



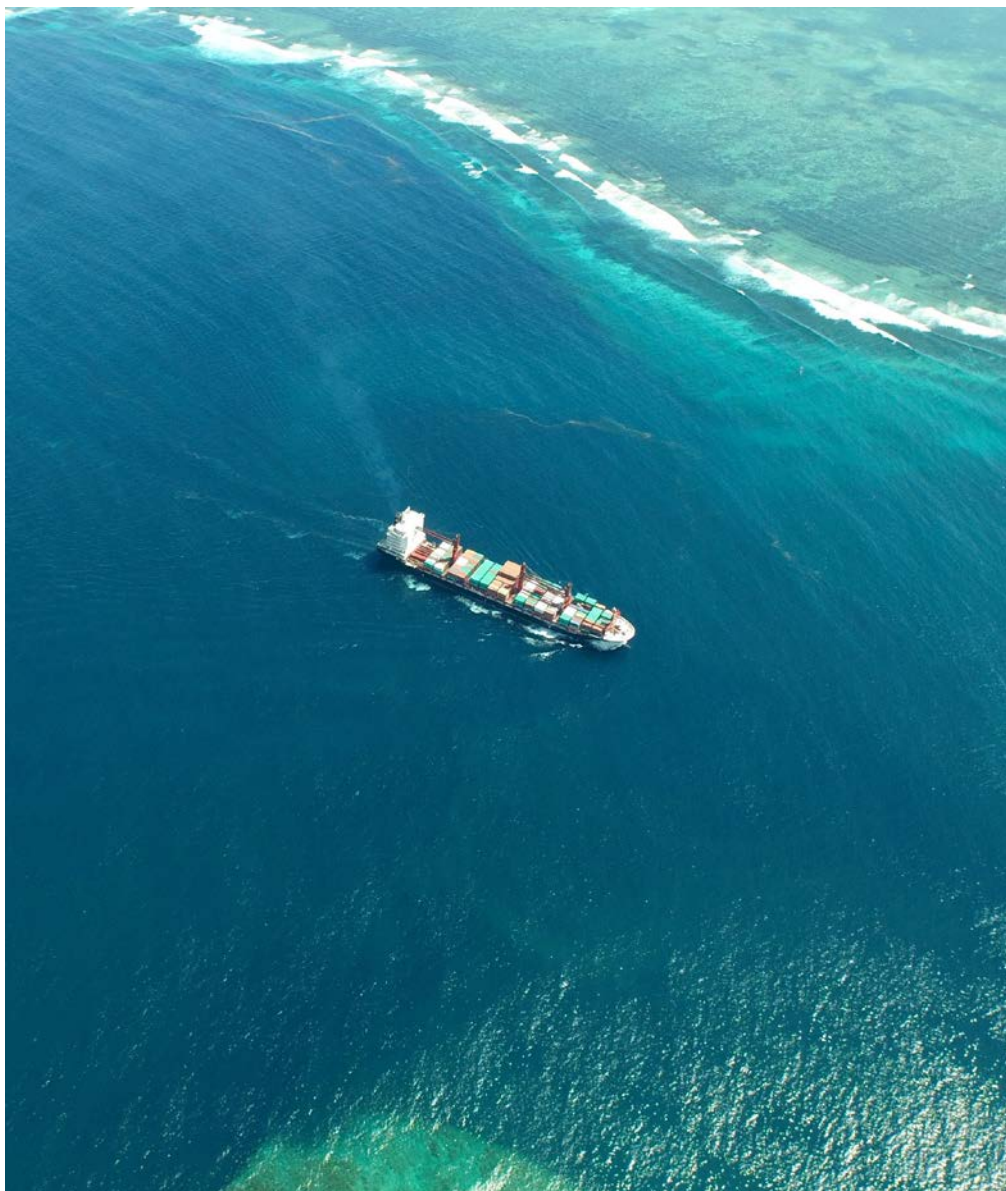
CHINA NAVIGATION

# SUSTAINABLE DEVELOPMENT REPORT

for the year  
**2014**



# Index



	<i>Page</i>
Managing Director's Message	<b>3</b>
Introduction	<b>4</b>
Organisational and Operational Boundaries	<b>5</b>
2014 Highlights	<b>6</b>
Our People	<b>8</b>
Our Community	<b>20</b>
Safety	<b>23</b>
Carbon / Environment	<b>25</b>
Awards and Recognition	<b>30</b>
Governance	<b>31</b>
Data Section	<b>33</b>
Abbreviations	<b>41</b>
Contact	<b>43</b>
GRI Accreditation Statement	<b>44</b>

In order to continue recording China Navigation's sustainability journey over the past decade, we have prepared an annual Sustainable Development report. For the third consecutive year, the Sustainable Development Report for the year 2014 has been prepared in accordance with the Global Reporting Initiative's Sustainability Reporting Guidelines (GRI C+), with a focus on transparency and clarity.

This report is different from previous editions as the content has been organised into four main sections – People, Community, Safety and the Environment - to enable our stakeholders to understand the company's commitment and performance in these key areas of sustainability.

Our vision (<http://bit.ly/1NHVY90>): “to be the leading provider of sustainable shipping solutions and our customers' partner of choice”, serves as the framework for our strategy and describes what we need to achieve in order to grow and develop our business along sustainable lines. The execution of our strategy is based on four main objectives:

- To build a winning team by developing an industry-leading workforce and providing rewarding careers.
- To establish and enhance long-term, mutually beneficial relationships with our key stakeholders.
- To promote innovation, operational excellence and provide safe, healthy and secure work environments.
- To provide innovative and value added solutions for our customers.

I am pleased to report that there were no incidences of non-compliance with environmental laws and regulations during 2014.

Our goal remains to achieve Zero Harm to our people, the environment and the ships and cargos in our care. While the safety initiatives introduced in 2011 and 2012 continue to play their part in improving our safety culture, four lost time injuries were reported in 2014 (no fatalities were recorded). As the fleet expands, we will continue to develop a just culture based on reporting and learning to prevent future incidents. Incident and near miss communications have been improved to increase the speed of communications, highlight key learning points, support root cause analysis and identify best practices. In 2014 our Toolbox Risk Identification Permit (TRIP) reporting increased by 51% yoy, averaging 155 reports/ship/month.

We continue to seek innovative ways to minimise the impact of our business on the environment. We are developing a road map to support our long term objective that our business will have a Net Zero Environmental Impact and we will continue to report on our progress.

Our 40-ship fleet renewal and expansion programme, including 12 multipurpose and 28 handysize vessels, has been designed with the Swire group's long-term sustainability objectives in mind. In 2014 we took delivery of the final two S31-Class (31,000dwt)

multipurpose vessels and five B.Delta39 (39,000 dwt) handysize bulk carriers. These ships represent the most fuel efficient designs currently on the water, fitted with systems to optimise speed and consumption ratios to minimise their environmental impact. In conjunction with the fleet renewal programme, the company has also started the process of sustainably recycling older vessels as they approach the end of their economic lives.

China Navigation takes a proactive approach towards sustainable shipping. We are a signatory to Hong Kong's Fair Winds charter as well as a founding member of the Sustainable Shipping Initiative (SSI). We continue to play an active role in supporting the SSI and participate in the working group tasked with creating a model for both the sustainable construction and recycling of ships. China Navigation continues to work in partnership with Forum for the Future to address major sustainability challenges and opportunities currently facing the shipping industry.

China Navigation's progress towards the development of a diverse, industry-leading workforce continues to build momentum. In accordance with the growth of the business and the expanded fleet, the team, both ashore and at sea, has grown by about 20% over the past twelve months.

In 2014 we have made significant investments in new IT systems, specifically in the areas of finance, procurement, ship management and human resources. We have also provided

more training and development opportunities to build a winning team. We will continue to invest in relevant training to improve our safety and financial performance and to develop the talent and competencies of our employees for the future.

In 2014 China Navigation participated in providing assistance to our communities most affected by the devastation caused by natural disasters, for example in the Solomon Islands and the Kingdom of Tonga. We continue to support the Mission to Seafarers and the Sailors' Society in recognition of the valuable support which they provide to seafarers around the world.

Thank you for your interest and your continued support for our sustainability journey.



A handwritten signature in black ink, reading "Tim Blackburn".

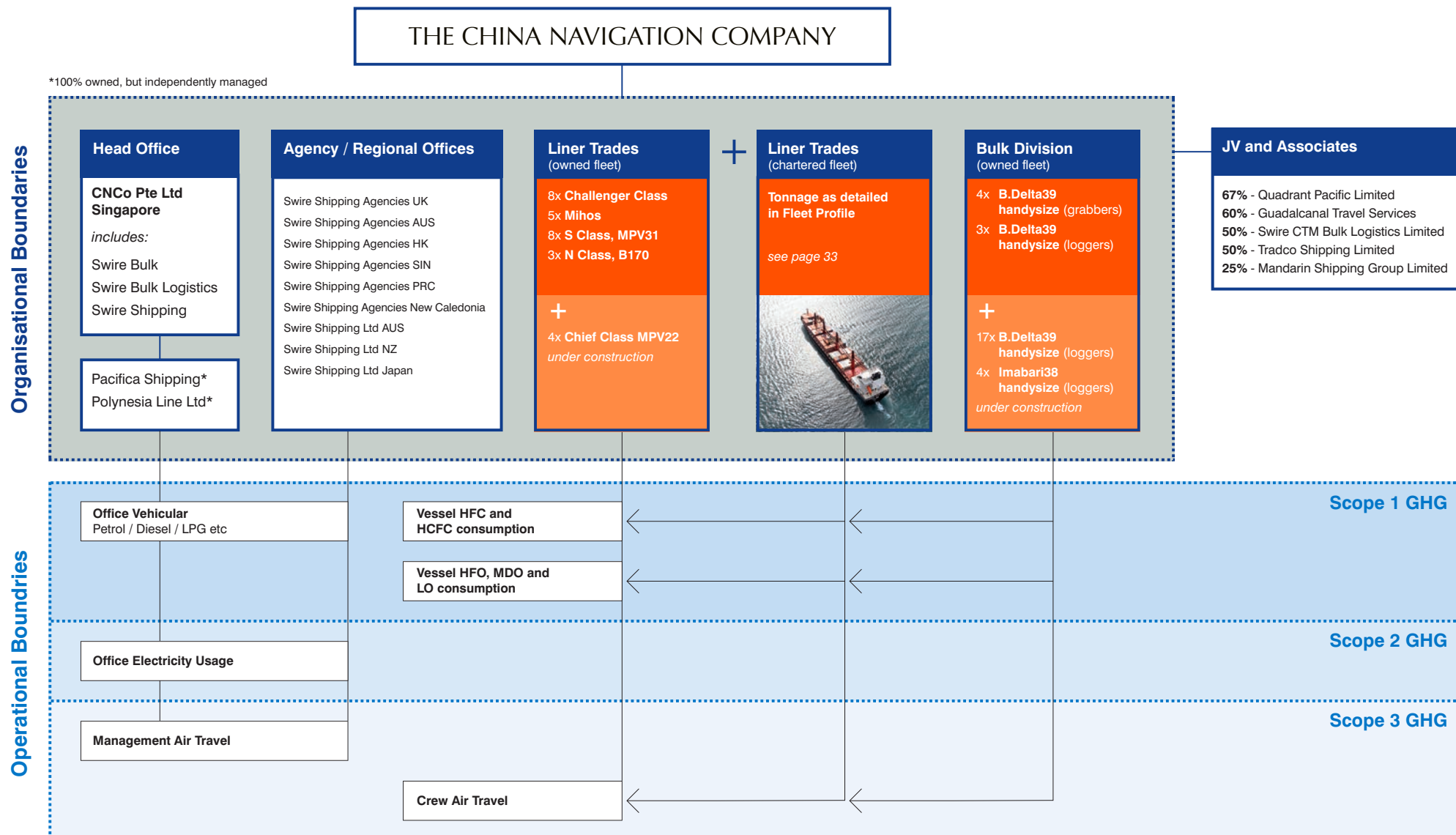


The China Navigation Company Pte Ltd (CNCo) launched the 2014 edition of its Sustainable Development (SD) report in October 2015.

