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## UK ports: delivering a global future

Secretary of State for International Trade, Rt. Hon Dr. Liam Fox MP



## In this issue

### Welcome to the Spring 2019 edition of Report magazine.

This year's first issue opens with an article by Secretary of State for International Trade, Dr Liam Fox MP, who discusses the vital role UK ports continue to play in our national life, underpinning our current and future prosperity.

The vital importance of ports is also reaffirmed by Danish Embassy Trade Advisor, Jes Lauritzen, who shares why ABP's Ports on the Humber are particularly well-suited for commercial links between the two countries. Other voices from Europe discuss the importance of skills, with experts from the ports of Rotterdam and Tallinn sharing their strategies on future-proofing their workforces.

Interviews with leaders at the helm of two of our biggest customers at the Port of Southampton, the UK's number one cruise and automotive port, are also featured. MSC Cruises' Antonio Paradiso talks about the maiden call of their brand-new \$1bn luxury cruise ship, *MSC Bellissima*, at the port in March, and VVV Solutions' Michael Rye reveals the latest initiatives VVV are using to drive continuous improvement in port safety.

We're delighted to showcase the ABP-sponsored Women in Journalism parliamentary reception, which brought together leaders from the world of politics, journalism and maritime to celebrate gender equality.

A further theme in this issue is advancement in maritime technology, with a piece by the Secretary of the International Windship Association, Gavin Allwright, focusing on wind propulsion technology, while ABB's Philip Lawson addresses the question of what the Fourth Industrial Revolution could mean to the maritime industry.



**David Leighton**  
Group Head of Corporate Affairs  
Associated British Ports

### 04–07

#### UK ports: delivering a global future

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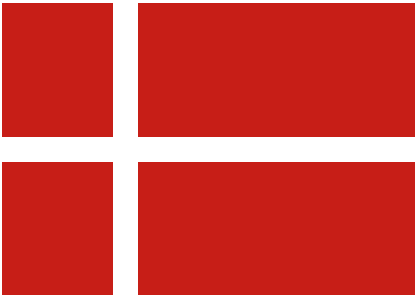
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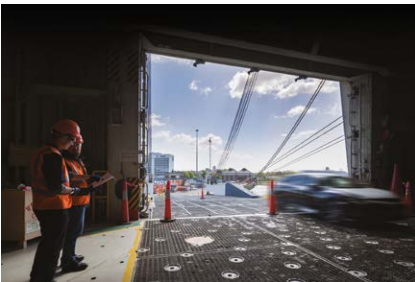
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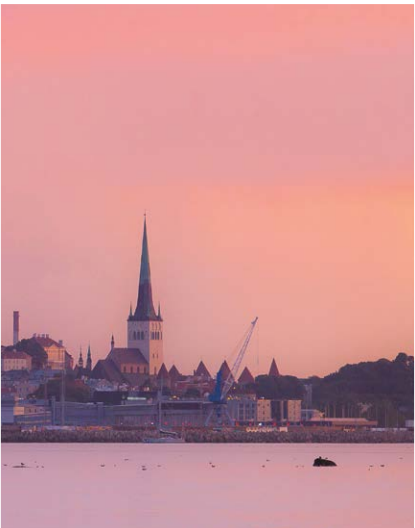
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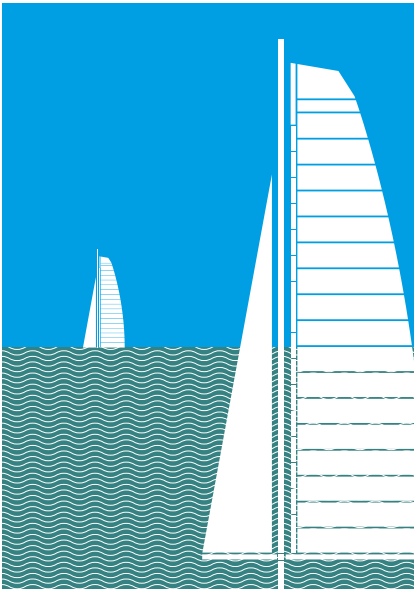
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If you would like to share your perspective on the future of trade and the maritime industry, please get in touch at [report@abports.co.uk](mailto:report@abports.co.uk)

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## UK ports: delivering a global future



Secretary of State for International Trade, Rt. Hon Dr. Liam Fox MP discusses the vital role ports continue to play in our national identity as a great maritime nation, especially in the coming months.

Ports play a vital role in our national identity as a great maritime nation and, in the months ahead, they will be even more important in reaffirming that status.

Around 95% of all our trade in goods travels by sea, including half of the food that we consume and a quarter of our energy.

So the significance of ports to our national wellbeing as well as our future trading success is clear. That's why the Department for International Trade is delighted to support the UK Ports for International Trade campaign group.

The campaign group is led by port companies, maritime trade associations and logistics and engineering businesses. It demonstrates how the UK's ports can help Britain seize on new opportunities as we set up our independent trade policy for the first time in more than 40 years.

This will be particularly true of maritime communities across the country, from the Clyde to the Severn, and from the Humber to the Foyle, who can expect to be some of those to gain most from international trade.

Last year, I visited Tilbury Port in Essex and saw first-hand the indisputable impact that the port has on the local area. Tilbury's £1bn investment programme is set to increase the port's employment threefold. As a result, by the end of the programme, one in five of those employed in the local area of Thurrock will work in the port.

The ports industry directly supports more than 100,000 livelihoods, but this number increases significantly when supply chains are considered. The Port of Southampton, for example, supports over 46,000 jobs across Britain, well beyond its own geographical neighbourhood.

As trade flows increase, high-quality jobs will be created, and the benefits will be felt throughout the wider UK economy. So whilst the communities where goods are loaded and unloaded are set to benefit directly from increased maritime trade, businesses and communities across the whole of the country will also get a significant boost, including those that are nowhere near the coastline.

The political think tank Open Europe has predicted that £41bn worth of trade with potential trade partners will come from outside of Europe by 2030 – and it truly is all to play for. Our coastal powerhouses sit in a unique position to tap into global trade growth, as well as becoming centres of maritime innovation and manufacturing.

At Tilbury Port, I saw Land Rovers and Jaguars ready to be shipped to West Africa and South America. Our ports are vital in realising the wide benefits of trade, providing an effective way of growing economies and building our trading partners of the future. There are mutual benefits, which is why the UK Government continues to work in developing countries to support critical trade skills and trade infrastructure like ports and roads. [\[X\]](#)

*“Around 95% of all our trade in goods travels by sea, including half of the food that we consume and a quarter of our energy.”*





## UK ports: delivering a global future (continued)

*“It will be your dedication and hard work which will be at the heart of our mission to deliver prosperity and jobs for the whole country.”*

Many of the new campaign group's key members, such as Associated British Ports (ABP), are already doing a fantastic job in making the case for free and fair trade. So I am calling on all of you, the backbone of our country's trade with the world, to join ABP in banging the drum for free trade.

