OPPORTUNITY. 機匯

08

SHIPPING GETS READY
AS IMO 2020 LOOMS

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CAPITALISING ON NEW OPPORTUNITIES AND IDEAS

Despite continuing uncertainty in global trade and volatile geo-political circumstances, we are moving ahead to further develop our global ports network and to also expand our logistics footprint in strategic locations.

The keynote agreement with the Government of Pakistan will significantly expand our operations in Karachi Port and continue our support for the country's economic development. The US$240 million of new investment in Pakistan is an indication of our confidence in the future of the country as a growing trade and commerce centre and of our strong relationship with customers, trading partners and stakeholders in this dynamic region.

Our strategy of developing new businesses in different parts of the world provides us with a balanced portfolio and mitigates risks. If you look at our investments in Sweden, Canada, Pakistan and Saudi Arabia, it demonstrates our relentless pursuit of business opportunities – be those within our existing portfolio or in new markets. We also see that by diversifying into the logistics sector, we are able to offer complementary services to a new customer group.

We are also adopting new ideas and technology to enhance our operations, such as introducing remote-controlled equipment, autonomous trucking and the proof of concept for blockchain solutions, where we are working with a number of companies across the supply chain.

It is important that even though we are currently expanding our business portfolio, we retain a keen focus on our costs and continue to look at ways to improve cost efficiency throughout the network.

The launch of the Group Environment Committee is a very important step forward for Hutchison Ports as we look to reduce our carbon footprint and further our efforts to protect the environment. It is up to each one of us to support new green initiatives for a more environmentally-sustainable future, and together we can make it happen.

Eric Ip
Group Managing Director
Hutchison Ports

SHIPPING GETS READY AS IMO 2020 LOOMS

From 1 January 2020, the International Maritime Organization (IMO) will enforce a new 0.5 per cent global sulphur cap on fuel content and has announced a 50 per cent reduction in green-house gas emissions from ships by 2050. This new cap is in response to environmental concerns, specifically the emissions generated by the shipping industry.

The cap was originally announced at the October 2016 session of the IMO's Marine Environmental Protection Committee (MEPC).

New regulation likely brings unprecedented change to the maritime fuels supply landscape, while simultaneously posing a significant challenge to ship owners.

However, it seems that concerns over fuel shortage with respect to Low Sulphur Fuel Oil (LSFO) are largely unfounded according to Tim Huxley, Chairman of Mandarin Shipping.

"All major bunkering ports report that they are able to match demand (for LFSO), indeed if anything, it is a potential shortage of Heavy Fuel Oil (HFO) which is raising concerns. There may well be shortages in some of the smaller bunkering ports, but we do not see any significant problems at major ports."

Another major issue is a technical concern that ship engines and machinery will be adversely affected by the lower viscosity of the lighter fuel oil, which could mean leaks in the engine room.

The industry has moved to deal with this potential issue by working with lubricant oil suppliers to manage the switch according to Huxley.

"There will need to be close scrutiny of the effect on items such as piston rings etc., from the switch to low sulphur fuel and it is almost inevitable that there will be some technical issues somewhere – as an owner you just hope you have done the right preparation and got the right suppliers," he said.

However, with a caveat, Huxley said that when any major switch is made there are bound to be some uncertainties, whether that is with recently installed 'scrubber' technology which removes sulphur dioxide from exhaust fumes or a switch to new fuels.

ASIAN SURPLUS OF LOW SULPHUR FUELS

While European ports such as Rotterdam and Aberdeen have invested heavily in ensuring adequate supplies of LSFO, it is Asia that has the refining capability to ensure adequate supplies for shipping according to a report by *S&P Global Platts Insight*.

The shift of bunker fuels to LFSO from HFO by shipping lines means there is huge change at refineries where 3 million barrels a day of HFO will be replaced by lower sulphur fuel, marine gasoil and other blends that meet the 0.5 per cent sulphur emission mandate.

In order to make those changes, relatively expensive steps are required throughout the refining industry to rebalance products, according to *S&P Global Platts Analytics* forecasts.

However, Asia already has a surplus of IMO 2020 compliant fuels available and is set to benefit from the regulations more than other regions as it is producing more than enough gasoil at its highly complex refineries. Oil refiners in Asia have spent 2019 upgrading their facilities to produce higher yielding lighter fuel products that strip out sulphur. In terms of being able to meet demand to LFSO by January 2020, Asia is well set according to *Platts*.

China and India are both able to produce lower sulphur fuels and have the technical capability to take advantage of the bunker specification changes. Japan is also a major LSFO producing and consuming country, while South Korea is a major exporter of gasoil.

Asia's rising surplus of gasoil will help to ease the region's transition.

The Middle East also has extensive refining capabilities that will meet demand for LFSO.

NO SET PENALTIES SET BY IMO

It is worth noting that the IMO has not set any fines or sanctions for non-compliance to its 2020 mandate and they will leave enforcement and penalties to Port State Control.

The Marine Pollution (MARPOL) convention does say, however, that penalties should be 'sufficient to discourage violation, irrespective of where the violations occur.'

The United States (US) has played a historically significant role in MARPOL enforcement, with the US Coast Guard and Department of Justice having a reputation for exacting major fines and criminal sanctions for past violations.

Regions that have existing Emission Control Areas (ECA), that already enforce use of lower sulphur fuels in their coastal waters include the Baltic Sea, the North Sea, the North American ECA, including most of the US and Canadian coast and the US Caribbean ECA.

It is likely that port state control will be most active in the existing ECAs, while it is unknown whether other areas including Asia, under the IMO's Tokyo MOU region, will have the resources to inspect and implement fines, detentions and arrests from January 2020.

"THE 2020 SULPHUR CAP IS A GAME CHANGER FOR THE SHIPPING INDUSTRY."

INDONESIA OPTS OUT OF IMO 2020 IN ITS TERRITORIAL WATERS

The Indonesian government has decided to opt out of IMO 2020 in its territorial waters, as most ships are between fifteen and thirty years old, making it difficult to upgrade engines and machinery to be compliant with the new rules, according to oilprice.com.

According to the report, in many cases, the engines and other equipment were manufactured by firms now out of business, which makes it difficult to get information on the upgrades needed to switch to low sulphur fuel.

Indonesian shipowners are also moving to implement a 2019 government rule which requires ships to use a diesel blend that contains 20 per cent biodiesel (FAME). The switch to FAME provides a market for renewable fuel produced in Indonesia.

Another reason to overlook the new regulations is that most vessels in the local fleet do not leave Indonesian waters. Latest estimates are that 560 active oil tankers are moving product around the country.

SMALLER OPERATORS DELAYING SWITCH

There are some sectors of the industry delaying preparations to ships for the LSFO as it is far more expensive than HFO.

