

REPORT

04–05

Our renewable energy industry
is a UK success story

06–07

Ports as vital hubs for the
UK's sustainable future

10–11

Celebrating ports' growing
green credentials

16–17

Cruise industry prepares for
a post-COVID recovery

Ports: Powering Economic Recovery

In this issue

Welcome to the Summer 2021 issue of Report magazine which arrives as restrictions are beginning to lift and we can look ahead to better times for businesses and society.

In line with this, the theme for this issue is post-COVID recovery and we are delighted to include a lead article by the Minister for Business, Energy and Clean Growth, Anne-Marie Trevelyan MP, who welcomes new investments in port infrastructure to support green growth. The importance of investing in resilient infrastructure is also echoed by Eric Machiels, Managing Director, Asset Management at OMERS Infrastructure.

On pages 6-11, we hear from two organisations representing the voices of ports – the UK Major Ports Group and British Ports Association, as they reflect on how ports are becoming vibrant hubs for renewable energy projects. Then Lloyd's Register outlines how ports can be the catalyst for shipping's zero-carbon transition.

Also, in this issue, our European friends at the Ports of Zeebrugge and Antwerp discuss the huge potential of their merger, which will create value for customers and other stakeholders. On pages 14-15, ABP's Julian Walker, Chief Commercial Officer, outlines how we're leading the way in delivering Freeports, followed by Clarksons Port Services discussing how their thriving company has been supporting the grain industry in the UK. On pages 16-17, ABP's Rebekah Keeler describes how the company and its key partners will be instrumental in the safe return of cruise.

Finally, Andy Reay, ABP Group Head of Commercial (Offshore Wind), looks at recent investment in port infrastructure designed to support the offshore wind industry and create favourable conditions for energy clusters that will drive a green post-pandemic economic recovery.



Henrik L. Pedersen
ABP Chief Executive Officer

04–05

Our renewable energy industry is a UK success story

The Minister for Business, Energy and Clean Growth, Anne-Marie Trevelyan MP, sets out the Government's plans for green growth and welcomes new investment in port infrastructure to support the offshore wind sector.



08–09

The right infrastructure for a low-carbon future

Eric Machiels, Managing Director, Asset Management at OMERS Infrastructure, sheds light on how companies within OMERS' portfolio have played a crucial role in keeping the economy going throughout the pandemic and their ambitions to support a transition towards a reduction in carbon emissions.



06–07

Ports as vital hubs for the UK's sustainable future

Tim Morris, Chief Executive of the UK Major Ports Group, discusses how ports are rising up to meet the existential challenges presented by climate change and are becoming hubs for emissions reduction and nature recovery.



10–11

Celebrating ports' growing green credentials

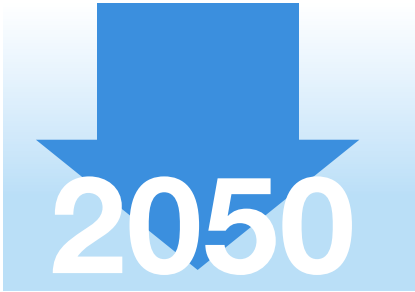
Mark Simmonds, Director of Policy & External Affairs at the British Ports Association (BPA), explores the growing regulatory and reputational risks for the ports industry whilst recognising the progress that ports can be proud of.



12–13

How ports can be the catalyst for shipping's zero-carbon transition

Charles Haskell, Decarbonisation Programme Manager at Lloyd's Register (LR), looks at the role ports can play in supporting cross-industry collaboration to tackle carbon emissions.



18–19

Introducing the new Port of Antwerp-Bruges

With plans to merge the Ports of Zeebrugge and Antwerp by 2022, these are exciting times for European ports with close ties to the UK. Tom Hautekiet, CEO at the Port of Zeebrugge, outlines the fantastic potential of this unification project to deliver value for customers and stakeholders alike.



14–15

The UK's largest ports group is leading the way in delivering Freeports

Julian Walker, ABP's Chief Commercial Officer, looks ahead to the near future where Freeports act as centres of innovation, investment and trade.



20–21

Clarksons Port Services and ABP: decades of successful partnership

David Rumsey, Managing Director at Clarksons Port Services, outlines how the company has been thriving at the Port of Ipswich and is working to meet the needs of major grain exporters and importers in the UK.



16–17

Post-COVID recovery of cruise

Rebekah Keeler, ABP Head of Cruise, discusses how ABP's ports and the company's key partners will play a crucial role in the safe return of cruise following the pandemic.



Also in this issue

News Wrap
22–24

—

An estate with a view: ABP Property
25

—

In the loop
26–27

—

A day in the life...
28–29

—

View from the Bridge:
A new era of low-carbon power
30–33

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

Our renewable energy industry is a UK success story



The Minister for Business, Energy and Clean Growth, Anne-Marie Trevelyan MP, sets out the Government's plans for green growth and welcomes new investment in port infrastructure to support the growth of the offshore wind sector.



Our renewable energy industry is a UK success story, providing cheap, green electricity and supporting thousands of jobs. For offshore wind in particular, the UK has the largest market in the world with more than 10GW already powering homes and industry with clean electricity but also crucially providing jobs up and down the country.

In the Prime Minister's ten-point plan, we stated our ambition to produce enough offshore wind to power every home in the country by quadrupling the capacity of offshore wind available to generate 40GW by 2030. Powering every home in the UK through offshore wind is hugely ambitious, but it is exactly this kind of ambition which will mean we can build back greener and reach net zero emissions by 2050.

In delivering on this ambitious objective we will position the UK to take advantage of export opportunities in new, global emerging markets in low carbon technologies and services, providing jobs, supporting levelling up and

“The nation's ports have a critical role to play in delivering this ambition, both as important links in the supply chain and as hubs for renewable energy growth in coastal communities around the country.”

reinvigorating our industrial heartlands. The nation's ports have a critical role to play in delivering this ambition, both as important links in the supply chain and as hubs for renewable energy growth in coastal communities around the country.

We have already seen the benefits of this in Lowestoft with the first-rate operations and maintenance (O&M) support the port has provided for the Greater Gabbard

and East Anglia ONE offshore wind farms. This role is set to continue and grow with ABP's ambitious investment plans to develop the port. Over the next five years, ABP will develop the Lowestoft Eastern Energy Facility (LEEF), which will bring significant upgrades to marine facilities at Lowestoft's Outer Harbour, providing a boost to regional growth and supporting the UK's journey towards decarbonisation.

The Port of Lowestoft plays an important role at the heart of the local economy and this investment ensures this role will grow in future. By attracting additional supply chain companies to Lowestoft this investment will support the continued growth of the sector and help create an energy cluster which will bring new jobs and prosperity to the region.

ABP is already the primary host of O&M bases in the UK, with a proven track-record in providing infrastructure and facilities to support offshore wind farms in the ports of Barrow, Grimsby and Lowestoft. In recent years ABP has also

“ABP’s work in developing new facilities and servicing our offshore wind farms has been indispensable and more than 50% of our capacity is now supported by ABP assets.”