The UK Ports for International Trade campaign provides a platform for all those involved in the maritime industry to champion free trade and it will be crucial in meeting our high ambitions as an outward-looking, free-trading nation. The support of the industry in making this case clear to the public is essential.

Make the case for international trade in real terms – how it benefits your businesses, communities and makes a real difference to people's lives.



New deals freeing up trade will make it easier for companies like Liverpool-based Clarke Energy, who produce power generators, to ship their products worldwide.

Their generators are used across a variety of sectors, including powering the world's third largest mosque and keeping hospitals and universities around the world running.

Exports already account for approximately two thirds of its £340m turnover, and a number of the Trans Pacific Partnership countries prioritised for a deal with the UK, such as Australia, New Zealand and Singapore, are key markets for the company.

The company has won a Queen's Award for International Trade and their products pass through the Port of Liverpool on the way to customers around the world.

Reductions in tariffs that will come with new agreements could mean lower production costs, better access to markets abroad and increased exports, which in turn could mean more jobs back home.

So spread the word of how your sector is bringing growth and jobs to every community across the UK – and providing the products, services and consumer choices that make us a prosperous nation.

It will be your dedication and hard work which will be at the heart of our mission to deliver prosperity and jobs for the whole country.

Everyone who stands to benefit from the vast opportunities that international trade represents and the prosperity it brings should speak up through the UK Ports for International Trade campaign. If you are not already a member, I urge you to join. **R**





## The Danish connection: keeping Britain trading



Trade advisor at the Danish Embassy in the UK, Jes Lauritzen, traces the history of the UK and Denmark's strong economic ties and shares why ABP's ports on the Humber are particularly well-suited for future commercial links between the two countries.

The UK and Denmark have a longstanding relationship tracing all the way back at least to the eighth century when the first Danish Vikings came to England. Even though the time of the Vikings might be better known for plundering, it was also a period of settlements, trade and cultural exchanges. It is a period in time with great significance for both sides of the North Sea and a period in which both countries were united under King Cnut the Great. The arrival of the Vikings is only one of many examples of why there is a strong bond between our countries. The history between the UK and Denmark covers many other aspects, such as a royal wedding in 1766 between the English Princess Caroline Matilda and the Danish King Christian 7th of Denmark, and the liberation in 1945 by the British forces led by Field Marshall Montgomery, ending World War II for Denmark. History shows there are very close ties between our two countries and this is what continues to keep us close.

Through it all, the relationship between our two countries has also revolved around the exchange of goods and services. In 2017, the UK was Denmark's fourth largest export market for services and goods.

Danish exports to the UK account for around 8% of total exports, which has a value of approximately £10bn. Likewise, Danish imports from the UK are vital, as the UK ranks third when it comes to where Denmark get its imports. A study from Aalborg University in Denmark suggests that Denmark is getting a quarter of all its fish from British waters. Denmark's decision to join the EU was directly linked to the UK's decision to join the EU. Therefore, the UK decision to leave the European Union will undoubtedly have consequences for both Denmark's exports and imports from the UK. In the coming post-Brexit reality, whatever the outcome of any deal, we will need to explore new ways of connecting with each other.


The Danish Embassy and the Port of Hanstholm went to visit the ABP's operations in the Humber in December last year. We saw the volume of goods coming in through the Humber area and how effectively and well organised the port operations were set up. During the visit, it became clear that new links between the UK and Denmark could be extended to the benefit of both countries. The Humber ports are especially interesting to Denmark

*“The Humber ports are especially interesting to Denmark as it is possible to reach around 60% of the UK's largest exporters and importers within a three hour drive. Furthermore, there is excellent access to skilled labour and lower operational costs in the Humber area.”*

as it is possible to reach around 60% of the UK's largest exporters and importers within a three hour drive. Furthermore, there is excellent access to skilled labour and lower operational costs in the Humber area. In addition, it is almost certain that Brexit will affect other links between mainland Europe and the UK, and creating new sea links out of the Humber area would be one way of helping us all overcome some of the potential Brexit consequences. For environmental reasons, it would be of great benefit to move more goods from roads and planes to the sea as this would be a much more CO<sub>2</sub> friendly mode of transportation.

The Port of Hanstholm is in the process of expanding its operations and capacity, a project that is expected to be completed by 2020. This expansion will ensure that the Port of Hanstholm, building on the existing activities, will be ready for handling more goods on bigger ships, with more space available for storage and containers. The Port of Hanstholm is one of Denmark's leading fishing ports and hosts Denmark's largest fish auction, attracting some of the best prices in Europe.

Geographically speaking, the Port of Hanstholm is one of the Danish ports which are closest to the UK. We would therefore encourage investigating how new sea links between the ABP's ports on the Humber and the Port of Hanstholm could be established.

Because of Brexit, we may face some slightly rougher seas in the coming years, but Denmark and the UK will always be close partners, and a collaboration between ABP Humber and the Port of Hanstholm could be yet another step to strengthen historic trade partnerships across the North Sea. 



# Simply Bellissima...



In an interview with Kate Thompson Pearce, Antonio Paradiso, Managing Director for MSC Cruises in the UK and Ireland, is positively bubbling with excitement as he talks about the christening ceremony for MSC Bellissima.



*“Over the last two to three years, our business in the UK has gone from strength to strength and we have seen a 150% increase. We are one of the fastest growing cruise lines in the UK and number one in Europe.”*

The beautiful new cruise ship arrived early in the morning of March 1st, 2019 at the Port of Southampton and stayed for four days of excitement, razzmatazz and ceremony.

“She is the largest ship ever named in the UK,” explained Antonio. “We had been working on the different elements for the naming ceremony for a year and had a wonderful lineup of celebrities and artists performing on the day.”

Against the backdrop of ongoing Brexit negotiations, Antonio is keen for the naming of MSC Cruise’s latest ship to be seen as a positive beacon of hope amidst a sea of uncertainty.

“Over the last two to three years, our business in the UK has gone from strength to strength and we have seen a 150% increase. We are one of the fastest growing cruise lines in the UK and number one in Europe.

“British customers are falling in love with MSC Cruises and by naming one

of our new ships in the UK, we saw an opportunity to say thank you.

“2019 may be a challenging year for all of us but we saw our ceremony in March as an opportunity to share some positivity,” he said.

MSC cruise ships have become a familiar sight at the Port of Southampton, the award-winning cruise capital of Northern Europe.

“Southampton plays a major role in our growth and we have seen more and more ships calling at the port every year.