The potential cost impact of the new LSFO is also an unknown for many shippers, they wait to find out how much they will have to pay carriers through the Bunker Adjustment Factor (BAF).

The cost differential between HFO and the new LFSO is significant, and several major shipping companies are responding by imposing new BAF. According to Maersk, the extra fuel costs needed to reach compliance could exceed US$2 billion.

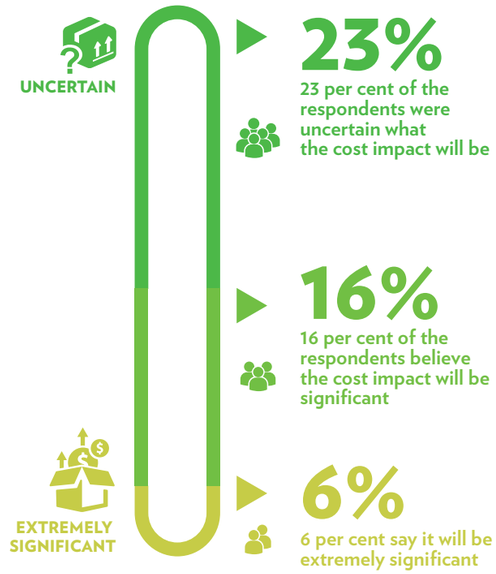
LINE-HAUL OPERATORS MOVE AHEAD

Maersk introduced the new BAF surcharge on 1 January 2019. "We fully support the new rules. They will be a significant benefit to the environment and to human health," Vincent Clerc, Chief Commercial Officer, A.P. Moller – Maersk said in a statement. "The 2020 sulphur cap is a game changer for the shipping industry."

In addition to Maersk, several other shipping lines have followed suit by adding surcharges to balance the additional costs of compliant fuel, including MSC, CMA CGM, Hapag-Lloyd and ONE, according to a report by Splash247.com.

SHIPPER CONCERNS ABOUT LFSO COSTS

According to a survey by *Drewry* asking about shippers about the cost impact of the IMO 2020, 16 per cent of the respondents believe the cost impact will be significant, and 6 per cent say it will be extremely significant. Some 23 per cent of the respondents were uncertain what the cost impact will be.



There are also concerns from shippers that BAF charges will vary from port-to-port and make it difficult for them to budget for the increases. The British International Freight Association (BIFA) has also expressed frustration with the sulphur surcharge, according to a BIFA press release. BIFA reported the increase to a 40-foot container being anywhere from US$480 to US$840 with the new surcharges.

"Differentials in bunker prices are part and parcel of shipping and prices will vary from port to port. I don't think anybody is looking to make a killing out of the fuel switch and inevitably nobody likes surcharges of any sort, but yes, there will be differentials in different ports and inevitably these have to be passed on," said Huxley.

HUTCHISON PORTS SUPPORTING IMO ENVIRONMENTAL GOALS

(Left to right) Professor David Attard, Director of IMO International Maritime Law Institute; Kitack Lim, Secretary-General of IMO; Frederick Kenney, Director of Legal Affairs IMO; Clemence Cheng, Executive Director of Hutchison Ports and Nusrat Ghani MP, UK Shipping Minister for Maritime.

Hutchison Ports is committed to reducing the environmental impact of global shipping and was a co-sponsor of a seminar about international port regulation at IMO headquarters in London during London International Shipping Week.

The discussion topic of the seminar was, 'Do Ports Need International Regulation?' A panel of experts from the maritime sector debated the question. The panel consisted of Frederick Kenney, Director of Legal Affairs IMO; Patrick Verhoeven, Managing Director of International Association of Ports and Harbours; Guy Platten, Secretary-General of International Chamber of Shipping; Lamia Kerdjoudj-Belkaid, Secretary General of FEPORT; Andrew Higgs, Setfords Solicitors; Sakura Kuma, Yokohama and Kawasaki International Port and Diana Whitney, General Counsel of Hutchison Ports (Europe).

During the seminar Clemence Cheng, Executive Director for Hutchison Ports emphasised the Group's commitment to a range of initiatives aimed at improving the environment and reducing waste.

"At the Port of Felixstowe we have been working on initiatives to reduce our environmental impact for several years now. These include investments in renewable energy, cleaner plant and machinery, electric vehicles, initiatives to reduce or eliminate plastic waste and investigations into hydrogen powered terminal tractors. We are committed to minimizing the impact we have on the communities in which we operate as well as to playing our part in helping achieve national and international environmental targets," said Cheng.

With over 20,000 guests from around the world and highlight over 140 different UK companies, Nusrat Ghani MP, Minister for Maritime also stressed," There can be no doubt that ports are very much at the heart of that future. As Maritime Minister I've visited numerous ports, including Felixstowe operated by Hutchison. I've been deeply impressed by the huge economic contribution they make to this country."

"Forecasts predict that seaborne freight is set to double over the next 30 years. It's therefore crucial we ensure that ports have the right tools to seize the opportunities this unprecedented growth presents. That's why in January I announced our Maritime 2050 Strategy – outlining our vision for ports and the wider maritime sector over the next three decades. Maritime 2050 examines how we can develop and use technology to grow ports sustainably. And it looks at how we can make port infrastructure, cleaner, greener and more secure." Ghani added.

MANAGING SUPPLY CHAIN RISK IN A TURBULENT WORLD

As the global supply chain faces new risks such as extreme weather, escalating cargo crime, environmental damage and political turmoil, there are calls for logistics professionals to take a new approach to manage this volatility.

Risk management expert Omera Khan, Executive Strategy Advisor for Risk Intelligence and Professor of Supply Chain Management at Royal Holloway, University of London said: "Raging trade wars are causing price hikes, which are disrupting global supply chains. There are also changes in demographics due to the rise of urbanisation and the depletion of our green and rural areas that could have a ripple effect for certain supply chains that rely on natural resources."

Consumer awareness of the ecological impact of the products they consume is also forcing logistics companies to rethink their strategic approach to their supply chains.

According to Khan, there is a need for a new way of thinking to mitigate risk and to look at broader collaborative solutions. Logistics managers in the future will need to respond flexibly and be adaptable to shifts in the supply chain.

Niels Worsoe, Risk Intelligence's LandRisk project manager says that in the language of risk management and risk mitigation, a 'threat' is very different from a 'risk'—and it is vital to understand the difference between the two.

"A 'threat' becomes a 'risk' when a company has understood its own vulnerabilities, assessed those risks and mitigates them—better locks, choosing a different route, mandating the use of secure parking, and so on. The better you know your enemy, the better you can mitigate the threats it poses. It's about 'hardening' your supply chains and shipments and making them more resilient to the threats that are out there. And the more you know about where those threats are, and the modus operandi of the perpetrators, the better you can do this," said Worsoe.