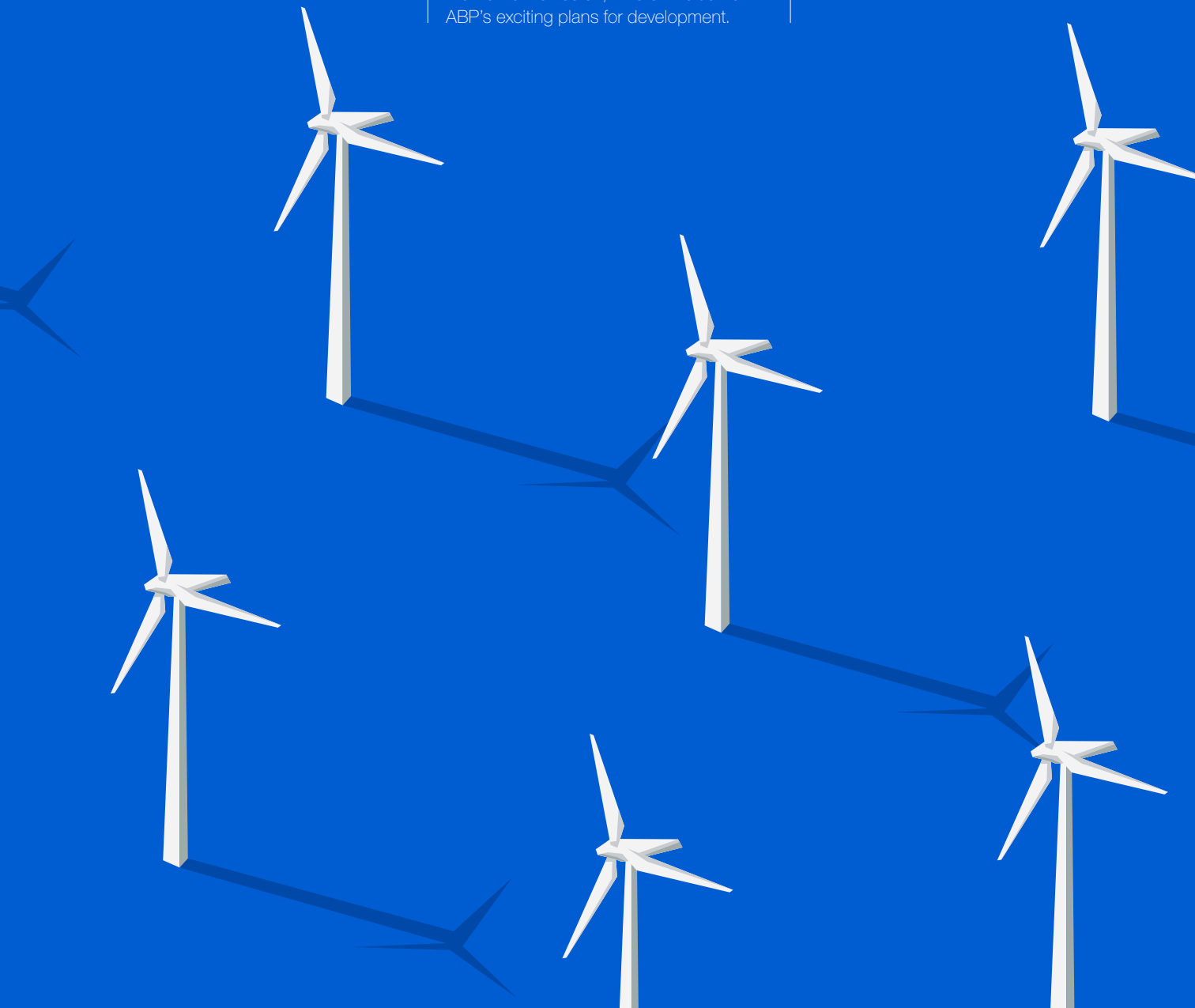
developed Green Port Hull, where leading wind turbine supplier Siemens Gamesa has been manufacturing offshore wind turbine blades since 2016, and facilitated the load out of over 2GW of turbines from the state-of-the-art production and assembly facility.

ABP’s work in developing new facilities and servicing our offshore wind farms has been indispensable and more than 50% of our capacity is now supported by ABP assets. I’m sure that number will grow as this impressive performance continues in the years ahead.

I am delighted to see the benefits of the offshore wind success story at work at the Port of Lowestoft, where I welcome ABP’s exciting plans for development.

This investment will see Lowestoft accommodating the next generation of offshore wind support vessels and put the port in a fantastic position to attract further business and investment, as well as further strengthen the UK’s offshore wind infrastructure and port facilities.

We are at the crux of something special in the offshore wind sector in the UK and it is infrastructure investments like this that will deliver benefits to communities up and down the UK in years to come. I very much look forward to seeing these plans come to fruition. 



Ports as vital hubs for the UK's sustainable future



Tim Morris, Chief Executive of the UK Major Ports Group, discusses how ports are rising up to meet the existential challenges presented by climate change and are becoming hubs for emissions reduction and nature recovery.

UKMPG
UK Major Ports Group

For millennia the UK's ports have acted as the predominant hubs for trade with the world for our island nation. That remains the case today. But today that vital hub role is extending to meet the existential challenge facing us all – the crises facing the climate and nature.

The UK, already a world leader in offshore renewable energy generation, has hugely ambitious targets for further growth. The Prime Minister's Ten Point Plan for a Green Industrial Revolution includes the goal of quadrupling how much electricity the UK produces from offshore wind turbine generation to 40GW by 2030. Development work is going on around the UK on other renewable marine-based energy generation technologies – wave and tidal power, for example. Carbon capture and storage, which is a key part of the net zero solution for some of the hardest sectors to decarbonise, will rely largely on undersea transport and storage. And the transition of the UK's current offshore energy assets presents opportunities as well as challenges.

“What unites these major components of the UK's net zero journey is the central role that is required from the nation's ports.”

What unites these major components of the UK's net zero journey is the central role that is required from the nation's ports.

The UK ports sector has a long history of servicing the offshore oil and gas sector and now it is also showing its strengths in the offshore renewables industry. Ports have demonstrated their capability to support offshore energy projects across all phases of development. They've done this as locations for manufacturing and assembly of equipment such as turbines and blades. They've provided the landside centres for contractors, lay down and staging during the project development and build phases. Ports have also been ongoing bases for the operation and maintenance of offshore energy projects through their generation lives. Finally, they've also demonstrated this capability as locations for demobilisation, recovery and recycling at the end-of-the-life of projects.

Crucially, this proven capability is not just important for the UK in terms of meeting climate change goals. It is a sad fact that many of the UK's most disadvantaged communities are clustered around the coast. The activity that has already taken place has led to well paid jobs – and the accompanying wider prosperity – in communities that have previously experienced declines in their traditional industries like fishing. The bold growth ambition the Government has set out should, if sufficient policy focus is given to capturing value for the UK, serve as a

powerful stimulus to not only transform emissions for the better but jobs and opportunity in coastal communities as well.

As well as port's role as bases for the offshore renewable energy boom, they themselves are changing to play their own role in emissions reduction.

Ports across the UK are grasping the opportunity of onsite renewable energy to deliver low-to zero-carbon energy for themselves and those operating on ports. There are significant amounts of onshore wind and solar energy now, with the prospect of new energy sources such as hydrogen very much in prospect. This generation, together with an increasing focus on 'smart' energy management,

“The bold growth ambition the Government has set out should, if sufficient policy focus is given to capturing value for the UK, serve as a powerful stimulus to not only transform emissions for the better but jobs and opportunity in coastal communities as well.”

Ports are a unique hub for emissions reduction & nature recovery

A crucial part of renewable energy supply chains

Centres for construction & manufacturing
O&M bases
Specialist services
(e.g. decommissioning complex lift)
Not just wind – marine, H2, plus Carbon Capture Storage Usage

Providing green energy & sustainability services

Energy supply & services for tenants & surrounding businesses
Green tenant services

Lower supply chain emissions & modal shift

Port-centric supply chains have inbuilt sustainability benefits
Ambitious for more modal shift (e.g. rail, water)
Digitisation key for more supply chain efficiency

Lower emissions, more efficient port operations

Energy & resource efficiency
Better fuels & new NRMM
Increased electrification

Vital facilitator of freight by water

Moving freight by water is at least 9x better than by truck and nearly 100x better than by air in emissions intensity terms
More potential
e.g. coastal shipping

Making natural capital & net gain happen

Delivering ecosystem services
Engaging with nature recovery network bodies
Terrestrial, intertidal & marine

Coastal nature recovery & ocean recovery

Habitat management & creation for biodiversity
Sediment management, inc beneficial use
Water quality & invasive species
Estuary & ocean management contribution, inc flood defence

Key part of future maritime fuels supply chain

Already facilitating some switching
e.g. LNG, shore power
Big opportunities to do more but big challenges too – land and marine side

points to a future where ports themselves are zero energy hubs, enabling resource efficient, zero emissions solutions.

Investment in electric and hybrid equipment, or best in class propulsion technologies where electrification is not yet available, is a key priority for port operators in driving down their own direct emissions. New equipment, plus new ways of working and collaborating with supply chain partners are proving to be effective tools in driving down emissions and driving up air quality.