“And the good thing about MSC Cruises is that we see Southampton as not only a port of embarkation but a destination as well. More and more European customers are wanting to come to the UK and 50% of our customers are coming to the UK via Southampton,” explained Antonio, who started his working life with the British Consulate in Italy before joining MSC Cruises in 2008. During his career with MSC Cruises, he has been responsible

for the direction and management of operations in over 30 different countries.

It’s the first time Antonio has been responsible for a naming ceremony and he wanted to ensure it was a truly memorable occasion.

“I’m really thankful for a successful career and this naming ceremony is a key milestone for me personally – it is the icing on the cake.

“It is the first time that I have been the official host at a naming ceremony. It has been a great opportunity to say thank you to MSC Cruises and also to everyone for supporting us,” he said.

On March 1st, the ship hosted members of regulatory bodies including the CLIA conference, followed by the christening ceremony which took place the next day. A significant celebrity coup for the event was the fact that world-renowned actress Sophia Loren agreed to be godmother for the ship – a role she has performed for all the MSC Cruises fleet.



“I am delighted that Sophia Loren is our godmother and that we were able to showcase our British cadets who will be taking part in a parade as part of the festivities,” explained Antonio.

And finally, on Sunday March 3rd, the ship played host to the largest trade event held on a cruise ship, before she departed on her inaugural voyage the next day. Experts from across the cruise industry were able to come and experience the luxuries offered on board first-hand.

“We welcomed 3,500 travel agents from all over the UK. I am a great believer in letting them see the ship for themselves – they are an important part of our larger travel family,” he said.

Looking to the future, Antonio sees the trend for taking cruise holidays continuing to rise with more families and younger people choosing to sail rather than fly.

“Cruise penetration compared to the number of hotel beds in the world stands

at 2%, so we have a 98% opportunity to grow our business.

“We are particularly interested in attracting Millennials and Generations X, Y and Z. We can see an opportunity for new ships to join the fleet and that growth will be completely sustainable,” he said.

In line with this commitment to reach a wider audience and tap into the interests of younger generations, the Port of Southampton was chosen as the location for the festivities because it is the largest cruise port in the UK, typically welcoming around 2 million passengers each year.

Commenting on the visit of MSC Bellissima, Alastair Welch, ABP Southampton Director, said:

“As a Gold Sponsor for the MSC naming ceremony, we were delighted to welcome this grand new ship to the port and work with MSC Cruises on a ceremony that the city won’t forget.

“Southampton is a significant port for cruise ships and we will continue to adapt so that we are ready to meet the needs of this growing industry.”





## Focus on safety: Wallenius Wilhelmsen in Southampton



Wallenius Wilhelmsen's Vice President Terminals and Stevedore (EMEA), Michael Rye, explains why safety is key to their landside operations in Southampton, which dealt with 680 vessels and handled more than 425,000 vehicles, including 390,000 cars, last year.



"We saw a welcome increase in the number of automobiles we handled in 2018 through the Port of Southampton," said WW Solutions' Michael Rye. "Our outreach sees us dealing with all the major global markets, predominantly North America, Asia and Australia."

"In order to accomplish that level of throughput, we have put safety at the centre of all we do with our Safety First initiative."

"We want our employees going home to their families at the end of the day the same way they came to work," he said.

A ground-up approach means every employee has a voice and if they see something that is dangerous, they are encouraged to pipe up.

"Even if it is detrimental to the productivity of the operation, we want to know so we can fix any potentially dangerous the situation."

"We offer incentives and recognition but more than that there is a real sense of pride on the terminal over our safety record. We have a board which shows the number of days we have gone without serious incidents and when our team sees it hit 100 days and then 200 days, you can really feel the pride," he said.

*"We are always looking at ways to add quality for our customers and make sure their needs are always met."*

Wallenius Wilhelmsen was formed in 2017 when Wilhelmsen of Norway and Wallenius of Sweden brought together their 157-year heritage. Globally, WW Solutions oversees the throughput of 7.5 million cars through 44 vehicle processing centres. The Port of Southampton is their largest UK operation.

In 2018, WW Solutions took on stevedoring operations at the Port of Southampton (moving the cars on and off the ships and from the five or six trains that bring cars to the port directly from the car plants each day).

"That has meant we are now working with different labour pools than we have in the past. We treat them very much as part of our workforce and they are very much aware of our safety ethos."


"We have employee forums and safety groups where issues can be discussed, and we have safety champions who wear Safety Champion tabards. We are living and breathing safety and our champions mean there is good liaison throughout the workforce and people can easily see with whom they can raise any safety concerns," said Michael.

New Wallenius Wilhelmsen Ocean vessels are coming on line with an order for eight new HERO class (High Efficiency Ro-Ro) vessels and five already completed. These new cleaner, greener vessels with greater capacity are already visiting the Port of Southampton.

"We are always looking at ways to add quality for our customers and make sure their needs are always met."

"New initiatives in 2019 will include the further roll-out of HERO class vessels which offer higher optimisation on fuel efficiency, special wave resistant technology and greater flexibility inside the vessel which means we can get more vehicles on the ships. On the terminal side, there will be a move to improve digitisation and improve infrastructure to handle the development of alternative fuel and semi-autonomous vehicles," he said.

The adoption of new digital technology will also mean that customers can track their cargo in real time.

"They can see when their vehicles are being loaded and when the ship will sail. We've gone from a 'wait-and-see' operation to offering live data that is vital for accurate planning. These new tools will help customers manage their business better, faster, smarter," he said. 



# ABP sponsors Women in Journalism parliamentary reception

Held in conjunction with Women in Journalism (WIJ), ABP's 'Meet the Women of Westminster' reception brought together prominent women in politics, journalism and the maritime industry.



On 27th February, ABP sponsored Women in Journalism (WIJ)'s 'Meet the Women of Westminster' reception in parliament. The reception is part of a series of events organised by ABP in partnership with the charity, which aim to create a forum for sharing of ideas among women across the different professional fields of journalism, politics and maritime.

On the night, WIJ Chair Eleanor Mills introduced our host Amber Rudd MP, who highlighted the importance of events that celebrate and bring together women from the worlds of journalism, politics and industry. Amber also made a point of saying how brilliant it was to have female MPs from across parties in one room, enjoying the evening, saying that they should all do more, politics aside, to support each other in parliament.

She went on to speak about the importance of the language used by the press when reporting on politics, highlighting how the use of incendiary language was both dangerous and damaging. >



Secretary of State for Work and Pensions Amber Rudd MP.



ABP CEO Henrik Pedersen, The Sunday Times Magazine Managing Editor Eleanor Mills, Secretary of State for Work and Pensions Amber Rudd MP and Shipping Minister Nusrat Ghani MP.



ABP CEO Henrik Pedersen, Group Head of Corporate Affairs David Leighton and Managing Editor of the London Evening Standard Doug Wills.