Moreover, he added, it is important to understand that greater threat awareness and supply chain 'hardening' are investments, rather than just costs. Put another way, he stresses, they have a definite Return on Investment.

"We need a mindset shift as supply chain management is no longer about getting product from A to B. Supply chain is about collaboration, flexibility and adaptability. There is a need to get back to the drawing board and recognise that the new normal is doing business in an environment that is volatile and turbulent." he added.

"We require skilled people that can be creative, think 'out-of-the-box', work across functions and have mixed skills and competencies," said Khan.

"Inertia, complacency to embrace change and risk are the biggest failures for many organisations," she added.

Training will play a key role in managing supply chain risks, according to Khan, with modular courses specifically focused on minimising and managing risk and apprenticeships to train the supply chain managers of the future.

Cargo crime figures continue to grow at an alarming rate, and Khan says that transport-related theft is increasing in sophistication.

"Partnering with risk intelligence providers should be considered as part of an organisation's strategic risk management approach. These strategic risk partners can help provide on-time alerts and re-routing and advice on safe parking spots amongst a myriad of many more optimal solutions."

LAW ENFORCEMENT STRENGTHENS COLLABORATION AS CARGO CRIME SOARS

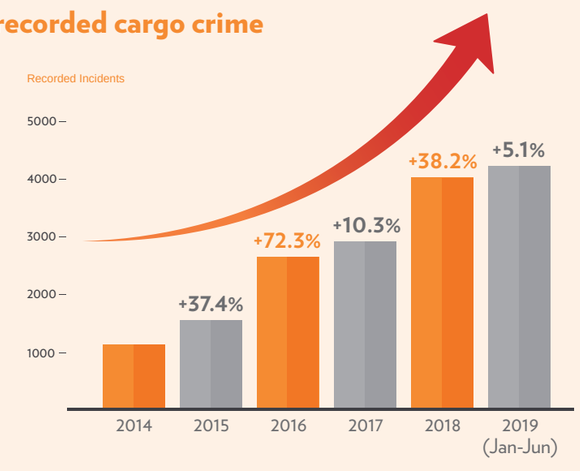
In the real world of cargo crime in the supply chain, statistics can make for some chilling reading, with soaring land-based raids on trucks and warehouses.

For the last five years, Transported Asset Protection Association's (TAPA) Incident Information Service (IIS) reported that cargo crime in Europe, the Middle East and Africa (EMEA) region has seen record year-on-year growth from 2015-2019 inclusive. For the first six months of this year the number of incidents reported to TAPA's IIS have broken new records, according to an article published on TAPA's official website.

The 4,187 crimes published in the TAPA IIS EMEA Reports for the first six months of 2019 surpasses the 2018 whole year by 5.1 per cent and shows a total value for incidents with financial data of more than €55 million or an average of €305,605 per day.

Behind these alarming numbers, however, sits some very positive news; the growing trust and intelligence sharing between national law enforcement agencies in EMEA and TAPA, which is providing new data base and vital information for security professionals trying to protect their supply chains across the region or, in other words, significantly reducing the likelihood of becoming a victim of cargo thieves.

2014-2019 TAPA EMEA recorded cargo crime



THE WAY FORWARD TO SUPPLY CHAIN RESILIENCE

A recent meeting of TAPA's Asia Pacific membership resolved that supply chains need to react faster to embrace supply chain resilience. The members also agreed that by complying with TAPA's security standards, it will help them be better prepared for unexpected risk events. Adhering to the standards will also help shorten response recovery times to potential disruptions and return supply chains to their original status, according to an article in TAPA's September issue of *Vigilant* magazine.

The article went on to highlight the major impact cyberattacks have had on supply chains, which have exposed major gaps, which are not necessarily addressed in current supply chain security standards or may not be scalable for all stakeholders.

To combat the smuggling of counterfeit goods, which costs brands and retailers billions of dollars every year, TAPA's relationships with global law enforcement agencies could help to significantly reduce crimes, as well as adopting TAPA's systematic approach to managing risk.

Another suggestion was that TAPA's IIS cargo crime data should be used in logistical planning to learn more about the modus operandi of criminals and help logistics companies prevent new incidents from occurring.

The Asia Pacific members concluded that data sharing can be achieved between collaborative partners under a MOU for the benefit of all stakeholders.

THE NEW PARKING SECURITY REQUIREMENTS STANDARD

Thorsten Neumann, Chairman of TAPA Europe, the Middle East and Africa (EMEA) said: "There is no quick fix to tackle the risks of truck drivers and cargoes face when they have to stop in unsecured locations. However, at an industry level, we have to start providing more controlled parking areas that offer improved safety and security and reduce the need for vehicles to stop in laybys, on industrial estates and at motorway service areas where statistics show they are highly vulnerable to attack. We are working hard to engage with parking place operators to highlight the commercial benefits of being TAPA-approved, and we are also encouraging our members who book parking spaces to promote the new Parking Security Requirements (PSR) standard to the parking site owners they know."

TAPA's new PSR and secure parking programme in EMEA now totals 4,900 sites in 10 countries and there are 55 new sites in the pipeline.

10 countries

4900 sites

55 new sites coming soon

SHIPPERS URGED TO TAKE ANOTHER LOOK AT CARGO INSURANCE

A fundamental misconception of risk is causing many shippers of ocean freight to completely overlook the need for cargo insurance of any kind and to cover against a multitude of eventualities.

Many industry professionals fear the endemic perception that insurance is unnecessary or not worth the expense is unlikely to change in the foreseeable future.

One estimate is that more than 90 per cent of all cargo imported into the United States (US) does so without any insurance, according to the US-based Association for Trade Compliance (ATC).

Steve Fodor, Director of the ATC said that cargo insurance costs less than half a per cent of the shipments value, on average most importers don't purchase coverage, according to an article in *Insurance Marine News*.

According to the ATC there are many reasons for shippers not buying insurance:

A misconception that their business insurance also covers shipments.

Suppliers already cover their own cargo insurance.

Thinking that the worst will never happen.

There are also misconceptions that most products are purchased on a 'Free on Board' (FOB) basis, in this case supplier is not required to provide insurance coverage.

There are also two types of FOBs: FOB Destination and FOB Origin. Shippers are responsible for coverage if the buyer takes out FOB Destination, but in many cases, are unaware of this responsibility.

Even if the freight is moved under cost, insurance and freight (CIF) terms, where the seller is required to arrange for carriage of goods by sea to a port of destination, goods are only insured to the first destination port and do not cover any damages or losses incurred after that point.

