker economic conditions, bushfires and the coronavirus "which we are yet to see really come through but we anticipate will happen".

"In that context, it is a challenging trade environment," Ms Calfas says candidly.

"But on the positive news, there is still quite a significant level of investment by tenants of the port, by us and also significant interest in new investment by potential new users of the port, either in growing existing trade or for new trades. I think that is really positive."

She notes a forward path of committed capital, including investment of about \$400m off the back of \$1.6bn in investment in the last six years, "so that's the positive space".

## INTERMODAL AND RAIL

Ms Calfas talks of getting more container volumes onto freight rail from Port Botany and out to metropolitan intermodal terminals to reduce traffic congestion.

"We've kicked off Stage 1 of our project to increase on-dock rail capacity at each of the three container terminals in Port Botany. The first stage with Patrick Terminals is progressing well and includes a \$190m investment, of which our contribution is \$120m to deliver 'on-dock' rail infrastructure and \$70m from Patrick Terminals to deliver automated rail operating equipment at the container terminal," she says.

"We are still working on rolling out the other two stages. The federal government has lodged a development application to finish the duplication of the freight rail line which is good. We are putting in significant capex to the Enfield intermodal and LINX CCG is continuing to grow their rail volumes."

She notes nine warehouses have been committed to at Enfield, with four being operational and the rest under construction.

"So Enfield is filling up which is great and Moorebank commenced operations at the back end of last year and is looking good," Ms Calfas says.

"What that means is, at the moment we are tracking at 440,000TEU [a year] on rail which is the highest in the country. We are the only port with dedicated freight rail connectivity onto each individual stevedoring terminal.

"And remember the 440,000TEU is in the context of lower exports at the moment because of the drought. So actually what has been growing quite substantially are import volumes on rail.

"That is our whole strategy around intermodals and lots of investment is going into that."

## NON-CONTAINERISED RAIL

Something which Ms Calfas believes is due more recognition is the role of rail in the area of non-containerised freight.





## Daily Cargo News takes a look at port and logistics developments in the state that is the largest economy in the Australian Commonwealth

"There has been a growth at Port Kembla of railing cement up to Sydney for construction projects and we think there's a real opportunity to continue to grow bulk construction materials, be it sand, cement," she says.

She notes the clever use of rail connecting ports Botany and Kembla through to bulk receival intermodal facilities, particularly in western Sydney.

This is relevant given major construction projects in Sydney's west, for example the new airport.

"The amount of construction that will need to occur, it would be fantastic to focus on transport and bulk products by rail rather than having them all transported by road," Ms Calfas says.

"We've been talking to the Western Sydney & Aerotropolis Authority about not just allocating land for a new container-based intermodal terminal with freight-rail connections in that western precinct.

"But we are also starting to look at bulk product receival facilities particularly around construction materials. That is probably worthy of more discussion as there really is a shortage of bulk rail receival facilities."

### WATERSIDE INVESTMENT

Ms Calfas says the supply chain has been boosted by the Port Authority of New South Wales' investment in dynamic under keel clearance technology.

"We already have very naturally deep channels, we can take the very large ships because of those depths, we can take greater than 12,000TEU or 13,000TEU vessels, we are not limiting it to a particular size," she says.

"What the DUKC system has done is given more visibility over the depths that are available when a vessel arrives, particularly in choppy sea conditions.

"Essentially it has added almost a metre of extra depth for vessels without actually having to do any dredging."

The largest ship to call at Port Botany to date had a capacity of 9972TEU.

"We've had more vessels greater than 8000TEU capacity in the last six months than we had in all of the last financial year," she says.

"We are seeing the shift to the bigger vessel. The median vessel is still not that high, but the big vessels are."

### PORT KEMBLA

Some discussion is warranted about Port Kembla, the facility in the Illawarra region to Sydney's south. Historically focused on steel, it is increasingly attracting interest from those looking to trade in other key commodities.

One high profile example is Australian Industrial Energy which is developing NSW's first LNG import terminal, with a view to delivering a new source of natural gas to meet predicted market supply shortfalls.

The NSW government granted development consent for the project in April 2019.

"But also other bulk products are getting a lot of interest," Ms Calfas says.

"Port Kembla really is a great port for future servicing of construction needs and bulk product needs for Sydney. That is where the proximity of the Illawarra and Port Kembla to Western Sydney becomes very exciting."

Ms Calfas notes the Illawarra is about 70km from south-western Sydney and 90km from western Sydney.

"So there is a huge opportunity for better road and rail connectivity between the Illawarra and western Sydney not just for the port and freight movement, but also population movement," she says.

"We do see that there is an opportunity for Port Kembla to entrench itself more in construction product."

Botany Bay, Sydney



**Craig Carmody,**  
CEO, Port of  
Newcastle



An artist's impression of what a Newcastle container terminal would look like

**What we recognise is that we can't predict the future and we need other major trades to underpin our future.**

**Sam Collyer,** Port of Newcastle

#### HUNTER DEVELOPMENTS

Looking north to the Hunter River region, Port of Newcastle is also pushing ahead with a range of interesting projects in bulk trades, renewables and looking to the possibility of a box port.

Newcastle is famous for its exports of coal and agricultural commodities such as grain and has also played a role in the movement of specialist cargoes such as turbines for wind energy projects.

While the outlook for coal still remains solid, belying predictions of a rapid decline, there is

acknowledgment among port management of the need to diversify.

"All of the industry forecasts point to there being sustained demand for coal from Newcastle," a Port of Newcastle senior manager communications Sam Collyer tells *DCN*.

"Our advice is there is still quite solid demand for thermal coal from the Hunter. We moved around 165m tonnes of coal last year through the port.

"If anything this was marginally up on previous years and continues a general trend of around that figure for several years."

But although there has been no immediate decline in coal volumes, management are preparing for change.

"What we recognise is that we can't predict the future and we need other major trades to underpin our future. Some of the truly economically-diversifying trade opportunities we're looking at, you don't switch them on overnight," Mr Collyer says.

## VIRUS DAMPENS STATE'S ECONOMIC OUTLOOK

■ The prominent role of services within NSW heightens the state's risk to a coronavirus impact, according to University of New South Wales senior lecturer in economics, Dr Stanley Cho.

Dr Cho says the virus presents a major economic challenge for Australia and NSW, just as optimism had emerged that the United States and China were closer to resolving their damaging trade dispute.

"So just when we thought the trade war between China and the US had subsided, now there is another uncertainty," he says.

"Not only is the Australian economy [at risk], but NSW is actually even more prone to uncertainty from coronavirus because service is one of the biggest components.

"We rely heavily on students coming from China for the education sector. It is a big industry (for Australia) and I think NSW takes up a large proportion of those revenues," he says.

"Travel is going to be severely impacted and I think there might be some headwinds at least in the next 12 months."

On the bright side, Dr Cho says if the coronavirus is contained and trade wars "calm down", there might be some added demand for Australian goods and services.

Reflecting on the trade dispute between the US and China, Dr Cho says there were fears Australia would be indirectly impacted.

"There were concerns that this was going to slash the GDP growth rate and Australia might be pushed into a state of recession.

"In January, there was a tentative agreement and people started to think maybe it's not going to be as bad as people were projecting."

Dr Cho says the impact of a tariff war was probably less in NSW than mining states like Western Australia because NSW relies more heavily on tourism, manufacturing and education.