Jane Spencer Regional Head of HR Humber and Steph Phillips Regional Head of HR South Wales.



The Rt Hon Nicky Morgan MP.



# ABP sponsors Women in Journalism parliamentary reception

*continued*



ABP Chairman Dr Phil Nolan, ABP Communications Advisor Pressiana Naydenova and BBC Political Editor Laura Kuenssberg.



ABP Communications Advisors Pressiana Naydenova and Bryony Gundy with Daily Mail Political Correspondent Claire Ellicott and Press Association Political Correspondent Jennifer McKiernan.

The event was a great success and saw the attendance of an abundance of female MPs and journalists, including MPs Emily Thornberry, Nicky Morgan, Diane Abbott, Nusrat Ghani and Jess Phillips, as well as BBC Political Editor Laura Kuenssberg and her colleague, BBC Politics Live Presenter Jo Coburn.

Speaking about the event, Henrik Pedersen, ABP Chief Executive Officer, said: “We were proud to team up with Women in Journalism for a second year in a row, in order to create a common forum for women across the worlds of politics, journalism and industry, to share ideas of how we could create more diverse workplaces.”

“Diversity is of paramount importance to ABP as we fundamentally believe that organisations are much stronger when different voices are listened to in business.”

This event follows last year’s ABP-sponsored ‘Centenary Celebration of Women at Westminster’ reception, which marked the 100th anniversary of the Representation of the People Act, a piece of legislation which allowed property-owning women over the age of 30 the right to vote in UK general elections for the first time. [R](#)



Group photograph of ABP women with WIJ committee member Eve Pollard.



*“We were proud to team up with Women in Journalism for a second year in a row, in order to create a common forum for women across the worlds of politics, journalism and industry to share ideas of how we could create more diverse workplaces.”*



The Shadow Home Secretary The Rt Hon Diane Abbott MP.



# The future of wind propulsion technology



Secretary of the International Windship Association (IWSA) Gavin Allwright looks at the latest developments in wind propulsion technology and its potential to deliver a range of efficiency and environmental benefits for the shipping industry.

2018 was an important year for the development of low carbon solutions for shipping. In April we had the clear market signal from the International Maritime Organisation (IMO) when it announced its initial strategy with a target of "at least" 50% greenhouse gas (GHG) reduction. By the end of the year, Maersk had pledged a fully carbon neutral fleet by 2050.

How attainable are these targets and what pathways do we have to get there? One thing is certain. The ships we are designing and building today will be operating in a net zero emissions environment before the end of their commercial life, and this makes financing new vessels problematic when banks are anxious about investing in stranded assets.

Wind solutions are part of a basket of technologies which will be required to propel the new fleet.

Industry players and cargo owners have begun the journey towards zero emissions. Maersk and Viking Line have both fitted rotor sails to vessels recently.

Chantiers de l'Atlantique (formerly STX Europe) now has a primary wind propulsion cruise vessel range undergoing testing with Ponant Cruise.

Airbus has invested in kite-based solutions, Renault Group signed an agreement to build two wind vessels for cross-Atlantic car deliveries, MOL is leading a rigid wingsail project in Japan and Wallenius Marine announced in December they will build a primary wind propulsion car-carrier in 2021.

Here in the UK, Drax is undertaking a feasibility study on wind propulsion solutions with the Smart Green Shipping Alliance, a group including LR, Ultrabulk and the Institution of Mechanical Engineers.

This interest in wind propulsion is driven by the potential fuel savings. Retrofit options could deliver 5-20% fuel savings, whilst optimised new builds promise savings of 30% and above.

Reducing the need for bunkering also makes wind attractive, increasing asset utilisation and improving long-term energy security.

Flettner rotor wind propulsion systems are already entering the market. Currently, there are six vessels in operation covering a range of cases, an example being UK-based Anemoui Marine Technologies' installation of its Flettner rotors on a geared bulk carrier, the 64,000dwt MV Afros, which was recently named 'Ship of the Year' at the prestigious Lloyd's List Greek Shipping Awards 2018. [1](#)



*“This interest in wind propulsion is driven by the potential fuel savings. Retrofit options could deliver 5-20% fuel savings, whilst optimised new builds promise savings of 30% and above.”*





# Port of Rotterdam: training a workforce fit for the Fourth Industrial Revolution



HR expert and researcher at the Port of Rotterdam Renee Rotmans discusses ways in which the port is focusing on upskilling in order to help its workforce embrace opportunities linked to the Fourth Industrial Revolution.

As the Fourth Industrial Revolution, characterised by digitalisation, automation, robotics and energy transition, unfolds across the globe, the future of work can be expected to change in ports and their surrounding cities. This poses unprecedented strategic challenges for institutions across the board, from firms, the workforce, port authorities and education institutes, to governmental bodies and other port stakeholders. To meet these challenges and embrace opportunities, building on the human capital in ports becomes even more important.

In the coming years, the quality and resilience of the future workforce is likely to become one of the decisive factors for the competitiveness and innovative power of ports and their surrounding regions. The Rotterdam region has experienced a high demand for well-trained staff, while having a relatively high unemployment rate and sizable skills gaps of the current and future workforce. A recent Port Innovation Barometer survey published in 2017 concluded that at least 50% of the workforce distributed in the Rotterdam port region will require reskilling of some kind and at least 18% will need to attend reskilling programmes, lasting more than a year.

At the same time, the Fourth Industrial Revolution will give rise to several new job roles, occupations and tasks. New roles will be created such as search engine optimisation managers, port data processing experts and application software developers. New types of organisations will appear such as cloud computing providers and various solar energy firms. It is expected that new sectors such as digital security, data science and virtual platforms will have significant influence on the operationalisation, efficiency and innovativeness of ports.

To ensure that the Fourth Industrial Revolution results in positive outcomes for the workforce, a collective effort for bundling investments and commitment to education, regional reskilling and upskilling plans at every stage of development is paramount.

This will help reduce the current and future skills gap that exists between the skills required by port firms and the skills scholars, students and unemployed people possess. Yet this requires cooperation and synergy between local government, port firms, labor unions, educational institutes and port authorities.

To achieve these goals it is essential that port firms take an active role in supporting

their employees through reskilling and upskilling. Local government also needs to create an enabling environment to assist in these efforts and individuals have to adopt a proactive approach to their own lifelong learning and sustainable development. Nevertheless, underlying all this is the key role that port authorities must play in promoting human capital development.

To adhere to these changes, the Port of Rotterdam Authority aims to create a good working environment for everyone by maximising the synergy between the port, the city and the region. There are various initiatives at the Port of Rotterdam that assist the current and future workforce in adapting to developments linked to the Fourth Industrial Revolution.

