

TOWARDS

A FUTURE READY
MARITIME SINGAPORE

ANNUAL REPORT 2014

MPA ANNUAL REPORT 2014

AN INAUGURAL
SUSTAINABILITY / INTEGRATED
REPORT BY



MPA
SINGAPORE



MPA
SINGAPORE

460 Alexandra Road #19-00
PSA Building Singapore 119963

www.mpa.gov.sg

ABOUT THIS REPORT

MPA has chosen to expand the 2014 Annual Report to include our Sustainability efforts aligned to Global Reporting Initiative (GRI) G4 comprehensive guidelines. As a stretch goal and to set ourselves as the benchmark for best practices in both the public sector and the Maritime industry, this report also attempts to adhere to the principle based International Integrated Reporting <IR> Framework to be MPA's first Integrated Report <IR>. However, in view that this is our first attempt at meeting the guidelines for <IR>, we recognise that our articulation of several Content Elements has much room for improvement. Please see Page 99 for details of our reporting approach.

This Annual Report covers material information relating to all of our operations during the Financial Year 1 January to 31 December 2014. In consideration of the target audience, the Financial Report is separately published. Both the Annual Report and the Financial Report will constitute the Integrated Report <IR>. Both reports cover all of our operations [G4-17].

MPA's material sustainability issues were identified based on the principles of the materiality standard AA1000, GRI and IIRC [G4-18]. The Materiality Assessment was facilitated by an independent sustainability expert and involved engagement of MPA's senior management. In due course, we aim to have our sustainability reporting externally assured.

MPA monitors water and air quality and controls emissions as part of its environmental stewardship. We seek to minimise environmental impact wherever possible. Our approach is to deploy the best available technologies and management practices to prevent pollution wherever feasible.

There were no significant organisational changes during the current reporting period.

For any enquiries, please contact Ms Goh Siew Min at goh_siew_min@mpa.gov.sg.

CONTENTS

CHAIRMAN'S FOREWORD	01
CHIEF EXECUTIVE'S FOREWORD	03
BOARD OF DIRECTORS	05
BOARD OF COMMITTEES	06
SENIOR MANAGEMENT	07
MPA'S ORGANISATIONAL STRUCTURE	09
ABOUT MPA	11
SINGAPORE 2014 MARITIME PERFORMANCE	13
MAPPING KEY MATERIAL ISSUES	15
SAFE, EFFICIENT & SUSTAINABLE GLOBAL HUB PORT	
STAYING AHEAD OF COMPETITION	19
KEEPING OUR SEA LANES OPEN AND SAFE	20
GETTING THE BASICS RIGHT – PROMOTING SAFETY@SEA	21
SAFETY@SEA SINGAPORE CAMPAIGN	22
PREPARING FOR THE UNEXPECTED – CONTINGENCY PLANNING	23
FLYING THE SINGAPORE FLAG AT SEA	26
ENVIRONMENTAL SUSTAINABILITY	27
VIBRANT IMC ECO-SYSTEM	
BUILDING A THRIVING ECO-SYSTEM	41
SAFEGUARD STRATEGIC MARITIME INTERESTS & AN INFLUENTIAL VOICE	
SUPPORTING THE INTERNATIONAL MARITIME COMMUNITY	45
STRONG MARITIME SINGAPORE IDENTITY	
ENGAGING THE LOCAL COMMUNITY	49
QUALITY MARITIME WORKFORCE	
DEVELOPING MARITIME TALENT	53
MARITIME KNOWLEDGE & INNOVATION HUB	
EXCELLENCE IN MARITIME R&D	57
CULTURE OF EXCELLENCE	
CORPORATE GOVERNANCE	61
MPA'S SUSTAINABILITY JOURNEY	65
NURTURING A CULTURE OF EXCELLENCE	67
FINANCIAL SUSTAINABILITY	68
STRONG PARTNERSHIPS	
STAKEHOLDER ENGAGEMENT	71
PROVIDING FAIR AND OPEN OPPORTUNITIES TO SUPPLIERS	77
ETHICS AND INTEGRITY	79
CONTRIBUTING TO THE COMMUNITY	79
CHOICE EMPLOYER	
CHOICE EMPLOYER	83
PROVIDING FAIR EMPLOYMENT AND MEANINGFUL CAREERS	85
BUILDING A COMPETENT WORKFORCE	87
ENGAGING AND CARING FOR EMPLOYEES	91
OUR PEOPLE	93
MANAGING LABOUR RELATIONS	95
ENSURING WORKPLACE SAFETY AND HEALTH	96
GLOSSARY	97
OUR APPROACH TO INTEGRATED REPORTING	99
GRI G4 CONTENT INDEX	100
OUR CONTRIBUTORS	115



CHAIRMAN'S FOREWORD

The maritime industry continued to face many challenges in 2014. While the US economy grew, bringing about a gradual recovery of global trade demand, the Eurozone continued to struggle and the growth of emerging economies was limited. In shipping, we continued to see oversupply of tonnage exacerbated by continued low freight rates.

However, we are glad to note that the collective efforts from the industry allowed Maritime Singapore to continue to enjoy good growth in 2014. We maintained our position as the world's busiest port in terms of vessel arrival tonnage, hitting a high of 2.37 billion gross tonnes.

Container throughput grew 4 percent to reach another record high of 33.9 million TEUs. Singapore remained the world's top bunkering port with 42.4 million tonnes in total bunker sales.

In our bid to be future ready, MPA continues to ensure that the Port of Singapore has sufficient capacity to meet future demands. Reclamation works for Pasir Panjang Terminal Phases 3 and 4 have been completed and we can look forward to the commissioning of these berths by the middle of 2015. When all berths are operational by end 2017, our container terminals will be able to handle up to 50 million TEUs. This will allow us to better cope with larger ships and improve Berth-on-Arrival levels.

Developing Singapore as a premier global hub port, our port operators

have increased the use of automation and technology to ensure our port services are efficient and user-friendly. As the world's top bunkering port, our quality bunkering services serve as a key complement to demonstrate Singapore's hub port leadership. We have initiated the use of mass flow metering systems for transfer of bunker which will become mandatory from 1 January 2017.

As a leading International Maritime Centre, Singapore continues to be a choice location for international shipping groups and maritime service providers to base their operations here. Singapore's maritime cluster is now home to over 130 international shipping groups, and 5,000 maritime establishments.

MPA continues to grow the Singapore Registry of Ships (SRS) fleet, which reached 82.2 million gross tonnes in 2014 and maintained its "White List" status under the Tokyo and Paris MOUs.

To develop our pool of maritime talent, more than 4,000 people were trained under our Maritime Cluster Fund co-funding schemes. In addition, in support of maritime research and development, MPA approved 35 R&D projects with a committed fund of \$18.8 million in 2014.

On the international front, Singapore participated actively in international fora such as the International Maritime Organization (IMO) and International Hydrographic Organisation (IHO). Maritime Singapore continued to play

a key role on the global stage, through various multilateral and bilateral technical assistance programmes. Last year, we trained over 100 personnels under our Third Country Training Programme.

We were also recognised for the 26th time as the "Best Seaport in Asia" at the Asian Freight and Supply Chain Awards. In addition, MPA clinched the May Day Model Partnership Award and was a finalist in the International Seafarers Welfare Awards and HR Excellence Awards. We also topped the Pro-Enterprise Ranking survey for the third consecutive time.

Guided by the Future Ready Framework, it is important that MPA plans for the future, considers sustainability issues strategically and embeds Integrated Thinking to move forward as one with our stakeholders.

I wish to thank all our stakeholders for their support and the MPA Board, management and staff for their valuable contributions in ensuring the continued success of Maritime Singapore.

Mr Lucien Wong
Chairman, MPA

CHIEF EXECUTIVE'S FOREWORD

2014 was once again an eventful year for Maritime Singapore and MPA.

Over the course of the year, we have invested significant efforts in strengthening our port operations following the three marine collision incidents at the start of 2014. While the subsequent investigations have identified lapses in human judgement and lack of situational awareness as key factors, MPA also proactively undertook a systematic review of our overall marine safety.

We embarked on a Safety@Sea Singapore campaign, launched a new Maritime Safety Forum and formed working groups together with the industry to look at various human and non-human safety aspects. To improve navigational safety, we implemented an additional pilot boarding ground near the busy Eastern Fairway that will be used by vessels arriving from the East, and relocated an existing boarding ground which will be used by vessels arriving from the West. These efforts have also shown up in the statistics, in terms of the Port of Singapore keeping to a low accident rate of 0.005 per 1,000 vessel movements.

With an eye on the future, we have started planning for our Next Generation Port 2030 initiative. A high-level multi-agency steering committee was formed to drive this as a Whole-of-Government effort. Some of the key elements being explored include next generation vessel traffic management, single window port clearance and better land optimisation.

As one of the world's busiest ports, I see it as critical that MPA leads and shapes economic, environmental and social sustainability across the maritime industry.

Shipping is an energy intensive industry. It is fundamental in our strategy to commit to environmentally sound shipping and port activities. One such initiative is the Maritime Singapore

Green Initiative for which we have pledged to invest up to \$100 million over a five-year period. In 2014, the Maritime Singapore Green Ship Programme continued to gain traction, with 90 companies pledged towards sustainable shipping, since its launch in 2011.

Maritime Singapore is not just about our port but the overall maritime ecosystem comprising a diverse and vibrant mix of shipping companies, ship managers and agencies, classification societies, finance, insurance, arbitration institutions, amongst others. Over the course of 2014, more companies have established a presence or broadened their scope of activities here. Today, there are over 130 international shipping groups in Singapore, making us one of the few countries with such a high concentration of shipping companies.

To enhance Singapore's attractiveness as a seat of maritime arbitration, we have been working with the Singapore Chamber of Maritime Arbitration and other stakeholders such as the Ministry of Law and Singapore Maritime Foundation. To boost Singapore's debt and equity capital market for shipping and offshore, we have initiated closer partnerships with the Singapore Exchange and Monetary Authority of Singapore to engage industry players such as investment banks, fund managers and research houses. Collectively, we are working with Singapore Shipping Association to explore platforms to strengthen Singapore's suite of financial instruments.

Quality manpower is a critical success factor for Maritime Singapore. We will continue to make every effort to ensure our workforce is well-trained and well-equipped for industry needs. On top of that, we will grow our local pool of maritime workforce to retain a strong Singaporean core. Together with our MaritimeONE partners, we will continue to raise awareness and public interest in the diverse career options in the maritime industry through various outreach platforms.

Last but not least, MPA will work more closely with our industry partners to raise the overall profile of the maritime industry and brand Maritime Singapore as a preferred one-stop

destination and hub for maritime activities in the heart of Asia.

On the international front, Singapore has been actively contributing in the area of training through initiatives such as the Port Management Programme, spearheaded by the MPA Academy.

Singapore has been working closely with our regional counterparts to keep regional waters safe from piracy and armed robbery and we have been playing an active role in charting ReCAAP's future directions as it prepares itself for its 10th Anniversary commemoration next year in Singapore. Beyond IMO and ReCAAP, we have been strengthening our engagement with regional countries as they develop their maritime plans. Last year, MPA and our colleagues from the Ministry of Transport also worked closely with the Indonesian authorities to help locate and recover the black boxes of the tragic AirAsia flight QZ8501.

To develop a more holistic enterprise risk framework, MPA undertook a Materiality Assessment to identify and prioritise both the internal and external risks including our key environmental and social issues. The results of the assessments were integrated into our Future Ready Framework. The Framework was formulated to drive our long term strategy embracing Integrated Thinking enterprise wide. It is because of this integration that we have embraced both Sustainability and Integrated Reporting seeking to adhere to the international guidelines of the Global Reporting Initiative (GRI) G4 Comprehensive and International Integrated Reporting Council (IIRC). As MPA systematically builds up our organisation's capabilities as well as capacity for transformation, I look forward to our continued efforts to engage and partner the industry through our stakeholders, and work towards a Future Ready Maritime Singapore.

Mr Andrew Tan
Chief Executive, MPA



BOARD OF DIRECTORS



Mr Lucien Wong (Chairman)
Chairman and Senior Partner,
Allen & Gledhill LLP



Mr Andrew Tan
Chief Executive, Maritime and Port Authority
of Singapore



Mr Carl Krogh Arnet
Chief Executive Officer, BW Offshore Ltd



Mr James Wong (till 1 Feb 15)
Deputy Secretary (Policy),
Public Service Division, Prime Minister's Office



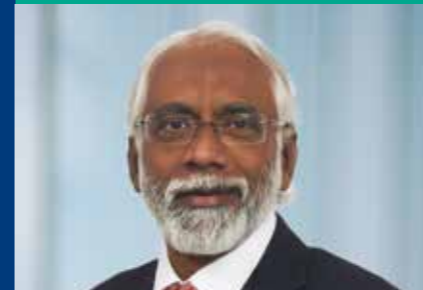
BG (Ret) Ishak Ismail
Chief Executive Officer, Defence Services,
CWT Limited



Mr Kam Soon Huat
General Secretary & Chief Operating Officer,
Singapore Organisation of Seamen



RADM Lai Chung Han
Chief of Navy, Republic of Singapore Navy



Dato' Jude Benny (till 31 Mar 15)
Senior Partner, Joseph Tan Jude Benny



Mr Luke Goh
Senior Director, PS21 Office, Public Service
Division, Prime Minister's Office/Institute Director
(Institute of Governance and Policy),
Civil Service College



Mr Norifumi Yamamoto
Chairman, Celeste Holding Pte Ltd



Mr Patrick Phoon
President, Singapore Shipping Association



Dr Robert Yap (till 1 Feb 15)
Executive Chairman, YCH Group



Mr Vincent Lien
Director, Wah Hin & Company Pte Ltd



Mr Wong Weng Sun
President & Chief Executive Officer,
SembCorp Marine Ltd



RADM Ng Chee Peng (till 31 Jul 14)
Chief of Navy, Republic of Singapore Navy



Mr Thomas Tay (till 1 Feb 15)
Emeritus General Secretary,
Singapore Maritime Officers' Union

BOARD OF COMMITTEES

INVESTMENT COMMITTEE

Chairman
Mr Lucien Wong

Members
Mr Andrew Tan
Mr Vincent Lien
Mr Patrick Phoon
Mr Wong Weng Sun

Secretary
Director (Corporate Development)/CFO

AUDIT REVIEW COMMITTEE

Chairman
Mr Vincent Lien
Dato' Jude Benny (till 31 Mar 15)

Members
Mr Carl Arnet
Mr Luke Goh
RADM Lai Chung Han
Mrs Quek Bin Hwee (from 1 Apr 15)
RADM Ng Chee Peng (till 31 Jul 14)
Mr James Wong (till 1 Feb 15)
Dr Robert Yap (till 1 Feb 15)

Secretary
Assistant Director (Internal Audit)

WELFARE COMMITTEE FOR SEAMEN

Chairman
Mr Norifumi Yamamoto

Members
BG (Ret) Ishak Ismail
Mr Kam Soon Huat
Dato' Jude Benny (till 31 Mar 15)
Mr Thomas Tay (till 1 Feb 15)

SSA
Capt Anuraj Singh
Deputy General Manager
Maritime Human Resources
NYK Shipmanagement Pte Ltd

PSA Corporation
Mr Lee Siak Quee
Assistant Vice President
Keppel Terminal

Jurong Port Pte Ltd
Captain Hemant Gupta
Senior Manager
Operations Department

Seamen's Missions

Rev Peter Manimuthu
Port Chaplain
Mission to Seafarers

Rev Schmidt Christian
Port Chaplain
International Lutheran Seamen's Mission

MPA
Director (Corporate Development)/CFO
Director (Shipping)

Secretary
Assistant Director (Seafarer
Management)

REGISTRATION COMMITTEE

Chairman
BG (Ret) Ishak Ismail

Members
Mr Luke Goh
Mr Kam Soon Huat
Mr Norifumi Yamamoto

Secretary
Director (Shipping)

MINT FUND STEERING COMMITTEE

Chairman
Mr Wong Weng Sun

Members
Mr Andrew Tan
Mr Carl Arnet
RADM Lai Chung Han
Mr Patrick Phoon

Industry Representative
Prof Lui Pao Chuen
Advisor
National Research Foundation

Secretary
Director (Technology)

SENIOR PERSONNEL BOARD

Chairman
Mr Lucien Wong

Members
Mr Andrew Tan
BG (Ret) Ishak Ismail
Mrs Quek Bin Hwee (from 1 Apr 15)

Secretary
Director (Human Resource)

SENIOR MANAGEMENT



1 Mr Au Kheng Sheng
Director,
Communications &
Community Division

3 Dr Parry Oei
Director,
Port Services Division

5 Mr Andrew Tan
Chief Executive

7 Ms Angela Png
Director,
International Division

9 Mrs Ong Seok Bin
Director,
Human Resource Division

11 Captain Khong Shen Ping
Dean of MPA Academy

13 Mr Tan Cheng Peng
Director,
Port Policy Division

2 Captain M Segar
Assistant Chief Executive
(Operations)

4 Ms Bernice Yeoh
Director,
International Maritime
Centre Division

6 Mr Toh Ah Cheong
Director,
Technology Division

8 Ms Tan Beng Tee
Assistant Chief Executive
(Development)

10 Mr Tan Suan Jow
Director,
Shipping Division

12 Ms Yvonne Chan
Director/Chief Financial Officer,
Corporate Development Division

MPA'S ORGANISATIONAL STRUCTURE



OPERATIONS CLUSTER

SHIPPING DIVISION

- Flag State Control Dept
- Port State Control Dept
- Registry Dept
- Seafarers Management Dept
- Ship Investigation Dept
- Ship Regulation & Development Dept
- Training Standards Dept/ISC

PORT SERVICES DIVISION

- Hydrographic Dept
- Marine Licensing & Permits Dept
- Marine Services Dept

PORT DIVISION

- Marine Environment & Safety Dept
- Operations Planning Dept
- Security Dept
- Vessel Traffic Management Dept
- Operations Policy Unit
- Safety Inspectorate Dept
- Emergency Preparedness Dept

TECHNOLOGY DIVISION

- Electronics & Communications Dept
- Engineering & Planning Dept
- Information Technology Dept
- Tuas Port Development Dept
- PPT Development Dept
- Research & Technology Development Dept

COMMUNICATIONS & COMMUNITY DIVISION

- Community Engagement Dept
- Corporate Communications Dept
- Maritime Gallery Office

HUMAN RESOURCE DIVISION

- Human Resource Development Dept
- Human Resource Management Dept

CORPORATE DEVELOPMENT DIVISION

- Financial Planning & Analysis Dept
- General Accounting Dept
- Organisational Excellence Dept
- Service Quality Unit
- Procurement & Admin Dept
- Facility Management Dept

DEVELOPMENT CLUSTER

IMC DIVISION

- IMC Capability Development Dept
- IMC Promotion Dept
- IMC Services Development Dept

INTERNATIONAL DIVISION

- International Dept
- IMO Affairs Office
- London Office

PORT POLICY DIVISION

- Port Policy Dept

PLANNING DIVISION

- Corporate Planning Dept
- Maritime Economics Dept
- Strategic Planning Dept

ABOUT MPA

The Maritime and Port Authority of Singapore (MPA) is the driving force behind Singapore's port and maritime development. Our mission is to develop Singapore as a premier global hub port and International Maritime Centre (IMC), and to advance and safeguard Singapore's strategic maritime interests.

REINFORCING SINGAPORE'S ECONOMY

The port and maritime sector is a sizable contributor to the Singapore economy, providing 170,000 jobs and accounting for 7% of Singapore's total gross domestic product in 2014.

Situated along a vital shipping lane, Singapore is one of the world's busiest waterways with about 1,000 ships in its waters at any one time. Known for providing high quality and reliable services at competitive prices, our port attracts an average of 140,000 vessel calls annually.

In 2014, Singapore continued to cement its position as the world's busiest port with a record vessel arrival tonnage of 2.37 billion gross tonnes, a container throughput of 33.9 million TEUs, and 42.4 million tonnes in total bunker sales.

The Singapore Registry of Ships (SRS) administered by MPA is amongst the top five ship registries in the world. It is the preferred choice of quality flag for a growing base of international ship owners who recognise SRS' efficient services, high operational and pollution control standards and good safety record. As such, we seek to bring influence where we can on the standards of the ships registered with us to maintain our reputation as a quality flag.

A MULTIFACETED ORGANISATION

MPA was established as a statutory board under the Ministry of Transport (MOT) in 1996. The formation of MPA brought together functions that were previously performed by the National Maritime Board, Marine Department and regulatory departments of the former Port of Singapore Authority.

As such MPA takes on the roles of port authority, port regulator, port planner, IMC champion, and national maritime representative. Our multifaceted function makes us an effective one-stop centre for the promotion and development of Singapore's port and maritime industry, establishing greater synergy and cohesiveness in policy formulation and implementation.

We also work closely with industry partners and other agencies to enhance safety, security and environmental protection in our port waters, facilitate port operations and growth, expand the cluster of maritime ancillary services, and promote maritime R&D and manpower development.

A cross-agencies taskforce comprising MPA and strategic partners from the Singapore Shipping Association (SSA), PSA International and Jurong Port has been formed to address the needs of the new port, ensuring that its objectives are customer-centric and relevant to all users. [Please see page 34, Building a Next Generation Port.]

VISION

A leading maritime agency driving Singapore's global maritime aspirations.

MISSION

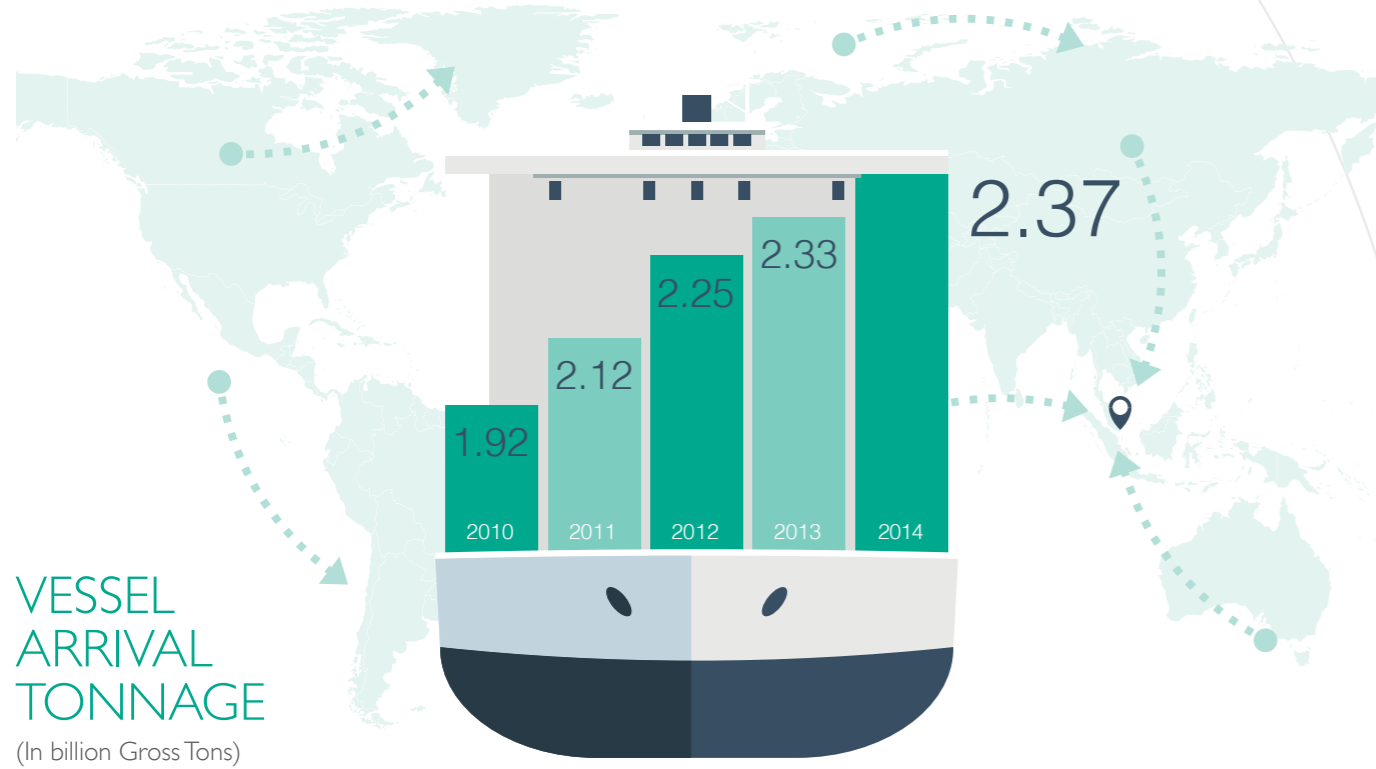
To develop and promote Singapore as a premier global hub port and an international maritime centre, and to advance and safeguard Singapore's strategic maritime interests.