But true environmental sustainability is not just about emissions reduction, vital as it is. It must also be about nature recovery – for example biodiversity, habitat maintenance and regeneration. Here too ports are playing their role as custodians of their surroundings and exploring ways to increase this contribution, such as through the beneficial use of dredged materials


Key points:

- Ports by their nature sit in the middle of a range of sustainability opportunities & challenges
- It's not just what they do themselves but what they facilitate for others
- This picture is aspirational, but there are examples of each activity today
- Reaching the full potential is ambitious & government needs to play its part

and working with other partners in local environmental management groups.

So, ports already play a key role as hubs for sustainability. They are ambitious and well placed to grow this role. Maximising this potential relies not just on the ports but also the Government. Setting the right policy and regulatory frameworks

“Setting the right policy and regulatory frameworks that encourage sustainable development can not only result in better environmental outcomes but also boost jobs and prosperity for the UK.”

that encourage sustainable development can not only result in better environmental outcomes but also boost jobs and prosperity for the UK. None of this is easy. But the dual prize must be worth working towards. The ports sector is ready to play its part. We look forward to working in partnership with Government in securing a more sustainable future. 

The right infrastructure for a low-carbon future



Eric Machiels, Managing Director, Asset Management at OMERS Infrastructure, sheds light on how companies within OMERS' portfolio have played a crucial role in keeping the economy going throughout the pandemic and their ambitions to support a transition towards a reduction in carbon emissions.



As a global investor, OMERS Infrastructure has seen first-hand the impact that COVID-19 has had on communities and businesses in every part of the globe. Through our various board roles, we have remained highly engaged with our portfolio companies to support them as we all work to secure a post-COVID economic recovery. With the vaccine rollout now underway, we hope we can finally see light at the end of the tunnel.

OMERS was established in 1962 and now supports over half a million public sector employees across Ontario, Canada in their retirement. Like other investors, COVID-19 presented an unprecedented challenge to our portfolio. Thanks in part to our strategic portfolio diversification as well as our active management approach, our infrastructure portfolio proved resilient in 2020. Sectors such as regulated utilities (power and gas grids, water), renewables and digital infrastructure continued to perform well,

“We are proud of how the utility companies in our portfolio continued to deliver essential services such as water, gas and electricity.”

while some transport sector assets were understandably quite challenged given global restrictions on travel.

Throughout 2020, we have sought to help our companies navigate through the crisis and have supported their management teams to ensure their balance sheets remained resilient and strong given increased volatility. Vitally, our assets have been able to provide their essential services in a safe manner for their customers and staff, despite the challenges they faced.

From the start of the pandemic, we knew the important role that many of our

assets would play as the world adjusted to life under lockdown. We are proud of how the utility companies in our portfolio continued to deliver essential services such as water, gas and electricity. Many organisations stepped up to support their communities, such as London City Airport, which offered logistical support to the temporary NHS Nightingale Hospital which was established next to the airport at the start of the pandemic to welcome up to 4,000 critical patients. Similarly, Associated British Ports (ABP) was able to ensure continuity of service for its customers in often challenging circumstances, keeping internal employee communication flowing in various innovative ways and persisting in implementing the key initiatives which underpin its ambitious commercial and operational strategy.

How well a company manages a crisis depends on the quality of its employees, management team, governance culture and the resilience of its systems and



“OMERS has recently announced its own commitments to achieve a 20% carbon reduction across our total portfolio by 2025.

processes. ABP’s successful navigation through the last 12 months is testament to its strength in all these aspects. Everyone at ABP should be proud of the way the team held together and managed the twin challenges of the pandemic and the changes to trade due to Brexit.

We know that infrastructure will play a key role in delivering our post-COVID economic recovery. Governments in the UK and across Europe are rightly seeing investment in infrastructure as a key building block in achieving this goal. Initiatives such as Freeports in the UK will also be crucial in supporting

this recovery. It is incredibly exciting to see ABP has been successful in its bids for Freeports for the Humber, Southampton, Garston and Plymouth.

Energy transition is high on the agenda of businesses and regulators. OMERS has recently announced its own commitments to achieve a 20% carbon reduction across our total portfolio by 2025, and at OMERS Infrastructure we are actively looking to invest in low carbon opportunities and working with our existing assets to support this transition, which we believe will secure sustainable returns for our members over the longterm.

ABP is a stand-out example of a port infrastructure provider that takes its environmental obligations seriously, working hard with customers and stakeholders to deliver improvements in air quality, investing in programmes to promote energy efficiency, as well as installing one of the largest privately-owned networks of air quality monitoring

systems in the UK. ABP’s strategy will continue to deliver major investment in solar and wind generation capacity to maximise the use of renewables for powering the business.

As long-term partners, OMERS stands steadfastly beside our portfolio companies as we work together to support the economic recovery post-COVID and invest for a low-carbon future. **11**

Celebrating ports' growing green credentials



Mark Simmonds, Director of Policy & External Affairs at the British Ports Association (BPA), explores how climate change and the environment represent a growing regulatory and reputational risk for the ports industry but is also an area where ports have a lot to be proud of.

The number of people who thought the environment is the biggest challenge facing the Government doubled between the 2017 and 2019 election. It is now a bigger political concern for voters than immigration, housing, and even the economy. Only a minority of voters think the Government is doing enough. The consequence of this is that climate change and environmental issues have been climbing Ministers' lists of priorities.

The BPA is stepping up efforts to celebrate the work that ports are doing to protect and improve the environment, to support low-carbon transport and to undertake development in a sustainable way. As well as taking credit for all the good work that has been done by our industry, it helps share good ideas with the wider sector and puts the industry in a better position to influence the political debate in this area.

Last year we published 90 examples of green projects across the UK that ports were supporting across five broad areas: improving habitats and biodiversity; reducing emissions; supporting renewable energy; plastics, waste and recycling; and research, collaboration and leadership. We were delighted at the breadth and scale of all of this hidden work and here we explore just a few of the examples we found.



Marine litter has been the focus of several high-profile campaigns and governments around the world are under pressure to act on it. It's one of several areas where ports are often dealing with the damage caused by others and harbours around the country have organised beach cleans – as with ABP in Ipswich.

The introduction and spread of invasive species is another area where we expect increased government interest in the coming years with talk of a new inspectorate operating at border entry points and new rules on the exchange and management of ballast water come into force later this year. Many ports with leisure-marine business such as Falmouth and Fowey have already introduced guidance to help stop the spread of invasive species by leisure users. At the other end of the UK, Orkney's harbour authority is fiercely protective of its waters and the species that call them home and has been taking steps to prevent the introduction of invasive species through ballast water for years. The port is one of many in the UK that monitors its waters for harmful alien organisms and takes samples from vessels wishing to discharge into Scapa Flow.

“Whilst shipping is by far the most carbon-efficient mode of transportation, ports are already taking action.”

Tackling greenhouse gas emissions is perhaps the biggest environmental challenge we face – a potentially existential threat and the focus of governments around the world. Whilst shipping is by far the most carbon-efficient mode of transportation, ports are already taking action. ABP Lowestoft's new hybrid pilot cutter is one example of the industry's willingness to invest in state-of-the-art technology to tackle emissions. Two more ports are also investing in similar hybrid pilot vessels and as hybrid and electric plant and machinery and cleaner fuels come to market, ports are investing to cut their emissions across the port estate too, including in new electric vehicle fleets.

For many ports, grid constraints are holding back these ambitions, but from Brixham to the Humber, investment in renewable generation is

helping overcome these challenges as energy generation and networks are decentralised. In Southampton, ABP's new cruise terminal will be the first port in the UK with a large-scale shoreside power connection – providing ships with up to 7MW of power at berth to improve air quality. BPA analysis last year found that a lack of government support for shore power is a barrier to investment: no port in the world has installed shore power without support from public funds. Many countries have already moved to put in place dedicated support for this technology, but whilst the UK government mulls this over, UK ports are acting.

These examples just scratch the surface of what is going on in the sector. Thanks to the incredible pace of change and investment we will publish a second volume of green case studies this year, challenging perceptions about the ports sector and demonstrating the sector's commitment to protecting and enhancing the environment and lowering emissions to fight climate change. **■**



How ports can be the catalyst for shipping's zero-carbon transition



Charles Haskell, Decarbonisation Programme Manager at Lloyd's Register (LR), looks at the role ports can play in supporting cross-industry collaboration to tackle carbon emissions.



50-100%

2050

Shipping produces about 2.9% of the world's man-made emissions of carbon dioxide, according to a report by the International Maritime Organization (IMO) in 2020.