The initiatives can be broadly divided into three categories. The first one is its 'School to Work' programme, which involves equipping current and future employees with additional skills through collaboration between educational institutes, port firms and the Port of Rotterdam Authority. Current employees are provided with upskilling and reskilling programs with the establishment of the RDM campus and the IT and Technology Campus.

In addition, students are provided intermediate vocational education and offered a special port-focused curriculum to prepare scholars (aged 12 to 18) for a rapidly changing world.

The second category is 'Work to Work' and focuses on allowing current port employees to change from one job to another job in the port region to sustain regional innovativeness. One initiative is 'Rotterdam Works', a network offering voluntary labour mobility opportunities to employees. Participating employees are able to gain new work experience and be better equipped for labour market orientation and professional development.

Similarly, the 'Rotterdam Initiative for Social Innovation' aims to achieve greater cooperation and labour mobility opportunities between port firms. A promising element is the collaboration between the Port of Rotterdam Authority and trades unions.

The third category is 'Return to Work' and focuses on getting unemployed people in the Rotterdam region to work in the port. Together with local government, the Port of Rotterdam Authority has initiated various projects which seek to match potential employees with the right jobs and to help unemployed people acquire basic qualifications.

Overall, the Port of Rotterdam is committed to investing in people now for them to be able to benefit from maritime job opportunities in future. This inclusive and proactive approach is needed to both increase the availability of future skills, as well as to enable a wider range of employees to share in the gains from the Fourth Industrial Revolution in the years to come. **R**





# Port of Tallinn goes smart and green



Valdo Kalm, Chairman of the Management Board of Port of Tallinn, looks at how digital innovations help his port combine sustainability with efficiency, while harmonising the flow of information between Estonia’s various e-service databases, both in the public and private sector.

As in all aspects of business and people’s everyday lives, the maritime industry of the 21st century needs to adapt its modus operandi to utilise technological innovations to construct viable business cases. The digital age, with its smart solutions, provides tools to create a successful, growing and profitable business.

Technological advancement and success is driven by the ability of maritime companies to fully adapt to their environment. They can use smart digital tools to simplify business processes and create a favourable business environment, while at the same time maintaining a focus on sustainability and responsible usage of natural resources.

For a company servicing 10.6 million passengers per year, ensuring smooth traffic for both people and vehicles is fundamental. Ensuring simple check-in and short waiting times, together with minimal wasted time and efficient management of queues, can be achieved with a modern Smart Port solution.

Since 2018, the Port of Tallinn has implemented a Smart Port traffic management system at two of its passenger terminals in Tallinn’s Old City Harbour. This vehicle management solution automatically guides cars to the right ship, thereby speeding up the entire licence process. Thanks to automatic license plate recognition, the drivers who have made a booking ahead of time are

*“‘Being green’ cannot by any means be seen as jumping on a bandwagon. Being green means valuing sustainability and, for any business entity, sustainability is the key to future development and success.”*

directed automatically to the right check-in booth and then the right lane for going on board. The new system has been developed in order to simplify the entire boarding process by minimising waiting times for passengers.

For the industry as a whole, smart solutions at end customer points are a must-have tool, but for real efficiency gains the key is digitalisation. All of the Port of Tallinn’s communication channels are digital already, and the Estonian logistics sector is utilising high-performance in-house digital platforms and solutions. But for a value chain that ranges across borders, and often includes tens of different companies, the bottleneck most often encountered results from the interconnection of IT systems between different actors.

In Estonia, the core members of the infrastructure cluster have started developing an information system exchange layer called Single Window, which allows the logistics and transportation sector to communicate with each other in a paperless and secure way.

Such a solution would in essence be similar to an information system exchange layer called X-Road. Its core digital infrastructure allows Estonia’s various e-service databases, both in the public and private sector, to link up and operate in harmony.

Another vital principle for a modern maritime company is sustainability. The maritime sector has previously been characterised as a ‘coal and steam’ industry for its high dependence on fossil fuels and high-energy consumption equipment. Traditionally this resulted in a large ecological footprint. However, in an era of an ever-stronger emphasis on finding new, eco-friendly and sustainable models, the sector is constantly looking for ways to cater for the need for economic development, while also finding the most sustainable means.

In shipping, it is estimated that for every euro spent on business development offshore, a socioeconomic return of about ten euros is created onshore. Therefore, every development that fosters cleaner and more sustainable business on the seas benefits society and surrounding the communities both financially as well as ethically.

In 2017, the first LNG-powered ferry Megastar was commissioned on the Tallinn-Helsinki route. A ferry that produces 25% less carbon dioxide, 85% less nitrogen compounds, and practically no sulphuric compounds or soot particles marked the beginning of a new era in marine traffic.

‘Being green’ cannot by any means be seen as jumping on a bandwagon or be used simply as a figure of speech. Being green means valuing sustainability and, for any business entity, sustainability is the key to future development and success.

In 2018, the Port of Tallinn changed its pricing system to motivate shipping companies to protect the environment. Starting from 2019, ships participating in the Environmental Ship Index (ESI) in working towards reducing air emissions may apply for up to 8% discount on tonnage fees in the harbours of the Port of Tallinn. The new port pricing system involving differentiated port fees is aimed at encouraging shipping companies to adopt environmentally friendlier technologies and thus also contribute to the health of the Baltic Sea ecosystem.

In conclusion, in all sectors, the prerequisite of success is the fast adoption of the opportunities technological innovation offers us. Being smart and digital, with a keen eye on sustainability, is the way forward in serving customers and reducing needless bottlenecks, which will not only have a direct impact on a businesses’ bottom line, but also benefit society as a whole. **I**





# NEWSWRAP

*Bite-sized, all the latest news highlights from ABP*



## ABP INVESTS £250M TO KEEP BRITAIN TRADING THROUGH BREXIT

In January ABP announced an additional investment to boost facilities at its Port of Hull, bringing the group’s total investment to £250m since the EU referendum in 2016. This programme of investment demonstrates the group’s commitment to keeping Britain trading with Europe and the rest of the world after Brexit.

*“This programme of investment demonstrates ABP's commitment to keeping Britain trading with Europe and the rest of the world after Brexit.”*



## ABP SOUTHAMPTON ANNOUNCED AS GOLD SPONSOR FOR MSC BELLISSIMA EVENT

In March, ABP was announced as a gold sponsor at a glittering ceremony to name MSC Bellissima at the Port of Southampton. The port was chosen by the world’s largest privately-held cruise company, MSC, as the stage for this momentous naming ceremony giving a huge endorsement for the future of cruise in the city.

## ABP HULL SECURES SIEMENS DEAL FOR WIND TURBINE BLADE STORAGE

In January, ABP announced a 12-month contract with Siemens Gamesa to provide storage for 37 wind turbine blades destined for the world's largest offshore windfarm, the Hornsea One Project. In order to accommodate the expanding business of the leading wind turbine blade manufacturer, a six-acre area located at King George Dock will be leased.