The idea that nothing goes wrong is also a dangerous game to play, as higher supply chain risk from accidents, extreme weather and cargo crime are all on the increase. It does not make good commercial sense to lose thousands of dollars just to save on a small insurance premium.

This lack of understanding of the need for adequate insurance coverage by many in the shipping sector has long been a source of frustration for insurance professionals, including those based at the Through Transport Mutual Services (UK) Ltd. (TT Club), a leading provider of insurance provisions to the international transport and logistics industry.

Peregrine Storrs-Fox, Risk Management Director of TT Club said, "We are aware that a proportion of cargo is transported without 'all-risks' cover. Analyses will differ as to what that proportion may be, influenced by the type of entity involved in shipping and the nature of the commodity," told *Forward with Toll* news website.

Storrs-Fox added, "There may well be a lack of knowledge of the contractual liability exposure and therefore an expectation that full recovery will be achieved."

He explained why the sector needs to be more alert to this issue, "Understanding risk requires appreciation far beyond the pure value of the goods being transported. The shipper community needs to consider the general and regulatory information available to optimise the likelihood that goods are received in good order."

He referred to the doctrines laid out in the principles of the Code of Practice for Packing of Cargo Transport Units (CTU Code), and of the importance of complying with dangerous goods regulations.

However, despite these codes and warnings of the consequences many times over of the failure to adopt proper insurance provision, Storrs-Fox remains pessimistic about changing industry thinking.

He lamented, "I cannot foresee any material change in the cargo insurance buying habits of shippers, although an increasing number of shippers are taking out cargo insurance as awareness of growing supply chain risk continues to rise."

In response to the growing hazard of container fires, a number of carriers have recently implemented fines on shippers who mis-declare hazardous cargo. Evergreen, OOCL and Hapag-Lloyd have all announced a range of fines to be implemented immediately.

Hapag-Lloyd is implementing a fine of US$15,000 per container for misdeclared hazardous cargoes, plus any costs required to mitigate the violation.

"Failure to properly offer and declare hazardous cargoes prior to shipment is a violation of the

Hazardous Material Regulations. Such violations may be subject to monetary fines and/or criminal prosecution under applicable law," Hapag-Lloyd announced.

Hapag-Lloyd holds the shippers liable and responsible for all costs and consequences related to violations, fines, damages, incidents, claims and corrective measures resulting from cases of undeclared or misdeclared cargoes.

WEIGHING UP THE RISK – WHETHER TO INSURE OR NOT

Tom O'Malley, President and Founder of Florida-based TJO Cargo Insurance Owner, says that it is size that matters when making a decision about buying cargo insurance.

The more important question for a beneficial freight owner to ask themselves is how much money can they comfortably afford to lose at any one time? If you are a major international company then that number is fairly high. If you are not then the number may be a tad lower.

If once a month a shipper ships ten containers to China from the US valued at US$50,000 each container, the total risk exposure ceiling of physical loss of the cargo amounts to US$500,000 plus handling/disposal of damaged freight. It's not all that impossible to accumulate value unintentionally. Today more than ever no matter how the containers are booked, they all may end up on the same mega vessel.

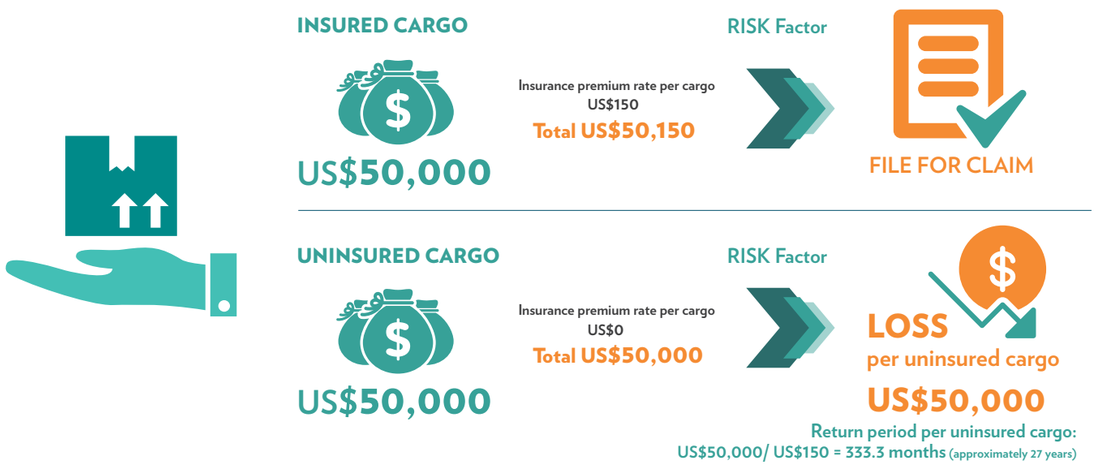
In the event US$500,000 is an acceptable loss for a shipper they can recover from and they can reship ten containers of inventory to replace the lost ten containers, and still have a happy day, they may question their desire to purchase cargo insurance. Over a long enough period of time, they will come out ahead if shipping standards remain high.

Let's look at the pay back of not spending money on premiums if one of the example shipments does succumb to risk and is lost. For an insured example let us use a cargo insurance premium rate of US$150 for Clause A 'all-risks' insurance for a full container load of general merchandise valued at US$50,000 headed to China from the US.

For an identical uninsured example, the cargo insurance premium rate is US$0 for a shipment cost savings of US$150. For the insured shipment in the event the cargo is lost as a result of a covered peril, it would take the insured shipper a reasonable number of weeks to file and collect on a claim.

In the uninsured example, the shipper would have saved the US$150 premium per shipment but would have to continue to ship their monthly uninsured US$50,000 container a little over 27 years (333 months) to save as much premium money as to equal the lost uninsured amount. The 27 years of course being contingent on no more uninsured losses.

RISK FACTOR TO UNINSURED CARGO



There are also other reasons why some shippers don't purchase insurance.

The main one is that large shippers choose to self-insure, covering the costs of any losses and accepting the financial risk for losses incurred.

The recommended cargo insurance is known as International Chamber of Commerce (ICC) Clause A, or 'all-risks' which covers everything other than what the coverage excludes.

"While there are standard and situational ICC Clause A exclusions, the principle exclusions include the inherent nature of the goods, insufficient or inadequate packing, ordinary wear and tear, and consequential loss or loss of market." told *Forward with Toll* news website.

According to O'Malley, while the type of cargo insurance coverage rarely changes, one significant change in recent years has been the proliferation of insurance providers in the market. Hence, shippers must ensure they perform adequate due diligence before taking out a policy.

"For many years, the primary outlets for cargo insurance have been insurance brokers and freight forwarders. Today, cargo insurance can also be purchased from many intermediary re-sellers and the carriers themselves."