SUSTAINABILITY REPORT REQUIREMENTS

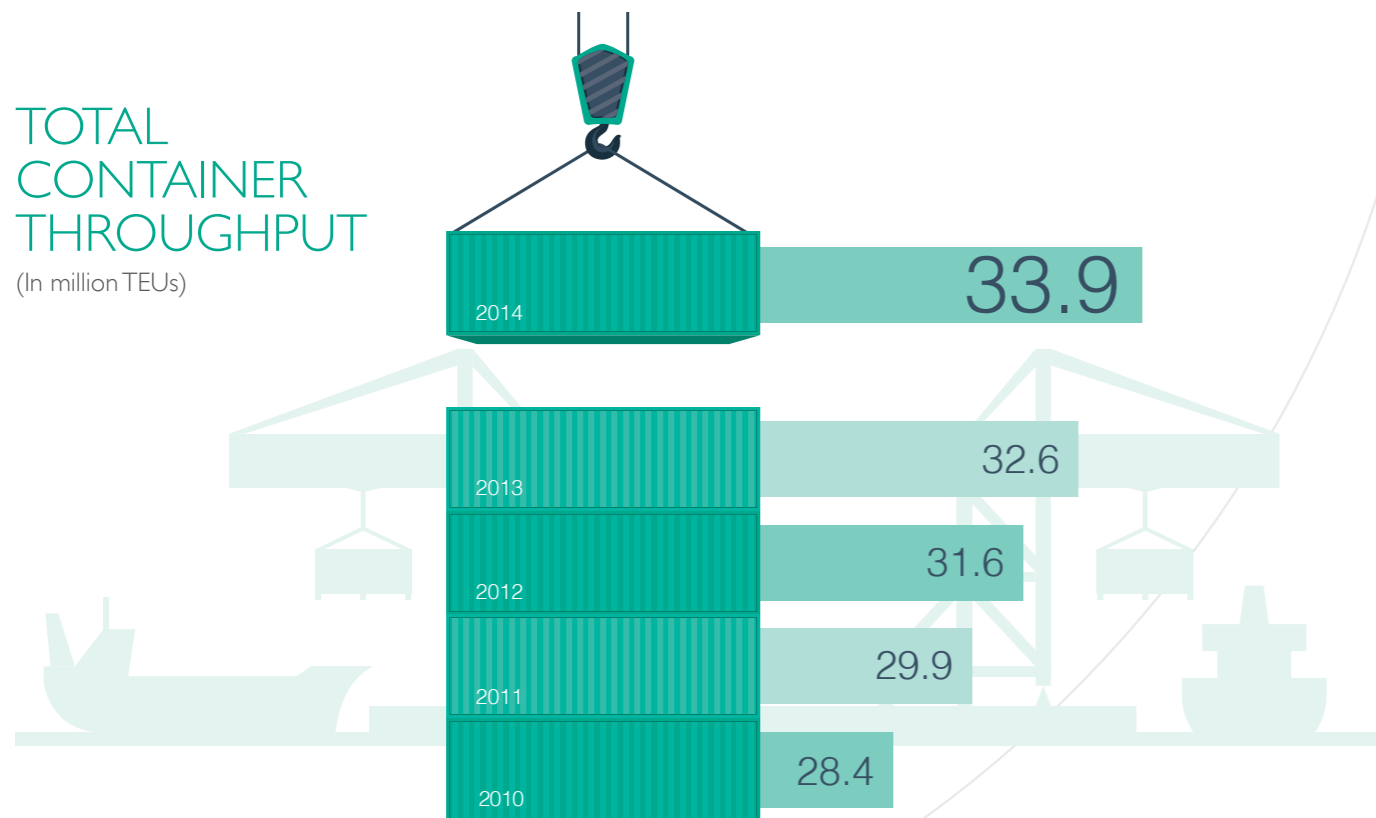
Our multifaceted roles make our sustainability reporting complex. In compliance with GRI G4 requirements, we focus on the sustainability impacts that we directly control and influence, and those that arise as a direct result of our activities. We also include, where relevant, the impacts that we influence [G4-18]. For example, through our roles as authority, regulator and planner, we have influence over the sustainability impacts relating to Singapore's port and shipping industry. It is through these roles that we can make the most material impact on reducing environmental damage, promoting best environmental and social practices. As such, for each section of this report we address our impacts internally, and also the impacts that we seek to influence to improve overall sustainability performance.



SINGAPORE 2014 MARITIME PERFORMANCE

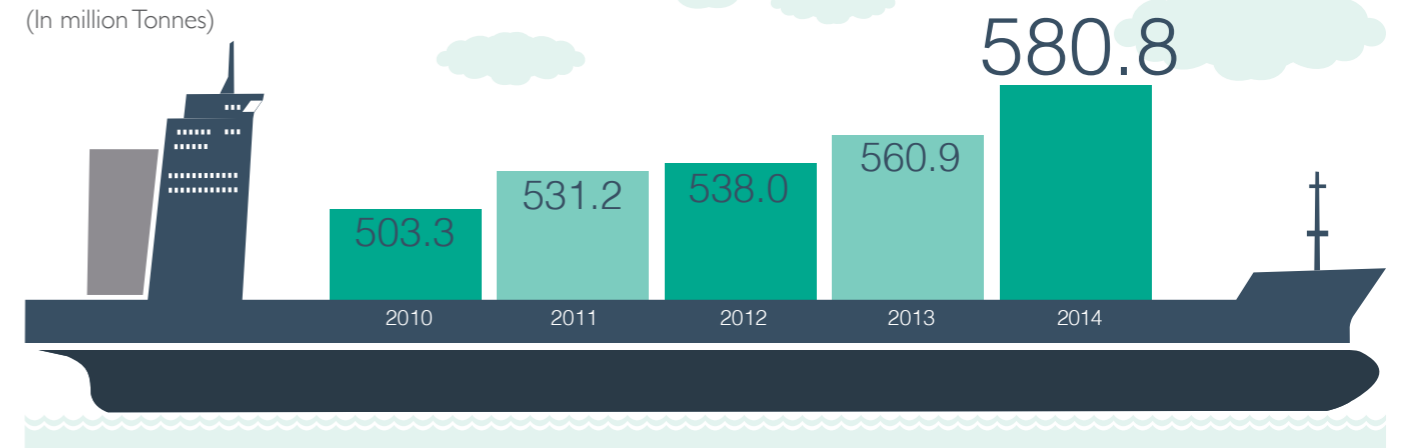


TOTAL CONTAINER THROUGHPUT
(In million TEUs)



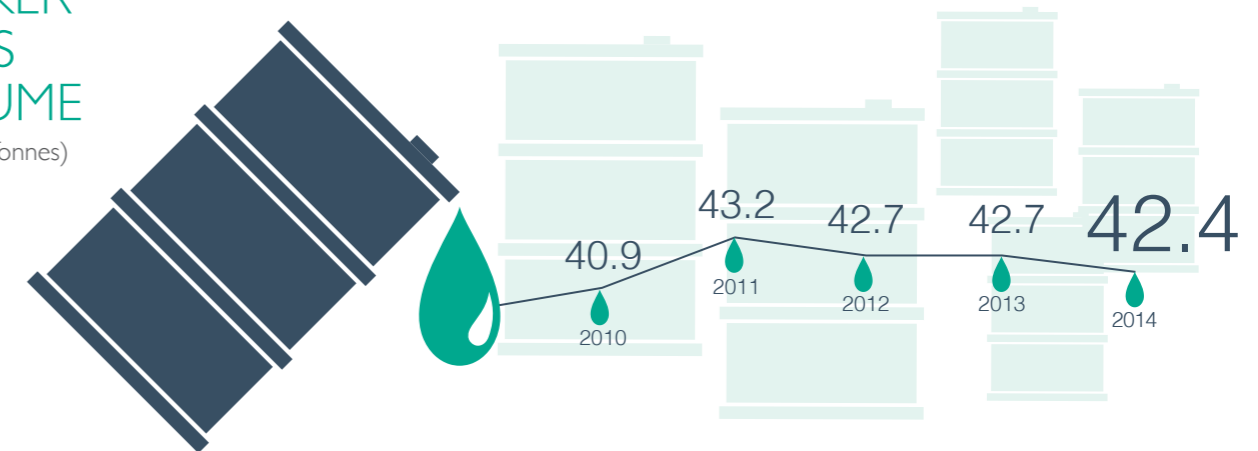
TOTAL CARGO TONNAGE

(In million Tonnes)



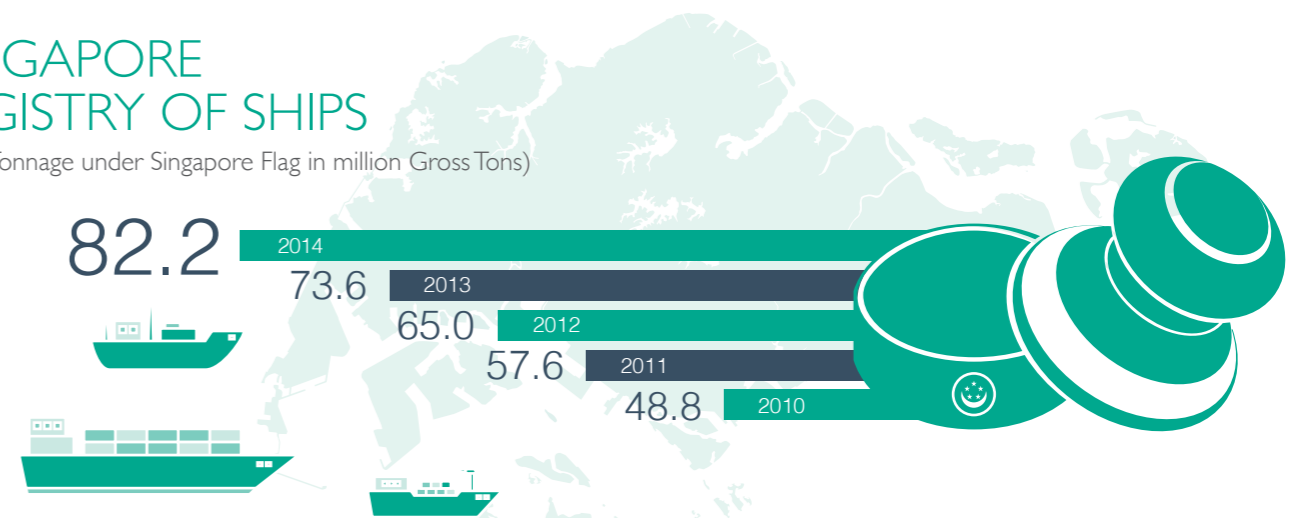
BUNKER SALES VOLUME

(In million Tonnes)



SINGAPORE REGISTRY OF SHIPS

(Total Tonnage under Singapore Flag in million Gross Tons)



MAPPING KEY MATERIAL ISSUES

BUSINESS MODEL – FUTURE READY FRAMEWORK

As an organisation, we face increasingly complex challenges. There is a need for MPA to re-think our strategic focus in increasing the value created for the maritime industry. This resulted in the development

of an enhanced Business Model to guide the utilisation of scarce capital resources in achieving the strategic key thrusts. The following six key thrusts were the outcome of extensive staff-level brainstorming sessions, and built upon the fundamentals of our maritime cluster, while identifying new areas of strategic opportunity.

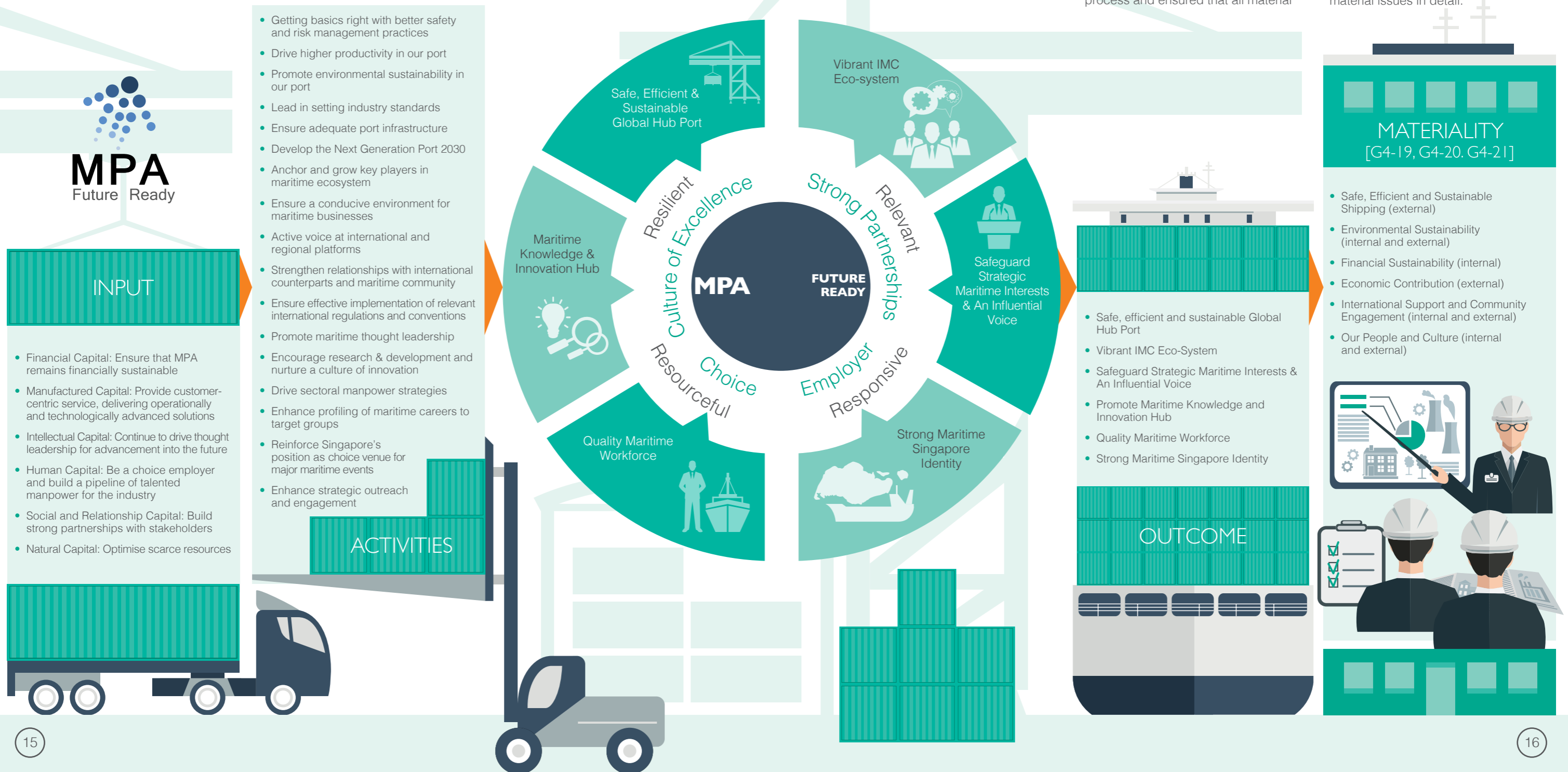
Achieving the six strategic outcomes will enable a Future Ready Maritime Singapore, one with a vibrant network of interdependent linkages. To do so, MPA must reposition itself to be Relevant, Responsive, Resourceful and Resilient, i.e. the 4Rs. To this end, internally, we must forge Strong Partnerships with our stakeholders, ensure we remain a Choice Employer, and embody a Culture of Excellence in all we do.

MPA has applied the AA1000 Accountability Principles Standard (AA1000APS) to identify and prioritise the sustainability issues that are material to us. We have also applied the principles of the Global Reporting Initiative (GRI) G4 and the International Integrated Reporting Council (IIRC) to determine our key material issues [G4-18].

In 2014, we conducted an extensive materiality assessment, identifying our potential material issues, based on both internal and external stakeholder perceptions. We prioritised these issues based on AA1000's materiality principles, facilitated by an independent sustainability expert. The senior management, including the Chief Executive was directly involved in the materiality assessment process and ensured that all material

aspects were covered. As we have also revised our strategy this year, we have made our material sustainability issues integral to our strategy, through our Future Ready Framework.

Our six key material issues are integral to our outcomes. They apply across our organisation [G4-20]. The following sections of this report will address each outcome and their respective material issues in detail.





SAFE, EFFICIENT & SUSTAINABLE GLOBAL HUB PORT

It is vital for us to stay competitive. We have to adapt constantly and evolve with the changing needs of our customers, business partners, NGOs, maritime regulatory framework, and the environment, to remain a key global hub port.

STAYING AHEAD OF COMPETITION

It is vital for MPA to stay competitive. To adapt constantly and evolve with the changing needs of our customers, business partners, NGOs, maritime regulatory framework and the environment to remain a key global hub port.

One of the ways MPA accomplished this was to conduct regular benchmarking studies and customer surveys to assess our competitiveness and identify performance gaps. We aim to have a solid understanding of our customers' operational requirements in creating the port of tomorrow. For example, MPA conducts

the Annual Marine Services Survey (AMSS) to determine the satisfaction level of the industry with the marine services within the Port of Singapore. Singapore has done well over the last five years, achieving a high rating of 4.3 out of 5.

A prime example of our customer-centric approach is the NGP 2030 Master Plan. This blueprint maps out the plan for developing the port of the future in Tuas, located on the western side of Singapore. The NGP 2030 Master Plan was formulated by a multi-agency taskforce in consultation with the maritime industry, and jointly

facilitated by Singapore Shipping Association (SSA), PSA International and Jurong Port.

This close partnership with the industry helps to ensure that MPA's policies, strategies and services remain relevant to customers' needs and pre-empt industry trends. It has enabled MPA's operations to match the pace of growth in global maritime demand, innovation and technology, and helped to overcome some of the pressures from a mature and limited domestic workforce.

INAUGURAL SMART PORT HACKATHON



Hackathon participants delved into and examined three main sets of challenges faced by the maritime industry today: productivity, efficiency and sustainability. Participants made use of these datasets to make sense of the port activities and to create innovative technology-enabled, data-driven solutions.

The hackathon saw a total of 20 different datasets with 32 million data points from MPA and its supporting partners such as PSA Corporation Limited, Jurong Port, YCH Group, DHI, Orbcomm and the National Environment Agency. These include datasets covering vessel movement and position data, ship registries, cargo information, berthing schedules, container trucking data, bunkering transactions, hydrographic maps, air quality, tidal and weather information. MPA has for the first time, unlocked never been released data representing different sectors of the maritime industry.

The top winner walked away with \$5,000 cash prize money and a Galaxy Tab 3 (7.0) for each team member. Two runner-up prizes worth \$3,000 and \$2,000 were also given out. This Hackathon also saw a total of six prizes being given out for 'Honourable Mention', 'People's Choice', 'Best use of Data' and 'Best Technology'. In total, 120 participants from 25 teams, produced 25 original maritime-related prototypes in 48 hours.



MPA and the Urban Prototyping (UP) Singapore community jointly organised the first maritime-themed hackathon, the Smart Port Hackathon 2014. Held over three days from 18 to 20 July, the event brought together maritime professionals, data scientists, developers, designers and passionate citizens with diverse skills, to develop innovative solutions to enhance productivity, efficiency and sustainability in the Port of Singapore.

KEEPING OUR SEA LANES OPEN AND SAFE

Sea Lines of Communication (SLOCs) are primary shipping routes between ports with numerous vessels bearing precious cargoes and passengers plying them daily.

Our own sea lanes have always been kept open. The number of marine incidents per 1,000 vessel movements in Singapore waters have remained low with an average of about 0.012 and 0.016 incidents per 1,000 vessel movements in our port waters and the Singapore Strait respectively.

Piracy and sea robbery are threats to the safety and security of key SLOCs used for international shipping. As

a shipping nation and a major hub port, Singapore stands firm against all threats to shipping and safe sea travel. To this end, Singapore is one of the founding members of the Regional Co-operation Agreement on Combating Piracy and Armed Robbery Against Ships in Asia (ReCAAP), the first intergovernmental initiative to promote cooperation against piracy and armed robbery against ships in Asia. Singapore also plays host to the ReCAAP Information Sharing Centre (ISC) established in 2006. MPA represents Singapore at the strategic and operational level as the Governor to ReCAAP ISC and the ReCAAP Focal Point (Singapore).

MPA has played an active role to fostering regional cooperation to counter armed robbery against ships in our waters by participating in the capacity building workshops organised by ReCAAP ISC, and supporting the cooperation between the ReCAAP ISC and international organisations such as the IMO to combat piracy and armed robbery against ships in Asia. We also regularly update the maritime industry



on piracy trends as well as preventive measures and advisories issued by IMO and ReCAAP ISC to deter piracy.

Singapore also contributes to anti-piracy efforts beyond its shores. Since 2009, the Republic has contributed to international counter-piracy efforts, including through the annual deployment from the Singapore Armed Forces (SAF) to the multinational Combined Task Force (CTF) 151, in the Gulf of Aden. Singapore has assumed command of the CTF 151 thrice in 2010, 2011 and 2013, and also chaired the 9th Plenary Session of the Contact Group on Piracy off the Coast of Somalia in 2011.



A typical day in the Singapore waters –at any one time, there could be more than 1,000 vessels in our port!

GETTING THE BASICS RIGHT – PROMOTING SAFETY@SEA

MPA launched the industry-wide Safety@Sea Campaign in July 2014 to raise awareness and inculcate a safety-first culture at sea amongst the stakeholders. Since the launch of the campaign, MPA has worked with the maritime community to introduce measures to instil a strong safety culture, enhance communication, encourage information-sharing and improve the safe passage of vessels. As part of the campaign, more than 1,700 information kits containing safety posters, decals and guidebooks were distributed to members of the harbour craft and shipping community. MPA also implemented an award programme which recognised those who have displayed exemplary effort in safe practices and served as good role models for the rest of the industry. 10 PSA Marine harbour pilots who have displayed exemplary effort in safe practices were presented with a certificate of commendation. This recognition scheme will be extended to include shipping companies, vessel owners and masters.

As part of the Safety@Sea Campaign, MPA also organised forums and briefing sessions to raise safety awareness in the maritime industry. The Small Craft Safety Forum in June 2014 brought together some 120 delegates from the harbour and pleasure craft community to share their knowledge and experience on safety at sea. MPA also organised 12 safety briefing sessions on the safety of navigation at sea for some 400 operators, masters and crew from the harbour and pleasure craft community.

In November 2014, MPA also championed the Safety@Sea Week, with the highlight being the inaugural Maritime Safety Forum which saw more than 250 participants discuss and share on best practices for maritime safety. Other events included customised workshops for sharing of best practices among regional ferry

operators and pleasure boaters, a cross-team workshop for PSA Marine harbour pilots and masters, MPA's Vessel Traffic Officers and sea-going officers, and industry visits to Port Operations Control Centre at PSA Vista (POCC-Vista).

To enhance the safety of the maritime community, four working groups involving MPA and respective industry segments were formed to look into safety issues and support the Safety@Sea Campaign. The four working groups cover safety issues relating to (i) ocean-going vessels; (ii) harbour pilots; (iii) regional ferries; and (iv) pleasure crafts.

One key outcome from these working groups was the enhancement to safety of navigation for the eastern approaches of the port waters. The working groups relocated the existing Pilot Eastern Boarding Ground 'B' and implemented a new Boarding Ground to streamline vessel traffic.

Furthermore, a queuing system was implemented for vessels arriving at these Pilot Boarding Grounds. The new measures took effect on 1 January 2015.

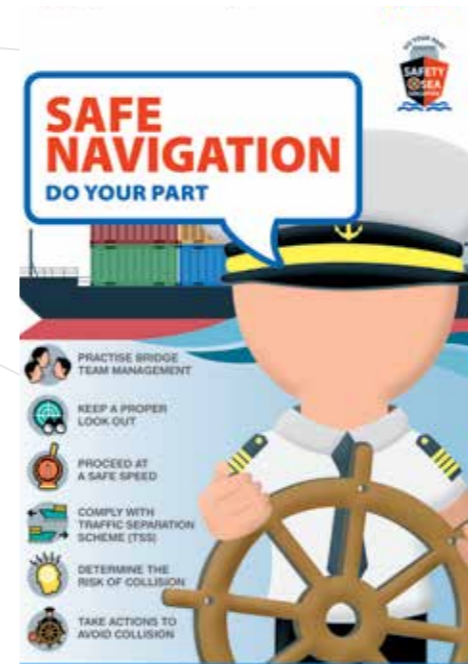
MPA also developed educational pamphlets and guidebooks to raise the safety awareness of the shipping community. For instance, to enhance navigational safety in the Straits of Malacca and Singapore; MPA, together with the Baltic and International Maritime Council (BIMCO) and the other two littoral States, Malaysia and Indonesia, jointly developed a safety pamphlet/guide for mariners navigating in the Straits of Malacca and Singapore. In addition, a Small Craft Guidebook on the various guidelines and regulations, boating safety, high risk areas, basic and relevant collision regulations, use of safety equipment and seamanship, was published and distributed to the harbour and pleasure craft community.



SAFETY@SEA SINGAPORE CAMPAIGN



The Safety@Sea Singapore Campaign was launched by MPA, together with representatives from the Association of Regional Ferry Operators, Singapore Maritime Employers Federation, Singapore Sailing Federation, Singapore Shipping Association, Singapore Power Boat Association, and PSA Marine.



PREPARING FOR THE UNEXPECTED – CONTINGENCY PLANNING

Emergency response is a key material issue for us. To be a trusted and reliable maritime administration, capable of protecting ships and lives in our waters, MPA must possess the capability to handle every foreseeable emergency at sea around the clock. We have developed an emergency response system together with other government agencies and organisations to respond to emergency situations expediently and to minimise casualties as well as economic and environmental damage.

Every year, different scenarios are played out to test the full extent of the readiness of the personnel and the efficiency of each procedure. These exercises may range from simple tabletop drills to inter-agency operations involving thousands of participants.

In 2014, more than five exercises, outlined below, were conducted to assess the readiness and speed of response of the governmental agencies and maritime industry.

CHEMSPILL EXERCISE

Chemspill 2014 is the first joint exercise for a chemical spill at sea between the Malaysia Marine Department and MPA to assess the response and operational readiness of both nations in the event of such an incident. It was conducted in April 2014 along the Straits of Johor and comprised a tabletop exercise and a seaward operation.

BORDERHEALTH EXERCISE

This exercise was conducted in May 2014 at the Singapore Cruise Centre to evaluate the adequacy of current procedures to identify and isolate febrile passengers at the sea checkpoints. Mass temperature screening equipment were deployed at both the arrival and departure areas to support 40 healthcare workers from Parkway Shenton, a primary healthcare solutions provider in Singapore, to screen the passengers. Anyone suspected of running a fever was attended to immediately and his recent travel history recorded for subsequent source tracing.