This SD report comprises four main sections: Our People, Community, Safety and Carbon/ Environment. CNCo has continued its commitment to detail transparently its performance in the areas covered by the Social Responsibility Standard: ISO 26000:2010, viz. Governance, Human Rights, Labour Practices, The Environment, Fair Operating Practices, Consumer Issues and Community Involvement and Development.

For the third consecutive year, this report has been externally accredited in accordance with the most widely used reporting framework, Global Reporting Initiation (GRI), version 3.1, to level C+. All data refer to the situation within the Operational and Organisational Boundaries (see page 5) and as at 31 Dec 2014, unless otherwise stated.





## CNCo's reporting and learning culture remains positive.

Near Miss Reporting – The reporting of leading indicators (e.g. near misses) fell by 15% in response to the increase in Tool Box Risk Identification Permit (TRIP) reporting where hazards are identified before a work activity begins.

There was a 51% increase in the number of TRIPs reported in 2014, averaging 155 per ship per month, up from 103 for the year 2013.

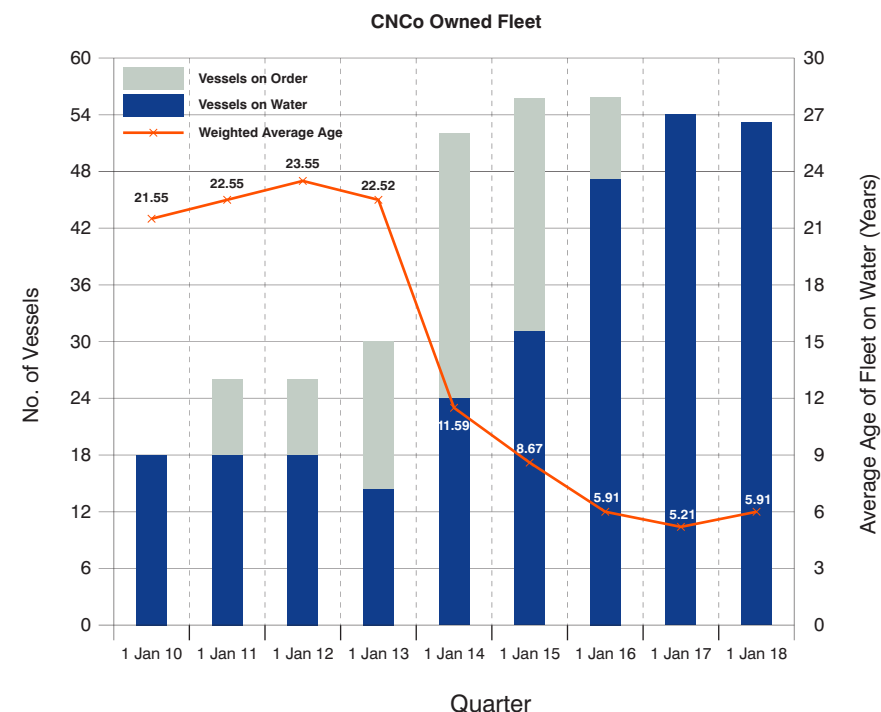
The safety initiatives introduced in 2011 and 2012 continue to play their part in ensuring that as the fleet expands, risks are controlled more effectively. Unfortunately there were 4 LTIs for 2014; one more than in 2013 weighted against an increase in fleet size from 21 to 28 ships for the same period.

Commercially, CNCo had a reasonable year against a background of a weak dry bulk market. There was a significant effort to reduce overhead expenses throughout the organisation.

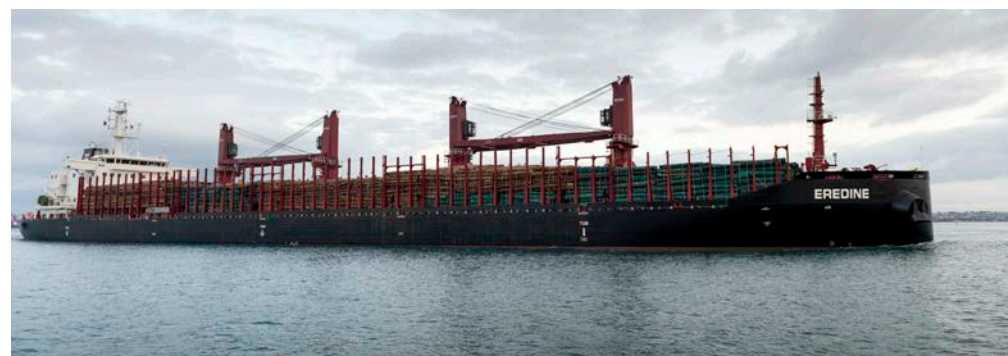
We continue to focus on the successful management of the company's newbuilding programme while also preparing commercially for the arrival of these ships.

The fully owned, managed and operated fleet profile and the list of ships under construction as at 31 Dec 2014 can be seen on pages 34 - 36.

The new building programme has significantly lowered the age profile of the CNCo fleet, with the average age dropping by 75% as the fleet size doubles over the period 2013 to 2016.



The new building programme has significantly lowered the age profile of the CNCo fleet



The emphasis on “eco-design” for our vessels has given our 24 x W, E, F, H, L and P Class B.Delta39 39,000 dwt bulk carriers an industry-leading energy efficiency. Seven were delivered up to the end of 2014. Another 17 logs-fitted bulk carriers are on order for delivery in 2015. Four Imambari38 design logs-fitted handysize bulk carriers are also on order for delivery in 2016.

The introduction of more efficient tonnage to replace older tonnage continues to result in a reduced GHG footprint per tonne of cargo carried. The eight new 31,000 dwt liner ships also delivered operating efficiencies as planned.

In 2014, CNCo acquired Pacifica Shipping, New Zealand’s leading coastal shipping service headquartered in Auckland, further increasing CNCo’s commitment to the Pacific region.

CNCo continues to participate in the Sustainable Shipping Initiative to assist the industry and its partners to raise the standards of operations in the areas of health and safety and the environment. One particular area is identifying ship recycling facilities that do not yet meet the conditions contained within the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (2009).

Our largest Community Investment/ Corporate Philanthropy initiatives in 2014 were the provision of pro bono (free) or discounted shipments supporting our key stakeholder communities in the South Pacific who were impacted by natural disasters.

Internally CNCo launched a Voluntary Work Leave Policy in 2014 to encourage our employees to volunteer their time for a charity of their choice.



The introduction of more efficient tonnage to replace older tonnage continues to result in a reduced GHG footprint per tonne of cargo carried.



Our people are our competitive advantage. We are committed to developing an industry leading team and to providing rewarding careers. We have a multinational workforce and strive to deliver an inclusive and diverse work culture. We promote equality and provide our employees with fair remuneration and a healthy and safe workplace. We are a dynamic organisation. Having a performance based culture is as important to us as ensuring that we have a fully aligned and engaged workforce.







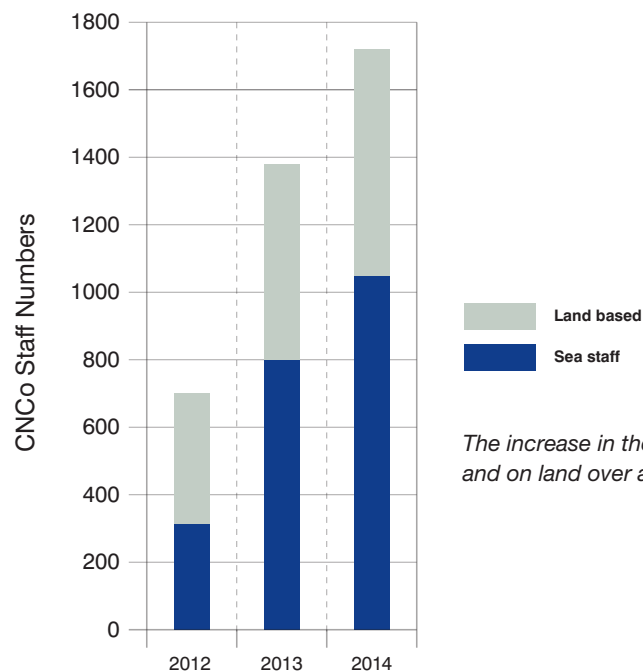
### Employment information

At the end of 2014, CNCo employed 1,718 people in various locations around the world. Our employees come from over 20 countries.

650 of our employees were shore-based, while the remaining 1,046 were seafarers (582 Officers and 464 crew members). 22 were based in shipyards in China, supervising our newbuilding programmes.

Our teams, both ashore and at sea, have grown substantially over the last three years. This is due to our business expansion: increased fleet size and acquisition of new businesses and restructuring. The year-on-year increase from 2013 levels is 19% for land-based staff and 20% for sea staff.

Swire Shipping has significant employee representation throughout the Pacific Islands, however the majority operate under joint ventures or agencies and are not direct employees of CNCo.



*The increase in the number of personnel at sea and on land over a three year period.*

Our office employees are based in four key locations: Singapore (Head Office) – 33%, PNG – 21%, Australia – 17%, and New Zealand – 14% with the remaining 15% being based in Canada, China, HK, India, Japan, Taiwan, UK and USA.

94% of our staff are classified as “local”, similar to 2013 figure. “Local” is defined as a national or permanent resident of the country of employment. The balance of 6% are classified

as “expatriates”. About 29% of the expatriate staff are parent company managers who have a centrally planned rotation through internal postings within the Swire group. The rest are employed as industry experts and have long term careers with the company worldwide.

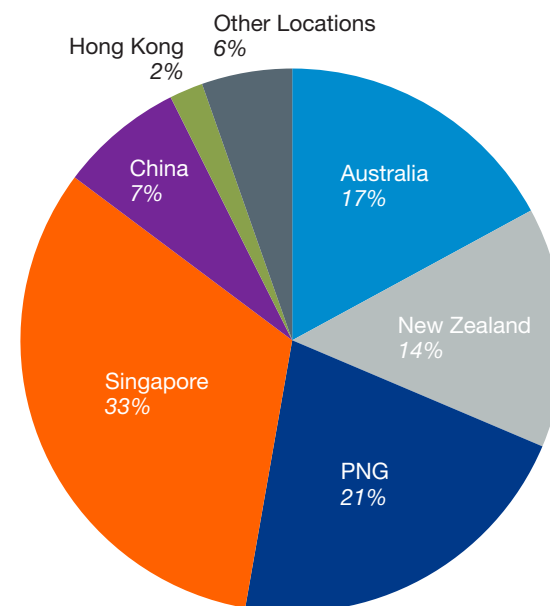
Of the shore-based employees, 53% were male (increase from 49% in 2013) and 47% were female (decrease from 52% in 2013). Among our sea staff, there were five female

officers (or 1%). This is reflective of the shipping industry in general. We seek to encourage more women to join CNCo by creating a culture where women feel safe and are supported. In addition to the policies on equal opportunities and anti-harassment, we provide an Advice and Guidance hotline to deal with any potential issues.