**Dr Stanley Cho,**  
senior lecturer in  
economics,  
University of  
New South Wales







# PORT of NEWCASTLE



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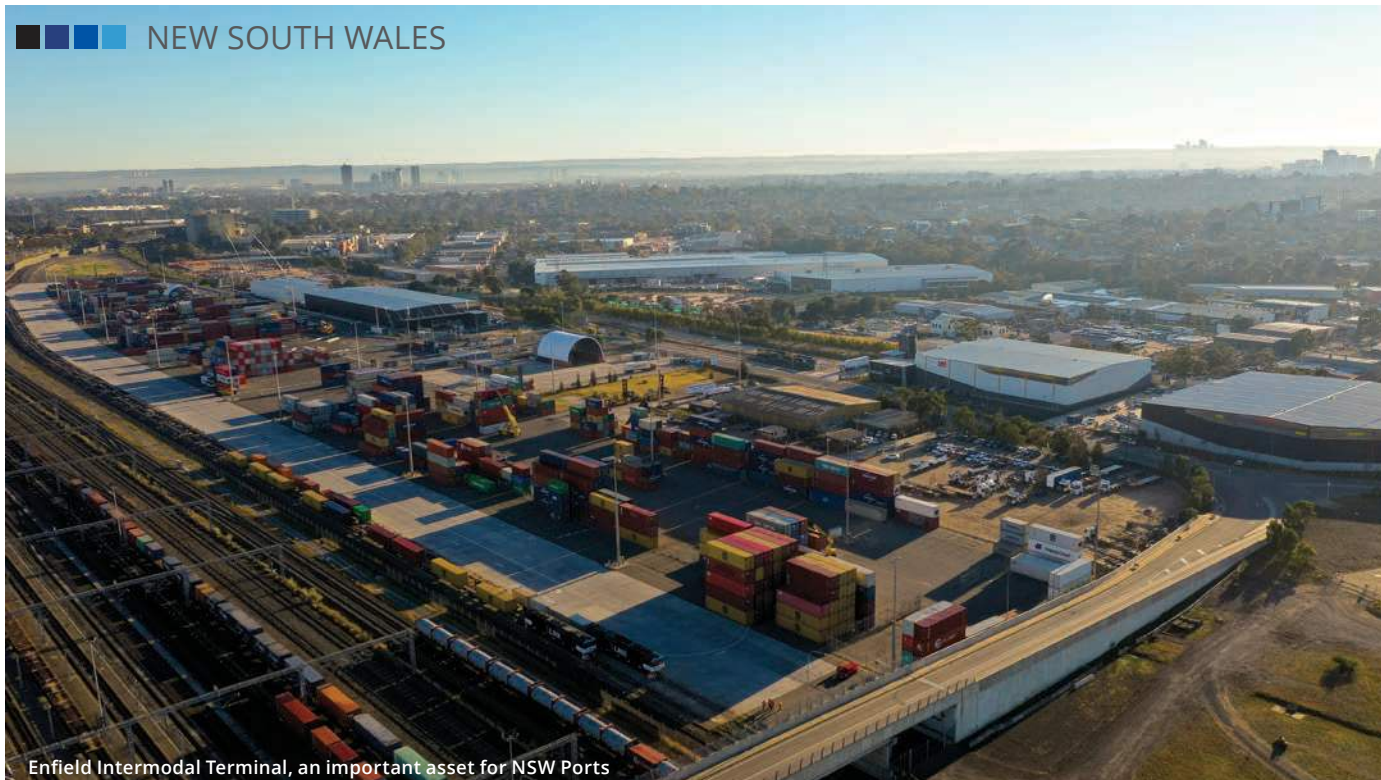
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Enfield Intermodal Terminal, an important asset for NSW Ports

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**Marika Calfas, NSW Ports**



**Marika Calfas,**  
CEO, NSW Ports

“We cannot afford to be flat-footed given that, in the case of the Multipurpose Deepwater Terminal, it would take about 15 years to get that trade to a sufficient scale to offset any potential future decline in thermal coal.

“We don’t know the future of coal. Certainly over the next 15 years thermal coal volumes are predicted to be consistent, assuming governments don’t change their regulatory settings,” he says.

Mr Collyer says given recent announcements about India no longer importing coal, “that sort of decision if made by one of Newcastle’s major coal importing customers”, would have far greater consequences for the region.

“There’s not much point waiting for a day when that commodity is in decline and then think about ‘what do we do next’. We have no choice but to diversify. We need to prepare for all possibilities now while we still can,” he says.

#### **A HUNTER BOX PORT**

A box terminal has been mooted for the Hunter for some time and although debates are ongoing, port management see a so-called Multipurpose Deepwater Terminal as an important means of diversification.

“It is not about transitioning dependence from one to the other, it is just about having different strings to our bow and obviously a big one is the Multipurpose Terminal,” Mr Collyer says.

He notes “compelling reasons”, with local and national support.

“Port of Newcastle remains confident that there will be a resolution to this matter to unlock much-needed private investment in NSW,” he says.

“There are also other trade opportunities that we need to start to develop now so we have a broader portfolio of trade and to act as a shock absorber for the economy”

The port makes its case for a box terminal on the basis the market within their catchment is at least half a million TEU per annum.

“About 38% of the export boxes going through Port Botany originate from our catchment so we can see ourselves targeting those,” Mr Collyer says.

“But then there are also import boxes, of which about 27% of the cargo inside is in fact destined for our catchment, which would more logically come through the port here in Newcastle.”

Infrastructure Australia recently announced it had made “a network of deepwater ports” a priority initiative, in a move Port of Newcastle CEO Craig Carmody says highlights major deficiencies in the nation’s preparedness for ever-larger ships.

Mr Collyer says landside connections with port infrastructure are already good and that the key port access road, Industrial Drive, is able to handle the level of heavy vehicle movements.

“Rail connections and capacity to the port are world-class,” he says.

“A new rail siding will be built inside port land at private expense.

“But I think one thing worth mentioning is we are the only port connected to the Inland Rail from day-1. So we have that connection up into places like Narrabri in north-western NSW.

“The connections are already there. In the future there may be upgrades to put in some shortcuts but essentially everything is in place and we are simply making use of the port’s existing infrastructure, particularly the heavy freight rail capability.” ■





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AMC's specialist maritime training facilities include a 360-degree immersive tug simulator

## Australia's premier training college for maritime engineering speaks to the *DCN's* Paula Wallace about its plans to attract more students and address the skills shortage in the industry

**F**or the past 10 years the industry has identified that the development of seafaring skills in Australia is on the decline. A survey conducted by Maritime Industry Australia in 2018, highlighted a potential skills shortage by 2023 of more than 560 personnel.

The Australian Maritime College has also seen a decline in the number of students enrolling in courses and part of its strategic plan over the next five years is to restore those student levels, under the leadership of principal Michael van Balen AO.

Appointed only last year, Mr van Balen's first task was to develop the strategy, which revolves around four key pillars.

"The first is around student load, which means increasing the number of students at the college and to do that we've identified a number of programs with the capacity to grow," he tells *Daily Cargo News*.

The AMC supports initiatives that work with children at high school level, starting as young as Year 8 through the SUBS in Schools. This program allows students to explore the complex challenges of

maritime engineering and hydrodynamics using coding and electronics as they design and build operational submarines and ROV's.

"We're just starting to develop in conjunction with the Tasmanian education department, a means to engage Year 11 and 12 students in relation to the studies they undertake in those years that can help with undergraduate degrees," Mr van Balen says.

The second pillar of AMC's strategy is around quality of education, not just the student experience but the way the college engages with students.

"This means combining different ways to allow students to undertake studies remotely or virtually. Perhaps they don't come here for four years but can do a lot of the study at home and then come here for certain periods of time," Mr van Balen says.

Recent research conducted by AMC shows one of the most important determinants of where students choose to study is wanting to be near home.

"They may already have a part-time job and may have a boyfriend or girlfriend," Mr van Balen says. "People who want a degree in maritime or ocean engineering and know AMC will make the move, but we're trying to capture the peripheral group by having greater flexibility and offering online study options."

The Sydney campus of AMC, at Darling Harbour, offers further options. It has bolstered its capacity in the last six months by installing a bridge simulation system which will enable it to teach seafaring courses.



The third pillar of AMC's strategy is around research, which the organisation is primarily exploring through expanding its maritime engineering and hydrodynamics R&D capabilities to support the government's Naval Shipbuilding Program.

"The development of knowledge around naval capabilities to support the Naval Shipbuilding Program will require a national approach from government, industry and academia to succeed," he says.

"We're progressing our plans to develop a Maritime Defence Innovation and Design Precinct, underpinned by \$30m in federal government funding. The precinct will provide a national hub for collaboration and will deliver the knowledge and technologies essential to the high performance, resilience and survivability of naval vessels and their human operators."

The fourth pillar of the AMC's strategic plan is around staff development and providing a values-based culture within the organisation, which encourages leadership and management training.

"This is to ensure that people in positions of leadership have been provided with the requisite training and ensure we keep and attract the highest quality staff we can," Mr van Balen says.

## COMMUNITY FOCUS

The AMC consulted widely in formulating its strategy, both within the university and across the industry as well as local communities.

"We're part of a number of committees," Mr van Balen says, "And it's all about sounding out the environment and trying to ascertain where we can best fit."

An example is the presentations made by AMC students last year of their thesis work, which was attended by industry people including 27 from interstate.

"At the end of it, industry representatives were going around and offering business cards and as such our graduating class, 100% of them had jobs to go to already... in everything from offshore oil and gas to shipping and even engineering jobs in places like Caterpillar, as well as ports, authorities and engineering firms," Mr van Balen says.

Strategic partnerships are also important for AMC's evolution and it is focused on developing partners within the defence industry.

"The first one is with Thales, signing an MoU to do trials using the Maritime Defence Innovation and Design Precinct as a base to conduct those trials and evaluations," he says.

The precinct is essentially a space that will be established in the existing footprint of AMC that will seek to harness the niche research facilities that is has, for input into the naval shipbuilding program.

Mr van Balen uses the Collins class submarine as an example of how the new research precinct can prevent unforeseen issues and costs.

