



## The Opinion

RightShip's **Warwick Norman** explains why ports are getting on the emissions-cutting bandwagon

**DESPITE BEING THE** most carbon-efficient form of international transport, the IMO's Third Greenhouse Gas Emissions (GHG) study, released last year, delivered the alarming news that a best-case scenario of shipping's CO<sub>2</sub> emissions were a 50% increase by 2050 – with worst case an extraordinary 250% increase.

# Benefits of environmental ratings



**WIN-WIN:** controlling emissions from ships helps ports out

This is despite expected average fleet efficiency improvements of around 40%.

The normalisation of slow steaming and unprecedented

oversupply of ships over the last couple of years has clearly affected the industry's CO<sub>2</sub> output, but as we've recently seen these market forces are volatile and temporary. As

individuals we are unable to influence factors such as the huge swings in global commodity prices and the resultant impact on the price of oil.

## EquipmentBriefs

### Konecranes RTGs head for Vancouver

**Konecranes** is to deliver four rubber-tyred gantry (RTG) cranes to GCT Canada Limited Partnership's Deltaport facility at Port Metro Vancouver – the company's first RTG delivery to the West Coast of Canada.

The CSA-approved, hydraulics-free Konecranes RTGs on order are 16-wheel machines with a lifting capacity of 40 tonnes, lifting 1-over-5 high and 7-plus-truck lane wide. They will be equipped with a Tier 4f diesel genset and Konecranes' Diesel Fuel Saver technology. They will also be equipped with the company's Active Load Control system, which eliminates container sway to increase container handling performance.

Konecranes is also to supply three ship-to-shore (STS) cranes to PT Pelabuhan Indonesia III's (Persero) PT Terminal Petikemas Surabaya (TPS) and 15 all-electric RTGs to DCT Gdansk, marking the manufacturer's first RTG delivery to Poland.

In another RTG contract, Konecranes is to supply Valencia's TCV Stevedoring Company with four more RTGs that when in operation, will take the company's Konecranes RTG fleet to 20.

### Ports demand reliability, says JLT

Rugged computer manufacturer **JLT Mobile Computers** is keen to push its prowess in the port sector where reliability is a necessity, not a luxury.

"Ports have become such a big deal for us as reliability is so important," said chief executive Per Holmberg.

Speaking exclusively with *Port Strategy*, Mr Holmberg said that it's JLT's personal service that sets it apart from other rugged computer manufacturers serving the port industry.

"We have manufacturing and servicing in-house so we can respond quickly to customers' needs – I don't think any of our competitors can do that," he said.

As a key part of its moves in the ports' sector, JLT recently announced that it has joined the Navis Ready partner program and will initiate validation of its rugged vehicle-mount computers against the Navis N4 terminal operating system.

### Cavotec nets €10m in orders

Engineering group **Cavotec** has booked orders worth €10m from ZPMC, Konecranes and Kalmar.

ZPMC has placed five orders, the most significant of which is for cable reels that will supply electrical power to 72 ZPMC automated stacking cranes at PSA's Pasir Panjang Terminal. A second order will see Cavotec provide 28 spreader cable reels for ship-to-shore container cranes at the same terminal.

Further spreader cable reels are destined for ZPMC cranes in the Port of Genoa, while RTG cable reels will be supplied to PSA's Port of Mersin in Turkey.

In the last of the ZPMC orders, Cavotec has won an order to supply gantry and spreader reels for three ZPMC ship-to-shore container cranes for the TIL-operated Port of Lomé in Togo.

For Konecranes, Cavotec will supply cable equipment for 11 automated RTGs for Indonesia's port authority, Pelindo, as well as motorised cable reels for five STS container cranes.

Meanwhile, Kalmar has requested eight sets of motorised cable reels from Cavotec for three separate applications.

However industry leaders can – and are – driving change. Environmental port incentive programs are gaining in popularity, with easy-to-administer yet sophisticated tools available for ports to reduce local emissions and drive the push for a more sustainable industry.

In 2011, RightShip launched the GHG Emissions Rating which measures the theoretical CO<sub>2</sub> output of ships and compares it against other ships of a similar size and type. Using a simple A to G graph (where A is the most efficient), it is an easy-to-use online tool which enables us to identify the more efficient ships. The methodology is based on the IMO's EEDI, however the GHG rating allows comparison of existing ships with new builds – something that hasn't been easily achievable in the past.