#### Geographical spread of CNCo group shore personnel

	Shore staff	% of total
<b>Singapore (Head Office)</b>	211	33%
<b>PNG</b>	139	21%
<b>Australia</b>	111	17%
<b>New Zealand</b>	93	14%
<b>China</b>	48	7%
<b>Hong Kong</b>	13	2%
<b>Others*</b>	35	6%
<b>TOTAL</b>	<b>650</b>	<b>100</b>

\*Canada, India, Japan, Taiwan, UK and USA



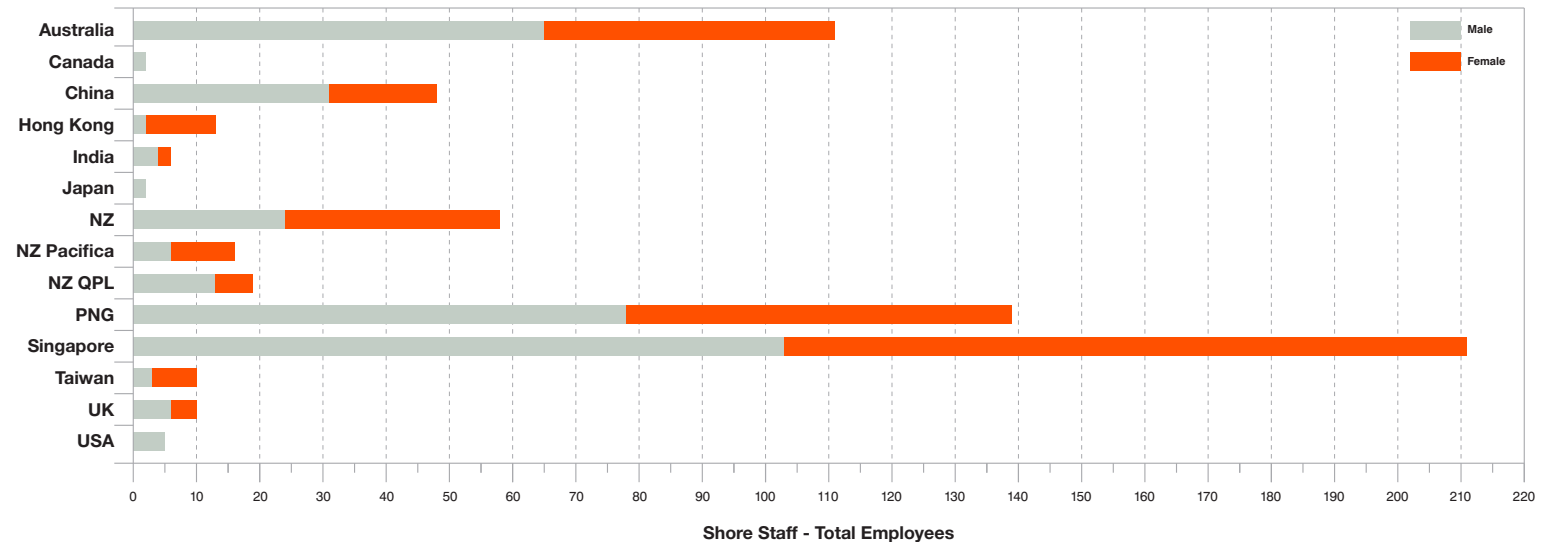
Our seafarers represent 15 nationalities.





### Percentage of the shore staff by gender and country

Countries	Total Employees	Male	Female
<b>Australia</b>	111	59%	41%
<b>Canada</b>	2	100%	0%
<b>China</b>	48	65%	35%
<b>Hong Kong</b>	13	15%	85%
<b>India</b>	6	67%	33%
<b>Japan</b>	2	100%	0%
<b>NZ</b>	58	41%	59%
<b>NZ Pacifica</b>	16	38%	63%
<b>NZ QPL</b>	19	68%	32%
<b>PNG</b>	139	56%	44%
<b>Singapore</b>	211	49%	51%
<b>Taiwan</b>	10	30%	70%
<b>UK</b>	10	60%	40%
<b>USA</b>	5	100%	0%



All our contracts comply with local employment laws. We provide additional benefits such as private healthcare for all seafarers and medical insurance for shore staff, and for all seafarers, life insurance and paid pension arrangements or cash in lieu. Given the different nationality and work locations of our employees, we have not provided a detailed breakdown on the types of employment contracts or staff benefits. All CNCo seafarers are covered by collective bargaining agreement (CBA) in accordance with the Maritime Labour Convention (MLC) 2006.

Staff turnover remains a valuable indicator of the company's sustainability and is an on-going area of focus for the company. Overall staff retention in 2013 for Shore staff was 87% and 98% for sea staff (officers). Shore staff retention was below our target of >95%, while sea staff retention remains high.

In 2014 due to some changes within our business, the turnover rates for our four key locations were higher than the national average:

- Australia - 19% compared to the national average rate of 13%.
- PNG - 22% (no direct benchmark could be found).
- New Zealand- turnover rate for Pacifica Shipping was 38%, due to the change of ownership during 2014. For CNCo, the rate was at 5% (compared to 8% in 2013) and QPL at 10%. The latter two are still materially below the national turnover rate of 16% annually.
- Singapore - 22% compared to the 16% national resignation rate in our sector.

### Long Service Awards

CNCo's Long Service Awards recognise our employees for their long service and ongoing contribution to CNCo. In 2014, we issued 174 awards to employees ashore and at sea for lengths of service from 10 to 35 years.

**A total of 2,475 years of service was recognised in 2014.**



	Shore staff	Sea staff
10 years of service	15	64
15 years	13	45
20 years	4	24
25 years	0	4
30 years	1	3
35 years	0	1



**A total of 2,475 years of service was recognised in 2014.**

### Employee Alignment and Engagement

One of CNC's "Vision 2030" strategic goals is the creation of a winning team, where employees have the right job, at the right time and in the right place, and are aligned and engaged with the company's vision, strategic goals and values.

To measure the level of staff alignment and engagement, CNC conducted an inaugural survey in 2012. The survey was repeated in 2014 and the response rate placed CNC in the top quartile of companies using the survey.

- 920 employees participated
- Response rate of 76%
- 2014 participation rate increased by 247%

Overall the 2014 results indicate a positive trend since 2012.

Employee engagement, team leadership and team effectiveness were the highest scoring areas while areas such as investment in people and investment in systems were identified as areas for improvement.

#### *Investment in people*

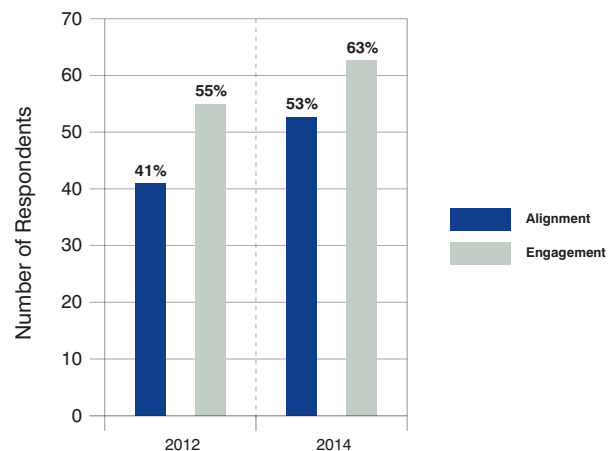
CNC has been working on implementing a new learning and development programme to support the growth and development needs of the individual employee. This new framework will ensure that employees get the training they need to excel in their current roles and develop to succeed in future roles. The training programmes will be rolled out over 2015 and 2016.

#### *Investment in systems*

CNC has invested in two new HR systems. These systems, one for shore personnel and one for managing our sea staff will bring world class HR processes to our employees.

Two-way communication between the onshore support staff and the seagoing operational staff is critical. It is necessary to communicate the strategic direction of the company and business progress as well as to ensure that management listen to employee suggestions and use their feedback to improve performance of the company. This is done through management visits to offices and vessels, officer forums as well as staff surveys.

We continue to use our in-house monthly newsletter, NiuSwire, to keep everyone abreast of the latest news across the company. In Singapore, we hold monthly town hall meetings where the Managing Director provides an update to the employees.



Percentage indicates the number of respondents who agreed/ strongly agreed with survey questions relating to Alignment and Engagement and were compared to a the surveying company's database of 420 other organisations.

The overall results give us a reason to celebrate as a company. We have significantly improved our alignment and engagement over the 2012 survey results.



**Diversity in the Workplace/ Human rights**

CNCo is committed to providing an inclusive work culture. We appreciate and recognise that all individuals are unique and valuable and should be respected for their abilities.

CNCo does not tolerate harassment or discrimination of any kind. Our Corporate Code of Conduct requires all employees to behave with courtesy and respect towards everyone encountered in the course of the business.

We take a strong stance with regards to any forms of harassment in the workplace and have a robust system in place to address such situations in a timely manner.

We have a policy on Diversity and Inclusion. When recruiting new employees, CNCo ensures that Persons with Disability (PWD) with the skill set matching our requirements are considered in the selection process. In 2014, we employed one person with a physical disability in our Singapore office.

Human Rights (and Diversity and Inclusion) are of great importance to our stakeholders and for the sustainability of our business. Accordingly we ensure that we cover those topics in our induction training as well as during relevant courses and forums.

**CNCo appreciates and recognises that all individuals are unique and valuable and should be respected for their abilities.**





### Performance, career development and training

CNCo places an emphasis on performance management as the key factor to achieving organisational goals and delivering quality services. In 2014, we introduced a new Smart Goals system to make the process more structured and consistent across the group. We believe that investment in our people is critical to the success of our business.

#### *Shore staff*

CNCo continues to invest in learning and development. In Singapore, our shore staff attended 4,000 hours of training with a total cost of S\$200K. In Australia, training for shore staff covered 1,003 hours with a total cost of AUS\$54K and in New Zealand, shore staff received 1,000 of training hours with a total training cost of NZ\$36K.

#### *Sea staff*

CNCo places significant emphasis on safety training for our seafarers. In 2014, CNCo ran a total of 18 Safety Awareness Courses (SAC). These are discretionary training courses, not required under the SOLAS/ STCW, but which CNCo considers to be very important. The goal of the SACs is to emphasise and reinforce the company's safety culture and promote zero harm. The SAC emphasises practical safety management skills, explores the benefits of

leading safety indicators, and looks at accident root cause analysis, proactively recognising hazards and understanding safety control, mitigation and recovery measures.

Out of the 13 SACs in PNG, 11 SACs were held at the National Maritime College in Madang and two in Port Moresby. These courses were aimed at locally employed seafarers from three companies - CNCo and our sister companies, Consort Express Line (CEL) and Steamships Trading Company (STC). The SAC is conducted separately for officers and ratings, with officers undertaking a four-day programme and ratings a two-day programme.

CNCo ran a total of four SACs in Singapore and one in Ukraine for our senior officers. SAC is also always carried out prior to the delivery of our new vessels, and includes "Log/Timber Carrying Training" for the officers and crew identified for our B.Delta39 log-fitted ships.

Our Cadetship Programme is on-going with cadets from China, Hong Kong and from the South Pacific Islands. As a strategic sustainability objective, CNCo has committed to recruit 15% of our required cadet intake from our major stakeholder communities in the South Pacific Islands by the end of 2016 (which has been met already) and 25% by the end of 2020.

In 2014, 140 CNCo seafarers received training at a total cost of US\$2.4M.



### Performance management

All CNCo seafarers receive a performance evaluation review conducted by the Captain and Chief Officer twice a year. The appraisal looks at specific skills set, personal characteristics, teamwork and leadership qualities, among others. The process highlights areas for improvement and training opportunities as well as individual strengths and feeds into the recognition and promotion programme.

For shore staff, performance management is done using the Smart Goals system. Performance assessments include a review of smart goals, performance against Swire values and job competencies. All shore staff undertook their annual performance assessments in 2014.



### First time at sea

For my first ship I signed up on *MV Shuntien* straight from the shipyard. I saw how the ship was constructed part by part, a unique experience that not every cadet gets to see. During my first month, I experienced many operations onboard the vessel. I learnt a lot, from how to organise stowage to checking equipment to proper cargo lashing and much more.