"Due diligence should include the actual insurer, ensuring they are rated 'A' by an organisation such as A.M. Best, which measures and reports the financial stability of insurers, in either the short or long term," he said.

CHINA'S FIRST OF THE ONLINE INSURANCE PLATFORM HERALDS NEW ERA FOR SHIPPING

As the maritime insurance industry looks to increase its access to shippers and shipowners in China, a new online shipping platform has been launched to cater for the very large shipping cluster in the Greater Bay Area – which includes Hong Kong, Macau and nine other cities in Guangdong Province.

The focus of the new shipping insurance transaction platform will be research and development of the shipping insurance sector in South Mainland China.

Nansha, the business and shipping centre of Guangzhou, will be the centre of development for maritime, transportation, shipping exchange, ship finance, maritime services and shipping insurance, according to an article published in *Seatrade Maritime News*.

The platform is jointly set up by Shanghai Insurance Exchange, Guangzhou Shipping Exchange Company, PICC Property and Casualty Company Limited Guangdong Branch, China Ping An Property Insurance Guangdong Branch, China Pacific Property Insurance Company Guangdong Branch and China Dadi Property Insurance Guangdong Branch.

The decision not to insure ocean cargo is a gamble that many shippers are prepared to take, but one significant loss means that the small savings made on not paying insurance premiums are just a drop in the ocean compared to covering the entire cost of a lost shipment.

CHALLENGES OF TRAINING IN THE LOGISTICS MULTIVERSE

As the logistics sector embraces digitisation and automation, a major challenge faces the industry as there is a pressing need to take a fresh look at the necessary skills required to ensure that training for employees and new recruits is available.

New employees to the logistics sector will need to be adaptive to change and flexible in their approach to new technology.

"Logistics companies need to have not only technically competent niche experts in areas such as warehousing, freight forwarding and inventory planning, but also adaptive employees who can embrace and leverage new technologies. The logistics and supply chain management industry will be dramatically transformed through artificial intelligence (AI) and Robotics disruption," said Paul W Bradley, Chairman and CEO of Caprica International.

CHANGES THAT ARE DEFINING THE FUTURE OF LOGISTICS

Today, inventory stock takes can be done by drones, as has already been deployed in several United States (US) and Singapore warehouses. Automated storage and retrieval system (ASRS) warehouses and open warehouse product selection robots are changing the human role and defining a different skill requirement.

Amazon's warehouse operations are a clear example of this trend. In the next eight years there may as many as 50,000 dark warehouses operating in the US alone, completely automated without the need of normal lighting.

Driverless trucking will also change the industry over the next decade. Therefore, the next generation of talent will need to be both operationally competent and adaptable, but also technically competent and willing to constantly evolve their skills.

The next generation employees should be comfortable working with others and with AI and Robotics seamlessly. Companies must invest more in life-long learning with regular training programmes from within the company and selective investing with outside special skills certificates programmes.

The companies that invest in their employees' potential and personal growth will gain a competitive advantage. Some governments such as Singapore jointly invest with companies for skill upgrades. The next generation employees must embrace a constantly changing work environment and thrive on that challenge, said Bradley.

HOW HAS DIGITISATION CHANGED TRAINING AND RECRUITMENT STRATEGY?

AI plays a bigger role in demand planning and inventory optimisation. Robotics plays a bigger role in the physical operations.

Digitisation also means that more information is available and can be leveraged at a level unimagined just a few years ago. Training must ensure that employees can comfortably adapt to a blended environment of people and technology cross integrating at every level of their working environment.

Employees must have a hunger for new knowledge and skills upgrading, whereas the company has an obligation to invest in each employee's capabilities and future potential to stay competitive.

The working environment will constantly adapt and be redefined in logistics and every five-year will seem like a quantum leap. Managers and corporate leaders must embrace constant disruption as part of their business strategy and they have an obligation to ensure that their employees at every level have the tools to adapt and thrive.

COLLABORATION ESSENTIAL BETWEEN ACADEMIA AND INDUSTRY

Academic institutions look at the future from both a theoretical and actual trend basis. This is extremely valuable for corporate leaders to leverage as an advantage. There are many examples of top executives and middle management being sent to advanced seminars and certificate programmes to leave their comfort zones at work and be challenged with new thinking by being on a campus of an interim period. This will become even more important going forward.

Monitoring the developments of new start-ups in the logistics and e-commerce space also provides early insight into technologies that can be absorbed and deployed. Industry leaders should be actively engaged with leading universities to understand future trends that will impact the logistics and supply-chain management (SCM) industry and enhance thinking and leadership skills. These universities can also provide on-line skill upgrade options for employees at all levels as needed. There are also opportunities for collaborative projects with these institutions.

HOW CAN THE LOGISTICS SECTOR BE MORE ATTRACTIVE IN TERMS TO TOP TIER GRADUATES?

The new logistics industry is in an exciting transformation stage full of new opportunities for the best graduates. Companies need to market on the campuses that this is an industry that connects the world through trade.

There are also evolving new trends optimising product flow, information flow, financial flow and knowledge flow. Influential leading companies are now shaping an industry for the future! Beyond traditional logistics, there are advanced areas including SCM, demand chain management and ultimately 'Dynamic Value Networks'.

The industry integrates physical infrastructure such as ships, aircraft, trains, warehouses and trucks; along with "virtual infrastructure" empowered by AI, Robotics and Blockchain technologies.

The best graduates should aim for an exciting career where they can connect the world through trade and finance, leverage the latest technology and shape the future, then the new logistics and supply chain industry should be a priority in their career path.

LOGISTICS SECTOR MUST INVEST IN TRAINING

Logistics companies must invest in training programmes to leverage their most valuable asset, human capital. When a company optimally combine the best people and the best technologies, then the company will always be an industry leader.

In contrast, the company's survival will be at risk if the human investment does not comply with future demands and standards. Modern workforces have never been in a time of human history where continuous learning was more essential than it is today. Unleashing the full potential of every employee is essential to a company's long-term success. This also includes creating a work environment where employees collaborate, evolve and thrive. The best employees should have a special training development programme where they can be exposed to a wider part of the business and be rapidly challenged and rewarded and this is an essential element of the strategic plan for success.

nGEN ACADEMY TRAINING FOR A DIGITAL FUTURE AT HUTCHISON PORTS

Hutchison Ports has launched a new programme, through the nGen Academy, to develop and roll out the Group's standardisation and digitalisation of operational processes.