"What we hope to do with the research in the precinct is to develop that knowledge beforehand, where we already know what it can do from an

engineering perspective and can change it to provide the level of capability that we need," he says.

## INDUSTRY OPPORTUNITIES

In discussing the skills shortage, Mr van Balen believes there are several factors at play.

"There has been a downturn in oil and gas industry, a downturn in the shipbuilding industry would be another reason," he says.

"There's still a requirement for seafarers out there. There's been increasing demand at the same time as you have a reducing workforce, that's broadening the gap."

Mr van Balen says the fact that we no longer have an Australian-flagged ocean-going fleet is "a component but not a major contributing factor". He says the drain of the workforce away from seafaring roles to shore-based positions is contributing to the skills shortage.

"I also think we need to look at how training and qualifications are received," he says.

"In the Navy for instance, they have shifted from requiring individuals to take 12-18 months sea time to get qualified to 16 weeks in a bridge simulator, they'd then go to sea... it now takes five to six months."

By comparison, the maritime industry requires significant experience at sea, says Mr van Balen.

"I think we need to explore other opportunities given that simulators can contribute to the qualifications people receive." ■



Michael van Balen, principal, Australian Maritime College

## AMC AND RINA CHART NEW COURSE FOR MARITIME ENGINEERS

■ All maritime engineering graduates of the Australian Maritime College have had their path to chartered status smoothed by a new agreement with the Royal Institution of Naval Architects Australian Division.

Michael van Balen and RINA's president Martin Renilson signed the agreement at the Newnham campus in December.

"This sets our students off on the start of their career for certification as maritime engineers," Mr van Balen says.

Dr Renilson said RINA was the international learned society for maritime engineers.

"This arrangement with AMC, which is the principal place for teaching maritime engineering in Australia, is a good move forward," he says.

"It makes it easier for AMC Maritime Engineering students to join RINA as student members and thus makes their path to corporate member and subsequent chartered status a lot easier."

Under the agreement all AMC Bachelor of Engineering students can become student members of RINA free of charge.

"Graduation from AMC as a Bachelor of Engineering in any of the three specialties has been accepted as meeting the educational requirements for corporate membership of RINA," Dr Renilson says.

However, to achieve full member grade a graduate must demonstrate professional competence through training and experience.

Dr Renilson said it may take up to five years of experience to achieve member grade and be eligible to be a chartered engineer.

"A person only becomes a fully fledged maritime engineer when they achieve MRINA CEng or the equivalent EA membership grade," Mr Renilson says.

"It is only when a person is at chartered status that they can truly work independently and call themselves an engineer."

# Marine pilots hit the check deck

Queensland's world-class ship simulator centre, Smartship Australia provides an update on its innovative marine check pilot training program. By **Paula Wallace**

**C**heck pilots are highly experienced senior pilots who independently peer assess the competence of other coastal pilots. Smartship's recently launched course for marine check pilots gives the 'best of the best' an opportunity to standardise their assessments through real-time scenarios generated on a state-of-the-art virtual bridge.

The program is intensive, generating discussions directly relevant to the senior roles of check pilots, and within the first day of the course, they find the questions are thick and fast.

Some answers are black and white, others need to be carefully considered in the context of industry experience and the latest in good assessment practice.

Smartship Australia director and principal instructor Captain Peter Listrup says the new program seeks to address differences in safety culture and performance standards between the various Australian pilotage organisations.

"Every week we see a mix of operators from around Australia working in our simulators, and the variance in professional standards is considerable," Capt Listrup tells *Daily Cargo News*.

"When we look at the pilotage companies performing the best in terms of safe and efficient practice, it is no surprise their check pilots are first rate," he says.

"We believe one of the best ways we can positively impact good practice and industry standards is to invest in training check pilots whose experience and influence we highly value."

Smartship worked with Maritime Safety Queensland and the Australian Maritime Safety Authority to ensure the course is formally approved for both harbour pilots and reef pilots.

Capt Listrup admits to being surprised by the level of industry attention Smartship Australia had received.

"We have been approached by different maritime industry sectors to tailor versions of the course for them and we will shortly be rolling out a version for tug masters," he says.

## REDUCING MARITIME INCIDENTS

Senior instructor Mike Hooley came to Smartship from the Australian Transport Safety Bureau and he agrees there is a link between a strong training and checking process and reduced cases of maritime industry incidents.

"This is especially important for coastal pilots operating in the environmentally sensitive waters of the Great Barrier Reef," Mr Hooley says.

Course designer and Smartship's RTO manager Lisa Hickman focused on the pilots' learning experience during training and assessment courses.

"Many of the experienced pilots have studied competency-based training and assessment theory previously but this is the first time many have put theory into practice," Ms Hickman says.

"We use a series of simulations specifically developed for check pilots on Smartship's high-fidelity, full mission bridge simulator.

"Adult learners need to see how their training applies in the real world and we have created a unique course which is directly relevant.

"The tools and learning outcomes represent the skills, knowledge and behaviours expected of a professional check pilot."

The simulations are set in Vorbasse - a bustling and fictitious Australian port where instructors focus directly on good check pilot practice.

While the location may be fictitious, all the scenarios draw on the real experiences of senior industry check pilots.

Senior instructor Chris Galloway said the benefits were evident from the animated conversations which followed each simulation.

"We designed the course to inform and challenge senior pilots, and we can see that happening," Mr Galloway says.

"We've run five courses so far and the feedback has been overwhelmingly positive." ■



Smartship Australia senior instructor Mike Hooley



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HR Wallingford's newly built ship bridge simulator

# Expansion of WA's simulation centre

WA ports minister Alannah MacTiernan recently unveiled two new purpose-built simulators at the Ship Simulation Centre in Fremantle, writes **Paula Wallace**

**T**he Western Australian minister for ports, Alannah MacTiernan opened the expanded facilities of HR Wallingford's state-of-the-art Australia Ship Simulation Centre on 6 February.

The independent engineering and environmental hydraulics organisation has added two new purpose-built simulators to its centre in Fremantle, bringing the total number of simulators that it owns and operates there to six. This makes it one of the largest ship simulation centres in Australia and allows a full manoeuvring team (including pilots, tug masters and vessel traffic service operators) to conduct integrated and immersive full port scenarios.

## INBUILT FLEXIBILITY

Guests at the event were invited to try out the new simulators, which were designed and built by HR Wallingford and running its highly realistic simulation system. The largest new simulator has a wide beam of more than eight metres and typically would be configured as a ship's bridge, while four of the other simulators would typically represent tugs. That said, the system is extremely flexible and all simulators can be easily configured to simulate any type of vessel, as

required. The sixth simulator is primarily intended to be set up as a VTS (similar to air traffic control for ports), but can also function as a secondary ship or tug bridge.

By building in flexibility in the configuration and operation of its simulators, the centre can meet a wide range of customer requirements. All of the simulators can be linked together to represent a single virtual port environment or run separately to allow for a number of scenarios at one time.

## PORT WORK

HR Wallingford has used one or more of its simulators for comprehensive port design work in Australia.

The linked simulators are also ideal for mariners to familiarise themselves with new port layouts, larger or new classes of ships, and to allow marine pilots and tug masters to practice specialist manoeuvres together.

HR Wallingford's decision to expand the facility was prompted in part by a new four-year contract recently signed with the Pilbara Ports Authority to provide integrated pilot and tug master training. PPA, which operates Port Hedland, has been carrying out training at the centre for the last six years.

Capt John Finch, general manager of operations at the PPA, says, "We are really impressed with the expanded facilities – they are ideally suited for our needs and have improved the realism for our marine pilots and tug masters".

"Safety is of paramount importance to us, so it is essential for the full port resource management team to be able to train together for particular situations, including emergency responses," Captain Finch says.

HR Wallingford's ships and dredging group manager, Dr Mark McBride, says, "By building the systems ourselves, we can ensure they are sufficiently flexible to allow efficient modifications and updates to reflect any changes in port layouts or ships".

"We are also able to adapt scenarios quickly to meet particular port design and training needs," he says. ■



The WA minister for ports, Alannah MacTiernan opens the simulators at HR Wallingford's Australia Ship Simulation Centre. Pictured with Dr Mark McBride, manager, HR Wallingford





Australian Government  
Australian Maritime Safety Authority

# Fatigue Guidelines

Managing and reducing the  
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safety and the marine  
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Pacific Towing staff benefit from training by SPO on vessels such as *Pacific Diligence*

# World-class training comes to Melanesia

Training on Swire Pacific Offshore vessels is providing Pacific Towing's mariners with the professional development opportunities of a lifetime, writes **Paula Wallace**

Swire Pacific Offshore and Pacific Towing are both part of the international and diversified Swire Group. Whereas SPO is a globally-recognised shipping brand, 'little sister' PacTow has a more modest profile in Melanesia's marine services.