The crew mates onboard the vessel are nice and friendly. Everyone is willing to teach me how things work. A sense of humour always helps to keep things interesting, while having a chat every now and then in the lounge helps me relax.

*Wai Chun Michael Lee / Cadet*





### Management Trainee Programmes

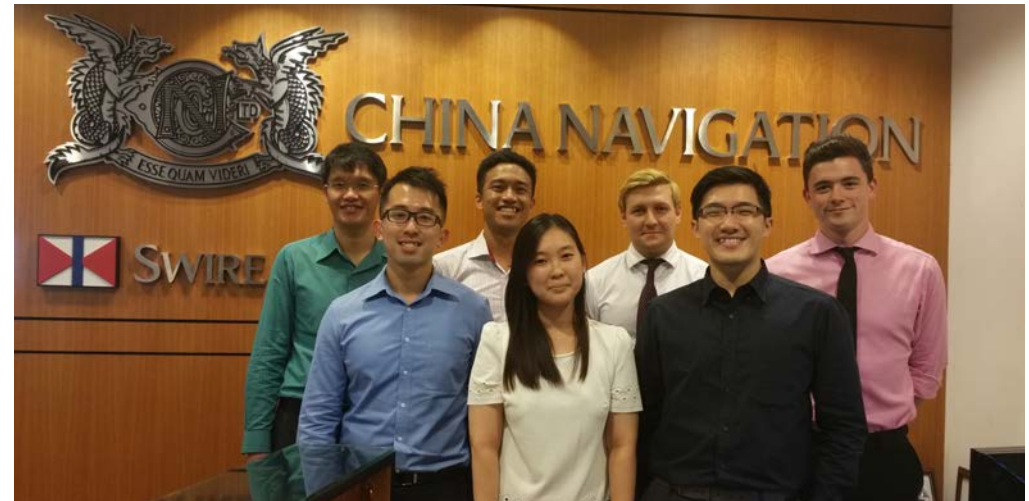
There are two management training programmes in CNCo. The first is our graduate trainee programme where we hire new graduates from universities in Singapore, and the second is the John Swire and Sons (JS&S) management trainee programme, designed to develop candidates for leadership roles within the wider Swire group.

For the Singapore management trainees, CNCo offers a multi-year structured job rotation that provides graduates with opportunities to work and become proficient in different sectors of our shipping business. This programme aims to accelerate the professional development of

young graduates, imparting them with business and industry knowledge, while deepening their cross-cultural learning – all valuable experience for their future as CNCo and Swire leaders.

Management trainees from JS&S are seconded to CNCo for a period of time before moving on to other businesses within the Swire group. All our graduates share a common interest in shipping and we are excited to see how they energise our workforce and develop their careers in the coming years.

The aim of the programme is that, upon completion, our young talent will be ready to take on more responsibilities and contribute towards their chosen area of expertise.



Left to right:

Gary Chin, Loh Zhanwen, Ooi Kang Sheng, Quah Su Xiang, Antony Riley, Joel Ng, Henry Stones

#### Ooi Kang Sheng Commercial Management Trainee

A graduate from the Singapore Management University, Kang Sheng started his career with CNCo in August 2014. He was placed in CNCo's Swire Shipping division after a month-long induction onboard *MV Szechuen* which gave him an opportunity to gain first-hand experience of CNCo's activities.

"The maritime industry is definitely an eye-opener, and I am thankful to be surrounded by many supportive colleagues and supervisors who are so generous in imparting their knowledge of this industry. CNCo's learning culture plays a vital role in my development. I strongly believe that CNCo is the right company to begin my career. For now, my goal is to study the organisation in detail, and understand how various functions operate. Following which, I hope to gather a more hands-on experience."

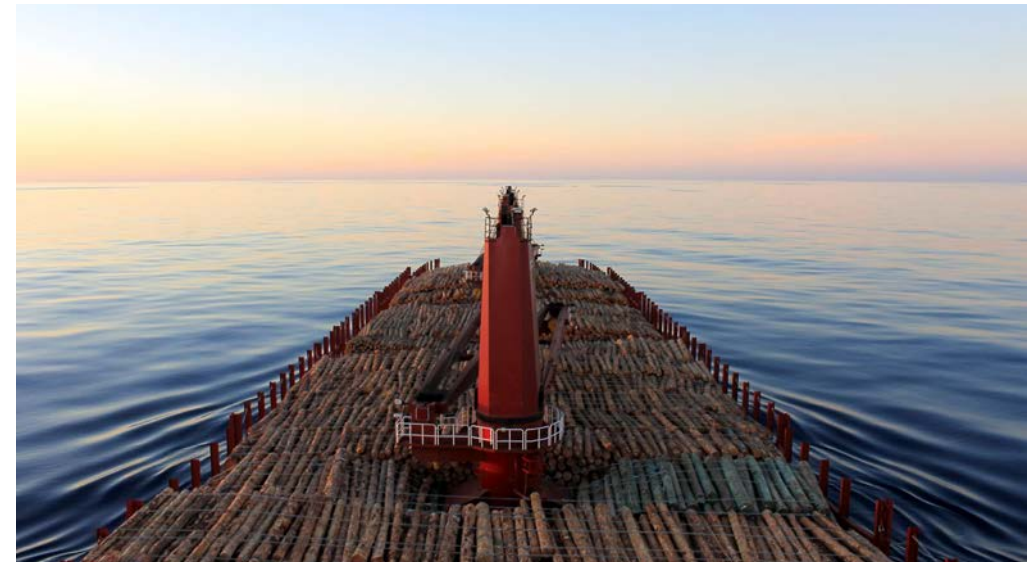
### Anti-competitive behaviour, anti-trust, and monopoly practices

CNCo takes industry practices very seriously and requires both our employees and contractors to display the highest ethical standards, as described in our Corporate Code of Conduct.

In 2014, CNCo was not involved in any legal actions for anti-competitive behaviour, anti-trust, or monopoly practices. As a prudent and responsible ship owner and operator, we will be introducing clear policies and guidelines in this area in 2015.

In late 2014, CNCo hired a Group Purchasing Manager (GPM) to be responsible for the overall procurement strategy across the group. The Sustainable Development team has been working with the GPM to develop the audit process of our suppliers to ensure full compliance with our Supply Chain Sustainability Code of Conduct.

### CNCo takes industry practices very seriously and requires both our employees and contractors to display the highest ethical standards



### Ethics and anti-corruption

CNCo does not tolerate any form of corruption and we expect all employees to live up to the high ethical standards as set out in our Code of Conduct.

CNCo's requirement for probity, transparency and accountable conduct in all business dealings is highlighted to all our staff upon joining the company. A copy of our Code of Conduct is given out to every new employee during their induction.

Following the introduction of Code of Conduct training for our shore staff in Singapore, the training has been rolled out to other offices

and training sessions have been held in Australia, Canada, China, Hong Kong, New Zealand, Taiwan and UK. An online Code of Conduct quiz was also conducted to ensure full understanding. All our employees are expected to obtain the maximum score. Participants who do not meet this requirement are mentored through the quiz until they do. The test is repeated biennially to refresh our employees' awareness with the content of the Code. The quiz was completed for our Australian, Canadian and New Zealand offices in 2014.

We have also produced, with the support of John Swire & Sons Ltd, a CNCo specific video explaining the Code of Conduct.

We believe in doing the right thing for our communities and we invest in worthy causes. We support charities and community organisations as well as our employees in need. Our support for the communities focuses in the areas of Education, Community, Health, Youth, Environment and Biodiversity.



## Supporting our seafarer community

We are committed to supporting The Mission to Seafarers (MtS) and The Sailors' Society through fundraising events and donations, providing care and support to seafarers around the world.

## Supporting our community

As a company, we are committed to establishing long term, mutually beneficial relationships with our partners and our communities.

CNCo supports our communities in times of need through the provision of pro bono (free) or discounted shipments. In the past, we have worked with charitable organisations to deliver emergency items to Dili (East Timor), Honiara (Solomon Islands), Alotau (PNG) and the Kingdom of Tonga.

## Supporting seafarers worldwide

CNCo contributes towards the good work of the MtS globally. MtS runs the International Drop-In Centre (IDIC) located in Singapore's Jurong Port and plays host to thousands of seafarers who need a safe and relaxing place to rest when they come ashore. In 2014, CNCo's support allowed the MtS to enhance the level of service and daily operations of the IDIC. Our support ensures that MtS continues to further the cause of caring for seafarers and upholding the provision of quality standards of welfare service to seafarers.





### Outreach in the Philippines

CNCo provides ongoing support to the ASSM Dependent's Association (ASSMDA), an independent, not-for-profit association in the Philippines. ASSMDA was formed by the partners and relatives of our Filipino seafarers, and is registered with the Philippine Securities and Exchange Commission.

They direct their efforts towards assisting seafarers' families in times of need. They run projects to improve livelihoods through organising activities such as making candles, dishwashing liquids, fabric conditioners and bracelets. They can be mobilised very quickly to assist with relief work due to natural

disasters, such as Typhoon Haiyan/ Yolanda which we reported in 2013.

### Outreach in PNG

CNCo has been running SACs at the Maritime College in Madang, PNG. In 2014, we provided funds to carry out a site inspection and determine the cost of repairs for their Engine Control Room simulator system following a small fire in the control system hardware.

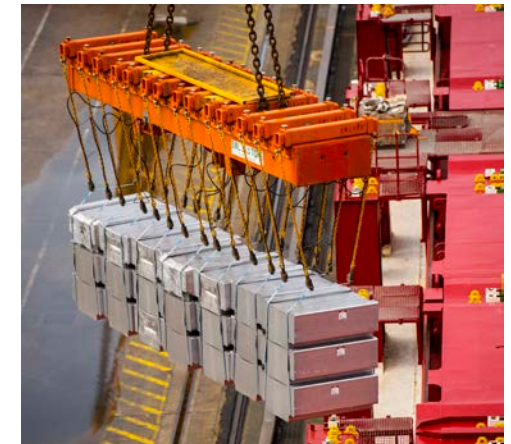
We also sponsor young people through primary/ secondary/ technical/ vocational education in Madang. We are looking at extending this support through our SwireSPORT programme, working in partnership with local sporting

associations to provide coaching for youths in PNG and the Solomon Islands.

### Strategic partnerships for sustainable development

CNCo takes a proactive approach towards operational improvements that can be made to deliver sustainability benefits combined with cost savings.

Swire Shipping works in partnerships with a number of clients such as Bell Bay Aluminium, Inghams, Starkist and Sunrice, to promote a more sustainable way of running operations and reducing our collective environmental impact.



Top and above: Bell Bay Aluminium/ Photo: Rob Burnett



### Assisting those in need

In May 2014, Swire Shipping provided a charity shipment of computers, filing cabinets, keyboards and related office supplies from Sydney to Nuku'alofa, Tonga. This shipment was sent to the island of Ha'api which suffered devastation from Cyclone Ian through the National Emergency Management Office of Tonga.

Another example of assistance included the free shipment of clothing, kitchen utensils, and building materials donated by New Zealand communities to flood victims in the Solomon Islands' capital, Honiara. The shipment was delivered to the National Disaster Council in Honiara.



Containers being packed

### Annual sustainability challenge

Since 2009, CNCo has partnered the Forum for the Future (FFF), a not-for-profit organisation which works globally with businesses to address sustainability challenges. Our partnership helps us to proactively address and challenge our business strategy, ensuring that our commitment to sustainability translates into measurable and meaningful actions. This is done through annual meetings during which the company's leaders and FFF work together to make CNCo a more sustainable organisation. In 2014, CNCo provided office space to their start-up office in Singapore on a pro bono basis.



### Supporting scientific research

CNCo works with a number of scientific organisations such as the Commonwealth Scientific Research Organisation (CSIRO) and the National Oceanography Centre at the University of Southampton to facilitate data collection using CNCo vessels. The data is used to study the changes in the weather patterns and the roles of the oceans as carbon sinks as well as the distribution of marine life.