The IMO's ambition is to reduce greenhouse gas emissions from shipping by at least 50% by 2050, with a stretch target of a 100% reduction by the same deadline. There is considerable uncertainty over how these ambitions will be achieved, but this target cannot be reached by energy efficiency measures alone. An energy transition from fossil fuels is required. LR's research has shown that to reach the IMO's ambition, zero-carbon vessels capable of deep-sea, trans-ocean travel will need to be in use by 2030.

Looking back at the previous energy transition – from coal to oil – this took place over 50 years and oil was cheaper, cleaner, abundant, more energy dense and safe to handle. The future fuels that are being discussed now – methanol, hydrogen and ammonia – do not have any of these characteristics. The energy density is at least half of today's fuels, this means more space will be required on ships to carry the extra fuel. LR analysis forecasts that these fuels will

"Ports have the potential to be a catalyst for the shipping industry's zero-carbon transition, but it is a chicken-and-egg scenario."

also be 2-4 times more expensive. A further complication is that these fuels can come from many different sources, some with more impactful or similar lifecycle emissions to the fuels of today.

There are also safety concerns about the hazardous nature of the fuels of the future. The safe use of these fuels is governed by the Control of Major Accident Hazards (COMAH) regulations on land. These rules define thresholds for the quantities of dangerous substances that can be stored. This is of particular relevance to ports because of the limits for hazardous fuels that can be stored close to habitation and consideration will be needed for bunkering of ships in ports. In the UK for example, alignment will be required across the regulatory landscape – Health and Safety Executive (HSE) for land-based, Maritime and Coastguard Agency (MCA) for shore-based and Statutory Harbour Authorities.

Shipping is not alone in this challenge, with many land-based sectors also looking to decarbonise. Ports can be seen as the interface in meeting the demand requirement from importation of fuels, and potentially solving the issue of demand and supply and de-risking projects across several stakeholders.


Ports have the potential to be a catalyst for the shipping industry's zero-carbon transition, but it is a chicken-and-egg scenario. Ships will need the fuel so the ports will need to supply it, but if the ports are using the fuel for other purposes, then the port infrastructure changes around that fuel can supply ships. This is why cross-industry collaboration will be so important to join up the dots between industries.

If a port is importing hydrogen for other purposes then it should be thinking about how can it be used for its own purpose – for example to power cranes, cargo trolleys and localised shipping like harbour tugs and pilot vessels under the port's control. This is likely to be driven by a local or national objective to meet decarbonisation targets. The port can then look at scaling this up to support the deep-sea shipping industry. Once more than one port is supporting the infrastructure and there is trade between these ports, then that trade can start going through an energy transition. It is vital that we see these types of pilots this decade.

Recently, the Port of Cromarty announced is working with the whiskey industry to develop a green hydrogen

hub, producing hydrogen from offshore and onshore wind farms. This is a significant investment that can be spread across several stakeholders, thereby de-risking the project whilst reducing greenhouse gas emissions.

Some other examples are the Port of Antwerp forming a consortium with DEME, Engie, Exmar, Fluxys, the Port of Zeebrugge and WaterstofNet to establish a fully renewable hydrogen import value chain by 2030. The Port of Hamburg has announced it is working with Vattenfall, Shell, Mitsubishi Heavy Industries and Warme Hamburg to develop a 100MW electrolyser to produce green hydrogen. The next step is to look at the shipping trade between these ports to create 'green corridors'.

These examples are precisely the types of collaborations that the industry requires – looking at how multiple stakeholders can create a valuable hydrogen chain. It is key that we see more of these initiatives so they can be scaled up to meet the 2050 ambitions. 

The UK's largest ports group is leading the way in delivering Freeports



Julian Walker, ABP's Chief Commercial Officer, looks ahead to the near future where Freeports act as centres of innovation, investment and trade.

The March Budget Statement announced the location of eight Freeports in England, marking an important milestone in the development of one of the Government's flagship policies. As the UK's leading ports group, Associated British Ports (ABP) has a significant role to play in turning this policy ambition into reality. The successful bids included the Humber and Solent Freeports, where ABP is a leading partner in the proposals, as well as the Liverpool City Region and Plymouth, where ABP's ports of Garston and Plymouth also stand to benefit. Work is now underway to establish the new Freeports before the end of the year, providing a significant and timely boost to the UK's economic recovery.

The UK's ports are already central to our economy, handling some 95% of the nation's trade in goods. ABP's 21 ports around Britain are vital trading gateways that connect businesses, manufacturers and industry to global markets. Freeports will further enhance the ability of ports to serve UK businesses and help deliver important shared objectives to grow trade and exports, support the energy transition and decarbonise the economy by 2050, and drive regional growth to level up the UK economy.

ABP's ports sit at the heart of coastal communities with proud maritime traditions. In addition to enabling the free flow of trade, ports are also hubs for economic activity and drivers of local and regional growth. Many ports have a long history of supporting manufacturing, having been built and expanded to support these growing industries. These ports now have a critical role to

play in supporting the energy transition of existing industries, while aiding the establishment and growth of new businesses. By enhancing the tariff and duty regime, simplifying customs processes, reducing operating costs and streamlining planning, Freeports can become magnets for inward investment in new manufacturing and innovation, helping to create thousands of quality long-term, high-skilled jobs.

ABP's ports are well placed to deliver on the stated objectives of the Freeports policy, establishing hubs for global trade and investment, supporting regeneration and job creation, and creating hotbeds for innovation. The Humber and the Solent Freeports have the necessary scale, infrastructure and connectivity to deliver on these key objectives. ABP's ports are located on key global and European trade routes and in close proximity to domestic industrial clusters and logistics hubs. The ports of Hull, Goole, Grimsby and Immingham collectively handle £75 billion of trade each year for businesses across the North and the Midlands. Southampton is the UK's number one export port, handling £40 billion of exports every year on behalf of UK manufacturers. Freeport status can further strengthen the role of these vital trading gateways in facilitating trade and exports both with the European Union and the rest of the world.

Freeports can also help to accelerate the growth of renewable energy clusters and innovation hubs, helping to deliver shared objectives on environmental protection and decarbonisation. The Humber ports already constitute an

important industrial cluster which is at the forefront of renewable energy, driving the continued growth of the offshore wind sector through manufacturing, assembly, installation, operations and maintenance. This role in supporting the offshore wind sector is set to grow in importance as the UK sets ambitious targets to reach 40GW of installed capacity by 2030. The Humber ports are also critical to the development of emerging green technologies like carbon capture, utilisation and storage (CCUS) and hydrogen which are central to the Zero Carbon Humber initiative.

The further development of these industrial clusters can play a critical role in fostering innovation in coastal regions. The focus on innovation formed an integral part of the successful Freeport bids and this will be further enhanced through close collaboration with academic institutions to develop the necessary skills base in these regions. ABP's ports benefit from established partnerships with leading universities and higher education colleges that will provide an important link to upskilling and training services for businesses located in the ports. Southampton is already home to the Marine and Maritime Institute and renowned academic and research facilities, which can provide a further draw for potential investment in new technologies or processes.

ABP has a strong track record of investment in state-of-the-art port infrastructure, facilities and services to support the sustainable growth of trade and our customers' businesses. In recent years this investment has delivered major projects to support the growth of trade for our customers and the wider economy. Freeport status will see this commitment magnified by increased inward investment in new industries and green technologies that can help accelerate the green transition and drive economic recovery in coastal communities. **R**

- ABP-BACKED FREEPORTS
- OTHER FREEPORTS

TEESSIDE

LIVERPOOL CITY REGION

HUMBER

EAST MIDLANDS AIRPORT

FELIXSTOWE AND HARWICH

THAMES

PLYMOUTH

SOLENT/ SOUTHAMPTON

ABP Ports:

- Hull, Immingham, Grimsby, Goole
- Southampton

- Plymouth
- Garston

The post-COVID recovery of cruise



Rebekah Keeler, ABP Head of Cruise, discusses how ABP's ports and the company's key partners will play a crucial role in the safe return of cruise following the pandemic.

Cruise, as an industry, has arguably had its most challenging year to date. The impact of COVID-19 has had far reaching effects, much farther than anyone could have foreseen at the beginning of the pandemic.

Now, a year on, the narrative is changing. Partners across the industry have been working together to ensure that cruise is ready to return even stronger when it is safe to do so.