EXERCISE BLUE DOLPHIN 2014

More than a thousand personnels from 20 agencies and companies participated in this emergency preparedness exercise in July 2014 to evaluate their speed and readiness in responding to a simulated passenger vessel incident in Singapore waters. Personnels and equipments were deployed to evacuate passengers swiftly from a vessel mooring at the Eastern Holding Anchorage, off Marina South Pier.



JOSE 2014

MPA led the Joint Oil Spill Exercise (JOSE) 2014 in October to test and demonstrate Singapore's readiness in responding to oil spills at sea. Some 180 personnel participated in a tabletop exercise followed by a seaward exercise off Pulau Bukom. The response teams demonstrated the effective deployment of equipment by anchoring a supertanker to a single buoy mooring and ringing the ship with an oil containment boom that would prevent an actual oil spill from spreading further. Specialised skimmers were used to show how the oil would be recovered from the sea. In addition to 16 anti-pollution crafts deployed, MPA dispatched an aircraft fitted with an aerial dispersant spraying system to disperse, breakdown and contain the simulated oil spill.



EXERCISE PELICAN 2014

This was a command post exercise held in August 2014 to familiarise MPA staff on the processes, work routine and administration of the Emergency Operations Centre. More than a hundred MPA staff representing the various supporting cells participated in the exercise.

FERRY RESCUE TABLETOP EXERCISE

The tabletop exercise was conducted in October 2014 to drill the Emergency Operations Centre and supporting agencies on the processes and procedures of our Ferry Mishap Contingency Plan. Some 80 staff from various government agencies participated in the discussions to work out an effective action plan for the rescue operation.



HANDLING SHIP COLLISIONS

In early 2014, three ship collisions occurred consecutively within a short span of two weeks in the waters of Singapore, spilling a total of 760 tonnes of heavy fuel oil into the sea. A total of 40 crafts, two skimmers, two harbour busters, more than 1,000 metres of containment boom and more than 400 personnels were deployed by MPA and oil spill response companies as part of the containment and clean-up efforts at sea.

In each incident, containment booms were used to contain the oil patches and to prevent them from reaching the coastlines. Approved oil dispersants were used to break up the oil patches into smaller globules for easier removal from the sea. After 14 days, the oil spills were successfully contained and cleaned up. The

readiness and swift response of our oil spill response teams allowed us to respond to the incidents quickly and successfully divert the busy vessel traffic from the affected areas.

The three collisions raised concerns over the standards of navigational safety in Singapore's waters. With 1,000 ships plying Singapore's waters at any time of the day, it was crucial for MPA to assure the shipping community on the safety and efficiency of the sea passage. In the aftermath of each collision, MPA immediately conducted a Marine Safety Investigation and Pilotage Inquiry. A separate Marine Safety Review Committee was subsequently formed to look into the implementation of appropriate measures to improve navigational safety in Singapore's port waters and approaches.

After a thorough review, the Marine Safety Review Committee

recommended several safety improvements that would instil a stronger safety culture within the maritime community, enhance communication and information sharing to avoid recurrence, and improve safe sea passage.

Following up from the Marine Safety Review Committee, MPA engaged the industry to form the aforementioned safety working groups between MPA and industry partners. These working groups went on to provide expert advice on ways to reduce the number of incidents at sea, such as raising the level of awareness on navigational safety and promoting good safety practices in the shipping community.

MPA's quick response in handling the incidents and rallying the ready support of the maritime industry displayed our commitment to maritime safety and security.

FLYING THE SINGAPORE FLAG AT SEA

Over the years, the Singapore flag has grown to become a quality flag of choice among many international ship owners and operators. SRS now ranks among the world's top five largest ship registries, and one that boasts of the youngest fleet of ships. It is vital for us to maintain high safety and security standards of the vessels registered through SRS, and keep a low detention record with the major Port State Control (PSC) regimes, such as Tokyo MOU and Paris MOU. Both MOUs consist of participating maritime administrations and governments that seek the efficient running of ships through port state control. For example, checks are conducted on foreign vessels at port regulated by the said MOU to ensure substandard ships are detained and held back until their deficiencies are addressed.

To achieve this, SRS actively monitors and disciplines any Singapore-flagged ships that infringe international maritime regulations and practices. It also consults with the maritime companies regularly on their operational needs and challenges. This close industrial engagement has been mutually beneficial. It enables us to develop policies and procedures that are in tandem with industry development,

and at the same time, allows the maritime community to stay updated on new regulatory developments.

The industry partnership has helped SRS to enhance the overall quality of the Singapore fleet. In 2014, SRS achieved 82.2 million gross tonnage, an 11.7% increase from 73.6 million gross tonnage in 2013. The total number of Singapore ships detained worldwide annually dropped by a significant 44%, from 68 detentions in 2011 to 47 detentions in 2014. Overall, SRS' detention rates were low at 1.14% and 0.85% against the average of 3.97% for the Tokyo MOU regime and 3.24% for the Paris MOU regime respectively.

At the same time, SRS improved its ranking on the Tokyo MOU and Paris MOU White Lists, ranking 4th and 14th respectively in 2013. The PSC White, Grey and Black List identifies and ranks the performance and risk of the flags based on the total number of inspections and detentions over a three-year period. The White List represents high quality flags with a consistently low detention record.

In 2014, SRS' commitment to safety and quality was recognised once again when it qualified for the

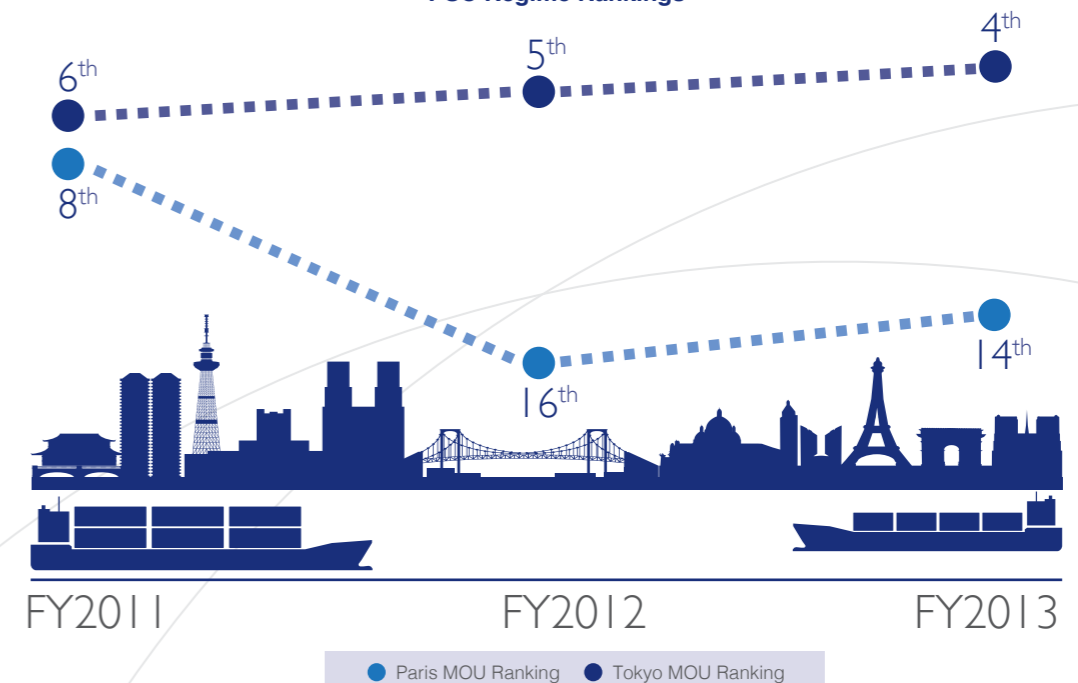


Quality Shipping for the 21st Century (QUALSHIP 21) programme. This is a United States Coast Guard initiative to identify high quality ships and incentivise them to continue with their commitment to safety and quality. Previously, SRS qualified for QUALSHIP in 2004 and 2010.

The recognition by the international maritime community and robust growth of Singapore as a flag state has attracted more shipowners and operators to establish their operations in Singapore. The vibrant market provides ample opportunities for development of the supporting maritime services that include ship financing, marine insurance and maritime training. This further strengthened Singapore's maritime ecosystem and augmented Singapore's stature as a leading IMC.



PSC Regime Rankings



ENVIRONMENTAL SUSTAINABILITY

International shipping carries 90% of the world's trade and is by far the most energy efficient mode to transport goods worldwide and only a modest contributor to overall carbon dioxide (CO₂) emissions. Notwithstanding this, a global approach to further improve its energy efficiency and effective emission control is needed as international shipping will continue growing in tandem with world trade. As the global regulatory body on maritime matters, the International Maritime Organization (IMO) has been successful in enacting mandatory standards to gradually reduce international shipping emissions. These higher environmental standards include the implementation of measures such as the Energy Efficiency Design Index (EEDI) for new ships and the progressive reduction of the sulphur content of marine fuels. Recent findings from the Third IMO GHG Study 2014 estimated that international shipping emitted 796 million tonnes of CO₂ in 2012, against 885 million tonnes in 2007. This represented 2.2% of the global emissions of CO₂ in 2012, compared to 2.8% in 2007.

The different roles that MPA plays – regulating the maritime sector, manning the ship registry, and promoting Singapore as an IMC, mean that MPA plays an important part in monitoring, enforcing and encouraging the maritime industry to adopt sustainable practices. As a key global port, MPA is able to exert influence both within the domestic maritime sector as well as internationally. This section focuses on both the international and domestic impact of Maritime Singapore's sustainability efforts.

The global maritime industry has to play its part to reduce international

shipping emissions. MPA is fully committed to environmental sustainability, both internally by reducing the impact of our own operations, but also by influencing others, where we can. MPA recognises that some maritime companies are ready to go beyond the minimum mandated requirements of the IMO and in this regard, the Maritime Singapore Green Initiative (MSGI) was conceptualised in 2011 to encourage first movers to adopt higher standards of environmental sustainability. This information can be found on www.mpa.gov.sg.

REDUCING GREENHOUSE GAS (GHG) EMISSIONS AND ENERGY USAGE

MPA has been working closely with shipping lines to further reduce CO₂ emissions through the Green Ship Programme (GSP). The GSP encourage owners of Singapore ships to adopt energy-efficient ship designs that exceed IMO's EEDI requirements for that particular ship type and size. Qualifying ships can enjoy discounts on the Initial Registration Fees and Annual Tonnage Tax.

THE MARITIME SINGAPORE GREEN INITIATIVE

In 2011, MPA pledged to invest up to \$100 million over a five-year period to support its MSGI, which comprises the Green Ship Programme (GSP), the Green Port Programme (GPP) and the Green Technology Programme (GTP). These are voluntary programmes designed to recognise and incentivise maritime companies to adopt clean and green shipping practices and go beyond the minimum mandated requirements when it comes to environmental sustainability. Maritime companies were also invited to take the Maritime Singapore Green Pledge to indicate their commitment in promoting clean and sustainable shipping in Singapore.

Since its launch, the MSGI has garnered huge support from the maritime community. In 2014, 90 companies including shipping lines, salvage companies and offshore service providers signed the Green Pledge; 203 Singapore-flagged ships qualified for the GSP; more than 3,000 vessel calls enjoyed port dues concessions under the GPP; and 17 companies and 57 Singapore-flagged ships participated in the GTP.

The Maritime Singapore Green Initiative



MARITIME SINGAPORE *Greenpledge*

- | | | |
|---|---|--|
| 1. ABB Private Limited | 32. Hong Lam Marine | 63. Pacific International Lines (Pte) Ltd |
| 2. AET Shipmanagement (Singapore) | 33. Hanjin Shipping | 64. Pacific Radiance Ltd |
| 3. America Bureau of Shipping | 34. IMC Industrial Group | 65. Pacific Richfield Marine Pte Ltd |
| 4. Apex Ship Management Pte Ltd | 35. J. Lauritzen Singapore Pte Ltd | 66. Posh Semco Pte Ltd |
| 5. Asia Lift Pte Ltd | 36. Jurong Port Pte Ltd | 67. PSA Corporation Ltd |
| 6. Boskalis International (S) Pte Ltd | 37. "K" Line Pte Ltd | 68. PSA Marine (Pte) Ltd |
| 7. Bourbon Offshore Asia Pte Ltd | 38. Keppel Offshore & Marine | 69. RINA Hong Kong Limited Singapore Branch |
| 8. BP Singapore Pte Limited | 39. Keppel Smit Towage Pte Ltd | 70. Rio Tinto Shipping (Asia) Pte Ltd |
| 9. British Marine (Asia) Private Limited | 40. Korean Register of Shipping (KR) | 71. Sembcorp Marine |
| 10. Burea Veritas Marine (Singapore) Pte Ltd | 41. Kumiai Navigation (Pte) Ltd | 72. Shell Marine Products |
| 11. BW Maritime | 42. Lloyd's Register Asia | 73. Singapore Cruise Centre Pte Ltd |
| 12. Cara Shipping Pte Limited | 43. Maersk Line - Asia Pacific Region | 74. Singapore Shipping Association |
| 13. Celeste Holding Pte Ltd | 44. Maersk Tankers Singapore Pte Ltd | 75. SMIT Singapore Pte Ltd |
| 14. China Classification Society | 45. Maju Maritime Pte Ltd | 76. ST Shipping & Transport Pte Ltd |
| 15. Columbia Shipmanagement (Singapore) Pte Ltd | 46. Maritime and Port Authority of Singapore | 77. Stolt-Nielsen Singapore |
| 16. D' Amico Shipping Singapore | 47. Masterbulk Pte Ltd | 78. Swire Pacific Offshore Operations (Pte) Ltd |
| 17. Dasin Shipping Pte Ltd | 48. Mermaid Marine Asia Pte Ltd | 79. Tai Chong Cheang Steamship Co. (H.K.) Ltd |
| 18. Det Norske Veritas Pte Ltd | 49. Mitsui O.S.K Bulk Shipping (Asia Oceania) Pte Ltd | 80. TecnoVeritas Asia Pacific Pte Ltd |
| 19. Dolphin Drilling Pte Ltd | 50. M.T.M Ship Management Private Limited | 81. The China Navigation Co Pte Ltd |
| 20. Eastern Navigation Pte Ltd | 51. Neptune Orient Lines Limited | 82. Thome Group of Companies |
| 21. Eastern Pacific Shipping Pte Ltd | 52. Nippon Kaiji Kyokai (ClassNK) | 83. Tolani Shipping (Singapore) Pte Ltd |
| 22. Enesel Pte Ltd | 53. NORDEN Shipping (Singapore) Pte Ltd | 84. TORM A/S |
| 23. Epic Gas Ltd | 54. Norgas Carriers Private Limited | 85. Ultrabulk Shipholding (Singapore) Pte Ltd |
| 24. Evergas | 55. NYK Bulkship (Asia) Pte Ltd | 86. U-Ming Marine Transport Corporation |
| 25. Evergreen Marine (Singapore) Pte Ltd | 56. NYK Group South Asia Pte Ltd | 87. Wallenius Wilhelmsen Logistics AS (Singapore Branch) |
| 26. Executive Ship Management Pte Ltd | 57. Ocean Tankers (Pte) Ltd | 88. Wan Hai Lines |
| 27. Ezra Holdings Ltd | 58. Oil Spill Response Ltd | 89. Western Shipping Pte Ltd |
| 28. Fleet Ship Management Pte Ltd | 59. OMC Shipping Pte Ltd | 90. X-Press Feeders |
| 29. Germanischer Lloyd | 60. Orient Express Lines | |
| 30. Grindrod Shipping Pte Ltd | 61. Oslo Bulk Holding Pte Ltd | |
| 31. Hamburg Süd Hong Kong Limited | 62. PACC Ship Managers Pte Ltd | |

LOCAL AIR QUALITY

MPA complies with the international regulations set by IMO. Effective from 1 January 2012, the global sulphur cap of marine fuels was reduced initially from 4.5% to 3.5%, and this will be further reduced progressively to 0.5% from 1 January 2020.

To maintain a clean and lush Garden City, Singapore implements strict legislation against pollution. As the maritime regulator, MPA enforces the relevant regulations on ships operating in the Singapore port, such as the MPA Port Regulations and Prevention of Pollution of Sea Act.

In 2013 and 2014, a total of 40 and 24 ships respectively were fined for air pollution, such as visible smoke and ash, in the Singapore port. To improve our capability to monitor air pollution in our waters, MPA has embarked on a research project to apply surveillance technologies in the automatic detection of black smoke emitted by ships during their port stay.

We are also encouraging ships to reduce sulphur oxide (SO_x) emissions through the GSP and GPP programmes. To qualify for the GSP, owners and operators of Singapore ships must submit documentation showing the installation of an

approved SO_x scrubber and the emission reductions achieved.

Ships calling to Singapore that burn clean fuels (less than 1% mass/mass (m/m) of sulphur) while at the port, or use type-approved abatement/scrubber technology are eligible to participate in the GPP. Under the GPP, ships are entitled to port dues reductions by 15-25%. We aim to encourage more ships to reduce SO_x emissions.

To further reduce emissions, we encourage local companies engaging in maritime related businesses like terminal operations, ship operations and harbour craft operations to

participate in the GTP. The GTP co-funds the development and implementation of technologies that reduce CO₂, SO_x and nitrogen oxide (NO_x) emissions. A company that qualifies for the programme may be subsidised up to 50% of the total project cost. Although the grant is capped at \$2 million per project, the quantum will be increased to \$3 million if the project can achieve more than 10% reduction in emissions.

It is also timely for us to assess the effectiveness of these voluntary programmes in reducing CO₂, NO_x and SO_x emissions from shipping activities in our port waters. To this end, we have begun preparatory works to conduct a follow-up air emissions study in 2015 to corroborate findings from the previous study conducted in 2008. This would help us to create a comprehensive database on the level of air emissions by ships calling at our port and to assess the impact of shipping emissions on Singapore's air quality.

THE INTERNATIONAL MARITIME ORGANIZATION

The International Maritime Organization (IMO) is a specialised agency of the United Nations that sets international regulations for safety, security and environmental protection of international shipping. Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented.

Singapore has acceded to all six Annexes of IMO's MARPOL

Convention. The MARPOL Convention is the primary IMO instrument for the prevention of pollution from ships. Singapore is also party to other IMO Conventions on environmental protection such as the 1990 Oil Pollution Preparedness, Response and Co-operation Convention and its 2000 Protocol dealing with chemical pollution; the 1992 Civil Liability and Fund Conventions; and the 2001 Bunker Convention.

Singapore has been a Member of the IMO since 1966, and has served on the IMO Council since 1993. (see Supporting the International Maritime Community section on page 45 for details).



At a Glance – Maritime Singapore Green Initiative Incentives

Up to **50%**

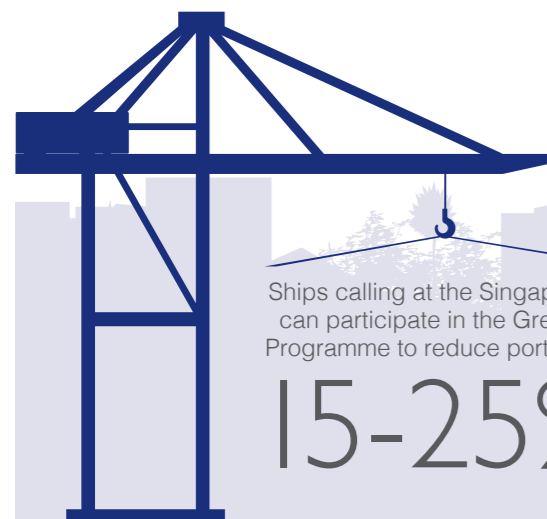


subsidy for companies that qualify for MPA's Green Technology Programme if the project can achieve more than 10% reduction in emissions



Quantum will be increased to **\$3 million**

if the project can achieve more than 10% reduction in GHG emissions



Ships calling at the Singapore port can participate in the Green Port Programme to reduce port dues by

15-25%

REDUCING EMISSIONS FROM BUNKERING AND SHIP FUEL

Bunkering is the process of supplying fuel to ships. The bunkering industry is an integral part of the global hub port. As the world's largest bunkering port, Singapore strives to raise the standards of the bunkering industry to ensure its operations are sustainable and meet IMO's environmental requirements.

As the shipping industry is shifting towards the use of low-sulphur fuel, the bunkering industry is looking into new technologies and operating models that can support the bunkering operations in meeting IMO's Emission Control Areas (ECA) airborne emission limits, under the MARPOL Convention. MPA has also introduced several

new initiatives to assist the bunkering industry in enhancing the bunkering processes and technology.

- Ensuring availability of ECA-compliant fuel**
 When the sulphur limit within the ECAs are reduced from 1% to 0.1% m/m in 2015, MPA wants to assure bunker buyers that they will be able to lift fuel that complies with IMO's new fuel standard in Singapore. We are working with the fuel industry to ensure the availability of ECA-compliant marine fuel oil in the Port of Singapore.
- Preparing for LNG bunkering, to reduce sulphur emissions**
 Following Singapore's announcement in 2013 of its plans to invest in the liquefied natural gas (LNG) market, MPA has been

preparing to meet the new stringent operational demands of LNG shipping and bunkering in the port of Singapore.

We are working on a pilot programme with the LNG bunker supply chain to establish the safety and operation protocols for LNG bunkering. MPA will fund up to six LNG-fuelled vessels to study the effectiveness of established modes of LNG delivery, such as the use of iso-tank containers, ship-to-ship transfer and terminal-to-ship transfer and to evaluate the operational standards and procedures of the most cost-effective mode of LNG delivery. This study, to be completed in 2017, will ensure Singapore's readiness in LNG bunkering.

PROTECTING OUR WATERS FROM CONTAMINANTS AND POLLUTANTS

MPA is responsible for the protection of the marine environment from ship-based sources of pollutants and regulates maritime commercial activities with potential for oil, chemical and waste release such as bunkering, passenger ferries and offshore vessels.

Singapore has acceded to all six Annexes of IMO's MARPOL Convention. The MARPOL Convention is the primary IMO instrument for the prevention of pollution from ships. Singapore is also party to other IMO Conventions on environmental protection such as the 1990 Oil Pollution Preparedness, Response and Co-operation Convention and its 2000 Protocol dealing with chemical pollution; the 1992 Civil Liability and Fund Conventions; and the 2001 Bunker Convention.

Singapore enacts domestic legislation that gives effect to the various international Conventions that it has ratified/acceded to. The Prevention of Pollution of the Sea Act (PPSA) prescribes measures to prevent, reduce and control of pollution of Singapore waters, and pollution from ships or land as well as from dumping from ships. The Act enables MPA to take preventive measures to prevent pollution, including denying entry or detaining ships.

At the regional level, Singapore works with the other littoral States of the Straits of Malacca and Singapore – Indonesia and Malaysia – through various mechanisms related to environmental protection. For example, the three littoral States have in place the Revolving Fund, established in 1981 with funding support from Japan's Malacca Strait Council. The littoral States can draw cash advances from the Revolving Fund for use in combating oil pollution caused by ships.

Singapore recognises the need for detailed contingency plans in order to respond effectively in the shortest possible time in order to mitigate its impact on our coastal and marine environment.

To this end, MPA has in place the Marine Emergency Action Procedure (MEAP) to deal with oil and chemical spills, as well as other marine incidents effectively. The MEAP contains detailed procedures on reporting, control, co-ordination and rescue in a marine incident and establishes clear channels of authority for effective assembly of resources. It enables MPA to tap a large pool of resources for assistance in the event of a marine emergency. These include resources and personnel from government agencies such as the SAF, PCG and SCDF as well as anti-pollution vessels and equipment operated by private organisations.

The Oil Spill Contingency Plan is a supplement to the MEAP. The aim of the plan is to respond effectively in the shortest possible time to stop the discharge of oil and contain the spill so as to prevent it from being washed ashore or extended over a large area.

In dealing with incidents involving bulk chemicals, hazardous and noxious substances (HNS), carried by ship at sea and at terminals, MPA has developed the Chemical Contingency Plan (Marine), which is also a supplement to the MEAP. It is jointly operated with government agencies including NEA and SCDF and the Marine Terminal Emergency Response Committee (MTERC) of the Singapore Chemical Industry Council (SCIC).

To test and demonstrate Singapore's readiness to respond effectively to marine incidents, regular emergency exercises are conducted with the relevant agencies, port facility operators and shipowners to test the response actions detailed in the MEAP. Such exercises help ensure the effective implementation of marine contingency plans and readiness of personnel in responding to incidents, should prevention fail.

There is also a standard operating procedure (SOP) for Joint Oil Spill Combat in the Straits of Malacca and Singapore set by the Revolving Fund Committee. The SOP, which was drawn up following the establishment of the Revolving Fund, covers areas such as the response areas and division of responsibility among the littoral States, communication and information sharing procedures, interstate assistance and reimbursement procedures. The objectives are to facilitate early information sharing and prompt and coordinated response to any oil spill incident.

MPA has been an early supporter of the IMO's International Convention for the Control and Management of Ships' Ballast Water and Sediments (the Ballast Water Management Convention) to prevent, minimise and ultimately eliminate the transfer of harmful aquatic organisms and pathogens through the control and management of ships' ballast water. In 2014, we conducted onboard sampling and analysis of ballast water on board six Singapore-registered ships to contribute to the IMO's review of the Guidelines for approval of ballast water management systems (G8) and presented our findings to the IMO's Marine Environment Protection Committee.