### Corporate philanthropy and volunteering

In 2014, CNCo developed and launched a Voluntary Work Leave Policy to encourage employees to volunteer for a charity of their choice. Following the launch of this policy, we introduced Corporate Volunteering to our Singapore based employees by organising an

awareness session conducted by Corporate Ambassadors from the National Volunteer and Philanthropy Centre and held two beach clean-up events in Singapore. We also contribute towards the Swire group Charitable Trust that works with various non-governmental organisations and educational institutions in Hong Kong and China to support education, arts and culture and environmental initiatives.

In order to measure the impact and success of our Corporate Philanthropic projects, CNCo developed a Social Return on Investment (SROI) framework or methodology which we apply to longer term/ larger projects.

Going forward we would like to encourage more employee volunteering activities and are aiming to engage at least 10% of our Singapore based staff in voluntary work that is sponsored, organised, or approved by the company.

### ASSMDA Medical Mission

In September 2014, ASSMDA embarked on a medical mission at Pila Laguna. 12 healthcare workers accompanied the members on the trip to the remote areas of the Philippines where they distributed medicine to hundreds of people who required assistance and medical supplies. In addition, ASSMDA raffled 30 solar lamps and food items to assist families during brownouts that were occurring as a result of recent typhoons.



ASSMDA members with the medical supplies at the Medical Mission

Going forward we would like to encourage more employee volunteering activities and are aiming to engage at least 10% of our Singapore based staff in voluntary work that is sponsored, organised, or approved by the company.



We continuously work towards our goal of zero harm and zero injuries. We are committed to maintaining the highest safety standards and preventing accidents throughout the group. By having a strong safety focus together with robust reporting and learning culture we make safety everyone's priority.

The safety initiatives introduced in 2011 and 2012 continue to play their part in ensuring that risks are controlled more effectively as the fleet size expands.

The safety initiatives introduced in 2011 and 2012 continue to play their part in ensuring that risks are controlled more effectively as fleet size expands. However, there were four LTIs in 2014; one more than in 2013 weighted against an increase in fleet size from 21 to 28 ships for the same period.

A monthly report is issued by the DPA to the Fleet with all safety and quality data consolidated to disseminate information on leading and lagging indicators to the Fleet. This information is reviewed during OHSE meetings. Comments and remarks are reported back to management.

CNCo's reporting and learning culture remains positive. Near Miss Reporting – the reporting of leading indicators (e.g. near misses) fell

by 15% in response to the increase in TRIP reporting where hazards are identified before a work activity begins. (The policy not to prescribe a number of near miss reports remains, relying on the openness to report, the integrity of our staff and our belief in a Just Culture approach to reporting).

Instruction is provided at all internal Safety Awareness training sessions to ensure that the usage of near miss reporting as a proactive safety tool is clearly understood.

TRIP activity creates a greater focus on safety for all work activities and has a positive impact on the number of near miss reports. It also identifies potential hazards so that control measures can be implemented before commencing any work.



*Right: Log lashing course*





There was a 51% rise in the number of TRIP reports in 2014, averaging 155 per ship per month, up from 103 for the year 2013. CNCo places considerable emphasis on the quality of the TRIP report. These reports are regularly reviewed by ship managers during vessel inspections and town hall meetings.

Three Port State detentions were recorded in 2014 (*Island Chief*, *Coral Chief* and *Kokopo Chief*).

As a result, a “Quality Improvement Plan” was launched and will be monitored on a regular basis until improvements are confirmed and sustained. The plan will be controlled by a visual management process for defects.

Further, CNCo’s new crew management software platform, “Compas” (planned to be introduced in 2015) will help to ensure that the right levels of experience, leadership and competencies are allocated to each ship across the fleet.

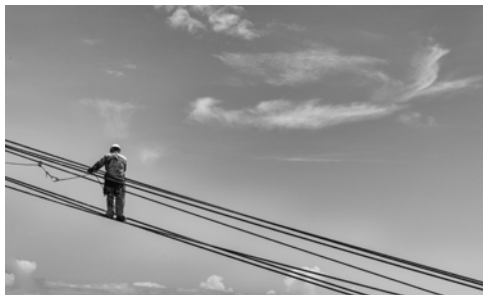
The objectives of the “Quality Improvement Plan” have been communicated to the Flag State and to the relevant Port State Control authorities.

Ship Management teams and independent auditors carried out over 50 Technical Inspections (SMTI) in 2014 and every ship has undergone a Safety Quality Control Inspection. The process for reviewing the findings has been accelerated to ensure that defect reporting and timely corrective action is prioritised.

Stricter sanctions for poor performance have been applied following a thorough review.

The 4-Box Alert continues to be a powerful and highly visual management tool where learning from an incident can be captured quickly. The scope of 4-Box alerts has widened and is used for all shore related incidents of a severe nature (ie actual injuries which result in a LTI or severe near misses).

The full CNCo Safety Statistics for sea staff can be found in the data section on page 37.



Ship Management teams and independent auditors carried out over 50 Technical Inspections (SMTI) in 2014 and every ship has undergone a Safety Quality Control Inspection.

## CNCo is committed to Zero Pollution Incidents and ultimately to a Net Zero Impact on the Environment.

### Carbon Footprint at Sea

We monitor emissions for each ship on both a ‘per voyage’ and an annual basis and have targets in place to reduce these emissions. We use the IMO EEOI metric (Energy Efficiency Operational Index or the energy we expend moving one tonne of cargo, one nautical mile) as our baseline.

The EEOI figures for both our liner and bulk fleets show a downward trend (using a rolling six month average to remove the data noise from seasonal weather events and trade flows).

This is largely a result of using more fuel efficient ships, rationalisation of the individual trades, and a higher focus on the operational efficiency of each trade.

To enable us to track our bulk and liner fleets together to benchmark how the CNCo group is performing against our internal KPIs to reduce emissions, CNCo has produced a simplified “whole fleet” EEOI metric that we have termed FOE or Fleet Operational Efficiency. As the two types of ships have very different absolute values for their EEOI, we combine the bulk

fleet EEOI as constituting a relative 50% of our FOE and the liner fleet EEOI as providing the balance of 50% to give a single global figure showing how the company’s GHG footprint reduction is performing as a whole.

We have set an internal target of reducing our FOE to 20% below our baseline by the end of 2016 and 50% below our baseline by the end of 2020. This is a key goal to advance our journey towards “Net Zero Environmental Impact”. Our progress since 1 Jan 2013 is shown in the graph on page 39.



### Shipping containers turned green

CNCo introduced a new generation of eco-friendly shipping containers with the support of the JS&S Sustainable Development Fund.

Our “Green Boxes” are manufactured using a two coat water based coating (Valspar) which eliminates the use of solvent based, zinc-rich three coat system. This process allows us to reduce Volatile Organic Compounds (VOC) emissions by 94%. For each 1,000 green boxes CNCo built, approximately 22 tonnes of VOC emissions are eliminated.

We also replaced wood flooring with bamboo as a more sustainable option cutting back on the use of timber. This initiative has a positive impact on the environment by reducing emissions and taking us one step closer towards our long-term goal of Net Zero Environmental Impact.

### Carbon Footprint Ashore

Our energy consumption ashore reduces year on year through more appropriate sizing of our main offices and we expect to see another improvement in 2015 as the various Singapore offices in split locations are further rationalised. Our business travel footprint has increased by a similar percentage to the owned and managed fleet size. This does not include the additional trips recorded due to the acquisition of Polynesia Line in mid-2013 and Pacifica in early 2014, and the work that has been undertaken to grow the business of Swire Bulk Logistics.

The annual CNCo group (at sea and ashore) GHG emissions figures for 2014 and comparisons with earlier years can be seen in the table on page 38. The figures for Scope 1 and 2 GHG emissions from 2013 to 2104 are not comparable with each other as the methodology of data aggregation has changed.

### Zero Oil Spills

There were no spills of substances hazardous to the marine environment in 2014. Our target for any oil spills of any size from our fleet continues to be ZERO.

### Environmental Training Protection

Training in environmental protection is conducted through CNCo's Computer Based Training programme which includes a post training assessment. This is carried out every three years and is a mandatory requirement for every officer and rating.

There were no spills of substances hazardous to the marine environment in 2014. Our target for any oil spills of any size from our fleet continues to be ZERO.







### Eco-friendly Ship Design

Our commitment is incorporated into the design of our new S and Chief-Class vessels. Some of the features of these new vessels include:

- Using exhaust gases from the main engine as well as generators for the production of steam.
- Using a hull form that optimises cargo capacity for low fuel consumption.
- Wake ducts to improve (propulsion) efficiency.
- Cargo cranes that consume 35% less power than conventional electro-hydraulic cranes. The absence of hydraulic oil also eliminates possibilities of environmental spills.
- Adoption of a newly designed Sea Water Cooling System that utilises variable frequency motors on pumps for the main engines and generators on board.

CNCo has also invested heavily in projects with sustainability benefits to minimise our environmental impact:

- Introduced trim optimisation for enhanced fuel savings.
- Use of premium hull coatings on all new and existing vessels.
- Installed slide valves on main engines of existing vessels - for slow steaming and to reduce NOx output. This produces an estimated annual saving of 17,000 tCO<sub>2</sub>e (2.4% of our total emissions).
- Installing Kongsberg's Marorka™ as the energy management system on our new vessels has allowed us to optimise vessel speed and fuel consumption to further reduce emissions.
- Ballast water treatment system.
- Advanced incinerator and oily water separator plants.
- Large black and grey water storage tanks.
- Low powered energy efficient lighting.

**CNCo has invested heavily in projects with sustainability benefits to minimise our environmental impact.**

### Hong Kong Civic Exchange's Fair Winds Charter

CNCo maintains active membership of the Hong Kong Civic Exchange's Fair Winds Charter in voluntarily switching to low (or ultra-low) sulphur content fuel within Hong Kong port limits.

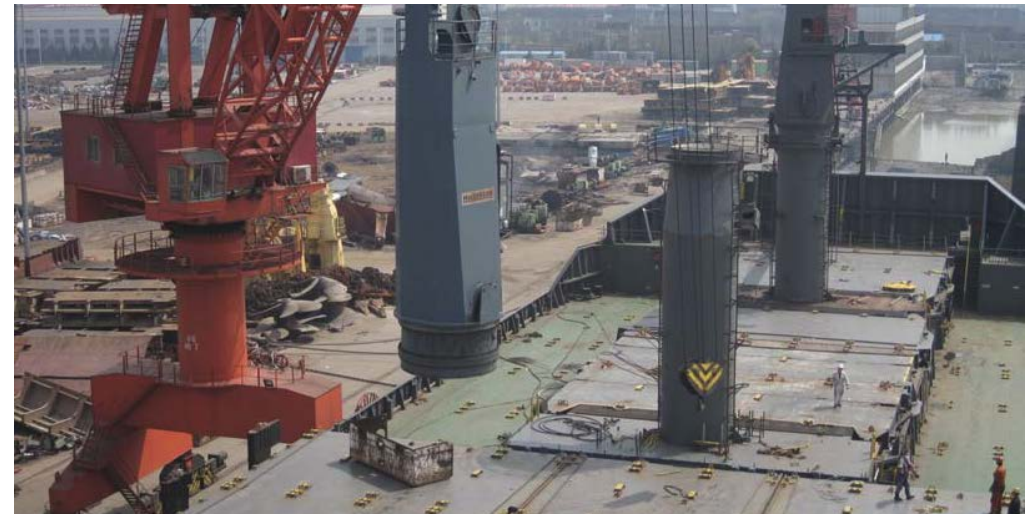
Our membership of this voluntary initiative is expected to lead to local legislation to comply with the use of low sulphur fuel when in port limits during 2015. This means we will have a level playing field and a marked lower air pollution level in the local environment.