We welcomed the news that domestic cruises could begin on the 17th May. Subsequent confirmation by the Maritime Minister meant it has been a crucial step in the industry's own roadmap to restart.

Of course, an industry restart couldn't be possible without the involvement of every cruise partner. In the last issue of Report, Andy Harmer, CLIA UK & Ireland Director, talked about the industry's collaborative approach to developing protocols and

"Partners across the industry have been working together to ensure that cruise is ready to return even stronger when it is safe to do so."



discussing challenges that has led to a framework of documents outlining new measures to enhance public health protection. The commitment from the industry as a whole with its collaborative approach has paved the way for a strong restart.

Speaking about the industry's return to domestic cruises, Andy, said: "We're delighted to see cruise restart alongside domestic tourism in the UK. The industry has been working collaboratively with the Government, health authorities and ports over the last year on health protocols which go beyond any other sector.

The industry has long planned a phased restart for cruise, with domestic sailings representing the first stage of this plan. We are continuing to work collaboratively with the Government on the safe restart of international cruise in time for the summer season."

ABP operates eight ports that welcome cruise ships and their passengers every year including Europe's leading cruise turn-around port in Southampton.

At the forefront of cruise, the Port of Southampton has not only been working with and supporting cruise lines while in lay-up, but it has also been forging ahead with the construction of a fifth world-class cruise terminal.

"We remain confident about a strong future of cruise here in Southampton and we've been working hard to support our cruise partners through this operational pause."

With NCL and MSC Cruises as cruise partners for this new open access terminal, the Port of Southampton has been actively planning and building for the future of cruise during the industry's pause.

We remain confident about a strong future of cruise here in Southampton and we've been working hard to support our cruise partners through this operational pause.

We know that a strong future of cruise is a sustainable one and this is why we've been pressing ahead with our plans to incorporate as many features as possible into the new terminal that support our long-term plan to accelerate positive progress in local air quality.

The Port of Southampton welcomes around 500 cruise calls in a 'typical' year and is a

crucial part of the economy with £2 million contributed with every cruise call.

There is, of course, an infrastructure of cruise industry partners woven into the operational fabric of the ports welcoming cruise ships. At the Port of Southampton, cruise stevedoring partner Solent Stevedores has been supporting crew repatriation during the lockdown periods as well as undertaking the critical role of stores loading and unloading for crew while the ships have been in lay-up.

Tom Dynes, Director at Solent Stevedores said: "It's been a challenging year for us all but we're ready to push forward into a positive and strong season for cruise. We've worked hard to support the cruise lines with their operational needs while putting enhanced safety procedures in place to support a safe restart."

Support from local MPs and stakeholder groups has been welcomed in order to keep the recovery of cruise an important item on the agenda of central Government.

The industry knew that a return for cruising wasn't going to be an overnight decision and by taking a collaborative and well-planned approach, the return of cruise will be a strong and positive one bolstered by enhanced health and safety procedures. **1**



Introducing the new Port of Antwerp-Bruges



With plans to merge the Ports of Zeebrugge and Antwerp by 2022, these are exciting times for European ports with close ties to the UK. Tom Hautekiet, CEO at the Port of Zeebrugge, outlines the fantastic potential of this unification project to deliver value for customers and stakeholders alike.

Last February, the City of Antwerp and the City of Bruges reached a historic agreement to merge their respective ports. The two-city deal marks the start of a unification process that is expected to take a year to finalise and, once completed, the ports will operate under the name 'Port of Antwerp-Bruges'.

I officially started as CEO for Port of Zeebrugge in October 2020 and I used the summer months to get more acquainted with the industry and dive into the unification project of the Ports of Zeebrugge and Antwerp. The unification project is all about creating added value for the surrounding areas of Zeebrugge and Antwerp, for customers and stakeholders, as well as for the rest of Flanders.

The shared position of the Ports of Antwerp and Zeebrugge within the global supply chain will receive a significant boost. The merged port will become the most important container port, handling around 157 million tonnes per year, one of the largest break bulk ports and the largest port for the transshipment of

vehicles in Europe. Furthermore, the port will account for more than 15% of Europe's liquefied natural gas transited and it will of course remain Europe's most important chemical hub. Post-COVID, it will be the largest port for cruise ships in the Benelux. With a total transit capacity of 278 million tonnes per year, the unified port will be able to consolidate its leading position in the world.

Our ambition is to become the world's first port that reconciles economy, people and climate. As part of a joint plan, our ports have defined three strategic priorities – sustainable growth, resilience and leadership in energy and digital transition.

The Port of Antwerp-Bruges will combine the best of both worlds and will focus on the strengths of each site, as the Ports of Antwerp and Zeebrugge are largely complementary. For example, Antwerp specialises in the handling and storage of containers, break bulk and chemical products, while Zeebrugge is a major port for Ro-Ro traffic, container handling and the transshipment of liquid natural gas.

Working more closely together will make it possible to consolidate sustainable growth, not only of each port's individual market share, but also of the joint market share of both ports together.

In order to maximise the added value of a unified port, the Port of Antwerp-Bruges will seek to develop and make optimum use of the interconnectivity between the two ports. The transportation of goods by rail between the two sites will be bundled, estuary traffic by inland vessels on the North Sea will be optimised and pipeline connections will also be on the list of priorities.

Committed strategic investments, such as the new sea lock in Zeebrugge and the additional container capacity in Antwerp, will go ahead. Future investments will be evaluated from a unified operational perspective, so that both port platforms benefit, and the port continues to meet its customers' expectations.

Secondly, by joining forces, the Ports of Antwerp and Zeebrugge will be more resilient to future challenges.



Above: the Port of Zeebrugge is taking a lead in the transition towards a low-carbon economy / Left The unified port will be more resilient to the challenges of the future

Left: The unified port will be more resilient to the challenges of the future and will take a lead in the transition towards a low-carbon economy.

That resilience is essential in order to secure the prosperity and wellbeing of our society and the future of our economy.

The Port of Antwerp-Bruges will draw upon the resources, expertise and talent of the teams in Zeebrugge and Antwerp. In the near future, a unified organisational structure and way of working will be developed, while respecting one another's DNA and corporate culture. Transparent, long-term agreements will be made with regard to the leadership and management of the Port of Antwerp-Bruges.

The Port intends to identify as many synergies as possible, to continue to build on the extensive support within society for this driver of Flanders' economy and to reinforce its position as a logistical, maritime and industrial centre, not only within Flanders and Belgium, but on a European level and worldwide.

Thirdly, the unified port will be able to respond more rapidly and more effectively to social and technological developments, such as energy transition, innovation and digitalisation.

Sustainability already formed a central part of the strategic direction in Antwerp and in Zeebrugge, but the Port of Antwerp-Bruges will set the bar higher. Combining the industrial cluster in Antwerp and Zeebrugge's location on the coast will create a unique opportunity to address the future energy challenges in Flanders and the wider region. As such, the Port of Antwerp-Bruges will take up a leading position as an import hub for green hydrogen and will play an active and pioneering role in the hydrogen economy.

In addition, the port, in collaboration with its industrial and maritime customers, will continue its efforts to reduce its carbon footprint and will examine methods of applying CCUS (Carbon Capture, Utilisation & Storage) in order to contribute to the transition towards a low-carbon port.

As a result of the merger, our ports will be able to strengthen our positions within the global supply chain and continue a course towards sustainable growth. Furthermore, the unified port will be

more resilient to the challenges of the future and will take a lead in the transition towards a low-carbon economy. Finally, the Port of Antwerp-Bruges will offer a number of significant advantages in terms of innovation and digitalisation, making it possible to make the supply chain not only more efficient, but also safer and more reliable.

The transaction is subject to a number of customary suspensive conditions, including approval from the Belgian competition authorities. Both parties aim to finalise the transaction in the course of 2021. **R**

Clarksons Port Services and ABP: decades of successful partnership



David Rumsey, Managing Director at Clarksons Port Services, outlines how the company has been thriving at the Port of Ipswich and is working to meet the needs of major grain exporters and importers in the UK.



The now thriving common-user bulk facility in Ipswich began in the early 1990s, when its capabilities and capacity were a shadow of where we are at today. The terminal was commissioned shortly after ABP acquired the Port of Ipswich in 1997 and Clarksons Port Services (CPS) joined forces with ABP to build the business from there.