MPA has supported equipment manufacturers to obtain basis approval from IMO to develop ballast water treatment systems. We will continue to assist these manufacturers to obtain the final approval and there by type approve the systems under Singapore. MPA is also assisting NUS on the Development of Integrated On-Board Technology for Ballast Water Treatment. MPA also supported Nanyang Technological University (NTU) in developing a project on the development of nano-fibre membranes to remove micro-organisms via filtration and disinfection for application in anti-fouling and ballast water treatment. The project has already been completed, and NTU is exploring upscaling and commercialising the technology.

SIBCON 2014

The 18th Singapore International Bunkering Conference and Exhibition (SIBCON) organised by MPA saw a record turnout of more than 1,600 delegates from 70 countries at Resorts World Sentosa. Opened by Mr Lui Tuck Yew, Minister for Transport, the biennial event is by far the world's largest and most influential forum for the marine fuels industry, where bunkering and shipping professionals connect with industry thought leaders.

Distinguished members of the maritime industry delivered keynotes and



Singapore's Minister for Transport, Mr Lui Tuck Yew, officiated as Guest-of-Honour at the opening ceremony of the 18th Singapore International Bunkering Conference and Exhibition (SIBCON).

industry addresses throughout the four day event on issues focused on the latest industry developments worldwide and discussed issues such as compliance, operational efficiency and managing operational costs, affecting the marine fuel industry. The event also offered numerous networking opportunities for participants including a SLNG site tour and networking cocktail session.

Participants were also involved in the pre-conference symposium on Mass Flow Meters and a full-deployment Joint Oil Spill Exercise (JOSE).

PORT OF SINGAPORE IS FIRST IN THE WORLD TO MANDATE THE ADOPTION OF MASS FLOW METERING SYSTEM FOR BUNKERING

As the first port in the world to mandate the use of Mass Flow Meters (MFM) for bunkering, Singapore will set a new benchmark for bunkering practices worldwide. The MFM system will enhance transparency, increase productivity and minimise illegal bunkering activities. MPA is confident that the adoption of MFM system for bunkering in the Port of Singapore will provide better assurance to both the bunker buyers and suppliers on the quantity of bunker delivered and safeguard Singapore's reputation as the world's top bunkering port.

RUNNING A CLEAN AND EFFICIENT PORT

MPA provides free waste collection services for ships berthing in our port. The waste collected is brought to the National Environment Agency's Tuas waste-to-energy plant for proper disposal.

MPA also provides disposal services for bulky waste for a fee.

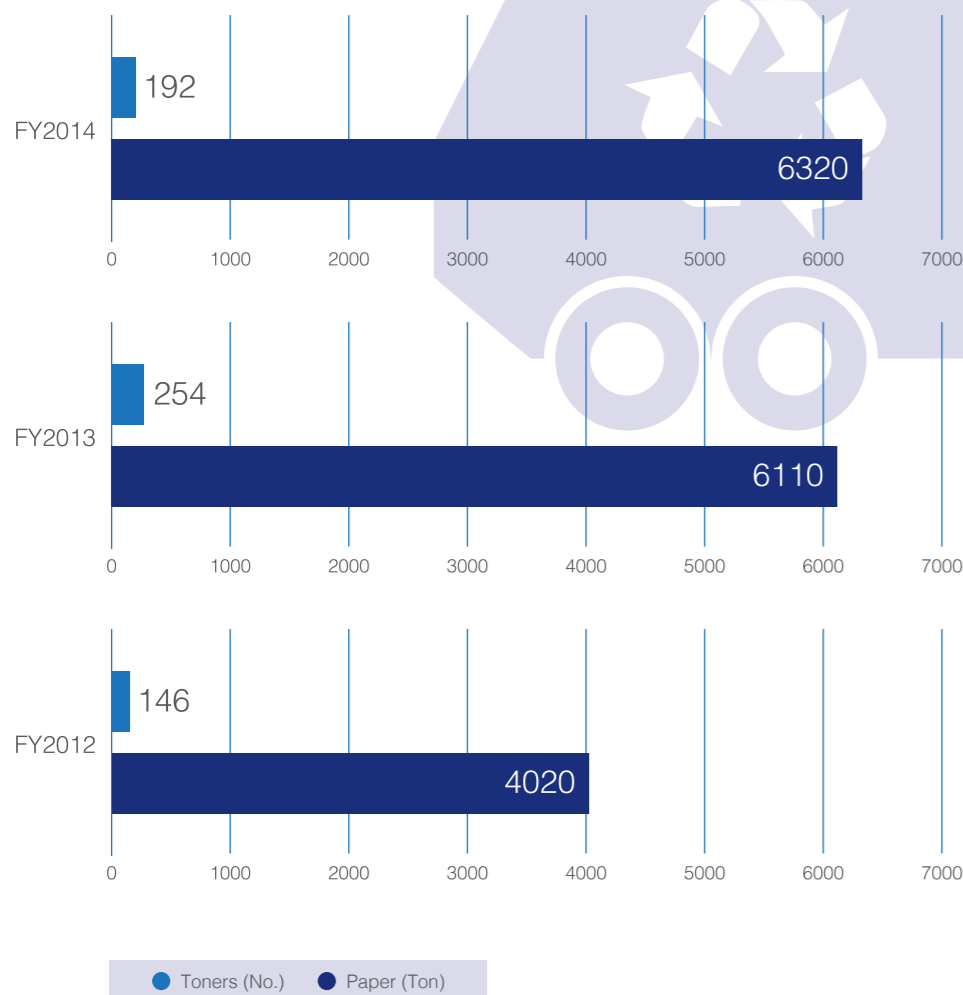
In 2014, a new Garbage Collection Special Service Online System was implemented for the shipping agents and ship masters, so that they can access and apply for the special waste collection services conveniently.

Currently, the waste collected from the vessels is not sorted for recycling. The intent is to look into this area over the next few years and also to increase the frequency of waste collection services for the vessels.

We also seek to reduce waste from our own offices such as implementing the 3R Programme to Reduce, Reuse and Recycle waste since 2002. Waste paper, spent toners and aluminium cans are collected through prominently placed recycling bins at our offices in both the PSA Building and Tanjong Pagar Complex.

MPA's Recycling Efforts

Recyclables Collection



MINIMISING CONGESTION OF PORT ROADS

Tens of thousands of containers are transported in and out of the port daily. Any traffic congestion around the port will reduce our overall productivity, increase atmospheric emissions and create a nuisance for local population.

To maintain a smooth traffic flow within and around the port, we worked with LTA during the early port planning stage to plan and design an efficient road system for the port. However, with more ships calling in our port, the port roads have gradually become more congested. To relieve congestion, we waived the Temporary Harbour Craft Permit (THCP) fee in 2013 for all vessels under Inter-gateway Feeder for a period of five years. The waiver aims to encourage more intraport movement using feeder via sea versus via land and this will then alleviate traffic conditions on the road.

RECLAIMING LAND FOR OUR PORT

Building a new port, or even redeveloping an existing one, in land-scarce Singapore is never a straightforward matter. Due to the scarcity of land resources in Singapore, reclamation usually has to be carried out to create land for port development. When MPA decided to develop Phases 3 and 4 of the Pasir Panjang Terminal (PPT) in 2004 to meet the growth in container volume, the 198 hectares of extension were reclaimed using a combination of dredged materials from marine development, land based excavated materials from underground rail and road projects and sand (see Using Excavated Materials as Reclamation section on page 35). Over 20 million m³ of dredged and excavated material or over 40% of the total fill volume was used in the reclamation of PPT Phases 3 and 4.

We are on track to finish the reclamation by March 2015. When completed, PPT Phases 3 and 4 will provide an additional 15 berths with

a capacity of 15 million TEUs. With nearly six kilometres of quay length and up to 18 metres draft, the new PPT terminals will be able to serve the next generation of container ships.

MPA also carries out research and development for the beneficial use of dredged material and encourages the use of dredged and excavated materials for reclamation to minimise dumping. Environmental protection measures MPA has in place include an (EIA) and (EMMP) for all large scale MPA development projects.

(Read about our other sustainable port development efforts in Building the Next Generation Port for the World section, Using Excavated Materials as Reclamation section, and Relocating Corals to Preserve Marine Biodiversity section.)

BUILDING A NEXT GENERATION PORT

As more economies in developing nations progressively open up and join the global marketplace, there will be increasing demand for international shipping and reliable port services. As a global hub port, Singapore is embarking on a key national initiative to develop a Next Generation Port (NGP).

The idea of the NGP was conceived during the detailed planning of Tuas container terminals in 2014. A fully integrated port can make better use of space – a critical factor in land-scarce Singapore – and apply advanced technology that will improve productivity and safety of our operators.

The new Tuas port will be implemented in four phases, leading to the development of a mega container terminal. Phase 1 development including reclamation, dredging and wharf construction is expected to commence in early 2015 and be completed by 2022. The entire Tuas Terminal will sit on 1,337 hectares of land, has 66 berths with a capacity of 65 million TEUs.

During the reclamation of Tuas Terminal Phase 1, over 60% of the total land fill, 60 million m³, will come from recycled dredged and excavated material.

To intensify land use, we are exploring the development of underground and aboveground space to increase usable space for planned development of the Tuas Maritime Hub. The maritime clusters could be conveniently co-located within this business hub and enjoy the common amenities and ease of doing business within close proximity of one another.



Artist Impression

USING EXCAVATED MATERIALS AS RECLAMATION

During the development of the new Tuas port, a large amount of materials is required for land reclamation. Instead of importing sand to supplement the dredged materials for reclamation, LTA and MPA derived an innovative solution that reduces the amount of sand required and the cost for reclamation.

During the excavation of underground construction projects, LTA generated a large amount of excavated materials, which requires proper disposal. The excavated materials could be ideal for land reclamation of the new port instead of wastage through dumping.

Both LTA and MPA proceeded to study the feasibility of opening part of the reclamation site for port development as an interim dumping site for the excavated materials. A tentative site was identified that can accommodate 3 million m³ of excavated materials at a dumping rate of 9,000 m³ per day. An EIA was done and the site identified was found suitable to receive the excavated materials without causing adverse environmental impacts.

As the reclamation site was immediately available, LTA was able to dispose off the excavated materials directly and avoided the stockpiling and re-handling costs, in addition to the disposal cost for dumping offshore. In total, LTA managed to save \$32 million from this innovative cooperation and MPA saved about

\$90 million land reclamation cost for Tuas Terminal Phase 1 reclamation for the government.

ENGAGING THE COMMUNITY

Non-governmental organisations (NGOs) can be effective channels for communicating environmental messages to concerned members of the public and interest groups. It is important for us to earn the support of NGOs, especially those deeply involved in marine life and biodiversity, and to work together with them to develop a sustainable marine environment. A strategic partnership with the NGOs will be mutually beneficial – it will allow us to leverage on the NGOs' expertise while providing unique opportunities for them to study the marine life in our waters.

MPA undertakes multiple steps when engaging and building partnerships with NGOs. Firstly, MPA ensures that there is a clear two-way communication between the organisation and the NGO. Secondly, MPA welcomes joint involvements in the projects. Thirdly, MPA monitors NGOs' activities to understand their concerns and views

on MPA. These steps help to build a relationship founded on trust, mutual respect and cooperation between the NGOs and MPA [G4-27].

MPA sought the advice of NGOs such as Nature Society of Singapore, Singapore Environment Council, WildSingapore, Singapore Reef and Marine Conservation Committee and etc. at various stages of the Tuas Terminal development. When we were relocating the corals, we again turned to the NGOs to jointly develop a Coral Relocation Volunteer Programme. The NGO fully supported the programme, which ran between 2013 and 2014, and sent a team of eight volunteer divers and surface observers to work alongside our marine biologist to relocate the corals.

The feedback we have received from NGOs and its volunteers was positive. They appreciated the opportunities for collaboration and the ability for them to contribute effectively to the development of the marine environment. In the process, the public also benefited from learning about the marine biodiversity in Singapore waters throughout the promotional activities and publicity created by the programme.



MPA worked closely with NGOs to develop a sustainable marine environment.

RELOCATING CORALS TO PRESERVE MARINE BIODIVERSITY

Prior to starting on any construction or development project, MPA performs an EIA to evaluate the level of impact the project could have on the surrounding environment. This was done for the first phase of the development of Tuas Terminal in 2012, and we discovered that the delicate corals at Sultan Shoal would be adversely affected by the construction and reclamation activities.

As corals are natural, living habitats for a wide array of marine life, they are critical in sustaining the biodiversity in our waters. MPA commissioned a Coral Relocation Plan to determine the most optimal relocation sites for the corals at Sultan Shoal and adopted the findings of the study to relocate the corals to Sisters' Island and St John's Island. MPA also put in place a five-year monitoring programme to study how these corals would be adjusting to their new environment.

During the relocation of the corals, some of their fragments were invariably left behind on the shoal. We harvested these coral fragments and started a research programme with the National University of Singapore to transplant and nurture them in coral nurseries set up at Lazarus Island, St John's Island and Kusu Island. If the effort is successful, the rejuvenated corals will eventually be relocated to degraded reef and non-reef waters in Singapore to enrich the biodiversity in those areas. Entitled, 'Enhancing Singapore's Coral Reef Ecosystem in a Green Port', we have an ongoing programme to assess whether coral fragments at the nurseries can be created from grown coral fragments. The programme also assesses the survivability, adaptability, and evolution of remaining corals at Sultan Shoal.



MINIMISING WASTE, WATER USAGE AND ENERGY CONSUMPTION

To the extent possible, MPA uses regulation and tariffs to influence the consumption of water and energy of vessels in port.

As water is a scarce resource to Singapore, MPA issues licences to public terminal operators and appoints agents via water sales agreements for selling water as ship stores to foreign visiting vessels. To extend the consciousness of this scarce resources, water tariffs are tiered higher as volume sold increases through a volumetric fee to discourage excessive water usage.

Many of MPA's material environmental impacts sit outside of our direct operations. As such, we encourage environmentally sustainable shipping and port operations through our Green Ship, Green Port and Green Technology Programme. However, we also see that it is essential to minimise the environmental impacts from our own direct operations wherever possible. The

material issues that relate to our own operations are waste, water usage and energy consumption. We report on each of these in this section.

Our staff are regularly briefed on MPA's environmental plans and goals and best practice from other organisations. Some of the ways we have promoted energy conservation in 2014 are as follows:

- Supported Earth Hour 2014 by switching off lights at Marina South Pier for an hour.
- Replaced incandescent lightings with LED lights in a pilot project (see box story "LED for A Brighter Future").
- Kept ambient temperature in offices at a comfortable 25°C.
- Placed stickers next to light switches and office equipment as a reminder to switch them off when not in use.
- Implemented energy-saving technology, such as dual-flushing cistern to minimise water usage, and motion sensors for taps and lights in the washrooms to reduce wastage.

During recent years, MPA has been implementing various environmentally-friendly initiatives in our buildings, including energy-saving lights, efficient air-conditioning systems, purchasing energy efficient appliances and installing water-saving features such as motion sensors for taps, water closets and urinals. We also seek to avoid waste generation, by including a tender requirement for contractors to include a "salvage value", such that they are encouraged to reuse or donate furniture upon the end of our contract with them.

To reduce our own carbon footprint, we are looking to install solar panels on our buildings to further reduce our carbon footprint by end of 2015. Our aim is to cover all feasible areas with solar panels. The project is under implementation and our preliminary estimate is that the solar systems could generate 543,000 kWh of electricity, with a reduction in CO₂ emission by 484,899 kg. Conversion factor taken for Global Emission Intensity of 0.893kgCO₂ Kwh (This is based on the emission intensity and generation, annual CO₂ emission saving = emission intensity x annual generation from the solar PV systems).

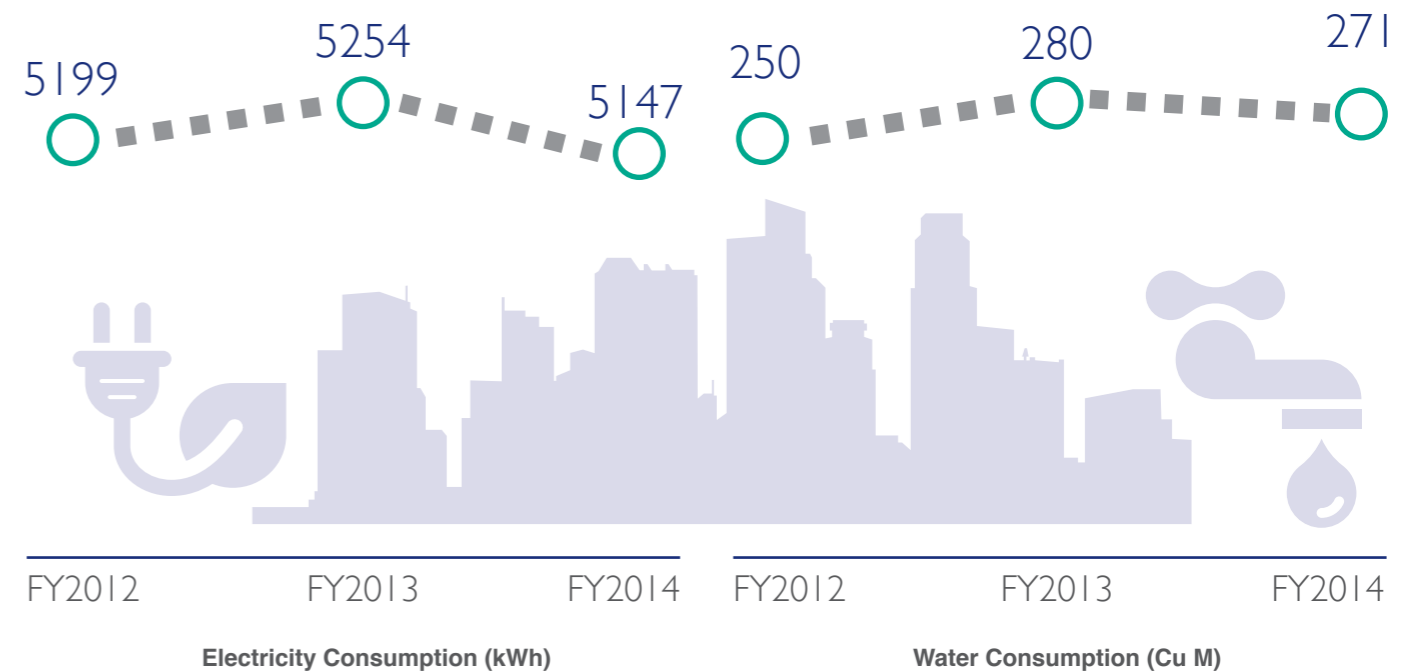
Electricity usage has decreased marginally by 19%, from 5,254 GWh in 2013 to 5,147 GWh in 2014, translating to energy intensity of 18.8 kWh/\$⁽¹⁾ in 2013 to 18.6kWh/\$ in 2014⁽²⁾. Water consumption has decreased by 3% from 27,993 m³ in 2013 to 27,116 m³ in 2014. This translates to emissions of 2358.82 TCO₂ in 2013 and 2315.45 TCO₂ in 2014⁽³⁾. The increase in water consumption could be attributed to renovation works at the piers. All of MPA's energy use is in the form of electricity, purchased from the national grid. We do not use other energy forms in significant quantities, hence our only material energy use is electricity consumption across our buildings.

LED FOR A BRIGHTER FUTURE

We have been changing photoluminescence (PL) lights to the more energy-efficient LED bulbs at our offices and facilities, to reduce electricity consumption, and therefore greenhouse gas emissions. Light bulbs at our offices within PSA Building (except 21st storey) and PSA Vista's toilets have been replaced in 2014, saving approximately 1,333kwh of electricity (or 0.60 TCO₂ emissions) each year⁽⁴⁾.

More facilities will be retro-fitted with LED bulbs with each renovation over the next few years.

Graph 1: MPA's electricity and water consumption



⁽¹⁾ On the basis of \$280 million of total revenue in 2013

⁽²⁾ On the basis of \$277 million of total revenue in 2014

⁽³⁾ Conversion factor taken from MEWR (2014) "Carbon intensity of electricity generation" figure (0.4499 kgCO₂/kWh).

⁽⁴⁾ All light bulbs are assumed to be switched on 12 hrs a day, for a year. All light bulbs are assumed to last the full period of their expected lifespan.

VIBRANT IMC ECO-SYSTEM

Singapore is home to more than 130 of the world's top shipping groups. A rich diversity of maritime products and services can be found in Singapore, and she is the ideal Asian gateway for global leaders in maritime services such as shipping finance, shipbroking, maritime law and arbitration, and marine insurance. MPA aims to continually broaden both the breadth and depth of the IMC eco-system in Singapore.



BUILDING A THRIVING ECO-SYSTEM

Singapore is home to more than 130 of the world's top shipping groups. A rich diversity of maritime products and services can be found in Singapore, and she is the ideal Asian gateway for global leaders in maritime services such as shipping finance, shipbroking, maritime law and arbitration, and marine insurance. MPA aims to continually broaden both the breadth and depth of the IMC eco-system in Singapore.

MPA runs one of the world's busiest port in terms of shipping tonnage, with some 140,000 vessel visits annually. As a premier port and a container transshipment hub, MPA offers a comprehensive range of maritime services, such as pilotage, towage, fresh water supply and waste disposal, as well as reliable and efficient cargo handling. Singapore is also one of the top bunkering (fuelling) port in the world, lifting about 30 million tonnes of bunkers annually.

As the world's third-largest petrochemical refiner, Singapore owns about 70% of the world's jack-up rig-building market and over 65% of the global floating production storage

and offloading conversion market. To support the demand of the oil and gas industry, Singapore possesses the most technically advanced and efficient shipbuilding and ship-repair facilities in Southeast Asia.

To develop Singapore as a leading international maritime centre, MPA has continued to focus on attracting and entrenching a core group of shipowners and operators to base their operations and decision-making functions in Singapore. In 2014, the pool of over 130 international shipping groups under MPA's Maritime Sector Incentive – Approved International Shipping Enterprise (MSI-AIS) award jointly contribute to our economy by committing to generate business spending of close to S\$4.0 billion annually.

DEVELOPING MARITIME SERVICES

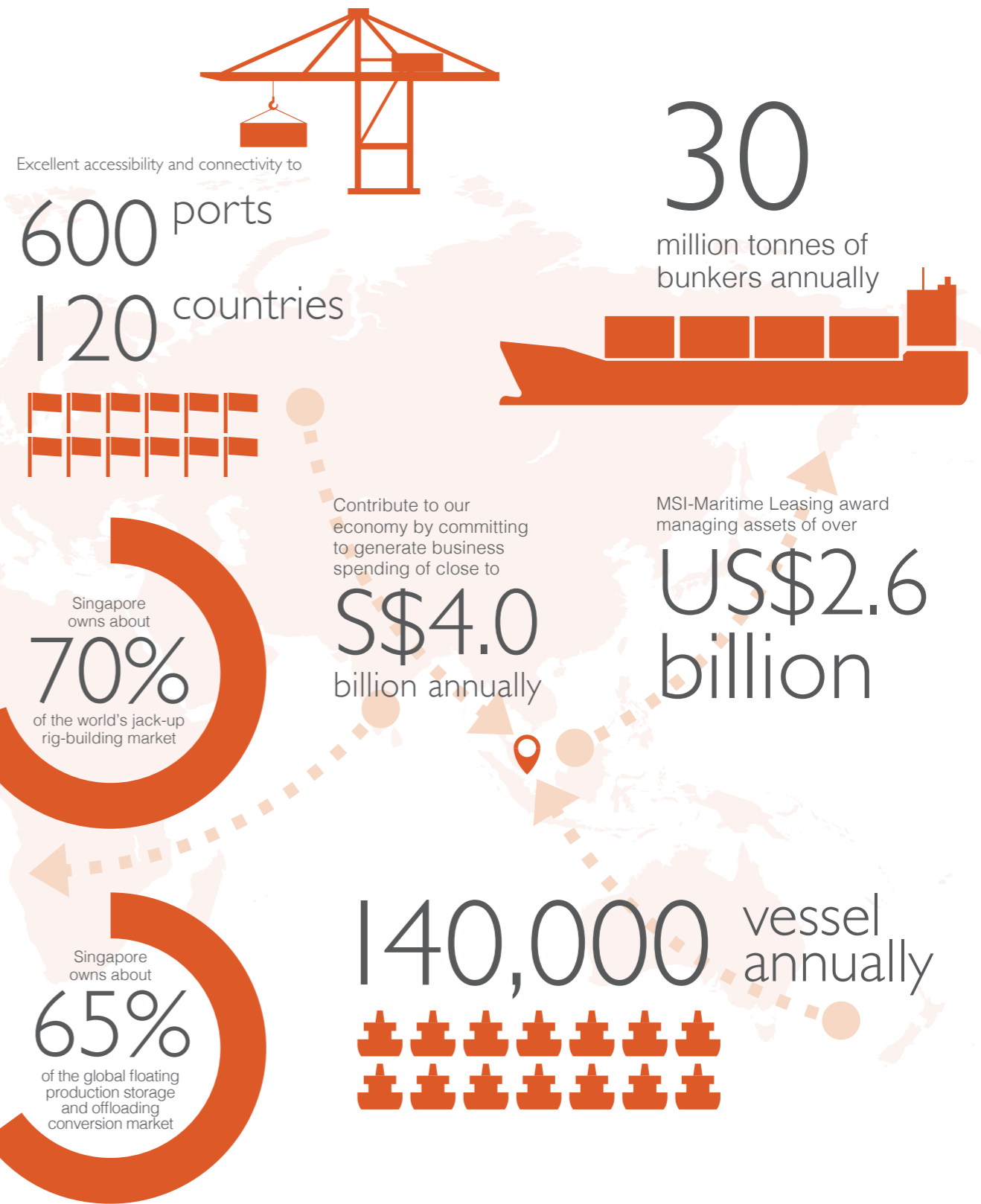
MPA continued to make progress in developing the maritime services sector. There are now more than 30 local and international law firms with

maritime practices in Singapore, over 20 banks with shipping portfolios and 8 groups under the MSI-Maritime Leasing award managing assets of over US\$2.6 billion.