We are closely monitoring the increased interest in littoral communities in other areas with

respect to potential pollution from emissions in waters close to urban conurbations and the outcome of the UNFCCC CoP21 meeting.

### Sustainable Ship Recycling

We are also committed to Sustainable Ship Recycling. Our policy requires acceptable ship recycling facilities to adhere to the Hong Kong International Convention (even prior to its full ratification) and to be certified by a reputable independent third party to ISO 9001:2008, ISO 14001:2004, OHSAS 18001:1999 or alternately ISO 30000:2009.



### Commitment to Reduce-Reuse-Recycle

During the green recycling of four D Class ships - *Pacific Java*, *Pacific Flores*, *Pacific Celebes* and *Pacific Makassar* in 2012, we removed eight modern cargo cranes for second hand market resale at a later stage. Four sets of cranes were sold in 2012 and the remaining four cranes were purchased by a second-hand machinery broker in 2014.

Left:  
Ships beached in India undergoing recycling



### Looking forward to 2015 and beyond

CNCo is:

- Exploring the use of using alternative, lower carbon fuels such as LNG and Bio-Diesel.
- Investigating the use of fuel derived from waste fats to power CNCo ships and working with Wärtsilä to explore the technical issues associated.

- *MV Papuan Chief's* main engine will be fitted with the first Chinese built High Pressure Selective Catalytic Reactor when she is delivered in August 2015. The objective of the trials will be to show that SCRs can enable two stroke engines to meet the new Tier 3 NOx rules. This is being done ahead of the legislation which will come into effect in January 2016 for all new vessels.

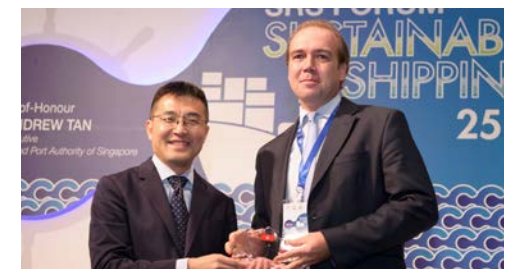
- In our offices we are applying eco-office principles such as reduced electricity usage, usage of FSC certified paper, double-sided printing, more efficient use of air-conditioning/ heating, and good recycling practices to further reduce our carbon footprint wherever possible.



### CNCo showcases its Sustainability Journey

The Singapore Registry of Ships (SRS)/ Maritime and Port Authority of Singapore (MPA) held its first Sustainable Shipping Forum in November 2014.

This forum was an excellent platform to exchange insights and raise greater awareness on sustainable shipping efforts, and create thought leadership in the area of sustainable maritime transportation system. CNCo shared its work with the Sustainable Shipping Initiative and other sustainability initiatives at this forum.



Mr. Andrew Tan, CE, MPA with  
Tim Blackburn, MD, CNCo.



## Hong Kong Ship Owner of the Year

CNCo was presented with the Hong Kong Ship Owner of the Year award at the Seafarer's Awards 2014 in Hong Kong on 13 November 2014. MtS, in cooperation with the Hong Kong Ship Owners Association surveyed over 4,000 seafarers asking how they are respected, valued and retained by ship owners/ managers. From the responses received, CNCo was nominated as the Hong Kong Ship Owner of the Year.

## Lloyds List Global and Asia Awards 2014

CNCo was a finalist in both the Global and the Asia awards in the Safety category. CNCo's submission focused on Swire values as a driver for sustainable performance now and into the future.

## Seatrade Asia Awards

For the second consecutive year, Swire Shipping, was presented with the prestigious Ship Owner/ Operator award at the annual Seatrade

Asia awards ceremony held in Singapore on 7 April 2014. These annual awards recognise achievements in the Asian shipping industry.

## International Seafarers' Welfare Awards

CNCo was shortlisted for the Shipping Company of the Year award at the International Seafarers' Welfare Awards, aimed at showcasing best practice in seafarers' welfare in the maritime industry. The ceremony took place on 7 April 2014 at the UN ILO in Geneva.

## Recognition for Green Shipping

The Green Ship Programme under MPA's Maritime Singapore Green Initiative encourages Singapore-flagged ships to reduce carbon dioxide (CO<sub>2</sub>) and sulphur oxide (SO<sub>x</sub>) emissions.

CNCo was presented with Green Ship Certificates for four newly built ships:

*MV Soochow, MV Szechuen, MV Eredine and MV Erradale*



Hong Kong Ship Owner of the Year  
Doris Luk with Reverend Stephen Miller



Above Mr. Andrew Tan, Chief Executive of the Maritime and Port Authority of Singapore, presenting a Green Ship certificate to Tim Blackburn

Left Seatrade "Ship Owner/Operator Award" 2014 Swire Shipping Singapore team at the Awards ceremony



The China Navigation Company Pte Ltd. (CNCo) is a Singapore registered company that is a wholly owned subsidiary of The China Navigation Company Limited registered in London. Neither company is publicly listed on any stock exchange.

As can be seen from the Organisational and Operational Boundaries diagram (see page 5), The China Navigation Company Limited is also the parent company for Swire Shipping branded agency companies in Australia, PRC, Hong Kong, New Caledonia, New Zealand, and Taiwan. It also has a 50% share in Polynesia Shipping Services Limited and Swire CTM Bulk Logistics Limited, a joint venture with C Transport Maritime SAM registered in Monaco, a 25% share in Mandarin Shipping Limited registered in HK and is a joint managing shareholder of Quadrant Pacific Ltd., one of New Zealand and Norfolk Island's leading shipping agency and logistics companies.

The parent company's Board of Directors is the highest level governance and oversight body and sets strategy for its subsidiary companies. The Chairman of the parent company Board of Directors is Mr. B. N. Swire. The CNCo Board of Directors provides organisational oversight and comprises nine members of whom four are non-executive directors including two independent directors.

CNCo has a Sustainable Development (SD) Steering Group comprising the MD, the Fleet Quality Assurance Manager and DPA, the Global Operations Manager for Swire Shipping (and head of the Shore-side Safety Committee) and the GM for SD. This group meets quarterly and reviews all strategic aspects of SD, in particular Health, Safety, Environment, Social and Governance issues, with a view to managing all operations in accordance with our SD Policy.

There are also SD Working Committees which comprise cross-functional representatives who meet quarterly in Singapore and the main regional offices of Sydney and Auckland. They seek to operationalise the guidance and strategy set by the SD Steering Group. An HR Welfare Group was also set up in Singapore during 2014 with oversight of the social/people matters, some of which are related to sustainability issues.

The shareholders are directly represented on the CNCo Board of Directors and use this forum to give governance direction to the company. While CNCo has no direct public shareholders, it manages and operates all its businesses in compliance with both the John Swire and Sons (UK) and its own Code of Conduct <http://bit.ly/1NIS9QD>.



Our Board is committed to observing robust corporate governance practices, and senior management conducts regular reviews of current practices including reviews of CNC's Enterprise Risk Management framework to ensure:

- the interests of stakeholders are safeguarded;
- overall short and long term business risk is understood and managed appropriately;
- high-quality services are delivered to the satisfaction of our customers; and
- that the highest standards of ethics are maintained by our employees in all dealings.

The GM of SD directly reports to the MD and is a member of the Executive Committee, allowing him to provide relevant input in the early stages of all strategic decision making.

The DPA has been an internationally legally required position since 1993, peculiar to the shipping industry under the ISM code, where every Company must designate a person or persons ashore having direct access to the highest level of management. The responsibility and authority of the designated person or persons includes monitoring the safety and pollution prevention aspects of the operation of each ship and ensuring that adequate resources and shore-based support are applied, as required.

Our Board is committed to observing robust corporate governance practices and senior management conducts regular reviews of current practices including reviews of CNC's Enterprise Risk Management framework





This section reports all the supporting data that is used to provide the narrative in the Detail section. The data is aggregated from many sources - primarily the owned and managed fleet and our offices worldwide, that are contained within CNCo's Organisational and Operational Boundaries. We review both the boundaries and which data is material for reporting to our stakeholders annually.

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In this section:

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34	Fleet Profile
36	New Building Programme
37	Safety Statistics
38	Environmental Summary
39	Consolidated Fleet Operational Efficiency
40	Materiality Index
41	Abbreviations
43	Contact
44	GRI Accreditation Statement

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In Operation as at 31 Dec 2014

Vessel Name	EVDI or EEDI	Rightship GHG Emissions' Rating	Year Built	IMO No.	DWT (SSW MTs)	GT	NT	LOA (m)	Max Breadth (m)	Capacity Nominal (TEU)	Hold Capacity - Bale (m³)	Hold Capacity - Grain (m³)	Cargo Gear (T)	Country of Registration	Status	Vessel Type
Island Chief	19.497	B+	1990	8810449	13387	10352	5804	158.1	22.0	981	N/A	N/A	3 x 45T	Hong Kong	Owned, Managed	Liner
Kiribati Chief	19.211	B+	1990	8809189	13668	10357	5802	158.1	22.0	876	N/A	N/A	3 x 60T	Hong Kong	Owned, Managed	Liner
Melanesian Chief	19.619	B+	1990	8809191	13387	10352	5804	158.1	22.0	981	N/A	N/A	3 x 45 T	Hong Kong	Owned, Managed	Liner
Micronesian Chief	19.630	B+	1991	8901705	13557	10350	5802	158.1	22.0	981	N/A	N/A	3 x 45T	Hong Kong	Owned, Managed	Liner
Kokopo Chief	19.040	B+	1991	8907412	13387	10352	5804	158.1	22.0	981	N/A	N/A	3 x 45T	Hong Kong	Owned, Managed	Liner
Chenan	14.519	G+	1992	9007374	25561	18391	9229	184.9	27.6	1123	32114	34103	3x26T, 2x31T, 1x20T	Hong Kong	Owned, Managed	Liner
Chengtu	14.458	G+	1991	9007362	25561	18391	9229	184.9	27.6	1123	32114	34103	3x26T, 2x31T, 1x20T	Hong Kong	Owned, Managed	Liner
Changsha	15.634	F+	1991	9003847	25561	18391	9229	184.9	27.6	1123	32114	34103	3x26T, 2x31T, 1x20T	Hong Kong	Owned, Managed	Liner
Kweichow	15.710	F+	1994	9070694	25524	18451	8250	184.9	27.6	1257	28831	29819	2 x 26T, 3 x 35T	Hong Kong	Owned, Managed	Liner
Kwangtung	15.297	F+	1994	9070709	25524	18451	8250	184.9	27.6	1257	28831	29819	2 x 26T, 3 x 35T	Hong Kong	Owned, Managed	Liner
Kweilin	15.734	F+	1994	9103104	25410	18468	9201	184.9	27.6	1257	32608	33756	2 x 26T, 3 x 35T	Hong Kong	Owned, Managed	Liner
Kwangsi	15.320	F+	1995	9103116	25607	18468	9253	184.9	27.6	1257	31472	33077	2 x 26T, 3 x 35T	Hong Kong	Owned, Managed	Liner
Ningpo	20.240	D+	1997	9134658	22900	16800	8662	183.9	25.3	1728	N/A	N/A	3 x 40T	Hong Kong	Owned	Liner
Nanchang	21.214	D+	1995	9082805	23016	16800	8662	181.1	25.3	1728	N/A	N/A	3 x 40 T	Hong Kong	Owned	Liner
Ngankin	21.291	D+	1996	9105994	23064	16801	8672	184.1	25.3	1730	N/A	N/A	3 x 40 T	Hong Kong	Owned	Liner
Spirit of Canterbury	24.121	D	2005	9319557	14053	9910	5032	148.0	23.3	1102	N/A	N/A	-	New Zealand	Owned, Managed	CV1100
Shansi	14.720	B+	2013	9614476	30700	25483	11814	199.9	28.2	2118	41881	44807	4 x 60T	Singapore	Owned, Managed	Liner
Shantung	14.449	B+	2013	9614488	30814	25483	11819	199.9	28.2	2118	41881	44807	4 x 60T	Singapore	Owned, Managed	Liner
Shaoshing	14.710	B+	2013	9614490	30769	25483	11808	199.9	28.2	2118	41881	44807	4 x 60T	Singapore	Owned, Managed	Liner
Shengking	14.856	B+	2013	9614505	30813	25483	11813	199.9	28.2	2118	41881	44807	4 x 60T	Singapore	Owned, Managed	Liner
Shuntien	14.538	B+	2013	9614517	30852	25483	11810	199.9	28.2	2118	41881	44807	4 x 60T	Singapore	Owned, Managed	Liner
Siangtan	10.409	A+	2013	9614529	30756	25483	11805	199.9	28.2	2118	41881	44807	4 x 60T	Singapore	Owned, Managed	Liner
Soochow	14.420	B+	2014	9614531	30721	25483	11817	199.9	28.2	2118	41881	44807	4 x 60T	Singapore	Owned, Managed	Liner
Szechuen	14.836	B+	2014	9614543	30688	25483	11813	199.9	28.2	2118	41881	44807	4 x 60T	Singapore	Owned, Managed	Liner