Headquartered in Papua New Guinea with additional businesses in Fiji and Solomon Islands, PacTow is steadily increasing its geographic footprint in Oceania and South East Asia, offering towage, moorage, salvage, commercial diving, life rafts, customised project solutions and in-water hull cleaning.

## TRAINING PARTNERSHIP

SPO commenced training PacTow cadets at the beginning of 2017. The cadets experience four-months of intensive training modules on a diversity of SPO vessels such as anchor handling tug supply vessels and platform supply vessels all around the world (e.g. Denmark, Japan, Hong Kong, Scotland, Singapore, Taiwan, and Vietnam). PacTow general manager Neil Papenfus calls the training both "top end" and "invaluable".

Without the training provided by SPO, Mr Papenfus concedes PacTow cadets would be unable to experience working on some of the world's most sophisticated vessels and in several of its busiest waterways.

"SPO's best practice training on their vessels teaches our cadets how to do things the right way to the highest international standards and they then bring this

professionalism back to Melanesia," he says.

Officer of the Watch training for both deck and engine cadets is provided by SPO. A considerable training component encompasses safety at sea, including oil and gas specific safety training. The latter is critical to PacTow mariners given PNG's sizeable LNG industry and the company's plans to further grow its oil and gas market share.

Peter Langslow, managing director, SPO, says, "SPO has considerable experience in training cadets of diverse nationalities and we are pleased to assist in the training of the next generation of officers for PacTow".

"As a market leader, we believe in sharing our expertise and knowledge in safety and operational excellence with industry partners and local communities where we operate," he says.

"Through our training programs, we hope to do our part to elevate the safety and operational standards of seafarers in the wider maritime industry."

SPO invests in statutory and discretionary training for its sea-going employees to ensure that consistently high standards of safety and operational excellence are maintained across its diverse fleet.

## OIL SPILL RESPONSE PARTNERSHIP

In 2018 the SPO-PacTow relationship evolved beyond cadet training to include an oil spill response partnership with Swire Emergency Response, a wholly owned subsidiary of SPO. This partnership involves



SER storing its oil spill response equipment (e.g., booms, skimmers, pollutant recovery and storage pods) on PacTow premises in PNG for ease and speed of deployment. Furthermore, SER provides oil spill response training to PacTow mariners so that staff from both companies can provide the service, at times collaboratively, such as the 2019 wreck retrieval of the *Southern Phoenix* container ship off Fiji.

SER manager, Simon Valentine, says, “Pre-positioning equipment with PacTow and training their personnel in its use and in general oil spill response procedures, substantially increases SER’s capability in the region, allowing us to respond for our joint clients in a timely manner, which is the key to all successful oil spill response incidents”.

Mr Papenfus says, “The SER-PacTow oil response partnership enables the delivery of an international standard service with in-country infrastructure at a domestic price”. In other words, a world-class oil response at an extremely reasonable local rate.

In addition to SER providing oil spill response training to PacTow, the company also trains PacTow clients such as Puma. PacTow and SER work together to regularly conduct training drills and exercises for Puma personnel throughout the year. Oil spill prevention services and equipment are provided to Puma whenever one of its vessels discharges in Port Moresby’s Fairfax Harbour.

## FUTURE COLLABORATION

SPO, SER and PacTow are exploring other ways in which they may work together. Currently there



Anchor handling tug supply vessel *Pacific Diligence*

are plans on the table to introduce an emergency management training program to PNG’s maritime sector. Such a program would utilise SPO and SER world-class systems and training protocols with PacTow playing a support role.

There are other future shared service provision options for the companies to explore. Given the extensive oil and gas capabilities and experience of SPO and SER, PacTow’s desire to increase its oil and gas market share, and a history of working together with energy clients, it is likely that PNG’s burgeoning oil and gas sector will be a foreseeable target for expanding their partnership. ■

## JUMP ONBOARD AT THE PORT OF MELBOURNE

■ Port of Melbourne has had a strong recruitment program since privatisation in late 2016, including a comprehensive induction process. Its new open plan office also provides a great perspective of the port for all employees.

“It was designed to emphasise our connection to the port and to promote collaboration and flexible workspace options for all,” says Alex Kuras, head of people and culture at PoM.

One area of the business it is especially proud of is its focus on diversity and inclusion.

“In the last 18 months a focus on extending our usual recruitment networks has led to the recruitment of four female engineers in our business,” Mr Kuras says.

One popular initiative is an employee-led team called MAST, which has an annual budget to deliver monthly events that focus on health, wellbeing, inclusion and fun. It organises events ranging from a family day at Melbourne Zoo, to health and skin checks, yoga classes and

women’s training and fitness classes.

An annual measurement of diversity and inclusion as part of PoM’s employee engagement program is entitled Jump on Board. For example, the organisation’s Structured Leadership Development program is a direct consequence of the Jump on Board program, which supports the diversity agenda through its breadth of membership as well as its focus on high potential talent.

Another opportunity afforded to PoM personnel is through its sister port relationships. It celebrated its 45th sister ports anniversary with Port of Osaka in November 2019, when PoM employees travelled to Port of Osaka to foster closer ties and broaden their understanding of the industry.

Port of Osaka’s key event to mark the milestone was hosting the Global Partner Ports Symposium. Patrick Smith in PoM’s finance team says, “The conference was terrific in furthering my industry knowledge. Being part of the finance team, it’s always beneficial to

actually learn about shipping and the port industry”.

“This provides me with greater context in performing my role at PoM,” Mr Smith says. “It was also beneficial to have the opportunity to network with the other conference participants.”

PoM also has global port partnerships with Port of Yokohama, Port of Tianjin, Port of Oakland, Port of Shanghai and Port of Philadelphia.

Emily Spiller, PoM’s environmental, social, governance and corporate affairs coordinator, attended the Yokohama Maritime Forum 2019. She says, “A focus of PoM’s visit was the theme of sustainability and the opportunities and challenges existing across the port and maritime industries”.

“Overall, the visit provided a great opportunity to collaborate and understand how ports can embrace their frontline position to drive positive change and implement sustainable solutions across a wide network to create long-term benefits,” she says.

# Status of the Australian free trade agenda

Andrew Hudson provides an analysis of how Australia is pushing the case for free trade



## IN THE LAST PRINT EDITION OF

the *DCN I* provided some predictions on a number of trade fronts. For this article I want to review some of those predictions so far as they apply to our trade and free trade agreement issues.

## THE AUSTRALIAN FTA AGENDA

This will be a busy topic requiring close attention to ensure proper compliance with the terms of the FTAs and parties secure all appropriate benefits. Australia recently passed legislation to implement the FTAs with Hong Kong (A-HKFTA), Peru (PAFTA) and Indonesia (IA-CEPA) with the A-HKFTA likely to be the first to start, even though it will be mainly about advancing trade in finance and investment.

I am part of small groups working with the Australian Border Force and the Department of Foreign Affairs and Trade to develop guidance material for implementation of all the FTAs. Although the Regional Co Operation and Partnership Agreement was announced as

having been concluded (except for India) late in 2019, it is still subject to legal “scrubbing”, the signature by the parties followed by each country’s domestic implementation, all of which may not happen until 2021. Stay tuned.

The other two major FTAs following Brexit will be separate FTAs with the United Kingdom and with the European Union. Negotiations on the EU are more advanced although completion of all commercial and documentation requirements is still some time away. Some comments on each of the FTAs are set out below.

## AUSTRALIA-HONG KONG FTA

As predicted the A-HKFTA started on 17 January 2020. Information on the implementation of the A-HKFTA from the ABF can be found online including a very useful guide. Information from DFAT also can be found including documents on outcomes, a guide to using the A-HKFTA as well as access to the DFAT FTA Portal and a guide on doing business with Hong Kong.

These are vital resources to ensure parties take full advantage of this FTA and comply with the regulatory requirements lest there be a denial of benefits, the imposition of duties and the imposition of penalties by the ABF or other agencies.

## PERU-AUSTRALIA FTA

It now has been confirmed that the PAFTA will come into force on 11 February 2020. Information from the ABF and DFAT can be found online including documents on outcomes, a guide to using the PAFTA as well as access to the DFAT FTA Portal and a guide on doing business with Peru. Again, these are key resources to ensure parties take full advantage of this FTA and comply with the regulatory requirements lest there be a denial of benefits, the imposition of duties and the imposition of penalties by the ABF or other agencies.

## INDONESIA-AUSTRALIA CEPA

On 5 February 2020, the Indonesian Parliament approved the terms of the





## The “phase one” trade agreement between the US and China may well not advance if China cannot complete its compulsory purchases of US goods.

documents, the text of IA-CEPA and associated documents together with information on trade with Indonesia.