More than 20 leading international shipbroking firms from countries like Norway, Germany, and the UK now have significant operations in Singapore. Many of these shipbrokers have also ventured beyond the traditional role of ship chartering and sale & purchase transactions, to provide higher value-add services such as research and consultancy. There are some who have also ventured into offshore broking.

In the marine insurance sector, MPA has continued to work closely with the Monetary Authority of Singapore (MAS) to attract Lloyd's Asia service companies and International Group Protection & Indemnity (IG P&I) clubs. There are now 16 Lloyd's Asia service companies writing marine and offshore energy business. With the establishment of Gard P&I Club, there are now 7 IG P&I clubs in Singapore.

Developing Singapore as a leading International Maritime Centre



SAFEGUARD STRATEGIC MARITIME INTERESTS & AN INFLUENTIAL VOICE

Singapore has served on the Council of the International Maritime Organization (IMO) for eleven consecutive terms during which it has made several important contributions as a member state. We have held key leadership positions such as Chairman of the IMO Council and Vice-Chair of the Maritime Safety Committee.



SUPPORTING THE INTERNATIONAL MARITIME COMMUNITY

Singapore has served on the Council of the International Maritime Organization (IMO) for eleven consecutive terms during which it has made several important contributions as a member state. We have held key leadership positions such as Chairman of the IMO Council and Vice-Chair of the Maritime Safety Committee.

MPA provides technical assistance to developing member states in Africa, Asia Pacific, Middle East and the Caribbean through the IMO-Singapore Third Country Training Programme. Under this programme, we have trained more than 1,500 participants from 82 IMO member states over the last 16 years.

We also actively support the IMO's Member State Audit Scheme, which aims to enhance compliance with IMO

regulations and reduce sub-standard shipping. We contributed two qualified auditors to the global IMO auditor resource pool and underwent the voluntary audit successfully in 2008. Since 2010, we have been conducting courses for other IMO member states in preparation of their own audits.

As part of our commitment to keeping the sea lines of communication open and secure for safe passage of ships, we are a Contracting Party of the Regional Co-operation Agreement on Combating Piracy and Armed Robbery Against Ships in Asia (ReCAAP) and the host country to the Information Sharing Centre (ISC) since it was established in 2006. We are actively involved in steering ISC's strategy and development as a member of the ISC Governing Council.

Closer to home, Singapore is an active contributor to the Co-operative Mechanism on Safety of Navigation and Environmental Protection in the Straits of Malacca and Singapore. The Co-operative Mechanism was launched in 2007 by the three littoral States of Indonesia, Malaysia and Singapore under IMO's Protection of Vital Shipping Lanes initiative.

In cultivating and strengthening relationships with the international maritime community, Singapore provides regular assistance and resources to maritime capacity development efforts in other countries. For instance, MPA organises the Maritime Public Leaders' Programme, which is a holistic and interdisciplinary executive programme for global maritime leaders.

MPA FURTHER DISCUSS WITH EUROPEAN PORT AUTHORITIES ON HARMONISING LNG BUNKERING STANDARDS AND PROCEDURES

MPA, Antwerp Port Authority, Port of Rotterdam and Port of Zeebrugge participated in a liquefied natural gas (LNG) bunkering focus group discussion on 14 and 17 October,

held in conjunction with the Singapore International Bunkering Conference and Exhibition (SIBCON) 2014.

The three European port authorities and Singapore discussed on harmonising the technical standards and procedures and examining risk management, emergency procedures and crew competency standards for international shipping for LNG bunkering.

This is in line with Singapore's efforts in driving transformation in the marine fuel industry. Over the years, MPA has been collaborating with industry partners and stakeholders on joint industry projects on LNG

bunkering in Singapore. In 2010, MPA embarked on a joint industry project led by DNV Technology Centre to assess the commercial viability for LNG. In 2013, MPA signed a Memorandum of Understanding with the Antwerp Port Authority and the Port of Zeebrugge to harmonise LNG bunkering standards. In 2014, MPA and its appointed consultant, Lloyd's Register, completed its study on the Technical Standards and Procedures for LNG bunkering in the Port of Singapore. Following the study, MPA is working closely with the industry and stakeholders to develop a technical reference for LNG bunkering in Singapore.

NORWAY SINGAPORE ARCTIC SYMPOSIUM

MPA and the Royal Norwegian Embassy, with support from the Singapore Maritime Institute and Innovation Norway, organised the Norway-Singapore Arctic Symposium on 14 March 2014. The symposium was attended by more than 100 participants comprising shipping industry partners, members of the Singapore Shipping Association, researchers and students from the National University of Singapore, Nanyang Technological University of Singapore and members of the local Norwegian business community.

The aim of the symposium was to raise awareness and facilitate discussion of Arctic issues among agencies, enterprises, and academia in Singapore. Distinguished speakers for the event included officials from the Norwegian Ministry of Foreign Affairs, the Arctic Council, the Royal Norwegian



Embassy, academia from National University of Singapore and Nanyang Technological University and the shipping industry.

The topics covered included activities of the Emergency Prevention and

Preparedness Response Working Group in the Arctic Council, the rule of law and prevention of marine pollution in the Arctic, as well as Arctic technology and the challenges facing oil and gas activities with the changing Arctic environment.

MARITIME PUBLIC LEADERS' PROGRAMME

The fourth Maritime Public Leaders' Programme (MPLP) was held from 13-18 October 2014. The MPLP is a learning platform that brings together senior maritime officials from around the world to discuss and exchange ideas on maritime issues and challenges. It is organised by MPA in partnership with the Nanyang Technological University (NTU) and supported by the Ministry of Foreign Affairs (MFA) under the Singapore Cooperation Programme (SCP).

Since its launch in 2011, 52 representatives from 28 countries have benefitted from the annual MPLP. This year, distinguished speakers from the private and public sectors including NUS' Lee Kuan Yew School of Public Policy and NTU's S. Rajaratnam School of International Studies

shared their wealth of knowledge and experience with 21 maritime representatives from Asia, Africa, Europe, Middle East, the Caribbean and Oceania. Some of the maritime-related topics discussed include port planning and management, shipping economics as well as maritime law, security and management of the marine environment.

In addition to the lectures, participants also experienced Singapore's rich maritime heritage and strengths in port planning and management from field visits to MPA's Port Operations Control Centre, PSA Container Terminal and the Urban Redevelopment Authority Centre.



Mr Pang Kin Keong, Permanent Secretary, Ministry of Transport together with participants from the 4th Maritime Public Leaders' Programme.



STRONG MARITIME SINGAPORE IDENTITY

Our work with stakeholders has helped us identify young people as a potential source of maritime talent – providing potential benefits for the community and MPA.

ENGAGING THE LOCAL COMMUNITY



MPA, the Singapore Maritime Foundation (SMF) and The Singapore Scout Association (SSA) collaborated to set up a Youth Maritime Advisory Board to promote awareness and interest in the maritime industry, and its careers among the youth and scouts in Singapore.

MPA understands that different stakeholder groups hold varying views of the shipping and port industries, some positive, some negative. MPA engages stakeholders such as local communities through regular communication. Our work with stakeholders has helped us identify young people as a potential source of maritime talent – providing potential benefits for the community and MPA.

We regularly brief our project teams and service staff that they are the external face of MPA with an important role in delivering a friendly experience when they engage both the public and maritime communities.

FINDING THE SEA LEGS AMONGST THE YOUTHS

To help increase awareness of the maritime industry amongst youths, MPA launched MPA Learning Journeys in 2011 for local educational institutions. Three different Learning Journeys to three different locations are offered under this programme for school sign ups – Singapore Maritime Gallery, Port Operations Control Centre and

Integrated Simulation Centre. On top of these, there are also MPA Sea Tour Learning Journeys which are organised for MPA's key partners. Our key partners include school leaders, teachers and uniformed groups as they play an important role in shaping the youth's perception of the maritime industry.

MPA is currently working on improving MPA Learning Journeys to further enhance the participants' learning experience.

We also worked with MOE to incorporate maritime topics into the school curriculum and launched a teacher resource package on Singapore's maritime industry for Economics in 2013.

In early 2014, MPA signed an MOU with the Singapore Scout Association (SSA) and Singapore Maritime Foundation. Since the MOU, we have designed and launched a new Young Mariner Badge programme and provided funding support for the hiring of a Sea Scout Executive to further advance our youth outreach objectives. A Youth Maritime Advisory Board was set up and this Board consists of members from both the scouting arena and the maritime industry for well-balanced views at Board meetings which take place twice a year.

In 2015, we will officially launch the Maritime Youth Club, an outreach initiative which encourages students to engage in maritime related activities. As part of the initiative, MPA will support approved projects with a seed fund. Schools can apply for the fund by setting up a dedicated Maritime Youth Club, through an existing CCA or through a separate workgroup/committee.

PUBLIC FACE OF MPA

The annual Singapore Maritime Week raises public awareness of MPA and Singapore's maritime affairs through games, competitions and exhibits. In 2012, the Singapore Maritime Gallery at Marina South Pier was developed and open free to the public. It is a place where they can learn about Singapore's maritime story in a modern, interactive gallery. Other public outreach programmes include the Singapore Maritime Trails, the Maritime Corner@Fort Canning and a Maritime Heritage Fund to support public projects with a maritime heritage theme.

MPA launched Singapore Maritime Trails (SMTs) in 2014. SMTs are designed to be an outreach tool to help raise awareness of Singapore's maritime story and they aim to do so through a guided tour of selected locations. The first of a series of trails (SMT1) was officially launched on 11 April 2014 and it focuses on Singapore's Maritime Heritage. SMT2 is set to be launched in 2015.

Our regular interaction with the public help strengthen relationships with the local community, and provides useful feedback to help improve our programmes. Their feedback has been positive. MPA plans to organise more events and activities to engage the public in 2015.

MARITIME CORNER@ FORT CANNING

MPA adopted the replica of the Fort Canning Lighthouse and Flagstaff from the National Parks Board (NParks) on 11 April 2014. The area around these two maritime structures was converted into the "Maritime Corner@Fort Canning" to tell the story of Fort Canning's importance to Singapore's early maritime trade and its significance as an important navigation point for guiding ships into our port.

The Fort Canning Lighthouse was re-lighted with solar-powered incandescent light to mimic the kerosene-powered light that shone from the lighthouse from 1903 to 1958.

The Maritime Corner@Fort Canning consists of 14 exhibition panels providing details on the history of Fort Canning, the Flagstaff, the Lighthouse, as well as information on the modern day lighthouses maintained by MPA.

SINGAPORE MARITIME TRAILS



MARITIME LEARNING JOURNEYS





QUALITY MARITIME WORKFORCE

Manpower development is essential to ensure a steady pipeline of talents to support the maritime industry's growth.

DEVELOPING MARITIME TALENT

Manpower development is essential to ensure a steady pipeline of talents to support the maritime industry's growth. The SkillsFuture Council, led by DPM Tharman Shanmugaratnam, was set up in 2014 to build an integrated system of education, training and career progression based on skills mastery. As the lead agency for the Transport (Sea) sector under SkillsFuture, MPA will be collaborating with industry partners and educational institutions to drive a sectoral manpower strategies to further build skill-sets and career advancement pathways for maritime employees.

MPA continued to partner various institutes of higher learning (IHLs) to enhance maritime-related degree/ diploma programmes. For example, MPA and the Singapore Maritime Academy (SMA) jointly conducted a review of the Diploma in Shipping Operations and Management programme, which is now being re-offered as the Diploma in Maritime and Offshore Management. In 2014, more than 1,000 students were enrolled in over 20 maritime programmes at local IHLs, spanning both technical and commercial disciplines.

As part of efforts to attract and cultivate local youths to the maritime industry, MPA administers the Tripartite Maritime Scholarship (TMSS) and the MPA Global Internship Award (MPA GIA). TMSS aims to groom promising students as Masters or Chief Engineers of ocean-going merchant ships. In 2014, a total of 11 TMSS scholarships were awarded to students pursuing either a Diploma in Nautical Studies or Diploma in Marine Engineering. MPA organises the MPA GIA in partnership with international maritime companies, and offers local undergraduates a fully-sponsored 10-week maritime internships with an overseas stint. In 2014, 23 students completed their internships with 16 maritime companies under the MPA GIA.

To raise awareness and understanding of the maritime industry amongst students, MPA and its MaritimeONE (Maritime Outreach Network) partners organised numerous activities throughout the year. One of them was the inaugural Singapore Maritime Dialogue which took place in July 2014, where Senior Minister of State for Finance and Transport, Mrs Josephine Teo, chaired the dialogue with industry leaders to address students' queries on the maritime industry.

The Maritime Cluster Fund – Manpower Development (MCF-MD) continues to encourage and support maritime employees to upgrade themselves in terms of skills and competencies. Maritime companies have also benefitted from the MCF-MD where they received co-funding support for their talent development efforts and implementation of best HR practices. In 2014, more than 900 companies and over 4,400 individuals benefitted from the training grant support.

MPA, together with the Singapore Workforce Development Agency (WDA) and the Employment and Employability Institute (e2i), jointly organised the inaugural Maritime Career Fair in September 2014 to enhance awareness of maritime careers among the public. More than 20 maritime companies and organisations offering over 300 jobs participated in the fair. MPA also worked with self-help groups led by Mendaki SENSE on various outreach efforts in the maritime sector, such as career talks and a Maritime Day career event in May 2014. These activities managed to attract more than 1,700 participants.

MCF IN A NUTSHELL

MCF-Manpower Development (MCF-MD) provides for the training as well as manpower and capability development of the maritime industry. The fund is available to all maritime companies for the development and skill enhancement of its employees through the following three programmes:

Training@MaritimeSingapore
Upgrades knowledge and expertise of local maritime personnel through approved training programmes.

Talent@MaritimeSingapore
Encourages companies to invest in the development of expertise through attachments and career development programmes.

InvestManpower@MaritimeSingapore
Promotes the adoption of well-structured HR and training infrastructure, tools and processes in maritime organisations and associations so as to attract, train and develop the maritime talent pool.

MCF-Business Development (MCF-BD) supports eligible expenses incurred by new maritime organisations setting up offices in Singapore, or by existing maritime organisations expanding into new lines of maritime businesses. The fund is available to all maritime organisations committed to grow and succeed in Singapore.

MCF-Productivity (MCF-PD) supports initiatives to improve productivity by enhancing business processes or adopting new technology. This fund is available to the maritime industry and associations, as well as technology and engineering companies with a maritime focus.



MPA, the Singapore Workforce Development Agency (WDA) and the Employment and Employability Institute (e2i) held the inaugural Maritime Career Fair in September 2014, with more than 20 companies, training service providers and Institutes of Higher Learning participating in the fair.



MARITIME KNOWLEDGE & INNOVATION HUB

One of MPA's key material issues is to grow a vibrant maritime technology cluster in Singapore, and establish a Centre of Excellence for maritime R&D.

EXCELLENCE IN MARITIME R&D

One of MPA's key material issues is to grow a vibrant maritime technology cluster in Singapore and establish a Centre of Excellence for maritime R&D. We achieve this through active investment in strategic maritime R&D initiatives. Since 2000, we have been developing our maritime R&D capability and innovation together with Tertiary and Research Institutes (TRIs) and the maritime industry.

To accelerate the development of the maritime R&D sector, a Maritime Innovation & Technology (MINT) Fund of \$100 million, to be spread over a period of 10 years, was set up in 2003. After some initial successes, the fund received a top-up of \$50 million in 2011 and the investment period extended until 2018. Since its inception, the MINT Fund has supported 14 R&D programmes a total of 274 projects.

Our regular interactions with TRIs and maritime organisations during project meetings, focus group

discussions, conferences, workshops and seminars, have provided a useful platform for us to identify emerging market trends and areas of keen industrial interest, and to direct the R&D efforts towards these potential growth areas to maximise the economic impact and returns on investment.

Some of the notable R&D programmes supported by the MINT Fund are:

- Green Technology Programme to encourage maritime industry to adopt emission reduction technologies
- MPA-PSA MOU on Port Technology R&D Programme
- MPA-JP MOU on Green Port and Productivity Solutions R&D Programme
- MPA-NTU MOU on the Maritime Clean Energy Research Programme

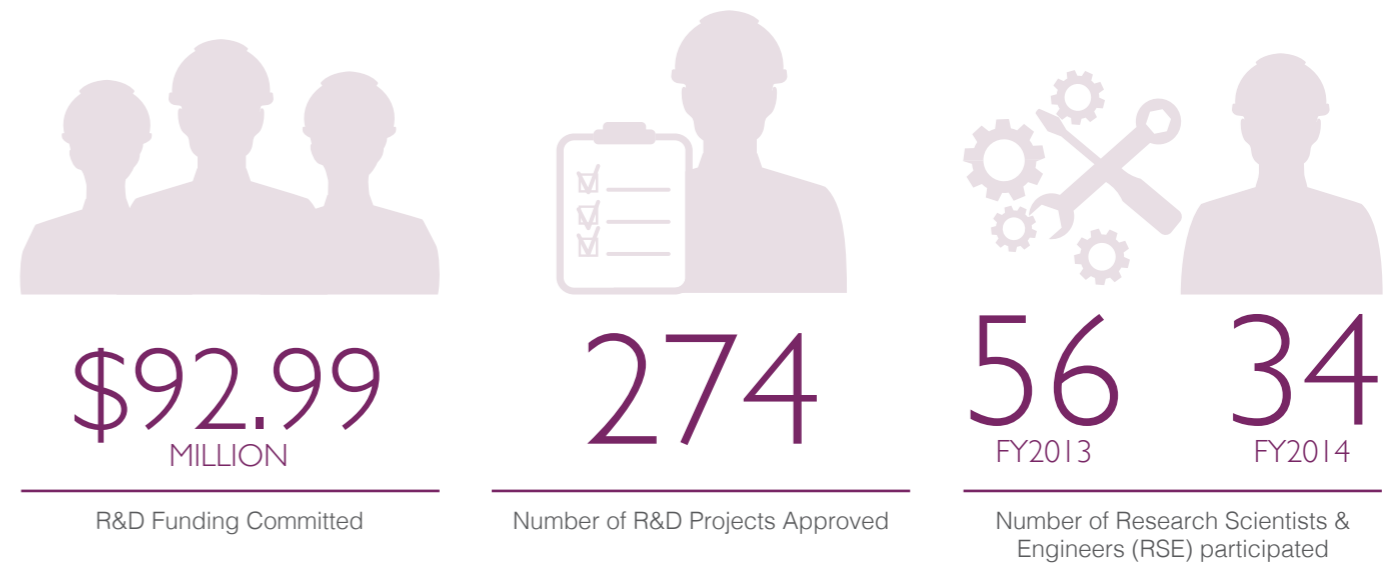
Under MPA-PSA MOU, MPA supported the development of Automated Guided Vehicles (AGV). The development of driverless AGVs for use at PSA's terminals will see the potential for PSA to reduce its reliance on human drivers for their fleet of terminal prime movers.

Under MPA-JP MOU, MPA has supported Jurong Port on a jointly-funded research study to identify environmentally friendly technologies for deployment at Jurong Port. Through the study and subsequent implementation of the green technologies, the Building and Construction Authority of Singapore has awarded Jurong Port with the Green Mark (Gold) certification for two of their berths in January 2015.



MPA and PSA Corporation Limited (PSA) signed an MOU to extend a collaboration under the Port Technology Research and Development Programme to continue with R&D initiatives in order to develop next-generation technologies for Singapore's future container terminal operations.

KPIs for MINT Fund (up to 31 December 2014):





CULTURE OF EXCELLENCE

As part of its commitment to stay relevant and competitive in a fast-changing world, MPA endeavours to be future-ready by spearheading various committees to drive a culture of excellence.

CORPORATE GOVERNANCE

ORGANISATION AND STRUCTURE

MPA was instituted by Parliament under the (MPA Act). As an autonomous agency, the highest authority in our organisational hierarchy is the MPA Board of Directors (Board) comprising the Chairman and 11 directors. They are independently appointed by the Minister for Transport for a three-year term. The current Board has been appointed with effect from 2 February 2015. Disclosures of interests by Board Members are declared at Board meetings at regular intervals.

The members of the Board are independently selected based on their specific appointments or capacities as industry representatives across professions. The full Board meets every alternate month to deliberate and approve matters pertaining to policy, major operations, governance and sustainability issues. This includes MPA material environmental and social issues, as addressed by this report. The Board and Chief Executive regularly review MPA's vision, mission and overall goals.

Supporting the Board are six sub-committees, each led by a member of the Board. The sub-committees meet at a regular frequency to ensure that the Terms of Reference are met.

The MPA senior management team, led by the Chief Executive, provides guidance in the development and execution of key initiatives as approved and directed by the Board. The senior management team meets every week to discuss, endorse and approve of proposals and initiatives relating to the day-to-day operations of MPA. These meetings include issues relating to MPA's key material sustainability issues, such as safe, efficient and sustainable shipping, our people, international support and community engagement. During the course of preparing this report, the senior management team have been briefed on sustainability and integrated reporting, materiality assessment and MPA's key environmental and social issues.

MPA Board and Board Committees



MANAGING CONFLICT OF INTERESTS

A whistle-blowing channel is manned by the Internal Audit department, which reports to the Audit Review Committee. All employees are required to acknowledge the MPA Code of Ethics and declare any potential conflict of interest to the HR division at the start of each year. MPA has a strict Conflict of Interest framework requiring all staff, including the Board, to abstain from decision-making should there be a situation of potential conflict.

DISCLOSURES ON COMPENSATION

The compensation policies and processes, as well as remuneration breakdown for the Board members and senior executives, are not disclosed in our public reporting. However, the composite fees paid to the Board of Directors are presented on page 54 of our Financial Report 2014.

The remuneration criteria for the Board and senior management executives are pegged to Public Service Division's guidelines in relation to MPA's overall vision and mission, which include meeting our wider sustainability goals. The process for determining remuneration is prescribed by the Government.

In 2014, the ratio of total compensation of the Board and executive senior management team members to that of all employees was 0.06. There was no increase in annual total compensation between the two groups from 2013.

Governance Framework in MPA - 6 Steps



STRATEGY PLANNING CYCLE

MPA's activities are determined through a strategy planning cycle where its short, mid and long-term objectives are defined and rigorously discussed.

The annual planning process starts with an environment scan during the third quarter of each year. This sets the backdrop for all MPA divisions to develop their workplans and budgets for the next fiscal year and to embark on long-term planning to meet the opportunity and challenges of the future.

To ensure MPA's plans and policies are relevant and aligned with the needs of our stakeholders, workshops and consultations are held at the Ministry of Transport (MOT) and industry levels. At the same time, we seek to ensure that the considerations identified under our Enterprise Risk Management (ERM) framework are addressed.

ALIGNING PERFORMANCE TO STRATEGY

To enhance alignment between organisational planning and execution, the annual MPA Performance Award was introduced in 2013. The award motivates staff towards the achievement of MPA's corporate objectives, and cultivates a greater sense of ownership for 10 key performance indicators (KPIs) across five comprehensive areas as listed. The payment of the Award also takes into account Singapore's GDP growth and MPA's surplus position. The amount payable under the MPA Performance Award will be shared equally among all eligible staff.

MPA's Key Performance Indicators

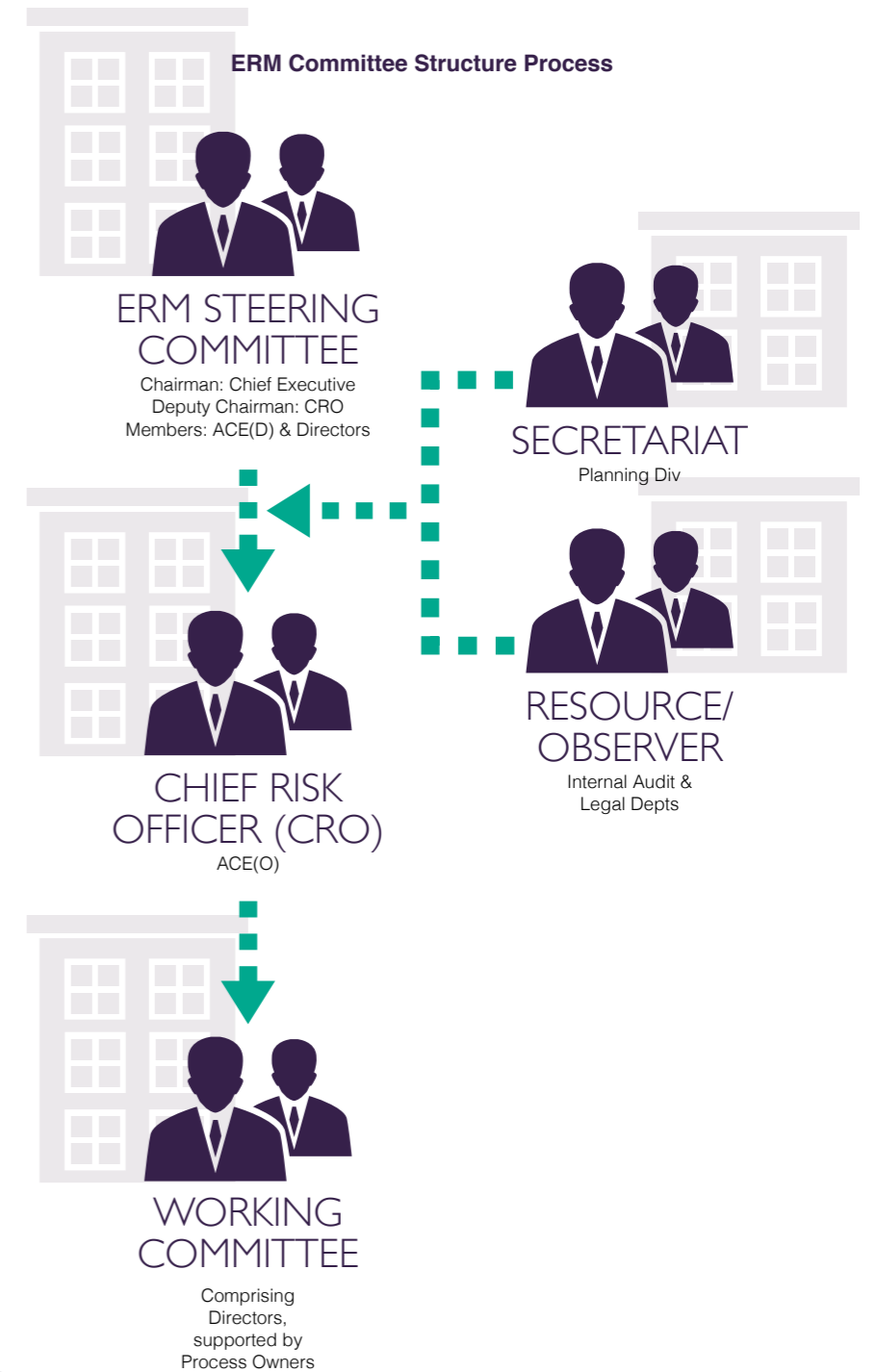


ENTERPRISE RISK MANAGEMENT (ERM)

In 2009, an inter-department taskforce was formed to spearhead ERM in MPA. The identification of existing risks, as well as the assessment and prioritisation of these risks, were part of the work scope. The ERM encompasses of MPA's sustainability risks, and is aligned with our key material sustainability issues.