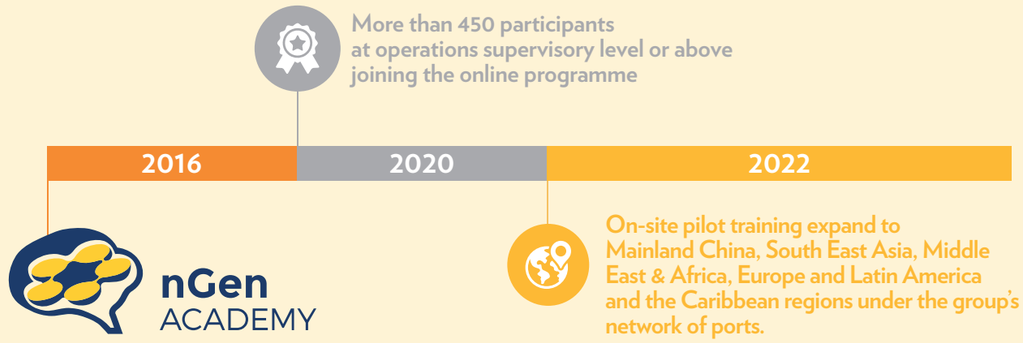
Hutchison Ports Operations introduced the nGen Academy in 2016 in order to enhance the collaboration among Business Units and Corporate Centre to establish the nGen standardised business solutions throughout its global ports network.

nGen 'graduates' including shareholders, partners and customers are able to leverage the full benefit of the platform's performance with confidence.

Through communication, engagement and Subject Matter Expert training the nGen Academy is designed to help users understand the platform's capabilities when dealing with different terminal operational scenarios locally and globally.

By 2020 there will be more than 450 participants at operations supervisory level or above joining the online learning programme. The aim is to build nGen-centric terminal operations with enhanced serviceability and sustainability as the Group's future operations model.

Today the group offers on-site pilot training in Mexico, Pakistan and Panama, and by 2022 the training will expand to Mainland China, South East Asia, the Middle East & Africa, Europe and Latin America and the Caribbean regions under the group's network of ports.



UBI EXTENDS REACH TO NEW PORTS

Hutchison Ports ubi (or "**ubi**"), the cloud-based customer-facing apps powered by nGen, which integrates waterside, yard and landside operations, allows customer to receive the latest updates and information and terminal access on their smart phones and smart devices at any time. Since its launch at Hutchison Ports Thailand, ubi has extended its service to Hutchison Ports Tanzania and today the app is made available to iOS and Android with over two thousand users. The growth of ubi app is to support Hutchison Ports' Smart Network Strategy to standardisation and digitalisation across the group's network.

TARGET USER GROUPS

Considering today's busy terminal operations, it is important for customers to stay connected to the port and be able to do more while they are on the go, with the latest version of ubi app customers will be able to pre plan their journey and cargo with more flexibility and effectively with more cost savings.

UBI TARGET USER GROUPS

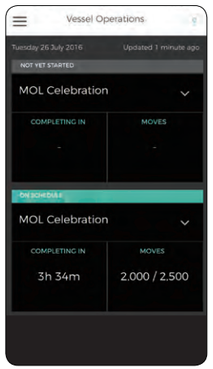
- Trucking Company/Haulier
- Freight Forwarder/Shipper
- Shipping Line/Intermodal Company
- Importer/Exporter

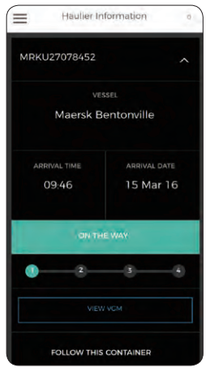
PRODUCT FEATURES

Since the launch of ubi in 2017, it has offered powerful features to achieve port digitalisation. Ubi allows carriers, service providers and yard operations to have greater visibility, efficient landside processes and safer working environment.

INCREASE VISIBILITY TO ALL TERMINAL USERS

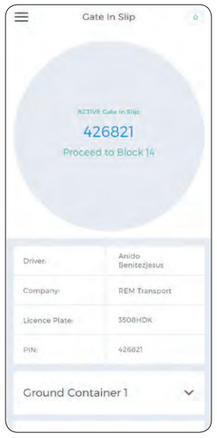
Ubi provides immediate updates such as shipping, haulier and terminal information to help customers with enhanced decision making. It can improve user experience with the latest information and allow users to react and work efficiently.

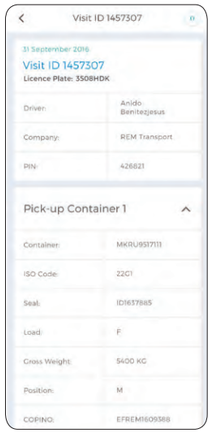


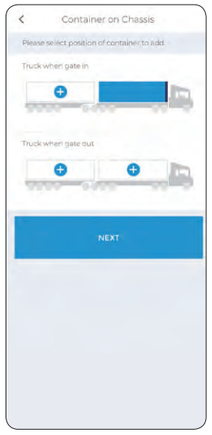


EFFICIENCY ON LANDSIDE OPERATIONS

To enable digital transformation, ubi also provides an electronic Gate-In Slip and Equipment Interchange Receipt (EIR), which could reduce paper usage and create a greener office environment. In addition, EIR in electronic form will enable more timely distribution when compared to using the paper form. It will also greatly improve information visibility and provide the latest container status to all stakeholders.

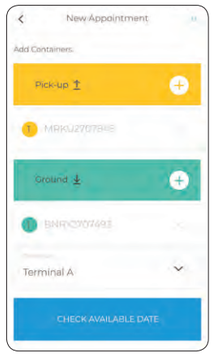


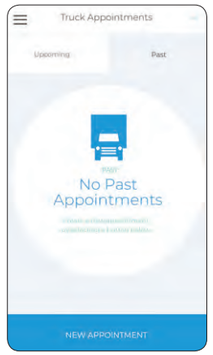




TRUCKING ON TIME

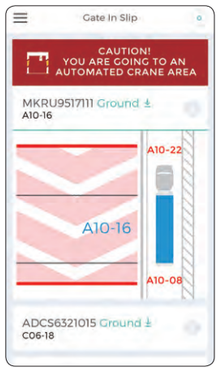
The latest version of ubi app features 'Truck Appointment function', enabling more streamlined collaboration between the terminal and the customer through the application. With this new feature, the driver can manage the pick-up location and grounding appointments in advance. The terminal will receive all required data about the truck and the container upon its arrival. It allows the terminal to better allocate its resources, reduce terminal traffic congestion and reduce drivers dwell time in the terminal.