## ABP WELCOMES PETERSON UK LIMITED TO THE PORT OF LOWESTOFT

Earlier this year, ABP Lowestoft announced a new deal with Peterson UK Limited, a major logistics and service provider to the offshore energy industry, to establish a new operational and logistics base at the port. The new agreement will see Peterson operate a wide range of warehouse, cargo and logistic services from the port, including fuel bunkering to support the oil and gas and renewable energy sectors being supplied from their Lowestoft Supply Base.



*“ABP Humber raised over £250 from World Oceans Day last year and aptly donated it to voluntary rescue group - British Divers Marine Life Rescue.”*



**ABP ANNOUNCES  
NEW 10-YEAR  
CONTRACT  
WITH THOR  
SHIPPING**

In January, ABP signed a new agreement which sees Thor Shipping & Transport commit to the Port of Hull for the 10 years. In addition, ABP has invested £6m into Thor’s 10-acre leased terminal, allowing substantial infrastructure improvement works and an additional 2.5 acres of container storage space. As part of this investment, a hybrid £3.5m Liebherr harbour crane was purchase by ABP to bolster eco-friendly operations.

**ABP SPLASHES OUT  
ON SEAL RESCUE  
EQUIPMENT FOR  
CHARITY**

In February, ABP donated funds for seal rescue equipment to support and improve the health of distressed seals in the Humber region and beyond. ABP Humber raised funds during World Oceans Day last year which it donated to voluntary rescue group British Divers Marine Life Rescue (BDMLR) to purchase two seal-rescue bags and a kennel.

**PORT OF IPSWICH  
HANDLES SALT  
DELIVERY  
AHEAD OF COLD  
WEATHER SPELL**

In March, the Port of Ipswich welcomed a 5,000-tonne delivery of salt to be used by Highways England to help make local roads safer. By transporting the salt as far as possible by sea, ABP has helped minimise the impact on the local road network and has ensured that Suffolk is prepared for the cold weather whenever it hits the county.

**In focus: ABP Property**



**CONSTRUCTION  
WORK  
ON HMS CAMBRIA  
IN CARDIFF BEGINS**

In September 2018, ABP began work on the construction of a facility for HMS Cambria at the Port of Cardiff. The facility will include a new training centre, as well as accommodation and social facilities, for the Royal Navy Reserve, Royal Marines Reserve, and the University Royal Naval Unit. The major project is being delivered by the Reserve Forces’ and Cadets’ Association (RFCA) for Wales in partnership with ABP.

**DEMOLITION OF  
FORMER OFFSHORE  
GAS FACILITY  
MAKES WAY FOR  
NEW USERS AT PORT  
OF LOWESTOFT**

In January 2019, Wards Demolition completed a large-scale demolition project to clear OGN Property Limited’s old site in order to increase the space available to future customers. This has created a blank canvas for the future development of the East of England Energy Hub, ABP’s solution to support the thriving southern North Sea offshore wind industry.

**PORT OF GRIMSBY  
COMPLETES  
SALE OF GARTH  
LANE SITE**

In January, ABP Grimsby completed the sale of its 4.3-acre car parking site, known as Garth Lane, to North East Lincolnshire Borough Council. The sale was identified in the Humber 2018 Five-Year Business Plan and is seen by the Council as an integral part of town centre regeneration and their wider Greater Grimsby Town Deal proposal which is being undertaken in collaboration with central government.



*In the...*

## The new year brings a new strategy for the future of the maritime sector.



Party conference season, the Budget and Brexit preparations made for a busy end to the year at Westminster.

The historic defeat of the EU Withdrawal Agreement in Parliament in January resulted in a prolonged period of political instability and uncertainty for business. With the UK's scheduled departure from the European Union fast approaching, the Government stepped up preparations for the event of a no-deal exit, securing the UK's continued membership of the Common Transit Convention, progressing plans to simplify customs approval processes and increasing the training and preparedness of border personnel. ABP continues to work with Government and industry to ensure the continued free flow of goods in the event of disruption on the Dover-Calais route.

Beyond Brexit, the start of the new year brought a series of significant announcements for the industry. January saw the launch of Maritime 2050, the Government's long-term strategy for the future of the UK maritime sector. Transport Secretary Chris Grayling MP and Shipping Minister Nusrat Ghani MP launched the strategy at an event in London, where it was welcomed by industry leaders as a positive and ambitious vision for the sector. Maritime 2050 is built on seven high-level themes, covering the UK's competitive advantage, environment, infrastructure, people, security, technology and trade. A series of 'route maps' are being published that will outline the steps that are expected to be taken in each of these areas in the next 30 years.

The strategy contains a number of exciting areas of focus for UK ports, ranging from the opportunities for port-centric development to the application of new technologies such as autonomous vessels.

There are also plans to implement Port Economic Partnerships, intended to leverage the "maximum benefits from both government and industry investments". The strategy also reiterates the Government's commitment to invest in the road and rail infrastructure required for the efficient onward movement of freight and passengers from ports, building on the findings of the 2018 Port Connectivity Study.

In support of the environmental aspect of the plan, the Government also published the Clean Air Strategy, setting out plans to: protect the nation's health; protect the environment; secure clean growth and innovation; reduce emissions from transport, homes, farming and industry; and monitor progress. In the spring, the Government will also publish guidelines to advise ports on how to develop effective and targeted Air Quality Strategies. ABP is working with the Department for Transport and the Department for Environment, Food and Rural Affairs towards achieving our shared objectives of clean and sustainable port development.

Transport for the North has set out its Strategic Transport Plan and Investment

Programme. Together they set out how £70bn of investment to 2050 would deliver improved connectivity and flagship programmes, including Northern Powerhouse Rail, the Long-Term Rail Strategy and new and enhanced roads. Transport for the North estimates that the proposals would create £100bn in GVA and 850,000 jobs. The UK's northern ports already play a vital role in connecting businesses to international markets. Improving road and rail connections to ports would further enhance the ability of ports to drive economic growth and give northern businesses a competitive boost.

The Government has launched a call for evidence to support the Rail Review, led by former British Airways CEO Keith Williams. The review was established to recommend "the most appropriate organisational and commercial frameworks to support the delivery of the Government's vision for the railway". The review will consider commercial models for the provision of rail services, accountability, financial sustainability and how to reduce disruption and improve reliability for passengers. The review will look at the whole rail industry, including increasing integration between track and train, exploring options for devolution of rail power, and improving value for money for passengers and taxpayers. The findings and recommendations will be published in a white paper in autumn 2019, with reform of the sector to begin in 2020. **R**



## A day in the life...

# Steven Green, Assistant Silo Operations Supervisor, Port of King's Lynn

*Can you tell us more about your career path so far?*

I started working for ABP in 2010 when I successfully secured a spot on the Port of King's Lynn's summer internship programme. The three-month placement was focused on working at ABP's bespoke grain processing lab at the port while gaining valuable experience of overall port operations as well. I conducted grain tests for ABP customers, sampling primarily malt, barley and wheat product. I was one of five students who were brought in on the summer internship programme and, together, I believe we prepared around 8,000 samples over the three month period, sharing the grain quality results with ABP customers. We learned about the importance of testing grains before they are shipped overseas, as our added-service saves a lot of time and money for customers because it ensures that their products meet international standards and avoids potential setbacks. To be honest, I didn't know a great deal about the maritime sector before I started my summer job at the Port of King's Lynn, but I really enjoyed it, so I knew that I would like to stay in this industry.