The terminal in 1997 was only capable of storing approximately 18,000 tonnes and really had just two principal customers. Since then, however, CPS has been able to open the facility to a wide range of customers, which has substantially grown over the last 30 years. Due to the demand it is now capable of storing circa 55,000 tonnes of bulk cargo, representing most of the major UK grain importers and exporters.

Due to continued investments in handling and storage capabilities, along with the experience and understanding of how demand for storage fluctuates seasonally, the CPS terminal today can facilitate three vessels working simultaneously, with an elevator loading rate of 5,000 tonnes a day.

The main features that allow us to successfully expedite these services are multiple segregated warehouses capable of storing circa 55,000 tonnes of bulk cargo and four centrally controlled weighbridges including two automated

“CPS and ABP provide two halves of the same service to our clients, which is centred around loading and discharging vessels – both halves have to work well to give the high level of service our clients expect.”

sampling points. In addition, we also have access to a fully equipped and certificated laboratory capable of performing and reporting the majority of quality tests in cereals, pulses and OSR. There are elevated loading rates of 5,000 tonnes per day and an automated stock control system. All warehouses are TASCC-approved and accredited to BS EN 9001:2015, BS EN 14001:2015 and BS EN 45001:2018 standards. There is also a large fleet of grain elevators and associated bulk handling equipment.

We have over 30 years of experience in handling a wide range of commodities, combined with a good understanding of the changing demands and requirements of cargo testing that can be brought about by variable weather conditions at the time of harvest. Throughout this time, CPS and ABP's relationship has grown and this has enabled us to give greater service and knowledge to our joint clients. CPS and ABP provide two halves of the same service to our clients, which is centred around loading

and discharging vessels – both halves have to work well to give the high level of service our clients expect.

Over the last year we have also expanded our Customs and Freight department in preparation for the changes brought about by Brexit so that we were ready to service our customers through the uncertainty of leaving the EU. Our ships agency and stevedores have also dealt with a dramatic change to daily operations and have been able to safely continue a seamless operation the whole time, whilst adhering to the restrictions put in place due to the coronavirus pandemic.

Looking to the future, we are delighted to have once again extended our lease with ABP for another six years, as we aim to develop and further expand both our import and export business. The Port of Ipswich continues to provide the ideal location for our activities and the support and communication we receive from ABP to make this all happen is first-class. **1**



Left to right: Paul Ager, ABP Divisional Port Manager – East Anglia; David Rumsey, CPS Managing Director; Andrew Harston, ABP Wales and Short Sea Ports Regional Director; and Julian Scott, CPS Sentinel Terminal General Manager



Above: common-user bulk cargo facility, ABP Sentinel Terminal, Ipswich



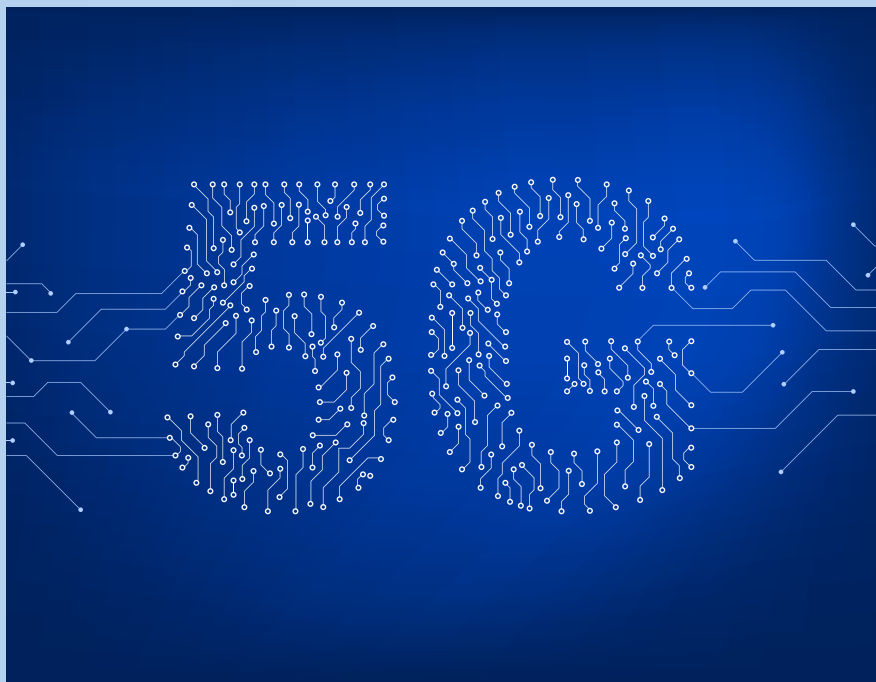
Above: aerial view, common-user bulk cargo facility, ABP Sentinel Terminal, Ipswich



Left: loading vessel operations at the Port of Ipswich

NEWSWRAP

Bite-sized, all the latest news highlights from ABP



5G AT THE PORT OF SOUTHAMPTON

In April, ABP announced a partnership with Verizon Business and Nokia to deploy private 5G at the Port of Southampton, making it the first UK mainland port to offer this flexible and resilient technology to customers. The private 5G platform will provide one of the UK's busiest ports with a secure, low-latency private network connection.

“ABP signed Maritime UK’s Mental Health in Maritime Pledge, demonstrating the company’s commitment to promoting positive mental health and wellbeing both within the company and the wider maritime community.”



ABP SIGNS MENTAL HEALTH IN MARITIME PLEDGE

In March, ABP signed Maritime UK’s Mental Health in Maritime Pledge, demonstrating the company’s commitment to promoting positive mental health and wellbeing both within the company and the wider maritime community. This follows the launch of ABP’s ‘ability’ employee diversity and inclusion network in 2020, as well as other initiatives such as the provision of a 24/7 external employee assistance service to support colleagues and their immediate families.

ABP CELEBRATES SUCCESS OF FREEPORT BIDS

In March, ABP’s ports on the Humber and in Southampton, Plymouth and Garston were successful in their bids for Freeport status. The Humber Freeport will lead the way in de-carbonising the UK’s economy through carbon capture and storage and alternative fuels, and the Southampton Freeport will catalyse an innovation revolution in maritime and green growth.

NEW SOUTHAMPTON RAIL SERVICE IN WESTERN DOCKS

In April, ABP invested £300,000 in a new rail service in the Western Docks at the Port of Southampton. Southampton is the UK’s number one port for automotive, handling around 900,000 vehicles a year. Together with customer DB Cargo UK, ABP will now move around 600 to 800 new BMW Minis each week by rail.

“This will eliminate the need to transport raw materials from the port to an inland factory by road, which will help reduce CO2 emissions.”



ABP GAINS ISO 14001 ENVIRONMENTAL MANAGEMENT CERTIFICATION

In February, ABP gained the ISO 14001 Certification for Environmental Management covering all ABP ports and terminals. ISO 14001 is the international standard that specifies requirements for an effective environmental management system (EMS). As part of the process, the company's existing systems were assessed against the certification's formulation and maintenance requirements.

NEW PORT-CENTRIC MANUFACTURING FACILITY IN NEWPORT

In March, ABP celebrated the start of a project to build a new plasterboard factory at the Port of Newport, which will help create around 60 new full-time jobs in the area. The new facility will be used to store gypsum, which will be delivered by ship before being used for the manufacture of plasterboard. This will eliminate the need to transport raw materials from the port to an inland factory by road, which will help reduce CO2 emissions.

PORT OF IPSWICH CELEBRATES 2 MILLION TONNES OF CARGO SINCE LOCKDOWN

Since 23rd March, the Port of Ipswich, like all of ABP's ports, has remained open and busy, handling 2 million tonnes of exports and imports of various products including agribulks, construction materials and timber. Around 9,000 tonnes of aggregate, which enabled the port to break through the milestone, arrived in March on board the Hopper Dredger Charlemagne, which self-discharged at Ipswich's West Bank Terminal.

An estate with a view



ABP EXPANDS CUSTOMER OFFER AT PORT OF GARSTON

In April, ABP expanded its customer offer with a substantial amount of additional covered and external storage at the Port of Garston. As part of the project, ABP is planning to invest over £4.5 million to enhance facilities, providing additional bulk and breakbulk storage facilities to its customers. Together with the Port of Garston, ABP owns 21 ports around Britain, which offer unparalleled marine, road and rail access to domestic and international markets.