### RCEP

As previously reported, although the announcement of conclusion of negotiations took place in December 2019, the text of the RCEP and associated documents are still to be completed, which is why it is still considered by DFAT as “under negotiation”. However the DFAT page does include content on the agreed outcomes even without the benefit of the text.

### EU AND UK

As readers would be aware, Australia has been negotiating an FTA with the EU for some time (as has New Zealand). All parties have pursued those negotiations actively although some issues have arisen which appear to be significant, mainly around seeking to oblige Australia and affected parties to pursue EU law and practices which do not apply in Australia. At the recent World Economic Forum there were threats by France to impose additional tariffs on goods from countries which France believes are not doing enough to deal with climate change issues.

As far as the UK is concerned, now the UK has followed through on “Brexit” and has left the EU, it is now in a position to formally advance FTA negotiations with Australia. The British Prime Minister has said Australia is on a “shortlist” of priority countries although, in reality, FTAs with the EU and the United States may take preference. The PM also referred to our “style” of FTAs as being “bare bones” FTAs merely dealing with tariffs and customs procedure issues, not venturing into other policy issues found in other FTAs such as that between the EU and Canada. I think that this may be an unfair description - the TPP11, for example has many “non - customs” provisions on policy issues. Ultimately we are limited by the negotiating scope of the other negotiating parties and if the UK wants a broader FTA I am sure we can oblige.

### TRADE WAR AND THE CORONAVIRUS

All of world trade is, to different degrees, subject to adverse effects from these factors. The “phase one” trade agreement between the US and China (previously reported in the *DCN*) may well not advance if China cannot complete its compulsory purchases of US goods. China may invoke “force majeure” and resort to measures to support its own economy, which would possibly agitate the US even if they do not breach the trade agreement.

Further, the US has now found currency manipulation by any country as grounds to impose countervailing duties on their goods when imported into the US. Use of such provisions by the US against other countries could re-ignite a wider trade war involving other countries, especially when matched with new tariffs on types of aluminium products not currently subject to the current high tariffs on other aluminium goods and the US threat to withdraw from the WTO Government Procurement Agreement. They would be tempting weapons to be used in the President’s election campaign to pursue his promise to “Make America great again”.

At the same time, the effects of the coronavirus are multiplying and deepening. If Chinese GDP drops along with its demands for imported goods or its factories cannot open and make the goods on which the world relies then countries may be forced back into sole reliance on their own domestic producers and suppliers.

Both these issues and their potential adverse impact on trade between countries could undermine the positive effects of any free trade agenda, especially Australia’s which is so heavily tied to the economic health of the US, China and its other major trading partners who are all subject to the same issues.

We can watch and hope that the adverse issues can be contained and that no country takes self - interested steps that could damage the wider global economies which are now so deeply enmeshed with one another. ■



Andrew Hudson, partner, Rigby Cooke

IA-CEPA with a formal announcement held on 6 February 2020. As legislation has been passed in Australia, subject to any further domestic ratification in Indonesia, the countries will be in a position to exchange “Diplomatic Notes” confirming ratification following which a date will be set for the commencement of benefits under IA-CEPA. Although the ABF and DFAT have yet to release detailed information on implementation of the IA-CEPA, the DFAT page includes a number of important links including outcomes and background

# Delivering on a vision of remembrance

David Field explains why The Merchant Navy War Memorial Fund has sought the support of the shipping and maritime industry in delivering on its vision statement

## THE MERCHANT NAVY WAR

Memorial Fund's objective is to honour the memory of Australian Merchant Navy Mariners who gave their lives in service to their country in World Wars I and II and giving thanks for those who were able to return to their families. This recognition is an important part of Australian maritime history and culture.

I was recently asked about my passion for the ongoing recognition, respect and commemoration. While not being a Merchant Mariner, I had a 40-year career spread between my appointments with the Swire Group/China Navigation and Blue Star Line, in Australia and overseas. Two important outcomes for me, were a very high respect for all those who serve on vessels on the sea lanes of the world and secondly the knowledge of the number of vessels and officers and crew that both companies suffered in war time.

By 1939 Blue Star Line operated 39 ships, all of which gave WWII service. In 1940 an Imperial Star-class ship being built by Burmeister & Wain in Denmark was captured in the German invasion of Denmark. Because the Imperial Star-class were refrigerated and in merchant shipping terms relatively fast, several sailed in high-risk convoys to relieve the siege of Malta.

*Melbourne Star* and *Sydney* took part in Operation Substance in July 1941, *Imperial Star* and *Dunedin Star* were in Operation Halberd the following month, and in August 1942 *Melbourne Star* and *Brisbane Star* served in Operation Pedestal. In February 1942 another ship of the same class, *Empire Star*, successfully evacuated an estimated 2,160 people from the fall of Singapore.

Blue Star suffered heavy losses in WWII with 29 ships sunk: a total of 309,390 (GRT). They included all the five Luxury liners, and two Empire ships that the company was managing for the Ministry of War. Another 16 vessels, including three more Empire ships under Blue Star

management, were seriously damaged. By the end of hostilities only 12 "Star" ships remained in the fleet. 646 Blue Star personnel, 272 passengers and 78 DEMS (Defensively equipped merchant ships) gunners were killed.

## VITAL TO THE ALLIED CAUSE

The Australian Merchant Navy was a vital part of how the Allied cause won WWII.

Most of the 1939's Australian merchant fleets and their management had lived through the Great War of 1914-1919. So when the prime ministers of the times - Robert Menzies in 1939 and John Curtin in 1941 - announced that Australia was at war, respectively with Germany and then Japan, it would have been no surprise that the country's Merchant Navy stood ready to contribute to the Allied cause as well as its own safeguarding. Indeed, those building new tonnage in the United Kingdom shipyards in the late 1930s and early 1940s were not insensitive to looming world events.

So, the twenty ship-owning companies 'stepped-up' and so did their mariners. But these were not easy times for seafarers; they were not 'sworn' members of Australia's armed forces, as often as not they sailed dangerous waters without naval escort. They were engaged, 'signed-on', usually on a voyage-by-voyage basis, they were not put into uniform, their pay stopped (at least in the early part of the war) if and when their ship was sunk, and they risked imprisonment if they refused to sail when a ship's job was available. In certain operational areas they were paid a War Risk Bonus which marginally supplemented their modest rates of pay.

But they served and sacrificed, and sharing their service, often their hardships and their watery risks and losses in their defensively equipped merchant ships were the Royal Australian Navy's D.E.M.S. (Defensively equipped merchant ship)



David Field, FAICD, chairman, The Merchant Navy War Memorial Fund Ltd

gunners tasked to serve the small-calibre guns usually mounted at bow and stern.

## ACKNOWLEDGEMENT

Australia's war time Prime Minister John Curtin acknowledged the role of the Merchant Navy when he said, "The Merchant Navies of the United Nations are constantly in the fighting line. Silently, efficiently and without fuss they carry on the unending task of keeping the fighting men and supplies moving. The men of our merchant navy have established a high tradition and the Australian government warmly acknowledges the great part they are playing in the war effort".

So, what do we owe to these Australian men who served in the war at sea last century? We owe them more than we can ever repay. These tough sailors who served under the Red Ensign held Australia's and the world's future freedom in their hands for nearly six years and they never let go their grip.

Wherever they lie, may they all rest in peace. Lest We Forget. ■





#### A PROJECT OF RESPECT AND RECOGNITION

Picture taken Sunday 20th October 2019 following the Official Unveiling of the New & Remedial Works to the Merchant Navy War Memorial, Kings Park, Canberra, by the Minister for Defence, Senator The Hon. Linda Reynolds CSC. On the right & left hand side are the four new concrete blades which were installed to provide for four large Bronze Plaques to be commissioned that carry the names & respective ships of the 862 Australian Merchant Mariners who sacrificed their lives for their country in WWI (184) & WWII (678). The 30th Annual Commemoration was attended by some 140 including, WWII Merchant Navy Veterans (whose numbers are so sadly decreasing each year), members of Merchant Navy Organisations, Representatives of the Australian Defence Forces, Diplomatic and Consular Corps and representatives from a range of other Maritime related organisations.



## THE MERCHANT NAVY WAR MEMORIAL FUND (MNWMF) PROJECT DEVELOPMENT FUND

The fund has been developed as an ongoing entity to financially support one of our Prime Objectives...*'To ensure the greater recognition of the vital role undertaken by the Australian Merchant Navy in WWI & WWII'*. It also seeks to encourage successive generations to take up our, and our predecessors', passion & commitment to ensure that future Merchant Navy recognition is as secure in the future as in the past & present. Our aim in all that we undertake is to *'Make a difference'*.