To align with the MOT's risk framework, a work group comprising risk owners from key MPA divisions was formed in 2011 to identify and carry out further assessment of high and ultra-high priority risk events and issues that could significantly impact MPA's objectives. The nine critical risks were reviewed and re-mapped using MOT's ERM framework for Statutory Boards two years later.

The ERM Framework was subsequently introduced in 2014 to drive a systematic approach to risk management by strengthening the ownership of ERM processes while fostering a risk awareness culture within MPA.



MPA'S SUSTAINABILITY JOURNEY

1996-2010

A sustainable approach to managing operations and the environment has been central to MPA's business philosophy since its formation in 1996.

In the initial years, our sustainability goals were focused on maintaining a quality flag registry, ensuring a vibrant workforce, corporate philanthropy and championing of meaningful causes in the maritime industry.

Our early achievements included the advocating of seafarers' welfare, charitable donations and sponsorships in the wider community through the President's Challenge and staff volunteerism at family service centres and hospices.

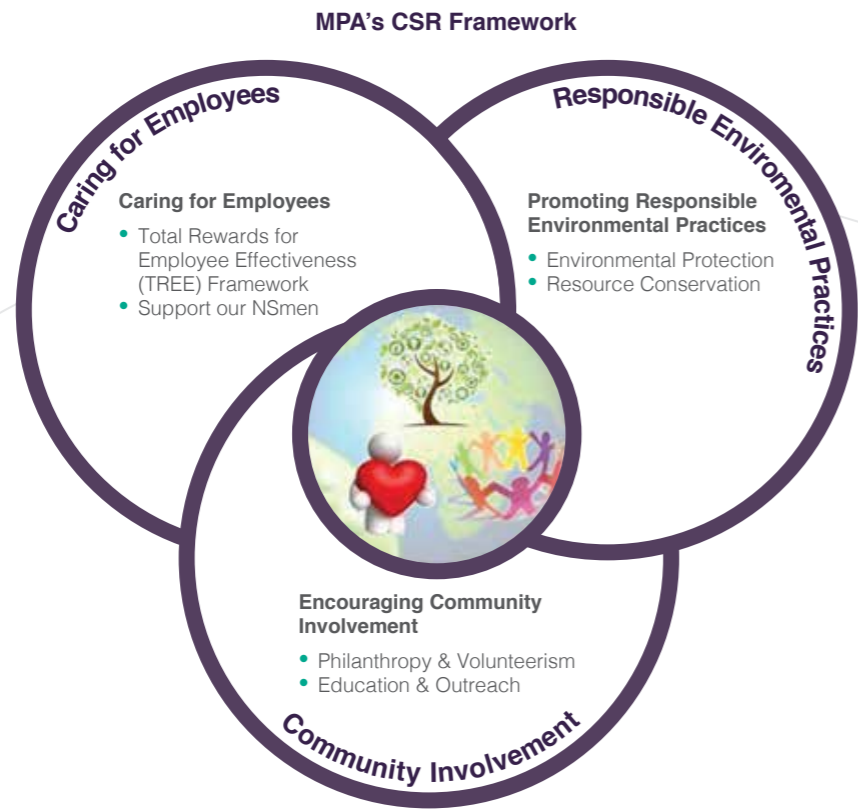
2010

Leading by example as the agency responsible for Singapore's global maritime aspirations, MPA's first Corporate Social Responsibility (CSR) framework was formalised.

The CSR framework encapsulated our efforts to introduce and integrate sustainability principles throughout our operations in three key areas: environment, community and employment practices.

2011

MPA CARE Team was formed to champion and organise activities under the CSR framework. Led entirely by staff volunteers, the team garnered stronger awareness and support for responsible environmental practices and active volunteerism.



2014

To elevate commitment to Environmental and Social issues by Board and Management, the MPA Sustainability Office was formed in 2014 to drive both internal and external sustainability efforts. The committee reports directly to the Chief Executive and accounts to the Board at regular intervals on progress of initiatives and KPIs. Its key objective is to foster a culture of good governance, prudent resource management and conscientious environmental and social practices.

The Sustainability Office will also take the lead to test bed new sustainability concepts for the Next Generation Port 2030 (NGP 2030) project and promote Maritime Singapore Green Initiative. [Please see page 34, Building a Next Generation Port.]

Under the Sustainability Office, a number of internal initiatives were rolled out to heighten environmental and use of alternative energy sources awareness amongst MPA staff.

On the external front, the Sustainability Office engages with industry partners and agencies to promote and ensure environmentally-friendly shipping and port activities. MPA enforces the application of consistent environmental standards amongst ship owners and port users, and is committed to investments in green initiatives and technologies.

Singapore's strong commitment to environmentally-friendly shipping and port activities can be demonstrated through its full compliance with

environment regulations set by national and global bodies such as the Annexes of the International Maritime Organization's (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL).

The Port of Singapore was conferred the 'Best Seaport in Asia' award at the 28th Asian Freight and Supply Chain Awards (AFSCA). The Port of Singapore edged past strong contenders, the Port of Shanghai and Port of Shenzhen to clinch the 'Best Seaport in Asia' award for the 26th time. The nominees were judged on a range of criteria, including cost competitiveness, container shipping-friendly fee regime, provision of suitable container shipping-related infrastructure, timely and adequate investment in new infrastructure to meet future demand and the facilitation of ancillary services.

SINGAPORE REGISTRY OF SHIPS FORUM 2014 : SUSTAINABLE SHIPPING

More than 90% of the world's trade is carried out by sea. With its central role, achieving sustainable growth has become a key challenge for many in the international maritime industry.

The second Singapore Registry of Ships Forum (SRS Forum) was held with the theme on "Sustainable Shipping". The event aimed to better prepare the maritime community for the challenges ahead and to encourage the adoption of sustainable initiatives within the maritime community.

Four distinguished speakers were invited to share with some 250 senior maritime executives from the Singapore maritime industry. Another 30 shipping companies signed the Green Pledge, bringing the total companies that have made

the commitment to 90. For a robust discussion, MPA board members, key strategic partners and various levels of staff attended the event and interacted with the speakers and other thought leaders on sustainability topics.

The MOU between Singapore Management University (SMU) and MPA to promote research and innovation for a clean and green Next Generation Port was also concluded at the Forum.



NURTURING A CULTURE OF EXCELLENCE

As part of its commitment to stay relevant and competitive in a fast-changing world, MPA endeavours to be future-ready by spearheading various committees to drive a culture of excellence.

For example, to provide better and more efficient processes and services to all maritime stakeholders, the MPA senior management team is supported by thematic sub committees, such as those for Operations Excellence, Information Technology and Strategic Communications Steering, which were formed to drive operational/processes excellence and to meet future operational challenges.

Together with A*STAR, an Operations-Technology Visioning and Roadmap was launched to identify projects utilising technology to address present and future operational needs. Our focal areas include navigational safety, marine enforcement, hydrographic operations, ship inspections and emergency response capabilities.

Recognising the need for change agents at every level of the organisation, we embarked on a series of "MPA Future Ready" workshops in June 2014. Since then, over 350 staff have been invited to share insights on trends affecting the growth of Singapore's maritime cluster, and contribute ideas for improving our processes, systems and infrastructure to address environmental changes and operational challenges [G4-26].



MPA received the Pro-Enterprise Panel - Singapore Business Federation (PEP-SBF) Award for the third consecutive time.



The Port of Singapore won the 'Best Seaport in Asia' award at the 28th Asian Freight and Supply Chain Awards (AFSCA) held in Shanghai, clinching the award for the 26th time.

FINANCIAL SUSTAINABILITY

As MPA is a self-funded statutory board, the revenue stream comes mainly from its port and marine services while staff costs and depreciation of fixed assets account for the bulk of its operating expenses.

REVIEW OF FEES AND CHARGES

To ensure MPA's financial sustainability, our schedule of fees and charges is reviewed every three years. In determining the revised rates, the review process is guided by four key principles:

- (i) Competitive: Aim to keep prices attractive
- (ii) Equitable: Seek to be fair to the various port users
- (iii) Simple: Make the fee structures easy to understand
- (iv) Sustainable: Ensure the prices are able to cover our costs

As a general rule, the fees and charges imposed by MPA are driven by cost recovery. Rates may be set below or above cost if the policy intent is to subsidise or deter usage. Cost Recovery Ratios (CRRs), representing revenue as a proportion of cost, are monitored annually to ensure that the rates set are aligned to policy intent.

ACTIVITY-BASED COSTING

As part of our continual efforts to reduce MPA's operational costs,

Activity-Based Costing (ABC) was introduced in 2014. The ABC approach seeks to drive operational productivity and efficiency by getting our resource owners to compute the unit cost of their key activities. The information will provide our management with greater clarity on cost escalations in certain departments so that proactive measures may be taken to address specific issues.

STANDARD OPERATING PROCEDURES

To ensure compliance to financial and procurement corporate governance throughout MPA, the Financial and Procurement Instruction Manuals were published on the intranet to standardise practices across our departments. The instructions are constantly reviewed and benchmarked against other agencies to ensure that they remain relevant and reliable amidst our ever-evolving operating environment.

BUDGETS

The annual budget is presented and approved by Board and published in the Government Gazette before the start of the financial year.

As the fiscal resources are limited and have to be allocated optimally and effectively among competing use, MPA needs to ensure that the budget requested and approved are accurate projections based on planned

programmes and needs. To assist in the budget marksmanship, the KPI of achieving 95% of the budget utilisation rate on the annual budget is reported to the senior management on a quarterly basis.

MPA had managed to achieve at least 95% budget utilisation rate in the previous two years.

As MPA is new to Sustainability reporting, it has not formally assessed the financial implications of climate change on the agency. No formal targets are set for Sustainability efforts. These will be looked into eventually and measured against.

AUDIT

The MPA accounts are assured by external financial auditors and presented to the Board for approval annually after endorsement by Audit Review and Investment Committees. The annual re-appointment of auditors is approved by the Auditor-General's Office (AGO) and all audit findings, if any, are also submitted accordingly. As part of the audit process, the external auditor will also conduct assurance for risk of corruption and fraud.

At intervals, the Auditor-General's Office will perform scheduled and adhoc audits to ensure that governance is adhered to.

An aerial photograph showing a dense urban skyline on the left with several tall skyscrapers, including one with a construction crane. A multi-lane highway runs through the middle ground. In the foreground and middle ground, a vast container port is filled with stacks of colorful shipping containers (red, blue, orange, white) and yellow gantry cranes. The sky is overcast with grey clouds.

STRONG PARTNERSHIPS

MPA has achieved the Top Rank for the 3rd consecutive time at the Pro-Enterprise Ranking Survey in 2014, reflecting the organisation's strong emphasis in growing the maritime industry through constant engagement with our stakeholders and strong pro-enterprise initiatives.

STAKEHOLDER ENGAGEMENT

In determining key stakeholders, we consider their interest in sustainability, as well as the potential influence we can have and the extent to which MPA can potentially impact on them [G4-25]. MPA's key stakeholders are our customers, the maritime community, partner organisations, vendors and employees [G4-24]. We interact with all of our stakeholders regularly and have been increasingly engaging them on areas and issues related to policy, including sustainability [G4-26].

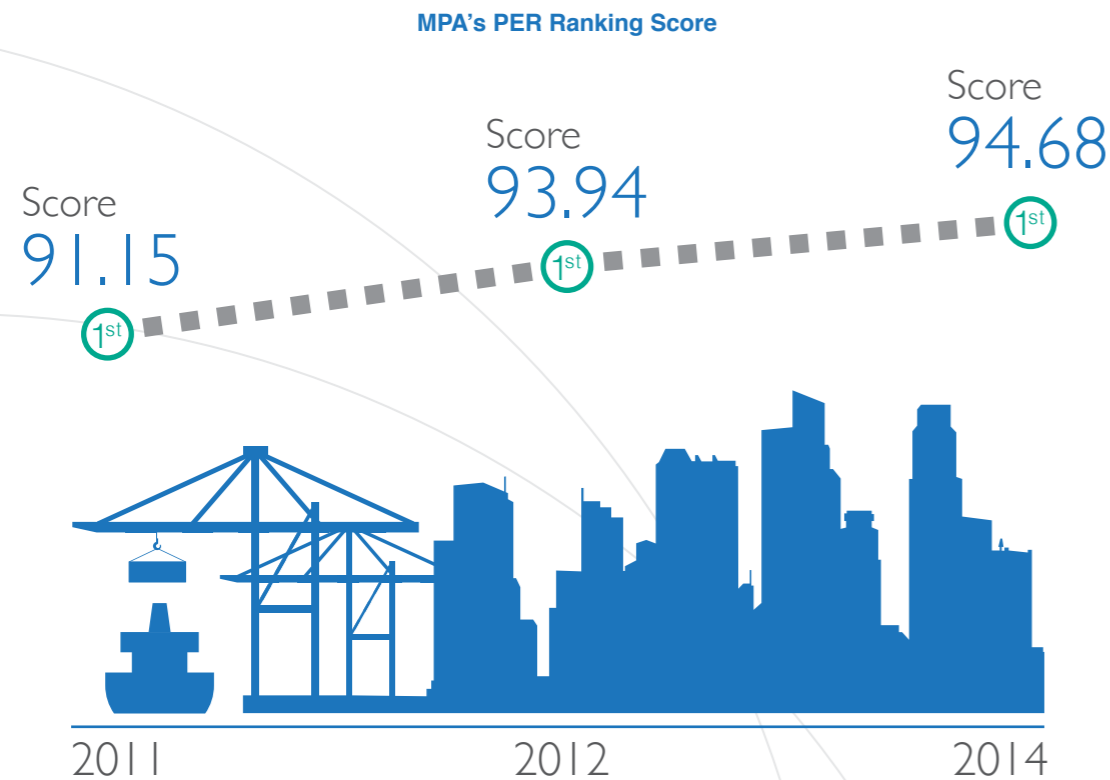
MPA has achieved the Top Rank for the 3rd consecutive time at the Pro-Enterprise Ranking Survey in 2014, reflecting the organisation's strong emphasis in growing the maritime industry through constant engagement with our stakeholders and strong pro-enterprise initiatives. Our stakeholders have commented that MPA is:

More pro-enterprise as they have been seeking feedback from the industry, and taking time to understand how our business works.

MPA has worked well with the Singapore Shipping Association. MPA has a good listening ear and responds promptly. MPA puts in effort to always maintain a good relationship with stakeholders.

MPA has been very forthcoming and engaging through their explanation of programmes and outlines. MPA has also been very supportive for enhancing training in companies.

MPA demonstrates a strong commitment in listening to our stakeholders by engaging Frost & Sullivan in conducting a focus group discussion with our Port Services stakeholders. This stemmed from the lowest scores received from this customer segment from the Pro-Enterprise Ranking Survey and allowed us the opportunity to look at ways in which we are able to continuously improve in our engagement with our customers.



No PER Survey in 2013

SINGAPORE MARITIME DIALOGUE

Over 200 students had the chance to engage a panel consisting of Mrs Josephine Teo, Senior Minister of State for Finance and Transport, and four other senior maritime leaders at the inaugural Singapore Maritime Dialogue.

30 July 2014

Guest of Honour

Mrs Josephine Teo

Senior Minister of State

Ministry of Finance and Ministry of Transport



Our FY2014 stakeholder engagement activities are summarised in the following table.

STAKEHOLDER GROUPS [G4-24]	STAKEHOLDERS [G4-24]	TOPICS COVERED [G4-27]	PLATFORMS [G4-26]	FREQUENCY [G4-26]
Maritime Enterprise Customers	Port Terminal & Shipyard Operators	<ul style="list-style-type: none"> Develop and promote Singapore as a global hub port Maintain a navigationally safe, efficient and environmentally-friendly port Formulate international policies and strategic plans to promote and safeguard Singapore's strategic maritime interests 	<ul style="list-style-type: none"> Briefing sessions Port Marine & Shipping Circulars Informal events such as sports and recreational activities 	Quarterly, Annually
	Shipping Lines, Ship Agencies, Ship Management Companies	<ul style="list-style-type: none"> Develop action plans to move goods through our port in a reliable and efficient manner Work with relevant agencies and organisations to facilitate and foster growth in Singapore's shipping finance sector 	<ul style="list-style-type: none"> Port Marine & Shipping Circulars Navigational Safety Dialogues Singapore Maritime Week: Sustainable Marine Transportation Conference Events for key finance partners ERM Forum Singapore International Bunkering Conference and Exhibition CEO Roundtable Offshore Marine Forum Tax Seminar Offshore Talk Bunkering Forum 	Monthly, Annually
	Ferry and Launch Operators, Maritime House, Marina South Pier & West Coast Pier Tenants	<ul style="list-style-type: none"> Lease physical infrastructure assets to companies and organisations and work with them to manage the environmental and social impacts of their operations Provide high quality and cost-effective services Involve operators and tenants in future planning decisions 	<ul style="list-style-type: none"> Dialogue sessions Meeting with Kusu pilgrimage season stakeholders to improve customer experience 	Annually
Non-Enterprise Customers	Seafarers	<ul style="list-style-type: none"> Administer welfare schemes and activities, as well as conciliation services for members of the mercantile marine (persons or vessels employed in commerce) 	<ul style="list-style-type: none"> Day of Seafarer Celebration International Bowling Tournament International Sports Week 	Annually
	Pleasure/Harbour Craft Owners & Licence Holders	<ul style="list-style-type: none"> Maintain the quality and standards of SRS Ensure adequate and fair manning conditions on Singapore-registered ships Improve maritime safety through professional and proficient investigations of marine accidents Coordinate marine environmental issues affecting MPA 	<ul style="list-style-type: none"> Briefing sessions on Certificate of Competency (CoC) Job fairs Tea sessions 	Quarterly, Annually
Local Communities / Partners	Government Agencies (MOT, A*STAR, MTI, MOF & MFA)	<ul style="list-style-type: none"> Collaborate with government agencies to share ideas and build long term relationships 	<ul style="list-style-type: none"> Joint Cargo Transport Hub Competitiveness Study Ministerial Committee on Services (MCS) 	Adhoc, Yearly
	Institutes of Higher Learning (SMA, SIT, ITE & Polytechnics)	<ul style="list-style-type: none"> Reach out to students on maritime education 	<ul style="list-style-type: none"> Career & scholarship fairs Open House MPA Global Internship Award Singapore Maritime Dialogue 	Annually
	Unions & Private Organisations (SMF, ASMI, SMOU, SMA & SGX)	<ul style="list-style-type: none"> Seek inputs and feedback on MPA's plans and initiatives 	<ul style="list-style-type: none"> Industry Consultation for Review of Tripartite Maritime Scholarship Scheme (TMSS) and Seafaring Alternative...An Investment for Life (SAIL) Young Mariners' Networking Event MaritimeONE Open House 	Yearly
	Members of the public	<ul style="list-style-type: none"> Champion maritime interests and educate the general public about the maritime industry 	<ul style="list-style-type: none"> Singapore Maritime Week Singapore Heritage Festival Singapore Maritime Trails MPA Learning Journeys Smart Port Hackathon 2014 	Yearly
Business Partners / Vendors	Contractors & Suppliers	<ul style="list-style-type: none"> Ensure the efficient provision of services such as garbage collection, patrol launches, dredging, infrastructure development and soil investigation 	<ul style="list-style-type: none"> Meetings/Briefings/Calls 	
	Internal Employees	<ul style="list-style-type: none"> Enforce environment, health and safety practices at the company and business unit level Facilitate individual and team performance Ensure high standards of business conduct and ethics Encourage professional development and training 	<ul style="list-style-type: none"> Intranet Townhall sessions Employee Engagement Surveys Employee Magazine - On The Deck Operational Excellence Workshops 	Daily, Monthly, Annually

SINGAPORE MARITIME WEEK 2014

Singapore Maritime Week (SMW) is the leading maritime event in Singapore. Driven by MPA, SMW gathers the international maritime community in Singapore for a week of conferences, dialogues, exhibitions and social events in celebration of all things maritime. The range of activities and events organised by MPA, the industry and research and educational institutions, as well as the cosmopolitan profile of participants, reflect the vibrancy and diversity of Singapore as a major international maritime centre.

SMW has grown in size and significance since the inaugural event in 2006, and is attracting more participants and event organisers from around the world. Participants can experience something new every year as new activities are added to the line-up, and eminent speakers share their insights and participate in dialogues on topical maritime issues. This dynamism and the good range of issues discussed during SMW are important to maritime decision-makers and business networking platforms.

This is why Singapore Maritime Week is all about PEOPLE, IDEAS and OPPORTUNITIES for the maritime community.



The 9th edition of the Singapore Maritime Week 2014 was launched by Minister for Transport, Mr Lui Tuck Yew at VivoCity.



The Singapore Maritime Lecture was delivered by Mr Jacques de Chateauvieux, Chairman of BOURBON, as well as Chairman and CEO of JACCAR Holdings.



Over 100,000 visitors visited the SMW 2014 exhibitions held at VivoCity, Jurong Point and Parkway Parade from 31 March to 6 April.



PROVIDING FAIR AND OPEN OPPORTUNITIES TO SUPPLIERS

As a statutory board, MPA is given full autonomy to perform its public services according to the statutes passed by the Singapore Parliament. Apart from reporting to MOT, MPA also has to comply with all governmental regulations. These include the Ministry of Finance's procurement guidelines, which are enacted as part of the Government Instruction Manuals for government ministries and agencies. Essentially, MPA adheres to the following three principles for all its procurement activities:

- Transparency**
 The procurement process is open and transparent throughout the entire procurement cycle. All information pertaining to the acquisition project, such as the objective and selection criteria, is disclosed equitably to all suppliers participating in the tender or quotation.

- Open and fair competition**
 Every supplier is given a fair opportunity to compete with one another on a level playing field as an open and competitive environment will encourage suppliers to put in their best offers.
- Value for money**
 The most cost effective proposal is selected if that can meet most, if not all, of our requirements to ensure the best value for the investment. By cost effectiveness, this is based on the notion of the lowest total cost of ownership, which will include human factors such as usability, maintainability, warranty and availability of spares, over the estimated useful life of the product or service period.

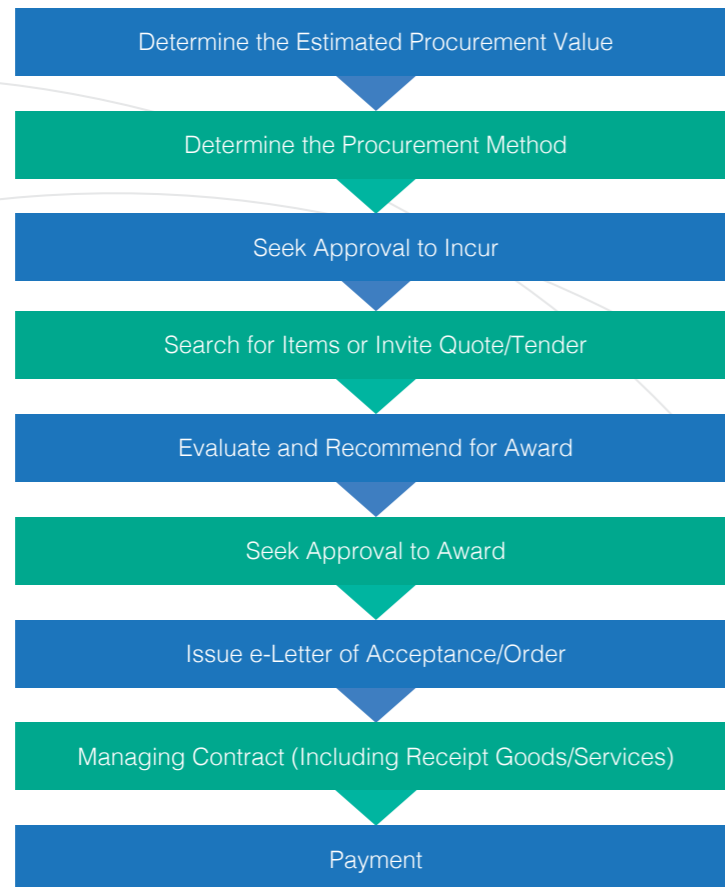
Not all of MPA's contracts are awarded through open tender or quotation as there are other procurement methods

like direct contracting and limited tendering method if certain conditions are met. Adopting these methods do not mean that we not giving open and fair opportunity to all.