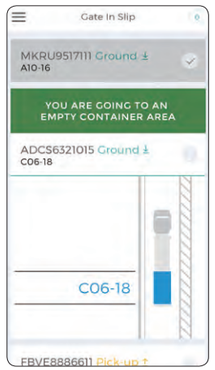


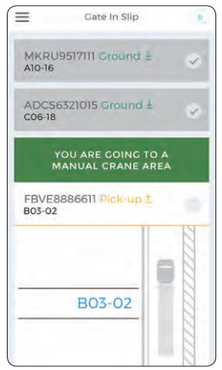


RC RTGC safety alert feature

Safety is Hutchison Ports priority and is also one of the key drivers when ubi was first being developed. The new 'Safety Alert' for Remote-Controlled Rubber-Tyred Gantry Crane (RC RTGC) function alerts the driver during the end-to-end RC RTGC process from gate-in to gate-out by detecting the truck's location and provide warning notification.

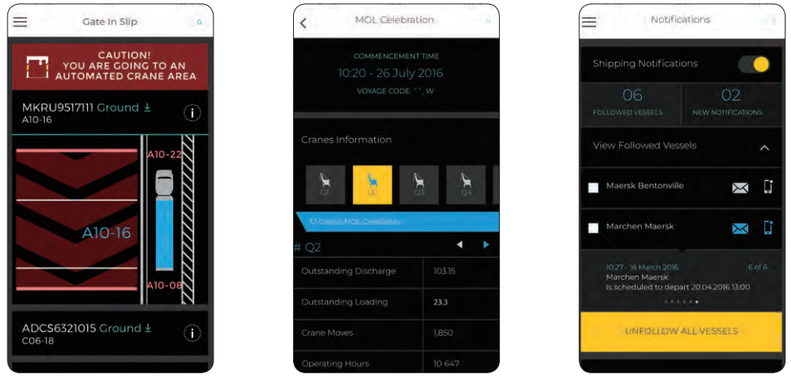






NIGHT MODE DISPLAY

The ubi development team realises that the brightness of a 'positive' screen may disrupt the truck driver while driving to the pick-up location at night. To resolve this, an automatic 'Night Mode' display has been introduced to the latest version of ubi to facilitate night-time operations and minimise the impact a bright screen would have on a driver while in transit.

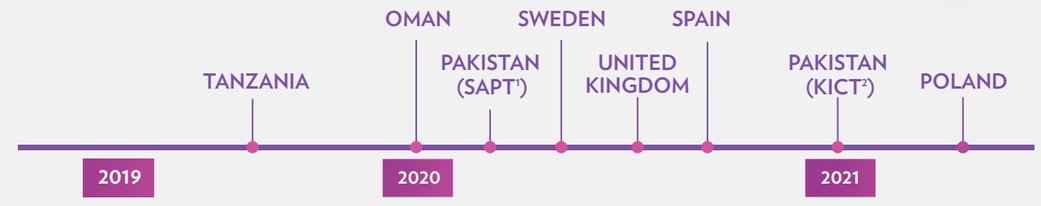


FUTURE DEVELOPMENT AND ROLLOUT ROADMAP

Hutchison Ports will continue to extend the reach of ubi to the Middle East & European regions in the coming years. Today, ubi consists of three languages, English, Thai and Swahili, along the rollout roadmap there will be more languages selection available to other regions such as Spanish, Catalan, Hindi, Urdu & Arabic.

- Español
- Català
- हिन्दी
- اردو
- عربی

UBI IMPLEMENTATION PLAN:



[1] *South Asia Pakistan Terminals and* [2] *Karachi International Container Terminal*

Ubi is an important component of a global strategy to bring profound impact to the port digitalisation roadmap along with the group's proprietary Terminal Operating System, nGen. Both systems work concurrently to enhance each port's hinterland connection, enabling greater insight and quicker access to landside terminal operations. It strengthens the connections with current customers and opens new business opportunities.

Last but not least, the ubi development team will continue to bring innovative ideas in terms of information enquiries, process changes and safety perspectives to modernise terminal operations.

NEW VENTURES AND OPPORTUNITIES AROUND THE WORLD

US$240 MILLION INVESTMENT DEAL AGREED FOR PORT EXPANSION PROJECT IN PAKISTAN

Hutchison Ports signed an historic agreement with the Government of Pakistan to commence construction of the second phase of Pakistan Deep Water Container Port expansion project in the Port of Karachi.

Eric Ip, Group Managing Director of Hutchison Ports met with Imran Khan, Prime Minister of Pakistan to discuss the agreement.

During his meeting Mr. Ip confirmed, to Prime Minister Khan, the start of the second phase expansion project with US$240 million of new investment which will increase handling capacity to 3.2 million TEU upon completion.

Mr. Ip further added that Hutchison Ports' total investment (including 20 years of operations in Karachi International Container Terminal) in Pakistan will reach 150 billion PKR (approximately US$1 billion), providing direct employment to over 3,000 staff and supporting thousands working in the ports and shipping sector.

Most of all, the terminals contribute over 15 billion PKR (over US$96 million) annually to the government in the form of taxes and concession fees.

Mr. Ip reiterated Hutchison Ports' commitment to Pakistan and how it has been playing a pivotal role in facilitating the economic growth of the country, as well as supporting the development of Karachi Port into a major hub for trade and transport in Asia.

Imran Khan, Prime Minister of Pakistan (centre) met Eric Ip, Group Managing Director of Hutchison Ports (third from left) at Prime Minister House.

(Left to right) Kenneth He, Board Member of Westwell Lab.; Kenny Tan, CEO of Westwell Lab.; Cody Leung, Group General Counsel & Corporate Development Director of Hutchison Ports; Eric Ip, Group Managing Director of Hutchison Ports; Eddie Lee, Group Engineering Director of Hutchison Ports and Ruth Tsim, Group CFO of Hutchison Ports.

AUTONOMOUS TRUCK PROJECT SIGNED OFF FOR LAEM CHABANG

A Strategic Cooperation Agreement was signed between Hutchison Ports and Westwell Lab (Westwell) on applying autonomous truck technology for the Group's container terminal operations.

The project scope includes deploying six electric autonomous trucks from Westwell at Hutchison Ports Thailand in Laem Chabang. Both parties will collaborate in development and implementation with a target to launch operations in the second half of 2020.

HUTCHISON PORTS TO DEVELOP, OPERATE SPARK'S LOGISTICS AREA

The Energy City Development Co. signed a memorandum of understanding with Hutchison Ports to develop, market and operate the logistics area and dry port at King Salman Energy Park (SPARK) in Saudi Arabia.

"The agreement aims to create an ideal business environment for the energy and logistics sectors. To achieve our ambitions, we seek to partner with the best in every field, and Hutchison Ports is a leading company in its field," Saif Al-Qahtani, SPARK's CEO said.

SPARK's logistics area, which spans over 300 hectares, will provide a bundle of logistics services for industrials and cargo owners. It also provides an area for international shipping, customs clearance, an automated container station linked to road and rail.