#### PROJECTS UNDERTAKEN BY THE MNWMF

- Completion in October 2019 of the extensive New & Remedial Works at the Canberra Memorial, in association with The National Capital Authority & our Architect & Construction Firm
- Annual Merchant Navy Commemoration Ceremonies at National Merchant Navy War Memorial, Kings Park, Canberra and at the Rookwood Memorial Garden, Sydney
- Annual provision of MNWMF Scholarships at the Australian Maritime College (AMC)
- Assisting the identification of Sea Going opportunities for AMC Cadets
- Sponsorship of the 'Young Achievement' Award at the Shipping & Maritime Industry Awards 2018 to 2020
- Financial support for other Merchant Navy Memorials around Australia
- Support of the Company of Master Mariners of Aust (CMMMA), The Merchant Navy RSL Sub Branch, The Merchant Navy Association (MNA)

#### NEW INITIATIVES 2020

- Developing strategies on how best to address achieving appropriate national approvals for the addition / inclusion of the Merchant Navy Logo / Badge on War Memorials throughout Australia
- Working with the National Flag Association (ANFA) to
  - (I) achieve a closer alignment of National Flag Day & Merchant Navy Day, both of which are 3rd September each year and
  - (II) achieve greater prominence of the Merchant Navy Flag

*For more information:*

# [www.mnwmf.com.au](http://www.mnwmf.com.au)

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#### CONTRIBUTIONS MAY BE MADE TO:

**The Secretary,**  
Merchant Navy War Memorial Fund Ltd (MNWMF)  
PO Box 3058, Rosemeadow NSW 2560

or by EFT to:

**Bank:** WESTPAC Banking Corporation  
**Account Name:** MNWMF Project Development Fund **BSB:** 032 197  
**Account No:** 477 684 **Reference:** Include your name & organisation

**Please note:** If paying by EFT please forward an email with your name, organisation, address and phone number to [secretary@mnwmf.com.au](mailto:secretary@mnwmf.com.au). A receipt will be forwarded for all donations received. MNWMF is currently pursuing an Application for registration as a Deductible Gift Recipient (DGR).

# How do your contracts respond to the coronavirus crisis?

An examination of issues relating to coronavirus and shipping by **Gavin Vallely**

## AT THE TIME OF WRITING, THE

World Health Organization's Emergency Committee has decided the coronavirus outbreak is a "Public Health Emergency of International Concern". China has implemented measures to contain the spread of the virus and Singapore has raised its Disease Outbreak Response System Condition to 'orange', being the second highest level of alert.

In addition, several countries, including Australia, have extended travel bans. These restrictions have been imposed on vessels that have called at mainland China and, in the case of Australia, have resulted in delays in berthing and crews being required to remain onboard when vessels are berthed.

The position has been further complicated by various stakeholders imposing their own conditions which have contributed to delays and costs.

## DISRUPTION TO SHIPPING

The level of disruption to international shipping into and out of China continues to escalate, as are reports of Chinese companies looking to declare 'force majeure' or obtaining force majeure certificates from trade bodies in an attempt to seek relief from performing or partially performing their contractual obligations.

Not surprisingly, parties are looking at contracts to assess who bears the risk and cost of delay and whether there are grounds to be excused from performance.

Some of the issues include the impact the quarantining of vessels and/or ports has on the obligation to pay hire under a time charter, and the position in respect of demurrage in circumstances where there isn't any provision that expressly addresses the position.

Some charterparty forms make it clear the charterers are liable for demurrage where they send the vessel to a port already in quarantine, but not where the port is declared quarantined during the approach voyage.

## A SAFE PORT

It is also not uncommon for a charterparty to require a vessel be employed "between a safe port and/or ports" and should the epidemic escalate it is conceivable that a shipowner may be contractually entitled to reject a charterer's order to call at a nominated port on the basis it is unsafe by reason of the risk of infection of the crew. Where a port is closed, charterers may be obliged to issue fresh orders nominating an alternative "safe" port.

Following the Ebola outbreak in 2014, BIMCO developed and published "Infectious and Contagious Diseases" clauses for voyage and time charter parties "for use in response to any virulent disease" which were to "take effect only in instances of extreme illness".

Relevantly, the clauses address both the immediate effects from a vessel being within an area of risk as well as possible future restrictions imposed at a port outside the "Affected Area" such as quarantine conditions or restrictions on crew changes.

The current circumstances are likely to result in clauses of this type being proposed, however, it is imperative parties give careful consideration to the level of risk that triggers their operation to ensure it is aligned with their intention.

## FORCE MAJEURE

Parties facing hardship or who simply wish to be released from their obligations will be seeking to engage the force majeure provisions in their charterparties and trading contracts.

Contrary to popular belief, force majeure clauses do not provide a panacea for all circumstances "beyond a party's control" that give rise to an inability to perform a contract or economic hardship.

Typically, a force majeure clause requires a party who wishes to rely on it to prove (i) the occurrence of events referred to in the clause and that they have been prevented,



Gavin Vallely, managing partner, HFW Australia

hindered or delayed (as the case may be) from performing the contract by reason of that event, (ii) the non-performance was due to circumstances beyond their control, and (iii) there were no reasonable steps he could have taken to avoid or mitigate the event or its consequences.

Australian and English contract law assumes obligations are to be performed rather than excused. Therefore, a force majeure clause will tend to be given a narrow interpretation and as they are, in effect, an exclusion clause, the approach of the courts is to read the clauses strictly with any ambiguity usually construed against the party seeking to invoke it. Consequently, force majeure provisions frequently do not provide the protection that parties believe they do.

## FINAL THOUGHTS

Given it appears disruption to world trade from the coronavirus epidemic is set to continue, it would be prudent for businesses exposed to that disruption to review their contract terms and give consideration to drafting clauses that provide the protection they need. ■





Crew members will be able to connect with their families and loved ones free of cost and without the hassle of going ashore.

Robert Coombs, TBSF

# Launch of Australian-first Wi-Fi service for seafarers

Tas Bull Seafarers Foundation is spearheading the charge for a new Wi-Fi access service for visiting seafarers

## AN AUSTRALIAN-FIRST INITIATIVE

to provide a Wi-Fi signal and internet access for seafarers on ships visiting Australian ports called Seafarer Connect was launched in Sydney. The event took place as part of a recent meeting of the International Transport Workers' Federation Offshore Task Force and Cabotage Committees.

An initiative of the not-for-profit Tas Bull Seafarers Foundation, a trial of the program at Port Botany for the past three months has proved to be an outstanding success.

Seafarer Connect project manager Bernie Farrelly says, "The new system will deliver 100 GB of connectivity and seafarers will get the benefit of a 4G signal. This will be upgraded to 5G when providers upgrade existing systems".

The system is simple to use, it involves new technology where a portable router is plugged into the ship's power and a Wi-Fi signal is generated throughout the ship's accommodation spaces.

"This means that seafarers can access the system through their personal laptops or phones," Mr Farrelly says.

TBSF chair Robert Coombs says, "This is simply a modern-day requirement that most of us take for granted".

"It will mean that when a ship ties up and the router is installed, crew members will be able to connect with their families and loved ones free of cost and without the hassle of going ashore of finding a shore side facility," he says.

Mr Coombs said all the major operators in Port Botany except one have supported the new program, but he hoped that negotiations in the future might bring all operators on board.

International Transport Workers Federation president Paddy Crumlin says, "This is an important tool in ensuring the proper welfare of seafarers who often spend months at sea, and long periods away from home".

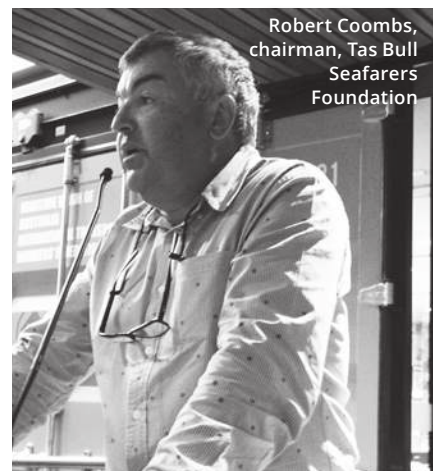
He also supported efforts by the TBSF to extend the initiative to other Australian ports and noted positive developments in Newcastle and Port Kembla.

To enhance the provision of Wi-Fi, a web page has been developed where seafarers will be directed after logging on. The web page provides important information on shore transport (bus timetables), nearby

shopping centres, welfare and assistance providers, and faith-based groups. Each port where Seafarers Connect is delivered will have a customised web page.

Each device has a firewall installed that prevents access to gambling sites, self-harm and other inappropriate sites.