Industry has voted with its feet. Since inception the uptake of RightShip's GHG Rating has been extraordinary. Currently 37 charterers, shipowners, insurers and banks use it as a vessel selection tool, accounting for almost one-quarter of the world's non-containerised cargo – or almost 2bn tonnes per annum.

Positioned – quite literally – at the forefront of the effects of global warming and rising sea levels, ports are increasingly aware of the impact of CO<sub>2</sub> emissions. Pioneering ports such as Canada's Port Metro Vancouver and Prince Rupert Port Authority now use RightShip's GHG Rating to offer incentives for more efficient ships, and are enthusiastic about the benefits experienced since introducing their environmental incentive programs.

The benefits include improved sustainability in the port area, with links to potential health benefits for local residents from emissions reductions; improved community relations, generating significant social capital within the local community as well as the wider maritime industry; reduced terminal fees for port customers and savings on fuel costs.

Preliminary analysis conducted by RightShip has established a link showing that 'greener' ships (the higher rating A-C vessels) are also safer ships, registering fewer incidents. If this holds true, the benefits to ports of promoting the more efficient ships means

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fewer breakdowns in shipping channels, fewer incidents and delays, and greater throughput for terminals.

Port Metro and Prince Rupert have positioned themselves as leaders with their respective programs, pioneering a recent and growing global movement to increase focus on emissions and efficiency. A positive spin-off has also been the significant amount of positive media exposure the incentive programs have generated for their ports, recognising their efforts in driving sustainable shipping.

RightShip, together with global NGO the Carbon War Room (CWR),

have teamed up to develop [www.shippingefficiency.org](http://www.shippingefficiency.org) to enable free access to the GHG Emissions Rating. RightShip and CWR also consult with individual ports (at no cost) to assist in the development of an environmental incentive program that is tailored to their requirements.

■ Warwick Norman has been chief executive of RightShip since its inception in 2001. RightShip helps shippers, terminals and ports, ship owners and managers and maritime finance organisations to minimise their maritime and environmental risk.

## EquipmentBriefs

### Kalmar invests €3m in port testing

Port equipment manufacturer **Kalmar** is investing €3m in a port automation testing and development platform, expected to be fully operational early 2016.

The platform will be used primarily for testing in customer projects and new product releases at the company's Technology and Competence Centre in Tampere, Finland.

The investment will cover “all modules to run an automated container yard operation, including the total automation system, a new automatic stacking crane (ASC) and the R&D work required for the deployment”.

The centre already boasts the industry's largest automation test field and world-class facilities and laboratories for prototyping, simulation, testing, monitoring and optimisation.

### Mantsinen launches mobile crane

**Mantsinen** has launched a new mobile crane that claims to have the “longest reach of any piece of wheel-mounted hydraulic materials handling equipment”.

The 200M Hybrilift has a maximum reach of 40m and a maximum lift capacity of 50 tonnes, loading and discharging 36 tonnes at 20 metres outreach.

The unit is available exclusively through materials handling specialist, Cooper Handling Group for the UK and Ireland markets.

### Konecranes crane study aids planning

**Konecranes** South East Asia Pacific has launched a Crane Reliability Study (CRS) to help ports with any brand of cranes to plan their future equipment needs.

The CRS is described as an “engineering assessment” that gathers data on crane usage and design life, in order to optimise safety, productivity and maintenance programs.

The CSR, said Konecranes, is useful for ports facing an upload in work and need to check if the existing cranes can handle the increased work, or if a crane is going to be used for additional tasks other than those specified originally.

“Konecranes can provide a CRS for any make or model of crane, regardless of age,” said John Bailey, general manager, service

development, Konecranes SE Asia Pacific. “The CRS looks at the overall condition of a crane's structures and components and evaluates this in detail with a focus on safety, productivity, reliability, usability and remaining design life,” he said.

### Navis launches Terminal Portal

Software specialist **Navis** has launched its Terminal Business Intelligence Portal in response to a need to increase terminal productivity.

Speaking to *Port Strategy*, Scott Fleming, vice president, professional services, Navis, said: “The industry is facing a variety of challenges including the arrival of mega-vessels, increased congestion and growth in data due to automation technology. All of these are driving the need to increase the use of data management techniques to manage productivity within the terminal.”

Navis' new BI Portal offers out-of-the-box integration with Navis N4 and promises “advanced operational analysis and data discovery capabilities”.