Our suppliers can be local or multi-national companies.

Flowchart 1 below outlines MPA's procurement process.

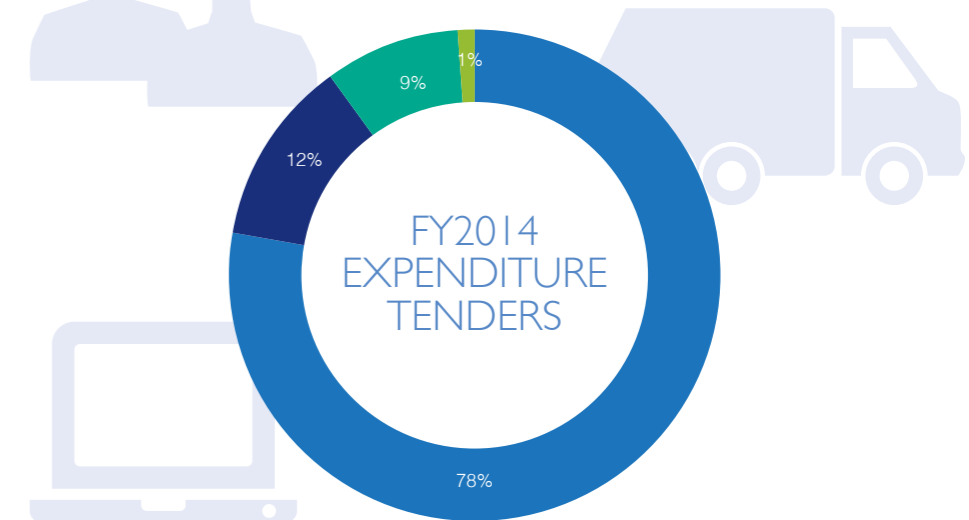
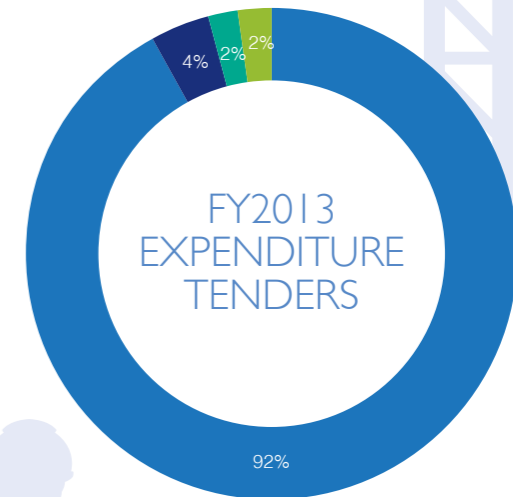
Flowchart 1: MPA's Procurement Process



UPHOLDING STANDARDS THROUGHOUT THE SUPPLY CHAIN

MPA strongly advocates fair employment practices, high standards of productivity, a progressive wage model, and a safe workplace. We have sought to extend these values to our business partners, consultants, suppliers and contractors by incorporating them as mandatory requirements in our tender and quotation specifications. These include the Ministry of Manpower's Workplace Safety and Health Act, the Building and Construction Authority's Public Sector Standard Conditions of Contract for Construction Works, and the National Environment Agency's Clean Mark Accreditation Scheme.

MPA requires our business partners, consultants, suppliers and contractors to install safety measures during work and to exercise fair employment practices. All new suppliers will be screened for compliance to environmental criteria in the near future to further emphasise MPA's focus on environmental sustainability. As standard practice, a 'salvage value' for existing furniture and fittings is included in MPA tenders; this encourages contractors to reuse these items for other projects or to donate them to charities, thereby encouraging recycling across our suppliers.



- Development/Construction projects
- Consultancy Services
- Other contracted services such as cleaning and repair & maintenance
- IT-related projects

ETHICS AND INTEGRITY

As a public agency, MPA is accountable for a high standard of ethical and professional business conduct. Ethical principles and behaviours are embedded into our core values of Forward Thinking, Integrity, Respect, Service Excellence and Teamwork, and all officers are expected to conduct themselves and carry out duties in a manner that is consistent with MPA's Ethics Policy and Code for Business and Personal Conduct.

MPA's Ethics Policy sets out the guidelines for internal disclosure where officers can raise concerns with regard to serious wrongdoings without fear of reprisal. Officers are assured of a response to their concerns and that appropriate actions will be taken should any wrongdoings be established. As at 31 December 2014, there were no critical concerns that were communicated to the Board relating

to Ethics & Integrity. The policy covers the following areas:

- 1) Reporting of wrongdoings – officers should report any serious wrongdoings directly to the Chief Executive, or to the Chairman if it concerns the Chief Executive.
- 2) Protection – officers reporting wrongdoings are assured of protection from any form of reprisal or retribution so long as their reports are made in good faith and based on facts and genuine causes for concern.
- 3) Disciplinary actions – officers found violating the Ethics Policy will be subjected to disciplinary actions which may lead to the termination of employment or dismissal from service.

The Code for Business and Personal Conduct contains the core ethical principles to ensure impartiality and transparency when dealing with internal and external stakeholders. The guiding principles for all officers are:

- 1) Work with the elected Government to serve the people of Singapore and shape Singapore's future.
- 2) Uphold the integrity and reputation of the public service and MPA.
- 3) Ensure there is no conflict of interest between official duties and personal activities of interest.
- 4) Be fair and impartial in dealings with all parties, and not be corrupt or be seen to be so.
- 5) Exercise prudence in managing public resources.

CONTRIBUTING TO THE COMMUNITY

The MPA CARE Team was formed in 2011 by a group of MPA volunteers to drive activities on community involvement. By finding ways to give back to society, the aim is to foster responsible corporate citizenry and good environmental stewardship among our people.

Over the years, MPA has supported various charity organisations including the Tanjong Pagar Family Service Centre, Redhill Moral Senior Activity Centre and Asian Women's Welfare Association's Senior Activity Centre. The MPA CARE Team has also organised

activities to raise funds for our parent Ministry's charity outreach programme.

To assist the elderly and less privileged, our people have volunteered with spring-cleaning, house painting and giving haircuts during routine house visits. On festive occasions, we have a Wish-list Project; compiling needs and requests, and spreading holiday cheer by distributing gifts and mooncakes to the needy.

In 2014, MPA adopted The Salvation Army-Kids In Play (KIP) and Lighthouse School – for the

visually handicapped to focus our charitable efforts. By contributing to the programmes and services for these children, we intend to lead the Maritime community in playing a larger part in reaching out and assisting those in need.

In conjunction with the SG50 celebrations, MPA organised a charity golf event at Sentosa and successfully raised \$400,000 in aid of KIP, Lighthouse School and Community Chest.

MPA AND MARITIME COMMUNITY RAISE \$400,000 FOR COMMUNITY CHEST AND MPA'S ADOPTED CHARITIES

MPA and the maritime community have raised \$400,000 for the Community Chest and MPA's two adopted charities - The Salvation Army Prison Support Services-Kids in Play and Lighthouse School. Of the amount raised, \$100,000 will be designated to each of the two adopted charities, while the remaining \$200,000 will go towards other social service programmes supported by Community Chest.

The funds were raised from an inaugural MPA Charity Golf event held earlier in November with the maritime community in support of Singapore's 50th anniversary. Eligible funds raised would qualify for dollar-for-dollar matching under the Care & Share Movement, which is a national fund-raising and volunteerism movement led by Community Chest for the social service sector.



MPA presented a cheque for \$400,000 to the Community Chest at MPA's Family Day.



MPA staff facilitating the year-end camp for Salvation Army-Kids in Play Programme.

CHOICE EMPLOYER

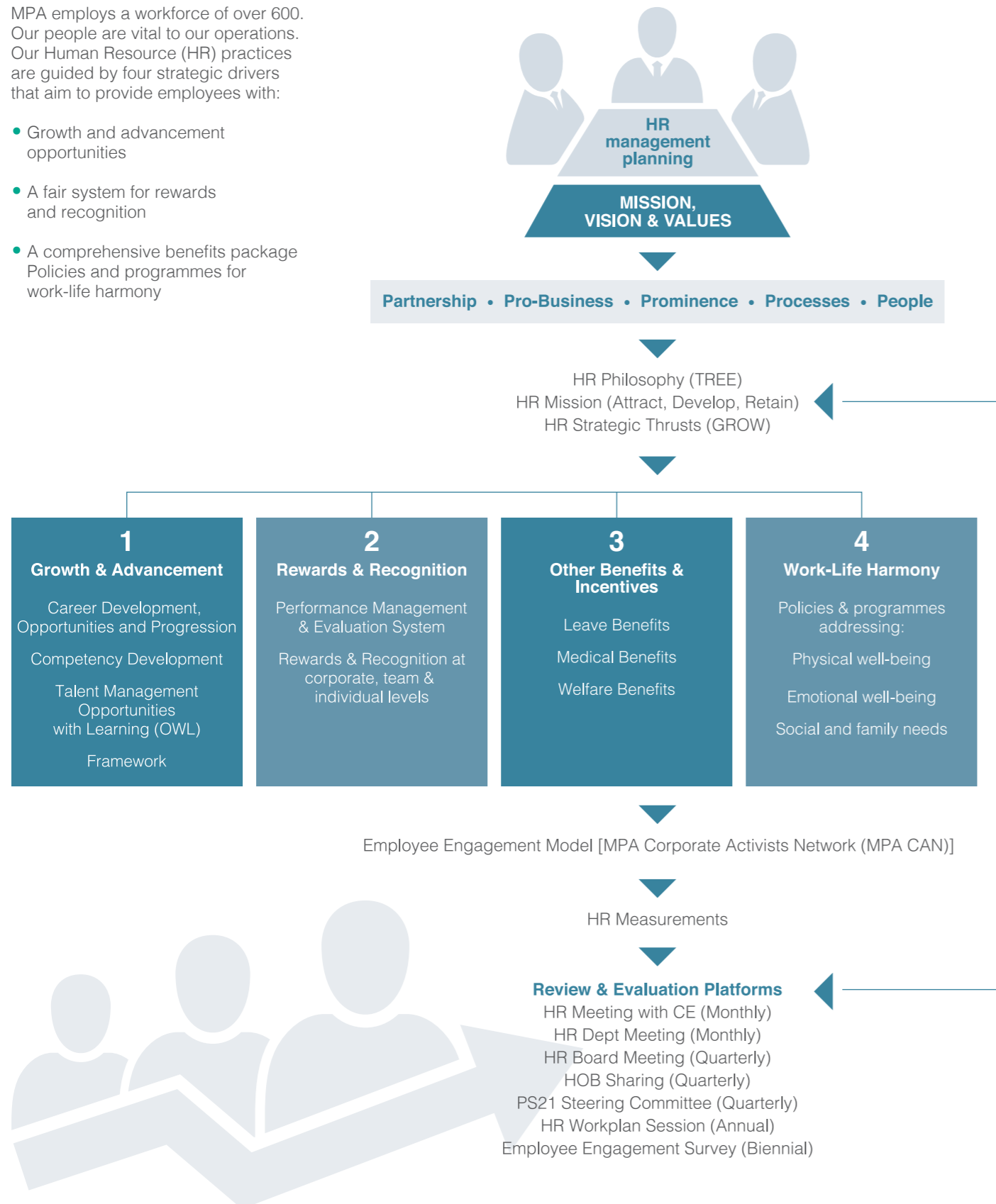
MPA seeks to develop human capital and bring out the best in its people through meaningful jobs with equal opportunities for career progression.



CHOICE EMPLOYER

MPA employs a workforce of over 600. Our people are vital to our operations. Our Human Resource (HR) practices are guided by four strategic drivers that aim to provide employees with:

- Growth and advancement opportunities
- A fair system for rewards and recognition
- A comprehensive benefits package
Policies and programmes for work-life harmony



To achieve the objectives set out in our HR management planning framework, MPA fosters close partnership between managers, people and the Union.

M MANAGEMENT

Our management is committed to engage, nurture, develop and care for our people, who are the most important part of the organisation.



MPA
SINGAPORE

P PEOPLE

Our people make a positive and meaningful difference to Singapore and the environment through their contributions. They are empowered to develop and implement initiatives in their area of responsibilities, and are given opportunities to learn, grow and have fun at work while achieving good work-life harmony.

A AMALGAMATED UNION OF STATUTORY BOARD EMPLOYEES (AUSBE)

Our union, AUSBE, is a close strategic partner who works proactively to reflect employee concerns and improve its members' welfare. A strong partnership with the AUSBE-MPA Branch has continued to ensure win-win outcomes for the MPA management and its people. There is no formal agreement on health and safety with AUSBE; however, MPA's Employees' Agreement has a work injury compensation clause that holds MPA responsible for treatment fees and paid leave of absence for injuries sustained by an employee in the course of his or her official duties.

'FIRST' VALUES

Forward Thinking

To be proactive and innovative. We will harness the best technologies and practices so as to stay relevant, efficient and competitive.

Integrity

To act responsibly, honestly and to be morally courageous in carrying out our duties. We will be fair and above board in all our business dealings and relationships.

Respect

To respect the feelings of the individual and to appreciate his dignity and self-worth, his time and effort, and his need to balance work and family life.

Service Excellence

To strive to serve our customers competently, courteously and efficiently. We shall persevere to excel in all areas of our work through continual learning and a positive work attitude.

Teamwork

To value teamwork, harmony and unity in our working relationships. We shall do our work with steadfastness and consideration for our colleagues and customers.

We review this approach through employee engagement surveys, regular dialogue sessions with MPA's Chief Executive and exit interviews. The feedback from these sessions has generated practical initiatives at the corporate and divisional level, such as:

- **UPGRADE Account** – A funding scheme that encourages all staff to pursue continuous improvement in an area of personal interest.
- **MPA Career Portal** – A job portal that allows MPA employees to view and register interest in available postings within MPA and MOT family.

PROVIDING FAIR EMPLOYMENT AND MEANINGFUL CAREERS

MPA seeks to develop human capital and bring out the best in its people through meaningful jobs with equal opportunities for career progression. We offer employees varied roles in a wide range of functions. These span from corporate roles, positions in policy development and implementation, to business operations at the hub port, IMC, or strategic maritime interest clusters. We encourage personal growth while supporting MPA's mission and vision.

PROMOTIONS, STAFF ROTATIONS AND POSTINGS

We have a rotation policy to offer competent and high-potential officers roles in other MPA functions. To enable all staff to be active in their own career planning, we publicise internal job vacancies and career opportunities through the Careers@GOV and MPA portal. Candidates with the proven capability are recognised through promotions, where they are challenged with broader portfolios and greater

responsibilities to contribute in a larger capacity to MPA.

For greater exposure to the maritime business, we offer local and overseas postings as well as attachment programmes with industry partners. Secondment opportunities are also offered within the MOT family for officers to gain strategic and macro perspective in the Ministry. Such postings and attachments help to hone the leadership skills of our officers.

This benefits the financial value of MPA through improved productivity and staff retention.

CROSS-FUNCTIONAL OPPORTUNITIES

MPA encourages all staff to go beyond their core responsibilities by providing various platforms for cross-functional committee work, interaction and learning. Staff are also encouraged to champion inter-departmental projects, contribute as volunteers in our Corporate Activist Networks, participate in work plan seminars, management advance programmes, technical committees, or make presentations at internal platforms such as MPA's senior management meeting, MPA's Board meeting or Minister's meeting with MPA's senior management.

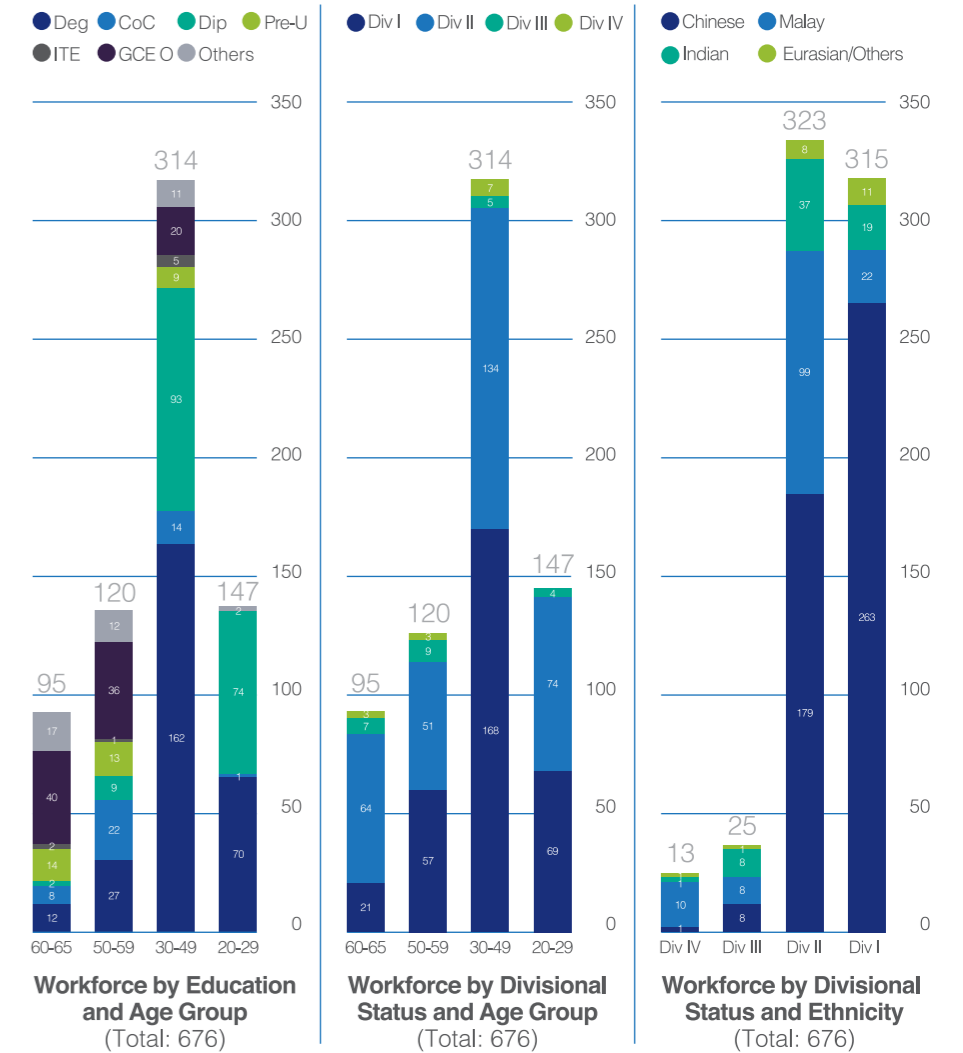
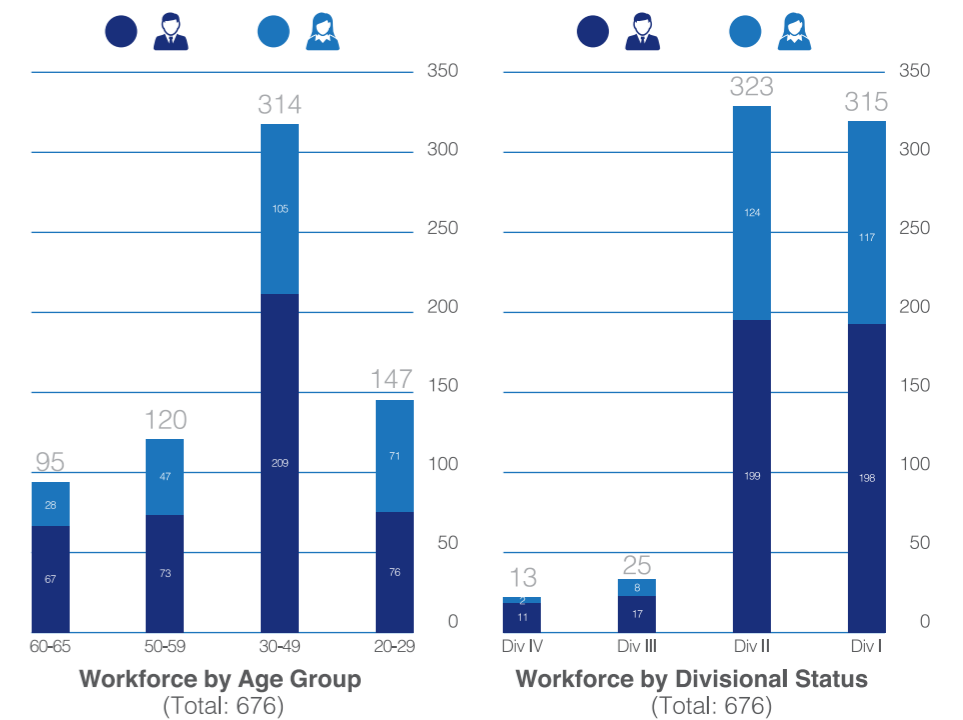
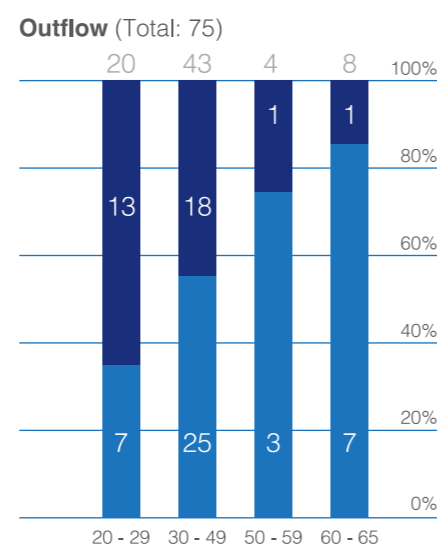
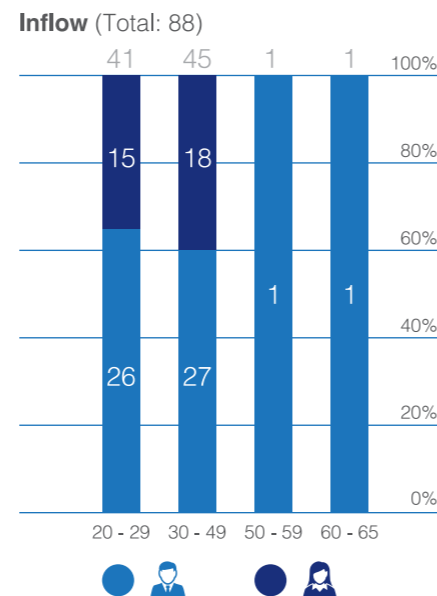
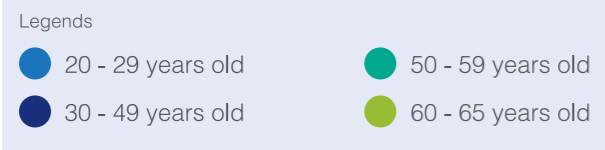
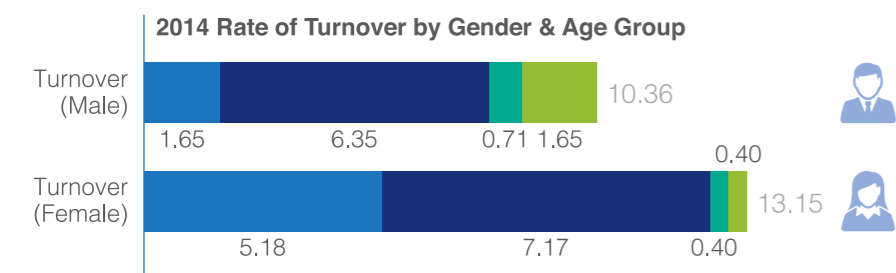
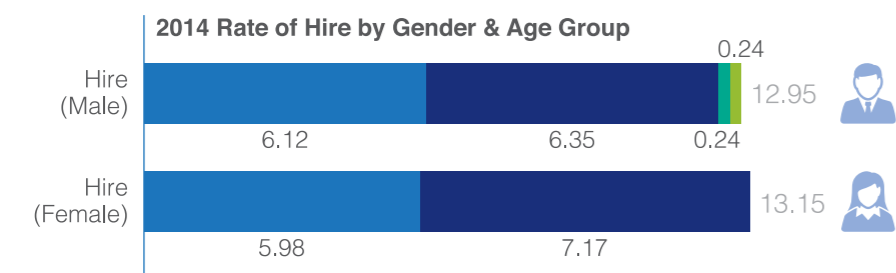
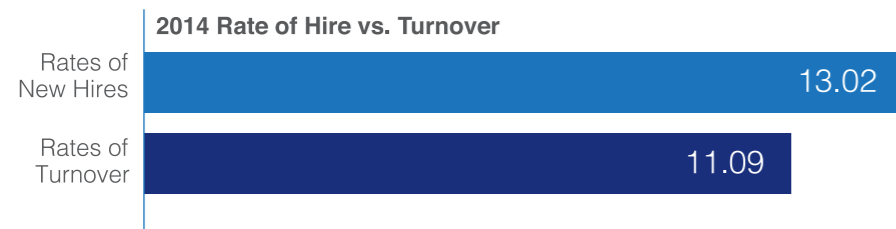
FAIR EMPLOYMENT

As a best business practice, MPA advocates fair and merit-based employment. We adopt the following principles in our HR management:

- Recruit and select employees on the basis of merit (such as skills, experience or ability to perform the job), regardless of age, race, gender, religion, marital status and family responsibilities, or disability.
- Treat employees fairly and with respect and implement progressive human resource management systems.
- Provide employees with equal opportunity to be considered for training and development based on their strengths and needs to help them achieve their full potential.
- Reward employees fairly based on their ability, performance, contribution and experience.
- Abide by labour laws and adopt the Tripartite Guidelines on Fair Employment Practices.