The TBSF has partnered with the Telstra Business and Technology Centre in Sydney to deliver the full package that includes the routers, hard cover protective cases, firewall's, data plans and tracking devices. ■



Robert Coombs,  
chairman, Tas Bull  
Seafarers  
Foundation





Neil Edwards, Sue Dight and John Lines



Ajith Jayasuriya, Inni Punay and Reverend Un Tay



The gathering is all ears at the Melbourne Mission to Seafarers

# Melbourne Mission film launch

## FOLKS FROM ACROSS THE MARITIME SECTOR

assembled at the Melbourne Mission to Seafarers recently, for the first screening of the short film, *Harbour Lights: Women with a Mission 1914-1918*.

This short but intriguing film tells the tale of how a network of women from many walks of life supported the merchant seafarers as they put themselves in danger traversing the seas to transport both troops and cargo to protect Australia and contribute to the Great War raging in Europe.

Welcoming guests to the special screening were Melbourne Mission chairman Neil Edwards and Victorian minister for veterans affairs Robin Scott, with Mr Scott outlining his own connection with the maritime industry.

The movie was co-produced by Jary Nemo and Lucinda Horrocks of Wind and Sky Productions and Ms Horrocks was on hand to explain the process of researching and making the movie.

Mission historian Jay Miller, an important contributor, also attended the launch.

The movie (which lasts around 18 minutes) was well-received and prompted several questions from the audience.

It has been a busy time socially in maritime transport and logistics, with recent other events including a coronavirus briefing organised by law firm HWF and the Victorian Transport Association annual conference at San Remo near Phillip Island. ■



Bishop Gary Nelson and Graham Miller



Frank Eastaughffe and Ian Fletcher





Georgina Kucera,  
Christina Sicilione and John Wall



Brett Howlett and Gabriel Kok



Victorian minister for veterans affairs,  
Robin Scott, addresses the gathering



Film co-producer Lucinda Horrocks (r) with  
Mission historian Jay Miller



Peter Neville and Marianne Pandjisi



Leading Seaman Alison Graham and  
Able Seaman Rhiannon Hodge



Geraldine Brault and Glenn Floyd



Ruth Stanley and Jill Oborn

# The challenges of coronavirus

Cruise ship crews around the world are among those impacted by the coronavirus outbreak, writes Reverend Un Tay from Mission to Seafarers, Sydney

**AT THE END OF DECEMBER 2019,** public health officials in China told the World Health Organization that they had a problem - an unknown new virus was causing a pneumonia-like illness. Public health experts from around the globe were scrambling to understand, track and contain the new virus. The novel coronavirus, as it is known was rapidly spreading throughout China and eventually to many parts of the world. Scientists are still trying to understand the symptoms. Early evidence suggested that, the virus jumps between people who are in very close contact with each other, and probably spreads when an infected person sneezes or coughs or through hand contact.



Mission to Seafarers Sydney continues its important work during the coronavirus outbreak

## HOW HAS THIS VIRUS IMPACTED THE CRUISE INDUSTRY?

As of 7 February, four major vessels — the *Diamond Princess*, *Westerdam*, *World Dream*, and Royal Caribbean's *The Anthem of the Seas* cruise ships — have been impacted by the 2019 novel coronavirus. Most affected by the outbreak has been the *Diamond Princess*, currently quarantined off Yokohama, the Japanese port city near Tokyo. At the time of writing, 61 passengers of the 3700 people on board have tested positive for the virus.

The two other ships — the *Westerdam* and the *World Dream* — were also stopped due to fears of coronavirus. The Royal Caribbean's *The Anthem of the Seas* was docked at a port in Bayonne, New Jersey,

where 27 passengers were screened for the coronavirus. Four passengers were sent to the hospital for further investigation, while the other 23 were cleared.

At MTS Sydney, we received notices and advice from AMSA, the Port Authority and International Maritime Health Association regarding coronavirus. Our staff, volunteers and chaplains have been briefed and they continue to go onboard to visit crew both at Port Botany and at cruise terminals in Sydney to provide support, pastoral care and prayers for the crew and passengers. We continue to pick them from the port and bring them to our centre. On one of my recent visits on a cruise vessel, a crew from The Philippines shared that his plane transited at Singapore and on arrival he was

allowed to board the vessel. Whereas, two of his mates who transited at Hong Kong, were denied entry and sent home.

## POINTS TO REMEMBER

Below is the advice from the International Maritime Health Association for shipping companies on the new type of coronavirus:

Frequently clean hands by using alcohol-based hand rub or soap and water.

When coughing and sneezing cover mouth and nose with flexed elbow or tissue – throw tissue away immediately and wash hands.

If you have fever, cough and difficulty breathing, seek medical care early and share previous travel history with your health care provider.

When visiting live markets in areas currently experiencing cases of novel coronavirus, avoid direct unprotected contact with live animals and surfaces in contact with animals.

The consumption of raw or undercooked animal products should be avoided.

## FINAL THOUGHTS

We are planning our next community and information evening on Tuesday 21 April at 5.30pm. We welcome you to attend. ■

Please feel free to contact us at (02) 92413009 or [enquiries@missiontoseafarers.org.au](mailto:enquiries@missiontoseafarers.org.au)

## SPECIFIC ADVICE TO SHIPPING COMPANIES AND CREW REGARDING NOVEL CORONAVIRUS

- Do not restrict embarkation/disembarkation of seafarers in non-affected ports.
- Do not restrict necessary ship visits by port agents, chaplains, service personnel and others.
- Do not visit food markets in China. Avoid provision of fish and poultry in China.
- Do not consume raw eggs, milk, meat.
- For galley: observe strict food hygiene to avoid cross-contamination.
- Store facial protection for all crew (five pieces per person).
- Provide influenza vaccination, alcohol-based hand rub and facial protection to ship inspectors and other company employees who travel to China.



# Strategic implications of 'sea blindness'

Our inability to appreciate the central role of the oceans and naval power may have implications for Australian maritime transport policy, writes **Peter Martin**

## SHIPPING IS A CRUCIAL ELEMENT

of economies of countries such as Australia, whose key means of economic communication with the rest of the world is maritime transport. Where much attention is given to a strategic maritime dimension based on the premise of international conflict, little emphasis is given to maritime trade as an integral component of the wider strategic remit.

## PROLONGED DECLINE

The Australian shipping industry is on a trajectory of prolonged decline. Data relating to the Australian major trading fleet ships from 1999 until now shows a relatively consistent, widening difference between Australian-flagged ships and non-Australian flagged ships needed to carry the bulk of Australian cargo.

The widening difference is a concern underpinning the call from Maritime Industry Australia for a strategic fleet. MIAL's call for a strategic fleet suggests a requirement to meld an Australian interest in shipping that is owned/flagged/chartered/crewed/operated by Australians carrying Australian cargo.

If this is a strategic profile then Australia might also recognise similar melded sovereign maritime interests of other countries, such as China, as being strategic, particularly as it does relate to Australia's liquefied natural gas trade.

## SHIPPING PATTERNS

As the global economic dynamic shifts from an east-west to a north-south profile centred on Asia, economic prospects will increasingly depend on developments in Indo-Pacific Asia. The United Nations Conference on Trade and Development Liner Shipping Connectivity Index highlight's China's increasing maritime trade connectivity when compared with Australia and the United States's relatively static connectivity.

The LSCI provides an insight into the growing Chinese interest and connectivity in shipping. China is the largest shipowner in terms of numbers of vessels and is one of the top five ship owning economies of world fleet tonnage.

It is more in China's interest to protect expanding commercial maritime connectivity rather than leave that protection, or good order at sea, to other sovereign interests. However, where there is melded interest in the seafaring adventure then increased sovereign attention should be anticipated.

## THE ROLE OF LNG

The annual lift of Australian LNG per LNG tanker is estimated to be 1.37m tonnes per annum based on a three-week delivery/return cycle. The number of LNG tankers required to lift Australia's present rate of LNG production, 63.52m tonnes per annum is estimated to be 47 ships of which four (8%) are Australian-flagged.

The LNG seafaring venture for Australia, which suggests a 92% opportunity to be engaged in this trade, highlights the Australian trend to a shipping interest in foreign flagged vessels. However, this shipping profile, and 8% interest by Australia, significantly shifts the weight of maritime interest in LNG as there is no further revenue, royalty or tax, to be derived from the product.

In effect, Australia has given over state sovereign interest to other state sovereign interests in the maritime domain. In doing so, the balance of Australian national interest pivots from an Anglo-Saxon centric, and idealistic, profile of security ostensibly for freedom of navigation and good order at sea; to require a more balanced appreciation.