After I completed my placement, I applied for a Silo Operative role at King's Lynn and was very happy to be selected. Since then I have been a part of the team at ABP King's Lynn for

*“Our added-service saves a lot of time and money for customers because it ensures that their products meet international standards and avoids potential setbacks.”*

a number of years and have seen the business go from strength to strength. My career has also progressed along the way and I am now an Assistant Silo Operations Supervisor, managing between three and ten other colleagues, depending on the season. In the summer, when groups of students intern at the port as part of our annual placement programme, the number of colleagues reporting to me can go up even further.

*What does your typical day at work involve?*

My days always start with planning and delegation, as I assign the tasks for the day to colleagues. There is plenty to do including a variety of tasks such as organising the safe passage of lorries coming into the port, providing stock management services, as well as efficiently running our silo complex, which holds 27,000 tonnes of product.

To put that in context, that is more than roughly 4,500 African elephants in weight. We currently manage around 50,000 tonnes of product on the port site for our customers. Not all of it is grain-based. We also have fertilisers, salt products and aggregates on site. We are also committed to health and safety and comply with Trade Assurance Scheme for Combinable Crops (TASCO) standards. In addition, I manage the day-to-day running of the grain processing lab at the port.

The way it works is that lorries carrying grain are weighed and tested so that we can report their specs back to their companies. Throughout this process, we work closely with our customers to ensure the smooth and accurate flow of information, so that we can be aware of their targets and requirements at all times.

My day ends with stock management, which helps us put in place short and long-term plans and ensures that operations run as efficiently as possible. Last year was particularly strong for us as we took on five new customers, driving a lot of traffic through the port, which is great for business.

*“I am convinced that as long as you are driven, you will succeed and maritime is the right industry for you.”*

*“Last year was particularly strong for us as we took on five new customers, driving a lot of traffic through the port, which is great for business.”*

*What advice would you give to young people who are interested in working for ABP?*

I think there are plenty of opportunities for young people in the ports industry. In my personal experience, I have never been held back. Every time I have shown interest in something new, ABP has been very supportive. For example, ABP has funded my HACCP Level 3 qualification, which is widely known within the industry. In terms of key skills or qualifications that we look for when we recruit new team members, I would recommend that prospective applicants get a forklift licence. When it comes to front-line operatives, I would say that the more licences you have and the more machines you are comfortable operating the better. There are a lot of places I have worked in the past where, if you wanted to try something new, it was always a challenge to get extra training, but with ABP I've had no problems with this at all. I've also had the opportunity to travel to quite a few of the other ABP ports, including Ipswich, Southampton, Hull and Immingham. It was definitely an eye-opener when I visited Southampton, seeing all the large cruise ships come into the port and realising how much they support the tourism industry. I am convinced that as long as you are driven, you will succeed and maritime is the right industry for you. ■





# View from the bridge: navigating the Fouth Industrial Revolution

Philip Lawson, ABB's General Manager, Marine & Ports UK, addresses the question of what the Fouth Industrial Revolution means for companies working in the maritime industry.

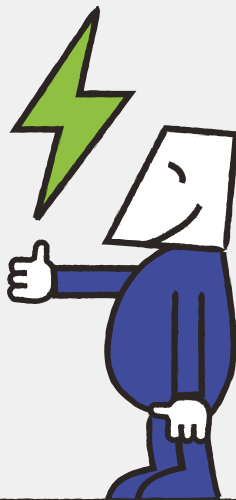
### The future of shipping

There are some powerful forces at work at the moment: electrification, digitalisation, and connectivity are converging on the maritime industry in a compelling combination destined to transform the way we move people and things on water. And ABB is no stranger to marine electric solutions. We have provided electric propulsion systems on-board vessels for more than 70 years.

Most recently ABB retrofitted a battery solution in conjunction with ForSea (formerly HH Ferries) to create the world's largest emission-free electric ferry vessels, linking Sweden and Denmark. The modernisations utilise turnkey ABB solutions including batteries, an energy storage control system and Onboard DC Grid technology.

The ferries operate the Helsingborg to Helsingør ferry route, transporting up to 50,000 passengers and 9,000 cars on a daily basis. In each port, automatic land-based charging stations are

*“As the global marine industry looks to become greener and use more sustainable energy sources, ABB has responded by developing commercially viable fuel cell solutions.”*

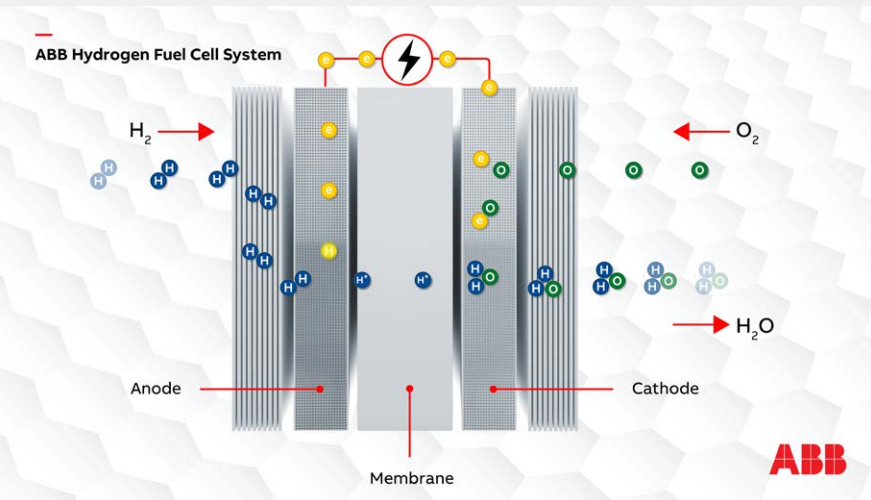
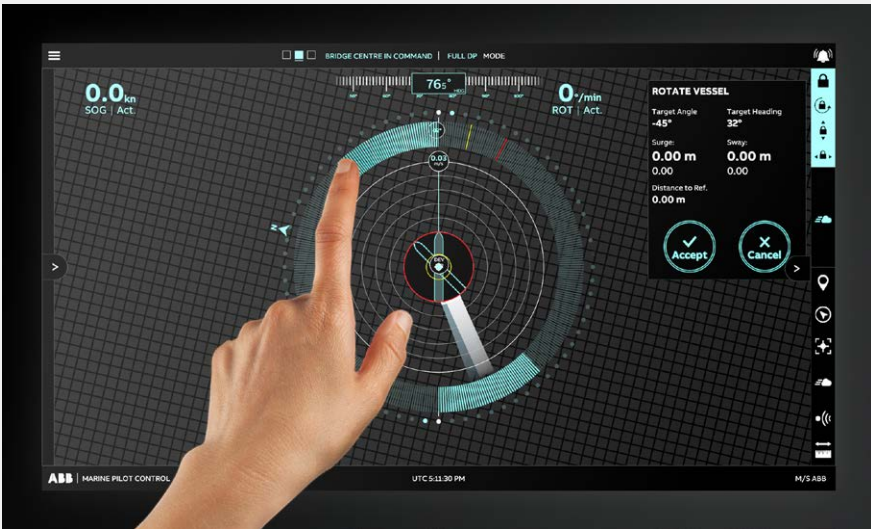