PORT OF SWANSEA CELEBRATES NEW CONTRACT WITH LEADING OFFSHORE VESSELS COMPANY

In April, ABP signed a new contract with HST Marine at the Port of Swansea in support of the offshore energy industry. The agreement covers the use of a one-acre mixed-use site at the Port of Swansea, which contains open storage space and a well-proportioned single storey office building. To prepare the location, ABP invested around £60,000 as part of work to install new fencing and gates, in order to enhance security and make the site self-containing.

PORT OF NEWPORT AND CEMEX CELEBRATE NEW AGREEMENT IN SUPPORT OF CONSTRUCTION INDUSTRY

In January, the Port of Newport celebrated the renewal of its lease and commercial agreement with leading building materials company, CEMEX, in support of the UK's construction industry. The deal covers a 2.9 acre site comprising land and buildings at Newport's South Dock for a period of six years, where CEMEX operates a silo storage facility for cement and construction materials.

In the...



An update from Westminster



Ports are at the heart of the Government's plans to build back better and greener.

The start of a new year brought new challenges as businesses and traders adjusted to new process and procedures following the end of the transition period with the European Union in the midst of the economic shock caused by the coronavirus pandemic. With increasing focus on the long-term challenges of climate change and regional growth, the Government also set out ambitious plans to level up the economy and accelerate decarbonisation in a bid to build back better and greener after the pandemic. The UK's ports have a critical role to play in delivering on these important shared objectives.

The announcement of a trade deal between the UK and the EU before the end of the transition period was welcomed across the ports and logistics sector. The Trade and Cooperation Agreement, as the deal is formally known, ensures the continuation of UK-EU trade without the introduction of tariffs or quotas that would have hit many businesses hard. The agreement also established a positive framework for increased cooperation and collaboration between the UK and the EU in future. The UK's departure from the Single Market and Customs Union has resulted, however, in the introduction of non-tariff barriers, including customs declarations and border checks, with additional checks for food and plants coming into force at the start of 2021. Work is underway at ABP's ports in the Humber, Southampton and in Plymouth to deliver important new border infrastructure for border checks on goods entering the country from the EU market next year.

Following the conclusion of the trade deal with the EU, the focus in Government has turned to other policy priorities as the UK looks to rebuild the economy after the pandemic. The Government's

full legislative agenda was laid out in the Queen's Speech during the State Opening of Parliament in May, with a clear focus on the levelling up agenda and the green industrial revolution. Bills will be introduced on planning reform, state subsidy, the public procurement framework, and on skills and further education, with a view to increasing the Government's ability to support regional growth. A Levelling Up White Paper is also proposed for later in the year. This Parliament will also see the return of the Environment Bill, which will introduce significant new requirements and ways of working for ports and maritime businesses following several delays.

Earlier in the year, the Chancellor of the Exchequer Rishi Sunak MP used his Budget Statement to announce a range of policy initiatives designed to stimulate economic activity and facilitate investment. This included the designation of eight Freeports in England, including the Humber and the Solent bids where ABP was a leading partner. The successful Plymouth and Liverpool City Region bids will also deliver benefits to ABP's ports of Plymouth and Garston respectively. Freeport status was also granted to Felixstowe and Harwich, Thames, Teesside and East Midlands Airport. The designated freeports are expected to be in operation before the end of the year, with work now well underway to turn this ambitious policy into reality. The Government is also committed to working with the Devolved Administrations to develop their plans for Freeports in Scotland, Wales and Northern Ireland, to ensure the benefits of Freeports are shared around the UK.

Other policies to boost investment included the introduction of 'super deductions' for qualifying new equipment

and machinery that will benefit from a first year 130% capital allowance. The new UK Infrastructure Investment Bank will be established in Leeds to deploy £12 billion of equity and debt capital and issue up to £10 billion of guarantees. The Government also launched the Levelling Up Fund worth £4.8 billion, which will invest in local infrastructure including town centre and high street regeneration, local transport projects, and cultural and heritage assets. In addition, the Government announced the allocation of funding to support the development of offshore wind, with funding to support manufacturing at ports on the Humber and on Teesside, as well as the launch of a £20 million programme to support the development of floating offshore wind technology across the UK.

While responding to the pandemic continues to present the transport sector with issues, the need to decarbonise undoubtedly presents a more long-term challenge for the sector. With Glasgow set to host the 26th UN Climate Change Conference (COP26) in November, the UK has a unique opportunity to show global leadership on measures to tackle climate change. As a maritime nation, the UK's ports will have a critical role to play as hubs for renewable energy generation and supply chain decarbonisation. In September, London International Shipping Week will provide a showcase for the UK's maritime sector, with significant focus expected to be largely on steps the industry is taking to deliver on climate change objectives. These landmark events provide an essential platform for discussion and collaboration across industry and government on how the UK's ports can help accelerate progress towards shared environmental and climate objectives. **R**

A day in the life...

ABP Humber's Marine Engineering Supervisor, Stuart Carmichael

Report magazine took some time to catch up with Marine Engineering Supervisor Stuart Carmichael to give us a little more insight into the work the team carries out across the Humber.

Stuart, can you tell us a little more about the roles and responsibilities of the team?

We are responsible for the maintenance and repair of roughly 120 floating navigation marks upon the Humber Estuary, which we access from the pilot launch vessels.

In addition to those lights on the estuary we also look after approximately 20 lights up the River Trent. These are all land based, many of them are quite remote and only accessible via farmer's fields, so we have a Land Rover to get to them.

Another key role we carry out at ABP is the maintenance, repair, and refit of ABP's six pilot launch vessels. At any one time there are three vessels operating 24/7 on the river. The three spare vessels enable us to ensure 100% capacity for the pilotage service.

Very similar to a car, we carry out an annual MOT on the pilot vessels, with the Maritime and Coastguard Agency (MCA). Every four years the vessel must come out of the water and be opened up for a thorough inspection.

Each pilot vessel runs for approximately 2,200 hours per year, and we service the vessel every 200 running hours. The service isn't simply an oil change, it is a full look through the vessel from the bow to the stern. We are then able to pick up on things that may be about to cause an

issue; this preventative maintenance is an essential part of our work.

The team is also responsible for the maintenance, repair and refit of ABP's two hydrography survey vessels. These vessels are also included in the MCA inspections.

As a team we provide 24/7/365 support to the six pilot vessels and two survey boats. We work a two shift system consisting of day/late shifts, and there is always one engineer on call through the night to support any breakdown situations.

How did you and the team start out in engineering?

I started working as a marine fitter apprentice, back in 1990, straight from school. I completed 15 years on my tools, and then I took the role of supervisor in 2005, which I have been doing for what will be 16 years at the end of this year.

When I was younger, I used to build bicycles, so my passion for engineering started there. I was looking for a job in engineering, and at the time there were a lot of shipyards in Hull. I applied to most for an apprenticeship and was offered three. I chose ABP as I was going to be their only apprentice, which I felt would really benefit me as I started out.

Within the team there are six marine fitters on shift, myself and our apprentice who has been working within our unit for the last year. We have a great mixed age group, from 60 to 22. The length of our combined service at ABP totals 167 years, which is incredible. Six out of the eight of us started as ABP apprentices, so that really says something for the company, and two members of the team are ex-armed forces.

"As a team we provide 24/365 support to the six pilot vessels and two survey boats. We work a two shift system consisting of day/late shifts and there is always one engineer on call through the night to support any breakdown situations."

Anyone can sit in classroom and learn from a screen, but to become an engineer you need the practical application and practice with tool and parts. We rebuild engines in-house, so the apprentices coming through now, are getting an experience that makes diagnosing faults so much easier. Restoring and refurbishing is also a valuable skill to have as an engineer.



Above: an ABP Humber Marine Engineer effecting a repair to the South Fort Cardinal marker. This extraordinary photograph was taken by pilot launch deckhand Patrick Knight.

The image highlights the valuable work of ABP Humber's Marine Engineering Team. Here an engineer is replacing the light on the South Fort buoy, marking the Bull Sand Fort, which you can see in the picture to the left.

What does an average day look like for the team?