## In Operation as at 31 Dec 2014

Vessel Name	EVDI or EEDI	Rightship GHG Emissions' Rating	Year Built	IMO No.	DWT (SSW MTs)	GT	NT	LOA (m)	Max Breadth (m)	Capacity Nominal (TEU)	Hold Capacity - Bale (m³)	Hold Capacity - Grain (m³)	Cargo Gear (T)	Country of Registration	Status	Vessel Type
<b>Antung</b> (ex MCP London)	23.121	F	2007	9371957	7702	5316	2309	117.0	19.7	618	9523	9522	2 x 40T	Malta	Operated	General Cargo
<b>MCP Famagusta</b>	23.091	F	2008	9371971	7709	5315	2309	117.0	19.7	618	9523	9522	2 x 40T	Cyprus	Operated	General Cargo
<b>Spirit of Endurance</b>	28.898	D	2008	9387607	8211	7464	3085	129.6	20.6	702	N/A	N/A	-	New Zealand	Managed, Operated	Container Ship
<b>Ninghai</b> (ex Robert Rickmers)	20.139	D	2003	9236444	23067	16802	8672	184.0	25.3	1728	N/A	N/A	3 x 40T	Marshall	Operated	Liner
<b>Fernando</b>	12.570	F	2003	9235359	30320	23132	9375	192.9	27.8	1829	24775	24775	2 x 100T, 2 x 50T	Liberia	Operated	MPP
<b>Wuchang</b>	4.713	B+	2013	9657844	39127	24785	12537	180.0	30.0	N/A	47661	48908	4 x 30T + 4 x 12cbm Grabs	Hong Kong	Managed, Operated	Handysize Bulk Carrier
<b>Wuchow</b>	4.772	B+	2013	9657856	39090	24785	12543	180.0	30.0	N/A	47661	48908	4 x 30T + 4 x 12cbm Grabs	Hong Kong	Managed, Operated	Handysize Bulk Carrier
<b>Wuhu</b>	4.709	B+	2014	9657868	39179	24785	12545	180.0	30.0	N/A	47661	48908	4 x 30T + 4 x 12cbm Grabs	Hong Kong	Managed, Operated	Handysize Bulk Carrier
<b>Wulin</b>	4.886	B+	2014	9657870	39047	24785	12538	180.0	30.0	N/A	47661	48908	4 x 30T + 4 x 12cbm Grabs	Hong Kong	Managed, Operated	Handysize Bulk Carrier
<b>Eredine</b>	4.646	B+	2014	9681871	39855	24785	13019	180.0	30.0	N/A	48908	47181	4 x 36T	Singapore	Managed, Operated	Logs-Fitted Handysize Bulk Carrier
<b>Erradale</b>	4.677	B+	2014	9681883	39757	24785	13021	180.0	30.0	N/A	48908	47181	4 x 36T	Singapore	Managed, Operated	Logs-Fitted Handysize Bulk Carrier
<b>Erisort</b>	4.531	B+	2014	9681895	39763	24785	13022	180.0	30.0	N/A	48908	47181	4 x 36T	Singapore	Managed, Operated	Logs-Fitted Handysize Bulk Carrier



<i>Ship Hull</i>	<i>IMO Number</i>	<i>Name</i>	<i>Estimated Delivery</i>
CX0348	9681900	<b>Eriskay</b>	2014
CX0349	9690884	<b>Fengning</b>	2015
H664	9689938	<b>Coral Chief</b>	2015
ZO665	9689940	<b>Highland Chief</b>	2015
ZO666	9689952	<b>New Guinea Chief</b>	2015
ZO668	9715191	<b>Liangchow</b>	2015
ZO667	9689964	<b>Papuan Chief</b>	2015
CX0350	9690896	<b>Fengtien</b>	2015
ZO669	9715206	<b>Lintan</b>	2015
ZO670	9715218	<b>Luchow</b>	2015
CX0351	9690901	<b>Foochow</b>	2015
CX0352	9690913	<b>Funing</b>	2015
ZO671	9715220	<b>Luenho</b>	2015
ZO672	9721554	<b>Pakhoi</b>	2015
CX0353	9714226	<b>Hanyang</b>	2015
ZO673	9721566	<b>Pekin</b>	2015
CX0354	9714238	<b>Hoihow</b>	2015
CX0355	9714252	<b>Hunan</b>	2016
ZO674	9721578	<b>Powan</b>	2016
CX0356	9714264	<b>Hupeh</b>	2016
ZO675	9721580	<b>Poyang</b>	2016
IM866		<b>Taiyuan</b>	2016
IM867		<b>Tatung</b>	2016
IM868		<b>Tsingtao</b>	2016
IM869		<b>Tunsin</b>	2016
		<b>Aotearoa Chief</b>	2016

**ZO – Zhejiang Ouhua Shipbuilding Co Ltd, China**

4 x Chief Class MPV22k Multipurpose Liners – ZO664 -667  
*All chartered by Swire Shipping*

8 x B.Delta39 - handysize Loggers L, P, Class ZO664 to 675  
*All chartered by Swire Bulk*

6 x Topaz CV1700 Class - Feeder container ships ZO696 - 699  
*Owned by Mandarin Shipping – to be chartered out*

**CX – Chengxi Shipyard Co Ltd, China**

9 x B.Delta39 - handysize Loggers E, F, H, Class CX345 to 356  
*All chartered by Swire Bulk*

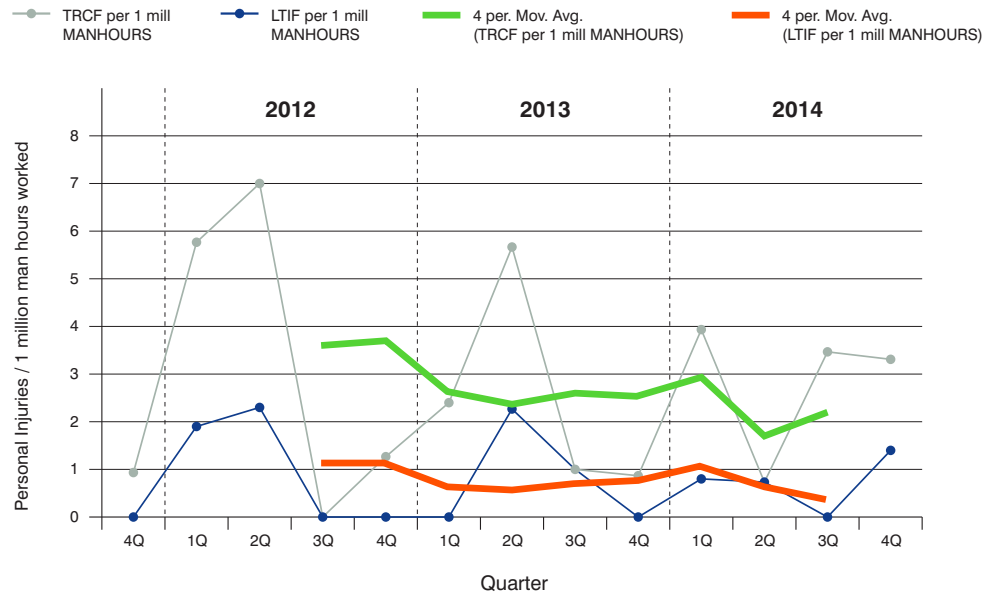
**IM – Imabari Shipbuilding, Japan**

4 x Imabari38 Loggers – handysize bulkers IM866 – 869  
*All chartered by Swire Bulk*

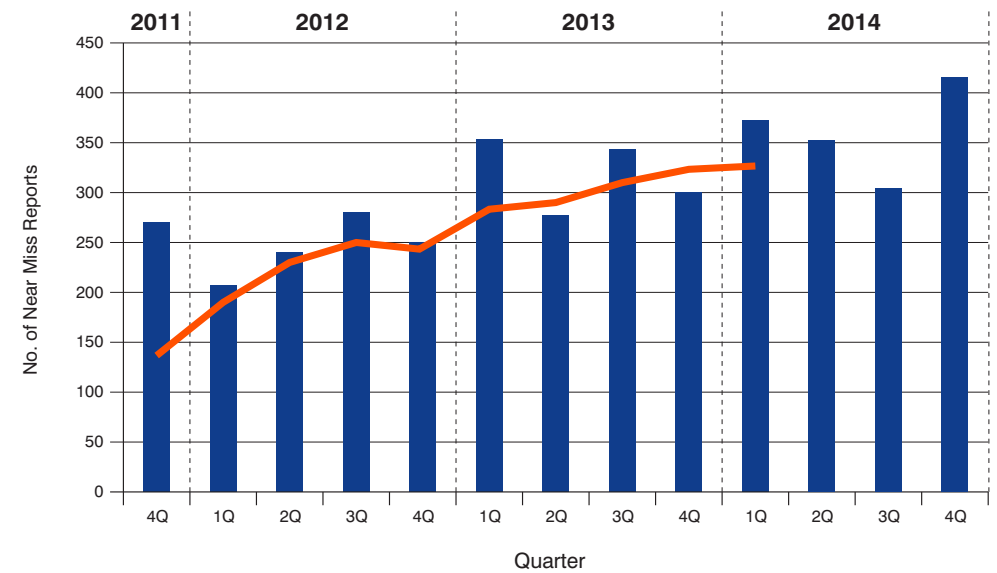
**Aotearoa Chief**

1 x 9000t Cement Carrier  
*To be chartered by NZ client*

## Injuries



## Near Misses



	2008	2009	2010	2011	2012	2013	2014
<b>Total vessels (owned and managed/operated)</b> <i>as at 31 Dec</i>	51		34	35	15 (plus 16 u/c)	24 (+4 managed)	31 (+6 managed)
<b>Scope 1 &amp; 2 emissions (tCO<sub>2</sub>e)</b>	1,059,271		661,041	690,242	610,558	625,426	479,486
<b>% GHG emissions of CNCo group that comes from marine fuel</b>	(99.9% marine fuels)	(99.9% marine fuels)	(99.8% marine fuels)	(99.8% marine fuels)	(99.8% marine fuels)	(99.9% marine fuels)	(99.9% marine fuels)
<b>EEOI - liner fleet (tCO<sub>2</sub>e/tm)</b>				30	31	30	27
<b>EEOI - bulk fleet (tCO<sub>2</sub>e/tm)</b>	n/a	n/a	n/a	n/a	n/a	<i>Not a full year's data</i>	7
<b>Scope 2 electricity consumed ashore (tCO<sub>2</sub>e)</b>				286	237	241	197
<b>Scope 2 GHG footprint for business flights (tCO<sub>2</sub>e)</b>				4284	4,547	3,098	4,467
<b>SOx emissions (mT)</b>	20,987	18,517	11,767	14,776	13,051	13,858	10,458
<b>NOx emissions (mT)</b>				17,506	15,510	16,259	12,236
<b>Particulate Matter emissions (mT)</b>				1,396	1,233	1,313	989
<b>VOC emissions (mT)</b>				261	231	241	185
<b>Spills of substances hazardous to the marine environment (litres)</b>				1 (20 litres oil, with 3 litres entering the sea)		2 (21 litres in total of hydraulic oil or sludge being transferred entered the sea)	Nil