equipped with systems which maximise the charging period to enable efficient charging of each vessel's 640 batteries within a few minutes. The batteries are located on top of the ferries along with two deckhouses for transformers, converters and cooling systems. The project also reduces the company's total emissions of CO<sub>2</sub>, NO<sub>x</sub> and particles by 65% when the two high-frequency ferries are powered by green electricity.

### Alternative energy sources

As the global marine industry looks to become greener and use more sustainable energy sources, ABB has responded by developing commercially viable fuel cell solutions. In basic terms, fuel cells generate energy by exploiting an electrochemical reaction at the interface between the anode or cathode and the electrolyte membrane.

The fuel cells involve no combustion, converting fuel directly to electricity and heat. The main benefits for the shipping industry are zero-emission operation



From top to bottom: HH Ferries' MF Tycho Brahe, ABB's marine control dynamic positioning system and an illustration of ABB Hydrogen Fuel Cell System.

and lower maintenance costs for the power plant. Fuel cells have higher efficiency than a combustion engine and the technology allows energy to be concentrated more densely than in petroleum fuels. And if you use renewables to produce the hydrogen, the entire energy chain is clean.

The fuel cell power system can be used as a power source in combination with batteries or engines. The fuel cells can be integrated to the AC power system or Onboard DC Grid system, via a DC/AC converter or DC/DC converter. Fuel cells are already used to power buses and cars today and are a safe and reliable alternative to combustion engines.

One of the key marine sectors to exploit fuel cells technology has been the cruise industry. This drive for change was partly driven by their customers demanding green credentials and partly driven by end destinations. One of the first cruise companies to pilot the use of fuel cell technology was Royal Caribbean. Other marine sectors will follow suit, either when the economics makes it viable or legislation drives the change. Many businesses have and are still investing in LNG (Liquid Natural Gas). However, this is still classed as a fossil fuel and is still a finite resource to exploit. [X]



*“Fuel cells have higher efficiency than a combustion engine and the technology allows energy to be concentrated more densely than in petroleum fuels.”*

**Safety comes first**


The maritime industry is now at a point where the pipeline of competent seafarers and port resources is significantly smaller than the industry's predicted growth. Therefore, technology is urgently needed to help plug the resource gap.

In the maritime industry, safety must always come first, so ABB has created a road map of solutions that not only improve safety but also efficiency. During the latter part of 2018, ABB launched a new situational awareness solution called Marine Pilot Control, which reduces the workload on navigational tasks and allows bridge officers to focus holistically on the overall control and positioning of the ship. The system integrates seamlessly with existing onboard equipment and ensures ease of installation and maintenance. One of the key benefits of the new system is that it allows the operator to switch to joystick control for maneuvering the vessel at any speed and all the way to docking.

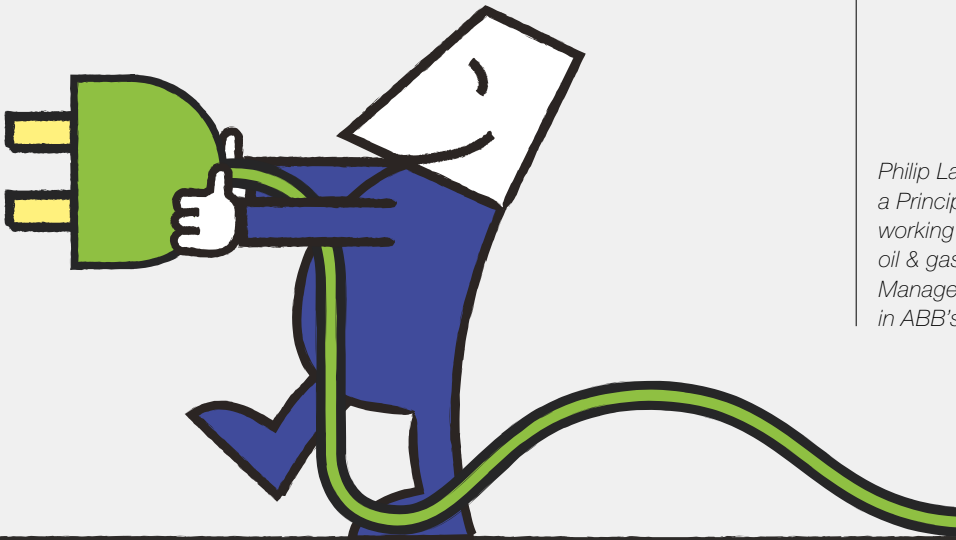
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ABB Ability Marine Pilot Control employs algorithms that calculate the optimal way of executing a command for controlling the vessel in any operational situation. The overall safety of the operation is increased as the crew can maintain full situational awareness, rather than having to focus on changing control modes. The system has obtained Lloyd's Register's Approval in Principle (AiP) certificate.

**The future's electric**

There has never been a better time to be in the maritime industry. Whether you are just starting out in your career or looking for a new skill to learn, the enormous rate of change in the industry will affect anyone working or living around the maritime sector. The pace of new developments in the design of ships, and the type of energy used, or even the technology deployed to ensure the safe passage of a ship, is almost overwhelming. The industry has never seen so much change since the First Industrial Revolution and the first steam powered vessel back in 1807. ABB looks forward to further collaboration with the industry, to help you manage that change successfully. 

*Philip Lawson joined ABB in 2012 as a Principal Asset Integrity Consultant working predominantly in the offshore oil & gas industry. He is now General Manager, Marine & Ports UK, based in ABB's Aberdeen office.*



**Proud of our people**  
Kim Kennedy,  
Port Manager,  
Port of King's Lynn.



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