Every morning I receive a report from VTS (Vessel Traffic Service) that lists any defects on the three pilot launch vessels in service. I then decide if the vessel requires an engineer to carry out a repair or can wait until its next service. Anything safety critical is considered a priority and resolved straight away.

We also receive a daily river report which contains all sorts of details, including 'aids to navigation'. This highlights if there are any deficiencies with the navigation marks. These are reported to the VTS by vessels, pilots, pilot launch crews and anybody else passing.

The engineers start their day around 7:30 am, we have a pre-shift briefing where I give out the tasks. Through the day the team will feed back how the work is going, and I usually get a chance to have a walk down to the shop floor once or twice a day. Being a small team helps to make us close-knit. We will often discuss and work out together how best to proceed on any issues that arise.

"Six out of the eight of us started as ABP apprentices, so that really says something for the company, and two members of the team are ex-armed forces."

The plan for the day can change quickly. The team could be deployed first thing to a repair or service, and then we could receive a call from the VTS informing us of a problem – perhaps an engine overheating, or a vessel which has caught a rope around its propeller. Our priorities can change across the day. The work we get to do is interesting and certainly keeps us busy, which makes the hours and weeks fly by.

How has the safety culture at ABP changed over the time you have been with the company?

Safety is a key value in our team, we highlight it every day – if in doubt, stop, don't do it, and ask for advice.

The perfect example of this is going out to a buoy. We encourage everyone to assess the conditions and raise their concerns if they are not happy to step onto the buoy to effect a repair. Everyone at ABP will support you for not doing something if you think it is unsafe or if you feel uncomfortable.

Things have certainly changed in my 31 years with the company. When I started as an apprentice, I was issued overalls and boots. 15 years ago, we didn't wear lifejackets and you wouldn't dream of not wearing one now or walking out without a hard hat and high vis on. The personal protective equipment we use now is vastly improved and continues to improve.

The COVID 19 pandemic has brought an added pressure to ensure everyone stays safe. Like many teams we now stagger breaks, socially distance, wear masks, and wash our hands and facilities regularly. Contractors are no longer allowed to use our mess room, they must go elsewhere, and we now receive all our spare parts using a delivery box.

Being a small team, it is even more vital that we keep everyone safe. We all look after one another. **■**

View from the bridge: Making the most of the UK's green industrial revolution



Andy Reay, ABP Group Head of Commercial (Offshore Wind), outlines some of the company's investments geared towards meeting the offshore wind industry's requirements and looks at how creating favourable conditions for energy clusters will benefit the wider economy.



Above: ABP's Lowestoft Eastern Energy Facility

Regardless of what mix of renewables is deployed to achieve net zero in the UK, we will still need a lot of offshore wind energy to support it, with required levels expected to be between 65 and 125 Gigawatts (GW). To put this into context, the amount of installed capacity is currently around 10 GW, so there is a long way to go in order to achieve our goals.

As the UK's leading ports group, ABP is an ideal partner for offshore wind energy businesses. We have over 30 years' experience in supporting developers through the full offshore wind project lifecycle. One of the biggest offshore wind projects the company has supported over the year is Green Port Hull, where leading wind turbine supplier Siemens Gamesa Renewable Energy has been manufacturing offshore wind turbine blades since 2016 and has facilitated the load out of over 2GW of turbines from the 54-hectare, £310 million state-of-the-art production and assembly facility. Building on this experience, ABP is exploring other opportunities across its estate of 21 ports to attract more manufacturers into the UK.

However, when it comes to operations and maintenance (O&M), there are still several important pieces of the puzzle missing. What we need to see



Above: Green Port Hull

is innovation in O&M facilities to satisfy growing market demand. The challenge for the UK ports industry is that it tends to deprioritise speculative building in favour of projects with existing specific and well-defined use. That is always a difficulty when it comes to the timing of investments. At ABP we aim to address this problem by acting early and developing projects with future requirements in mind.

Whilst we have historically supported a variety of energy industries, including the import of coal, biomass and bulk energy liquids, we are also shifting our focus towards renewable sources of energy. ABP has identified offshore wind amongst other strategic areas for future growth, such as hydrogen and carbon capture and storage. Playing a key role in supporting the offshore wind industry is important because it will solidify our place at the forefront of green innovation within the ports industry.

ABP is the number-one host of O&M bases in the UK, providing infrastructure for O&M facilities and the ongoing operations and maintenance of offshore wind farms in Barrow, Grimsby and Lowestoft.

The Port of Grimsby is the largest O&M port in the world and is located on the

“ABP is the number one host of O&M bases in the UK, providing infrastructure for O&M facilities and the ongoing operations and maintenance of offshore wind farms in Barrow, Grimsby and Lowestoft.”

Humber estuary on the East Coast of England, making it ideally placed for access to operational and planned offshore wind farms in the North Sea. It is already home to Ørsted's East Coast hub along with RWE and XceCo's O&M bases, and has the space, facilities and flexibility to suit future offshore requirements. The port has also recently been chosen by the Offshore Renewable Energy (ORE) Catapult as its new O&M Centre of Excellence to develop research and innovation projects to improve the way offshore wind farms are operated and maintained.

The Port of Barrow also plays a key role in serving the offshore energy industry

in the Irish Sea and in East Anglia, the Port of Lowestoft has emerged as the East of England's Energy Hub supporting developments in the Southern North Sea.

Over the next 10 years, a significant proportion of new offshore wind developments will be located around Dogger Bank, off the East Coast, at Hornsea, off the Humber Coast and in the Southern North Sea. We are seeing a concentration of large offshore wind energy projects off the East Anglian Coast, with the involvement of significant industry players such as Vattenfall and Scottish Power Renewables.

Currently, port infrastructure and capabilities to support these large future wind farms are limited. To address this challenge, ABP will be investing in a new Lowestoft Eastern Energy Facility (LEEF) project, which will significantly upgrade the capability and capacity of the Port of Lowestoft. The project will enable us to build port infrastructure to meet the offshore wind industry's current and future demands. One of the key requirements for an O&M facility is its geographical proximity to the windfarm it is looking to serve and with its space and strategic position, the Port of Lowestoft provides an ideal base for this. 



Above: ABP's Port of Grimsby



Above: ABP's Port of Lowestoft

"I think that investing in the port infrastructure of the existing O&M energy cluster in Lowestoft will contribute to the town's prosperity, creating a new growth pathway for the Port with important implications for the surrounding area."



ABP's LEEF project represents a step change in our ability to service customers in the growing Southern North Sea energy business, by re-engineering the existing quay and creating the modern infrastructure needed to support a rapidly changing energy industry in a growing regional economy. The project will ensure that the Lowestoft berths can support larger vessels and will also provide a site that is suitable for O&M bases or laydown areas as part of the construction phase of these offshore wind farms. We recognise that during the construction phase of offshore wind projects multiple construction vessels will need port access in order to load on mission equipment and transfer their crews off and on. Therefore, LEEF will enable us to provide not just O&M but also construction support.

The LEEF project is centred around the Outer Harbour East in the Port of Lowestoft and is a major opportunity that will require around £25 million of investment. When complete in 2023, we will have replaced the existing quay wall, created 360 metres of berthing space for simultaneous use by three SOVs and created over 1 acre of new infill land. We will also be deepening the Harbour Approach channel, creating the berth pockets needed for flexible operations.

In addition, quayside will be constructed to deal with high point loads and provide a total of 8 acres of open storage and marshalling space needed by key

customers. Around 5,000 square feet of new office space with direct quayside access and parking is also expected. The second aspect of LEEF will create new capacity at the western side of the Outer Harbour. When delivered, both projects will complete the modernisation of Lowestoft Outer Harbour's marine facilities, creating key UK capabilities for the journey to net zero.

The LEEF project will not only bring additional capacity but can also encourage supply chain companies to locate in Lowestoft in order to support O&M operations. We're working with local stakeholders to create an innovative environment that will be attractive to other offshore wind support companies and help draw them to the area. I think that investing in the port infrastructure of the existing O&M energy cluster in Lowestoft will contribute to the town's prosperity, creating a new growth pathway for the Port with important implications for the surrounding area.

Economic impact work in 2018 demonstrated that the Port of Lowestoft contributes £30 million to the economy annually and supports around 580 local jobs. This is a role that is set to grow with a rise in activity, new investments and new customers. **1**