## SOVEREIGN TRADE

It is reasonable to anticipate Chinese interest in protecting sovereign trade on



**Captain Peter Martin** FNI, CMMA, AIN, master mariner, former officer in the Royal Australian Navy

maritime sea lines of communication plied to collect cargo, LNG, from Australia. The level of Australian sovereign interest in the downstream LNG venture, four ships in a 47-ship domain circumstance, does not provide a revenue source to underpin other related maritime ventures – such as the rapid development of naval capability. This illuminates a critical mismatch between Australia's broad maritime trade exposure and activity related to maritime security in support of US Pacific interests.

## A "CRITICAL JUNCTURE"

Absent public, political and institutional awareness of the maritime domain, and considering increased militarisation of the Pacific, Australia is at a critical juncture.

Analysing maritime nuances would be better served by embedding experienced commercial seafarers into key federal departments. This would improve analysis of maritime activity inconsistent with commercial, rules-based 'good order at sea' particularly regarding the topic of Australian-flagged shipping. ■

# The grill



**Rhys Jones**, general manager of engineering at the Port of Darwin, talks about life in the Northern Territory, growing up in exotic locations and 90s punk music

## **What is your job and what does it involve?**

I'm the general manager for engineering at Darwin Port. The role is quite varied and extends from the more typical engineering technical support type activities such as asset management and capital project delivery, through to management of the port's maintenance department.

## **How long have you been in this role?**

I've been at the port for 18 months. My predecessor was in the role for around 20 years so I have big shoes to fill.

## **How did you get into the world of ports and maritime?**

Largely by accident. I started studying oil and gas engineering at uni but found it wasn't for me and so I started looking at other courses. My great love has always been the ocean, so I found my way into a coastal engineering-focused degree. I didn't really know where it would lead in terms of a career, but found the study interesting and ultimately had the good fortune of landing on my feet with a very dynamic port and harbours-focused consulting company in Perth as my first job out of uni.

## **Where did you grow up? What are some early memories?**

My father was a geologist so my family was constantly travelling whilst I was growing up living in all kinds of places from outback Australia to Germany, to West Africa. Looking back, I was incredibly fortunate

and had a lot of freedom to do things that other kids just don't experience. Living in Ghana in my early teens I used to frequently head off into the jungle with my mates for hours on end doing all kinds of silly stuff from climbing down old mine workings to sometimes driving the local bus!

## **What did you want to be when you were growing up?**

I really didn't have a clue, but I did know that I wanted the opportunity to travel with my work and to be able to work with 'big stuff'. I didn't want to be office bound, but I'm not sure that I've been successful in achieving that objective.

## **How long have you lived in Darwin? What makes it a great place to live?**

I'm a Darwin returnee. I first moved here in 2012 and stayed three years before moving to the Pilbara. I never stopped missing Darwin, so when the opportunity came up to join Darwin Port it was a no brainer to come back. There are so many things I love about Darwin and the Northern Territory, but to choose just a couple it is the characters that you meet up here and the grandeur of the landscapes. There are places in the NT where it feels like the modern world doesn't exist.

## **Do you think Australians overlook Darwin as a place to visit?**

I definitely think that many Australians overlook Darwin as a place to visit which is a huge shame. It's got something for

everyone, from the cosmopolitan city bars and eateries at the waterfront to some of the wildest and most pristine landscapes you could ever hope to experience.

## **What do you enjoy doing in your spare time?**

I'm a very outdoors-focused person, so I spend a lot of time camping and hiking in the dry season and during the wet season it's usually fishing or finding a cool waterfall for a swim.

## **What was your favourite TV show as a kid?**

As a kid I was a mad fan of the Simpsons. When we were living in Africa in the mid-90s we didn't have a TV so family and friends would record episodes on VCR and send them to me and my brother and we'd watch them over and over. I'm not going to admit to relating to any of the characters but one thing I probably never appreciated as a kid was that it was actually quite cleverly written and there was quite a bit of adult humour that passed me by.

## **Have you got a family?**

Yes, I have a wife and two young boys, with a third on the way.

## **What's your favourite music?**

I've got quite an eclectic taste in music. My favourite genre is probably still ska punk from the early 90s with bands like Sublime and Reel Big Fish because I've never quite grown up. I also listen to a lot of Aussie music and always have something playing in the background.

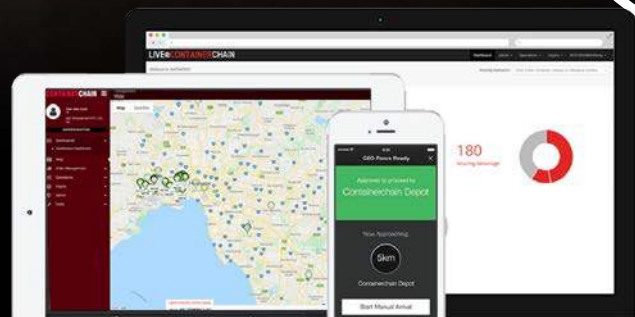
## **To where would you like to retire?**

It's a long way away so not something I've given a lot of thought to. I'm very happy in this part of the world, but I do miss being able to swim in the ocean, so maybe I'll chase an endless summer between the south-west of WA in the warmer months of the year and migrate north to Darwin in the winter. ■





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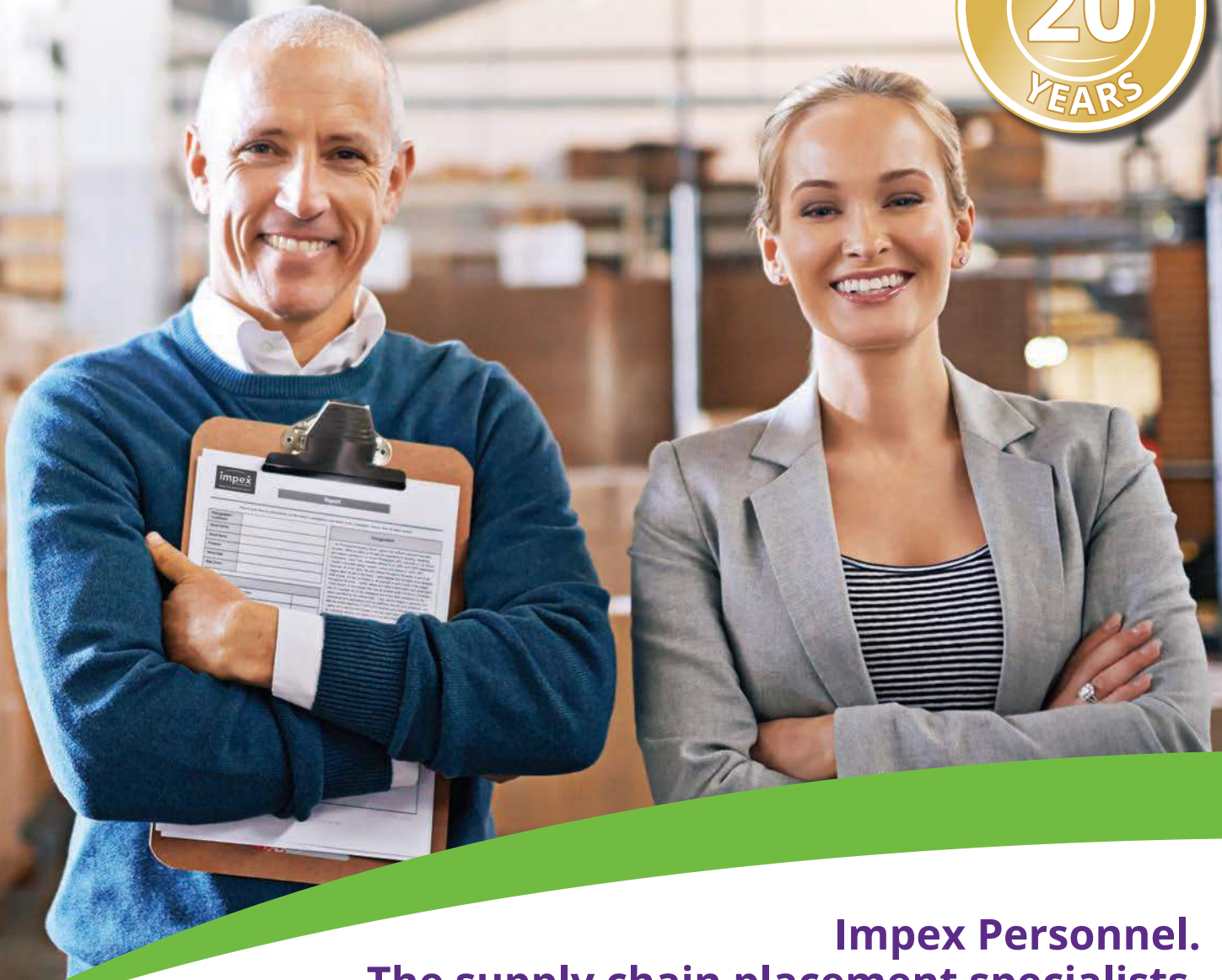


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