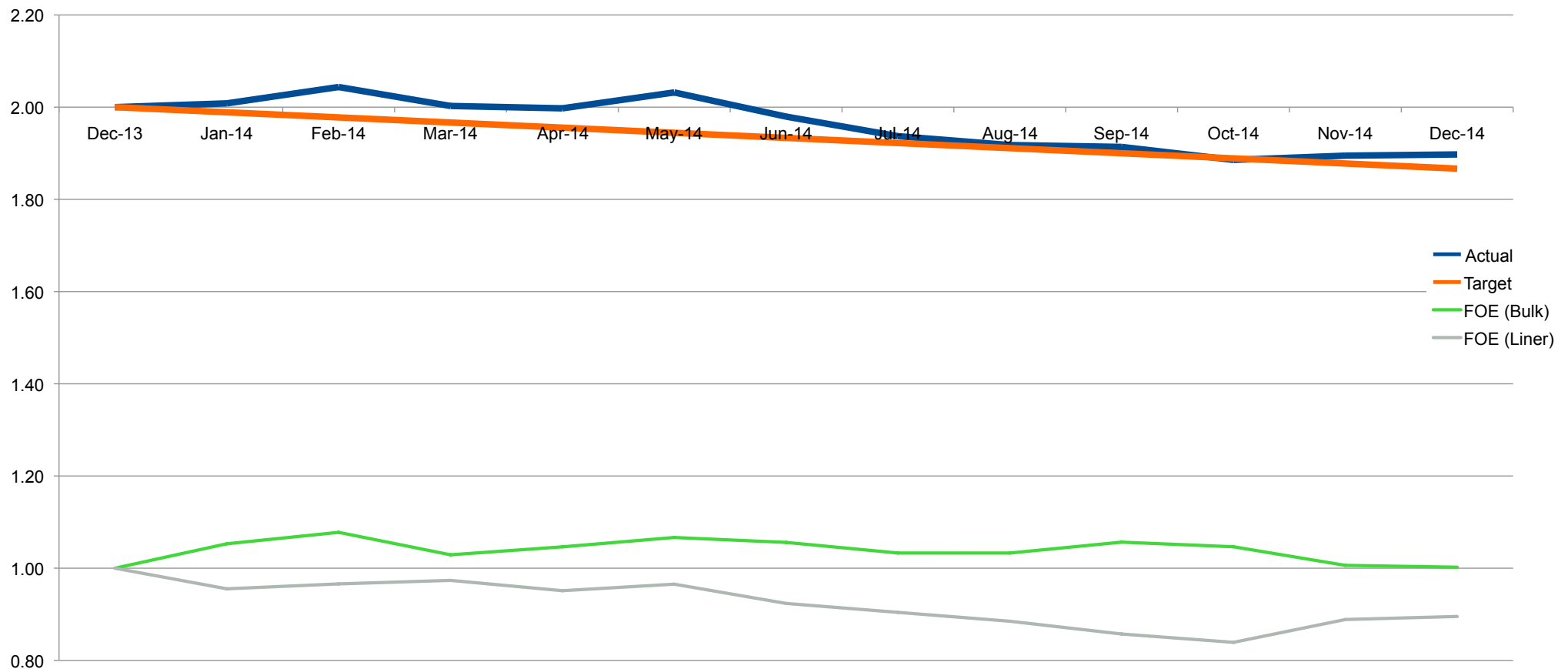


To track our bulk and liner fleets together to enable us to benchmark how the CNCo group is performing against our internal KPIs to reduce emissions, CNCo has produced a simplified “whole fleet” EEOI metric that we have termed FOE or “Fleet Operational Efficiency”.

As the two types of ships have very different absolute values for their EEOI, we combine the bulk fleet EEOI as constituting a relative 50% of our FOE – the green line, normalised as 1 in the baseline

month in the lower half, and the liner fleet EEOI as providing the balance of 50% - the grey line also normalised at 1 at the bottom of this page.

These are then combined to give a single global figure - the blue “actual” figure against the scale of 2 in the baseline month, showing how the company’s fleet GHG footprint reduction is performing against target that declines monthly – the orange line.



The ratings of the various components that make an organisation “Socially Responsible” are shown in Table (below).

This shows that all 12 areas we have identified are important (rated >92%).

Some areas are considered more important than others (e.g. avoidance of pollution of the marine environment, and requiring sound health and safety practices to be followed, rated >97%).

	<i>Importance level of SD area</i>
<b>1</b> We do not cause spills or pollute the marine environment.	<b>97%</b>
<b>2</b> We have sound Health and Safety practices. Health and safety of our staff, clients and their employees is our main priority.	<b>97%</b>
<b>3</b> We are responsible and well governed. We operate ethically, with accountability, transparency and respect for the rule of law. We do not tolerate corrupt practices.	<b>96%</b>
<b>4</b> We take care of our employees, providing good working environment and fair compensation and benefits.	<b>96%</b>
<b>5</b> We respect and add value to the community, providing fair and quality employment opportunities, and deal fairly with any grievances and criticism.	<b>95%</b>
<b>6</b> We show leadership in reducing carbon and other greenhouse gas emissions from our operations.	<b>95%</b>

	<i>Importance level of SD area</i>
<b>7</b> We expect a high standard of sustainable and ethical performance throughout our supply chain. We have a clear Supply Chain Sustainability Code of Conduct and take action to ensure that everyone in our supply chain meets high standards in key areas of environmental protection, workers’ rights, and health and safety performance.	<b>95%</b>
<b>8</b> Our communication with stakeholders is clear, accurate and credible. We have a positive and transparent approach.	<b>94%</b>
<b>9</b> We are among the leaders in the industry with respect to Environmental Performance.	<b>94%</b>
<b>10</b> We encourage our staff, customers and supply chain to act in a socially responsible manner.	<b>93%</b>
<b>11</b> We have a Corporate Philanthropy (charity) programme which provides meaningful benefits to our communities.	<b>92%</b>
<b>12</b> We work closely with both clients and suppliers to help them become more environmentally sustainable.	<b>92%</b>

AMSA	Australian Marine Safety Authority
ASA	Australian Shipping Association
ASSM	Anscor Swire Ship Management manning agency
BHP	Brake Horse Power
CAR	Audit-driven Corrective Action Report
CBA	Collective Bargaining Agreement
CCoC	Corporate Code of Conduct
CFC	Chloro-fluoro-carbon/s
CNCo	The China Navigation Company Pte Ltd
CoC	Certificate of Competency
CSR	Corporate Social Responsibility
DCC	Australian government: Department of Climate Change
DECC	UK government: Department of Energy and Climate Change
DEFRA	UK government: Department for Environment, Food and Rural Affairs
DPA	ISM Code Designated Person Ashore
ECA	Emission Control Area
EEOI	Energy Efficiency Operational Index
EPA	US government Environmental Protection Agency
ETS	Emission Trading Scheme
FOE	Fleet Operational Efficiency
GEDO	Australian government DCC Greenhouse and Energy Data Officer
GHG	Greenhouse Gas/es
GJ (unit)	Giga-Joule, 1 billion joules of energy
GRI	Global Reporting Initiative
HCFC	Hydro-chloro-fluoro-carbon/s
HCV	High Conservation Value

HFO	Heavy Fuel Oil – a residual fuel
HHV	Higher Heating Value, also known as gross calorific value, of a fuel is defined as the amount of heat released by combusting a specified quantity and returning the temperature of the combustion products to 150°C. LHV assumes all the water component is in liquid state at the end of combustion
HOF	Head Office (in Singapore)
HSE	Health, Safety and the Environment
ICAO	Inter Civil Aviation Organisation
IFO	Intermediate Fuel Oil - residual fuel. Usually 180 or 380 CST viscosity. <i>See <a href="http://intertek.ch/schwerol">http://intertek.ch/schwerol</a></i>
IHM	Inventory of Hazardous Material, per the HK Ship Recycling Convention
ILO	(UN) International Labour Organisation
IMO	(UN) International Maritime Organisation
ISM	International Management Code for the Safe Operation of Ships and for Pollution Prevention, (International Safety Management (ISM) Code) as chapter XI of SOLAS
IUCN	International Union for Conservation of Nature and Natural Resources
KBA	Key Biodiversity Area
KPI	Key Performance Indicator
kW hr (unit)	Kilo Watt hour, is a unit of energy equal to 1,000 Watt hours or 3.6 mega Joules
LHV	Lower Heating Value, also known as net calorific value, of a fuel is defined as the amount of heat released by combusting a specified quantity and returning the temperature of the combustion products to 150°C. LHV assumes all the water component is in vapour state at the end of combustion
LO	Lubricating Oil
LTi	Lost Time Injury
LTIFR	Lost Time Injury Frequency Rate



MARPOL	IMO International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 and later
MCA	(UK) Maritime and Coastguard Agency
MDO	Marine Diesel Oil – a distillate fuel
MGO	Marine Gas Oil – a distillate fuel
MHE	Material Hazardous to the Environment
MLC	ILO Maritime Labour Convention, 2006
MTC	Medical Treatment Case
NGER	Australian National Greenhouse Gas and Energy Reporting Act
NI	Nautical Institute
NO <sub>x</sub>	Oxides of Nitrogen
OFW	Overseas Filipino Workers
PM	Particulate Matter
PO	Purchase Order/s
POEA	Philippines Overseas Employment Agency
PSI	Port State Inspection, DPI: Deficiencies per Port State Inspection, CARB: California Air Resources Board, PSCI: Port State Inspection Compliance Index, TRCF: Total Recordable Case Frequency Rate
QHSE	Quality, Health, Safety and Environment
RFQ	Request For a Quote
RWC	Restricted Work Case
SD	Sustainable Development

SECA	Sulphur Emission Control Area/s
SEEMP	Ship Energy Efficiency Management Plan
SIN	Singapore
SMS	Safety Management System
SMTC	Swire Marine Training Centre, located in Loyang, Singapore
SOLAS	IMO International Convention for the Safety of Life at Sea, 1974, as amended in 1980 and later
SO <sub>x</sub>	Oxides of Sulphur
STCW	IMO International Convention on Standards of Training, Certification and Watch-keeping for Seafarers, 1978, as amended in 1995 and later
tCO <sub>2</sub>	Tonnes of Carbon Dioxide
tCO <sub>2</sub> e	Tonnes of Carbon Dioxide equivalent. This is CO <sub>2</sub> plus the other four “natural GHG of CH <sub>4</sub> , N <sub>2</sub> O and the two industrial GHG of SF <sub>6</sub> and HydroFluroCarbonsGHG
TRCF	Total Recordable Case Frequency
TRIP	Toolbox Risk Identification Permit
ULS	Ultra Low Sulphur content
UNFCCC	United Nations Framework Convention on Climate Change
VOC	Volatile Organic Compound/s
y-o-y	Year on Year change
5S	“Seiri, Seiton, Seiso, Seiketsu, and Shitsuke” or “Sorting, Set in order, Systematic cleaning, Standardizing, and Sustaining”

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## Request for feedback

In order that we may continually improve our reporting, we would be grateful for your views and comments on any aspects of this report via e-mail to the address below.

## Contact Details

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