SPARK is a new megaproject being constructed and located between Dammam and Al-Ahsa in the Eastern Province of Saudi Arabia. This project is being developed, operated and managed by Saudi Aramco in partnership with the Saudi Authority for Industrial Cities and Technology Zones.

Saif Al-Qahtani (left), President and CEO of SPARK and Andy Tsoi (right), Managing Director of Hutchison Ports, Middle East & Africa.

CARGOSMART COMPLETES BLOCKCHAIN PROOF OF CONCEPT WITH ETRADECONNECT

CargoSmart, a leading technology solution provider for the shipping industry, has successfully completed a proof of concept with eTradeConnect, a multi-bank blockchain consortium in Hong Kong facilitated by the Hong Kong Monetary Authority (HKMA).

The project aims to improve global trade through enhanced collaboration among shippers, banks, terminal operators, and ocean carriers, with applications to be further developed once the Global Shipping Business Network (GSBN) is formed.

CargoSmart and eTradeConnect have successfully completed the proof of concept facilitated by PwC, with banks and ocean carriers.

FOR MORE INFORMATION PLEASE SCAN THE QR CODE.

> **Eric Ip, Group Managing Director of Hutchison Ports said, "The successful completion of a proof of concept with eTradeConnect marks a positive beginning of a collaboration between carriers, terminals and banks to explore new products and value propositions for trade finance. We are excited about the potential benefits this can bring to the supply chain. Once GSBN is established, we are confident future members will benefit from its strong data governance and trusted transactions will help simplify trade for end customers."**

GEC LAUNCHES BOLD NEW GREEN VISION FOR THE FUTURE

The newly formed Hutchison Ports Group Environmental Committee (GEC) held its first meeting at its Hong Kong Headquarters this summer. Both GEC Co-chairmen, Clemence Cheng and Stephen Ashworth have volunteered to co-chair the GEC because they strongly believe in protecting and improving the environment. Both joined other GEC committee members to discuss the Group's new environmental plan and roadmap given the growing global awareness of the adverse impact our actions are having on the environment and a rapidly changing maritime sector which is placing greater focus on reducing carbon emissions. As a responsible business and being the No. 1 Port Network of the World, it is essential for the Group to show leadership in this important agenda, and the GEC will set up and implement environmental policy and strategy across the Group to ensure we have a long-term sustainable business.

The strategy for Hutchison Ports aims to redefine the Group's environmental expectations and targets to improve global environmental performance. As a medium-term programme, implementation of this strategy will span over three to five years.

THERE ARE FOUR FOCUS AREAS FOR THIS STRATEGY:

1. Effective environmental management.
2. Capitalise on best-available technologies.
3. Re-positioning Hutchison Ports with aspirational environmental values.
4. Development of Key Performance Indicators (KPIs).

"The mission of the GEC is to improve Hutchison Ports' environmental performance by establishing policies and action plans, in the pursuit of a more sustainable business," said the Co-chairmen in a joint statement at the inaugural meeting of the committee.

FOLLOWING THEIR STATEMENT, THE GROUP HAVE ISSUED THE FIRST ENVIRONMENTAL POLICY TO:

- Conduct business activities in such a way as to minimize the adverse impact on the environment of our activities.
- Reduce carbon footprint and prevent pollution as far as is reasonably practicable.
- Continually improve performance against targets associated with significant environmental aspects.
- Comply with all applicable environmental legislation.

Clemence Cheng, GEC Co-chair

Stephen Ashworth, GEC Co-chair

WHAT ARE SOME COUNTRIES DOING?

In order to achieve targeted commitments, set by the Nationally Determined Contributions (NDCs), many countries have begun to implement more stringent environmental regulations and policies around the transport sector. Some countries are even moving to ban practices that are harmful to the environment, which will significantly affect port operations and these risks should be reflected in the business strategy moving forward.

Hutchison Ports operates in 27 countries, in which 24 of them[1] have submitted an NDC to the United Nations with environmental protection or conservation targets by 2030 or earlier.

[1] *The outstanding countries are Oman and Iraq, which have both submitted an intended NDC (which is not legally binding)*

The Group will aim to reposition its business with a roadmap of environmental commitment and a shift in focus to ensure that Hutchison Ports has a progressive approach to become a leader in this important agenda, according to the Co-chairmen's statement.

Each of Hutchison Ports business units should recognise their critical position of the importance of their role to be the preferred partner for a sustainable supply chain.

Sustainable development is one of the most important challenges facing us all going forward and the Group will be looking for input and support from everyone in the company. The GEC have every confidence to make a positive difference to the environment in the group's network of ports; adding that no challenge poses a greater threat to future generations than climate change.

Some of the Group's port operations have already made significant progress towards implementing initiatives which improved local environment and it's the right time to align all of the Group's port operations and move towards a common goal.

As a responsible business, the Group must act as part of an integrated supply chain to effect positive environmental change, the Co-chairmen concluded.

HUTCHISON PORTS GREEN AND ENVIRONMENTAL INITIATIVES

- Reduce carbon emissions by investing in Liquefied Natural Gas (LNG) tractors to replace diesel fuel tractors
- Deploy electric Rubber-Tyred Gantry Cranes (eRTGCs) and hybrid eRTGCs to reduce CO2 and SO2 (Sulphur dioxide) emission and reduce energy consumption
- Beach, underwater and coastal clean-ups campaign
- Protection and conservation of sea animals' campaign
- Wetland Habitat Restoration to increase the richness of plant species
- Temporary Refuge of Species to relocate the species
- Recycle used cell phones and cans; and tree planting campaign via GoGreen

1990
Hutchison Ports ECT began changing to hybrid and electric equipment.

2006
Hutchison Ports UK was certified by EcoPorts "Ports Environmental Review System".

2012
Hutchison Ports Shanghai was certified as a pioneer in hybrid port technology.

2015
Hutchison Ports Australia established its first Sustainability Plan.

2016
Hutchison Ports Corporate Centre has been collecting Environmental, social and corporate governance (ESG) data and initiatives for CK Hutchison, our parent company.

2018
Hutchison Ports Executive Committee endorsed the initiative to move forward the group's global environmental framework, visionand strategy.

2019
The Group Environmental Committee (GEC) is established. The first committee meeting was held in July.

TOGETHER WE CAN MAKE IT HAPPEN

HUTCHISONPORTS

THE WORLD'S LEADING PORT NETWORK

CELEBRATING 50 YEARS

This year we celebrate three key milestones.
Our 50th Anniversary,
the first port operator
to achieve a cumulative global throughput
of 1.3 billion TEU
and named
Best Global Container Terminal Operator.

A member of CK Hutchison Holdings

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