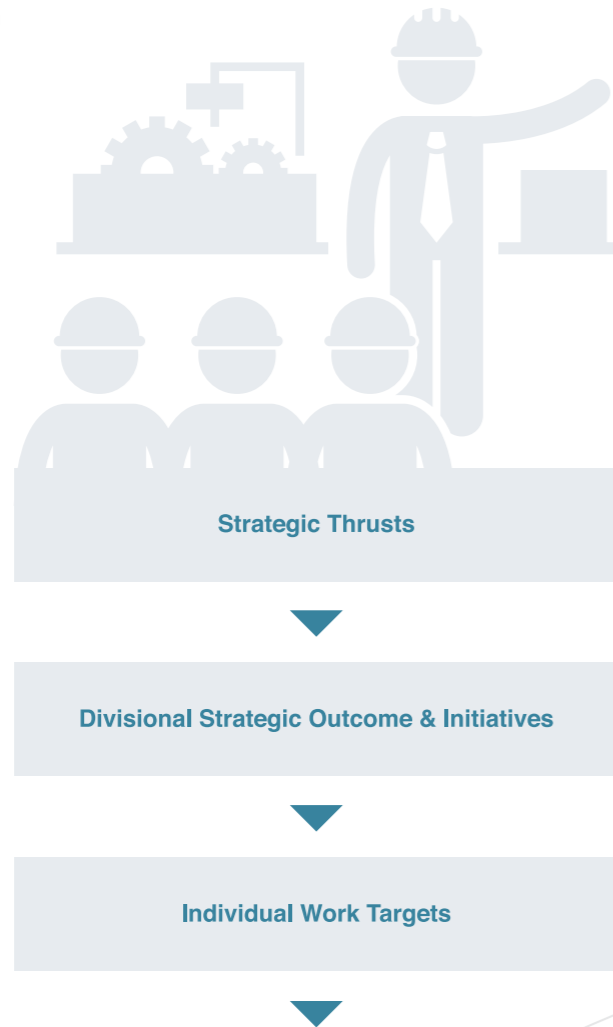
MPA employs a diverse labour force. We measure diversity in terms of age, gender and ethnicity.

Staff Turnover (1 January 2014 - 31 August 2014)



BUILDING A COMPETENT WORKFORCE

MPA adopts a competency driven approach to developing the capabilities of all employees. We place a high priority on providing relevant training to all staff.



Competency-Based Learning Programmes
Learning Needs Analysis Conducted Biennially

<p>Corporate Learning Focus</p> <p>Corporate annual emphasis such as core knowledge training and new staff structured training for 2010.</p>	<p>Core Skills Development</p> <p>Core Skills Programmes (e.g. Effective Writing, Project Management) helps to close up the identified competency gaps during the Learning Roadmap (LRM) exercise.</p>
<p>Functional Job Competencies</p> <p>Technical Skills Programmes that are unique to individual functions such as GST training for the Finance staff and VTIS training for the Vessel Traffic Management staff.</p>	<p>Other Essential Skills Development</p> <p>Additional generic development programmes (e.g. stress/time management) that address needs covered by the competency framework.</p>

STRENGTHENING OF CORE SKILLS

The MPA Core Competency Framework (CCF) was formulated following the implementation of the Balanced Scorecard (BSC) in 2007. While the BSC defines the performance outcomes to be achieved, the CCF outlines the relevant training programmes based on the core knowledge, skills and behaviours expected of each individual in the achievement of key performance indicators.

GEARING FOR BROADER LEARNING EXPERIENCES

Our "Opportunity with Learning" Framework ensures supplementary training through a wide spectrum of learning modes. By sending our people to useful functional programmes, we encourage all staff to:

- G**row in their job knowledge and skills
- E**xplore and discover more about MPA, other organisations, themselves and their peers
- A**spire by broadening their horizons, and
- R**eflect on lessons learnt and how these can be applied.

IMPROVING TRAINING EFFECTIVENESS

We are continuously improving upon the effectiveness of the training that we provide to our staff. All staff are required to submit a course evaluation form at the end of each training session, and based on this feedback and other recommendations we seek to fine-tune our training programmes or course contents.





FULFILLING PERSONAL ASPIRATIONS

MPA supports continual and life-long learning by providing all staff with opportunities for personal and professional development beyond their vocational needs. For example, an interest-free study loan initiative was introduced in 2009 to motivate officers to upgrade themselves through higher education.

All staff who have completed two years of service are also entitled to \$1,500 paid through a personal UPGRADE Account set up by MPA. The account can be used to co-fund any non-work-related training course of their choice.

Employees above 45 years can also make use of their UPGRADE Accounts to co-pay up to 75% of the fees for vocational courses such as Taxi or Bus Driver certification training, as well as courses offered by the Singapore Workforce Development Agency (WDA).

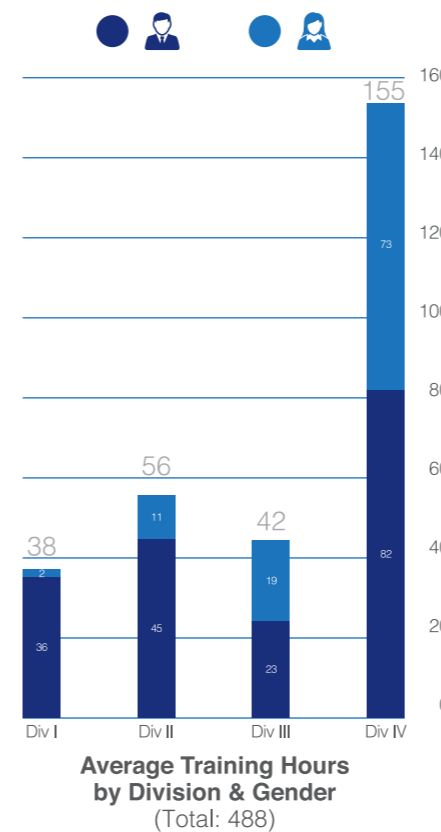
UPGRADE Accounts are topped-up annually with a sum of up to \$750, subject to a maximum balance of \$1,500.

TALENT AND LEADERSHIP DEVELOPMENT

The MPA framework for talent identification and management is illustrated above.

The MPA Leadership Development (LEAD) Programme is structured to develop high-potential officers by sharpening their leadership and general management skills and equipping them to become more effective leaders.

Under the programme, younger participants can benefit from mentorship by senior management team members, while executive development courses and post-graduate programmes are offered to those with more working experience. Participants will also undertake projects and other developmental activities that expose them to strategic issues.



RECOGNISING ACHIEVEMENT

MPA aims to align organisational, team and individual efforts towards the achievement of its mission and vision. We recognise the performance and contributions of our people through performance-based rewards and staff awards. All of our staff receive regular performance and career development reviews.

PERFORMANCE-BASED REWARDS

Corporate Rewards
e.g. Non-Pensionable Annual Allowance, Annual Variable Component, Corporate Gift

Team Rewards
e.g. Work Improvement Teams

Individual Rewards
e.g. Salary, Allowances, Performance Bonus, Growth Bonus, Merit Increment, Market Adjustment Component, Staff Suggestion Scheme

STAFF AWARDS

- National Day Award
- Long Service Award
- Meritorious Award
- FIRST Award
- PS21 STAR Award
- Model Worker Award
- Outstanding NS Employee Award
- Appreciation Letters & Receptions

DEVELOPING A TALENT PIPELINE

To promote awareness about jobs in the maritime sector and to connect with potential recruits, MPA published a 10-part series in four major local newspapers from August to September 2014.

The campaign culminated in the inaugural Maritime Career Fair, organised jointly with WDA and the Employment and Employability Institute (e2i), in September 2014.

ENGAGING AND CARING FOR EMPLOYEES

A highly engaged workforce is an essential aspect of MPA's success and effectiveness. Please see Employee Engagement, page 92.

STAFF BENEFITS

Our staff enjoy a comprehensive and competitive benefits package designed to enhance personal wellbeing, promote team spirit and boost morale. These benefits are made available to all of our employees, regardless of contract type. The benefits we provide include:

- Annual Leave
- Paternity Leave
- Marriage Leave
- Compassionate Leave
- Examination Leave
- Sick and Hospitalisation Leave
- Maternity Leave
- Health Screening
- Flexible Benefits Scheme
- IPPT Award Annual Leave
- Insurance
- Employee Referral Scheme
- Handphone and Broadband Subsidies
- Study Loan
- Book Prize
- Bursary Award
- Marriage Gift
- Newborn Gift
- Birthday Gift

WORK-LIFE HARMONY

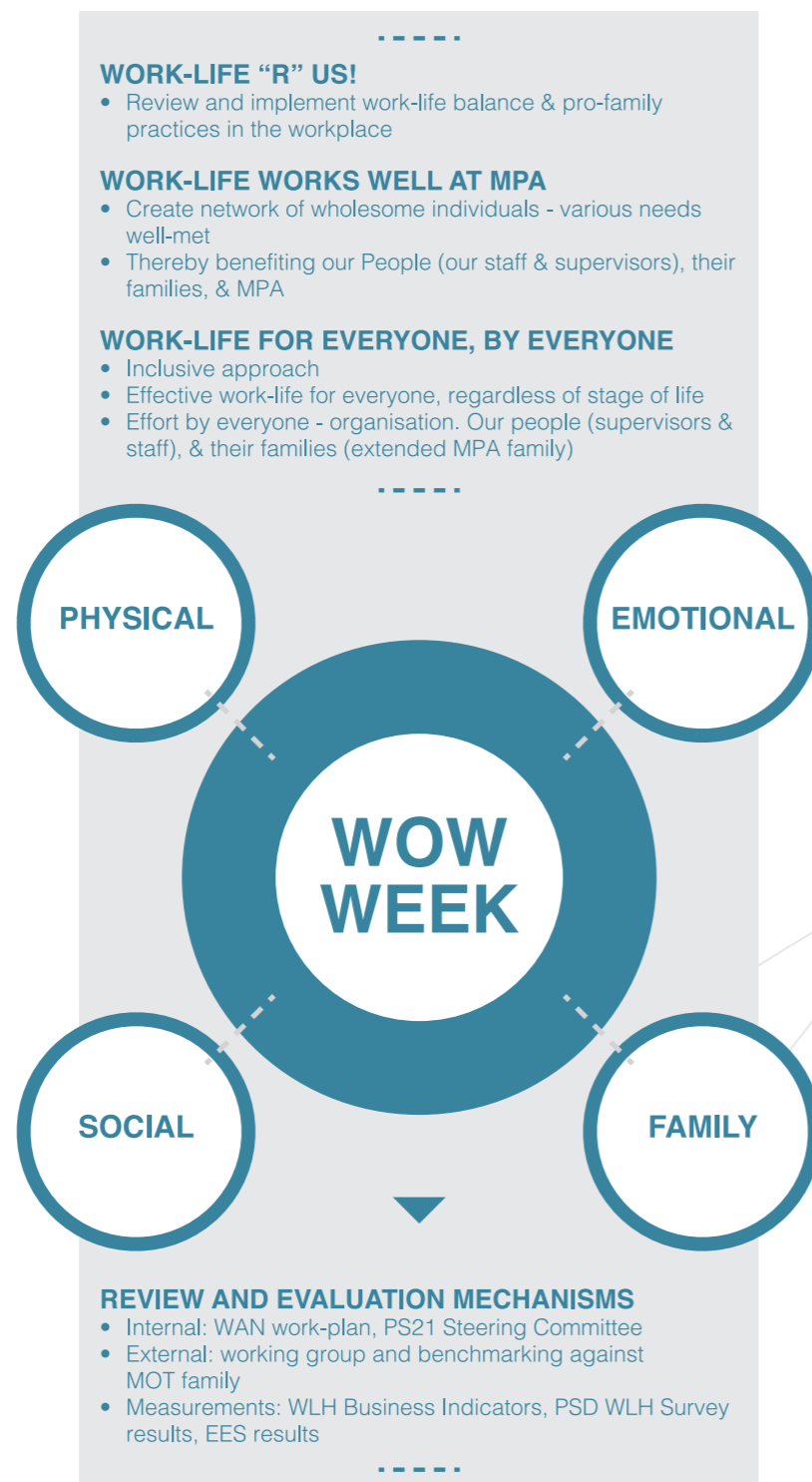
MPA recognises that the attainment of work-life harmony takes effort and planning on every individual's part. Policies are in place to help all employees achieve a good balance between their official duties and personal life.

DISCLOSURE 01/01/2014 – 31/03/2014

Number of female officers who took maternity leave, and are still working in MPA: **16**

Remarks
All staff who took maternity leave were still working with MPA 12 months after returning to work.

MPA's efforts at promoting work-life harmony is guided by a framework as shown below that focuses on the physical and emotional well-being of all staff, as well as their social and family needs.



EMPLOYEE ENGAGEMENT

Regular employee engagement can foster a positive and productive workplace.

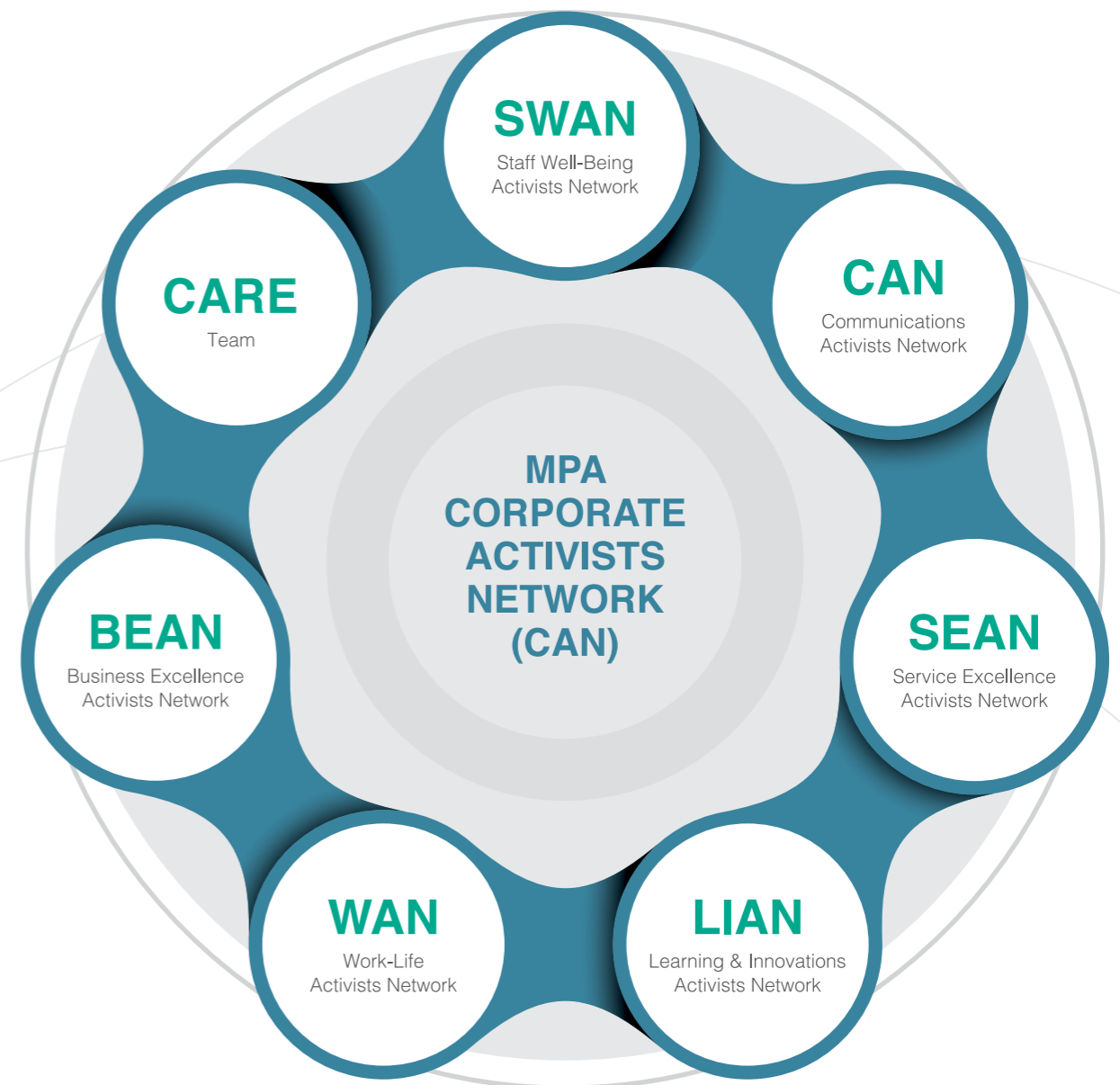
MPA offers regular 'townhall' sessions with the Chief Executive and other senior management to communicate MPA's corporate progress and challenges to all staff, while giving them the chance to ask questions.

Employee Engagement Surveys are conducted every two years to track employee satisfaction levels and gather feedback from the ground. The survey results are highlighted and analysed at senior management level.

MPA's employee engagement index has continued to show improvement, having increased from 68% in 2008 to 73% in 2010. An engagement index of 82% was registered through a pulse survey carried out in 2013. The Employee Engagement Survey (EES) for 2014 yielded a response rate of 93% which is above the average response rate of

agencies in Civil Service College Public Sector EES norm of 90%. The survey showed an overall 2014 engagement score of 78%.

Our Corporate Activists Network comprises of seven networks, each supporting a different aspect of MPA's quest for excellence internally and externally. Each network comprises of a chief and a team of activists drawn from various MPA departments. The key aims are to empower people and tap into the ideas, creativity and energy of diverse individuals to make MPA a great place to work.



OUR PEOPLE

WOW WEEK

The annual 'Well-On-Worklife' (WOW) week jointly organised by the Work-life Activist Network (WAN), Staff Well-Being Activist Network (SWAN) and CARE team is a week packed with activities to promote work-life harmony. Held in June 2014, WOW Week comprised of a series of activities including workplace emotional health activities, Junior@Work, learning journeys and fund raising activities.



MPA DINNER & DANCE 2014 – UNIFORM NITE

SWAN organised numerous fun events for staff during the year including the MPA Dinner and Dance in August 2014. With the theme "Uniform Nite", MPA staff enjoyed an evening of entertainment and fun.



MPA FUTURE-READY

As part of MPA Future Ready conceptualisation efforts, 7 staff sessions and 1 management session involving more than 350 officers from all levels were conducted from May to July 2014.



INAUGURAL MPA TOWNHALL SESSION

The inaugural MPA Townhall organised by HR was attended by more than 300 staff. Management presented on the challenges and the direction to move forward for a Future Ready MPA. There was also a panel discussion by Senior Management to engage staff on their views and concerns. Staff asked the Management numerous questions which were mostly answered during the Townhall.



MPA FAMILY DAY 2014

The MPA Family Day 2014 was held on 29 November 2014 at the Singapore Zoo. Beneficiaries from our newly adopted charities, The Singapore Salvation Army's Prison Support Services-Kids in Play and the Lighthouse School were also invited to join the MPA family for a fun-filled and educational day. The two charities were officially adopted at the event.



APPRECIATION HOUR

MPA introduced the Appreciation Hour in April 2014. The Appreciation Hour will be held once in 2 months to recognise and show appreciation to officers who have displayed high standards of professionalism, put in extra effort and taken pride in doing a good job.



CLUSTER GAMES

MANAGING LABOUR RELATIONS

Rank-&-file MPA employees are represented by the Amalgamated Union of Statutory Board Employees (AUSBE), with whom we have enjoyed strong partnership and good labour-management relations since 1997. The MPA Branch of AUSBE has been strategic to our efforts in maintaining a harmonious work environment.

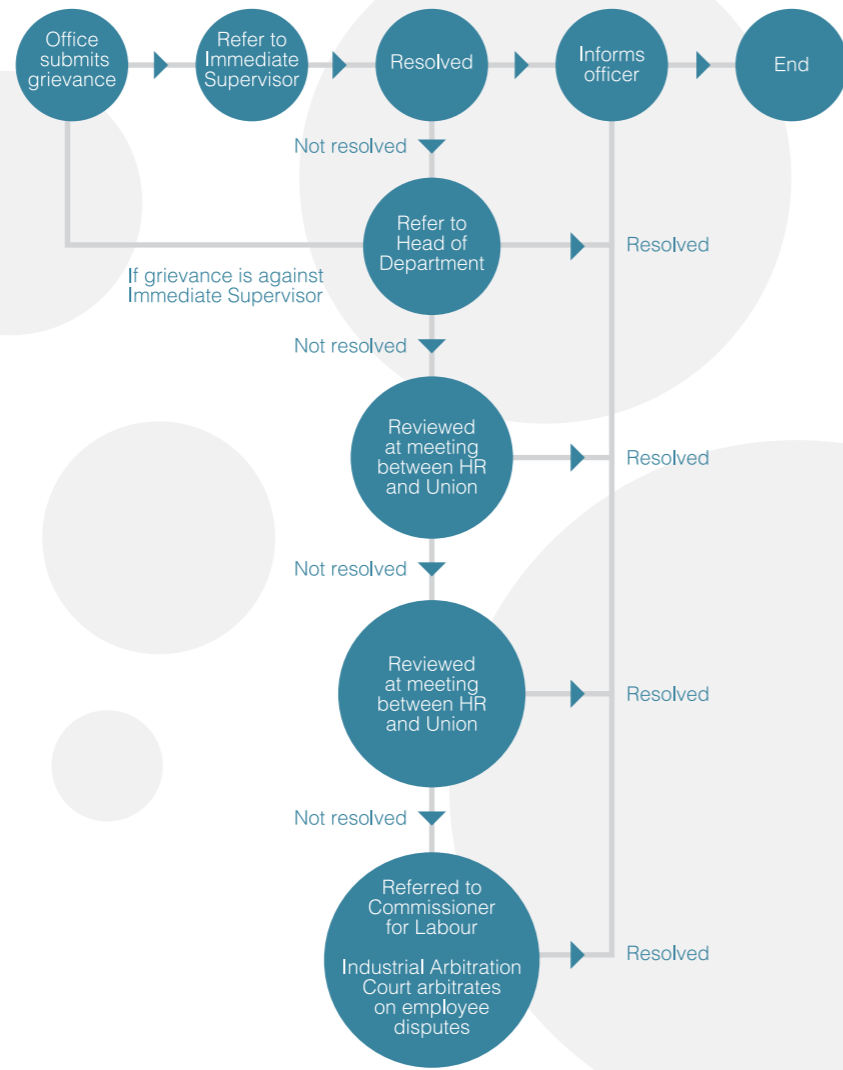
To reinforce synergy and cohesiveness in our organisation, we actively engage the union on issues that concerns our employees. These include:

- Policies on career progression and skills upgrading (e.g. progressive wage model for vessel traffic officers)
- Remuneration matters (e.g. salary reviews)
- Matters concerning Workplace Safety and Health (WSH) (e.g. ensuring union representation in MPA's WSH Committee).

Our Employees' Agreement symbolises the mutual trust, consultative and collaborative approaches, and shared responsibility underlying our partnership with the union. 70% of our workforce is covered by the Employees' Agreement.

Recognising the value and importance of candid discussions in preserving harmonious industrial relations, every reasonable effort is made to resolve any concern or grievance raised by our employees. In consultation with the union branch, we have put in place a grievance handling process that is made known to all employees. It is always our aim to resolve any conflict situations at the lowest possible level.

Since its formation of in 1996, MPA has signed six collective agreements with AUSBE. There has also been no industrial dispute with the union since its formation in 1997.



MPA's Grievance Handling Process

The Grievance handling process outlines the progressive steps an employee could take in raising any work-related disputes or concerns.

ENSURING WORKPLACE SAFETY AND HEALTH

Under Singapore's Public Sector Commitment to Workplace Safety and Health (WSH), MPA has pledged to work on the following areas when managing all projects:

- (a) Include WSH considerations in the procurement of services for building and infrastructure development and refurbishment projects by:
 - Setting a minimum bizSAFE Level 3 criteria for all main and sub-contractors; and
 - Considering the WSH track record of main contractors using the Construction Safety Audit Scores System (ConSASS).
- (b) Incorporate WSH in project planning and management by:
 - Practising Design for Safety (DfS) principles in building and infrastructure development/ redevelopment projects; and
 - Tapping into CultureSAFE, a WSH Council programme focused on cultivating the right WSH mindset and attitudes, to institute and ensure safe working behaviour amongst the workforce.

- (c) Take an active role in promoting WSH by putting WSH on the agenda at regular project coordination meetings.
- (d) Appoint a management representative to champion WSH and work with WSHC to collectively raise the WSH standards in MPA's building and infrastructure development/ redevelopment projects.

In 2012, 22 man-days were lost due to 3 work-related injuries. There were no work-related injuries in MPA in 2013. 5 man-days were lost in 2014 due to 2 work-related injuries; however, neither injury was classified by MOM as requiring formal or official reporting.

There were no work-related fatalities in both 2013 and 2014.

GLOSSARY

Term & Abbreviation	Definition
Agency for Science, Technology and Research (A*STAR)	A Singapore statutory board under the Ministry of Trade and Industry.
Amalgamated Union of Statutory Board Employees (AUSBE)	The AUSBE looks after the interests of employees across 12 statutory boards, including MPA.
Baltic and International Maritime Council (BIMCO)	The largest of the international shipping associations representing shipowners.
Classification society	An organisation that publishes its own classification rules in the design, construction and survey of ships.
Emission Control Area (ECA)	Emission control area means an area where the adoption of special mandatory measures for emissions from ships is required to prevent, reduce and control air pollution from NO _x or SO _x and particulate matters or all three types of emissions and their attendant adverse impacts on human health and the environment.
National Environment Agency (NEA)	A Singapore statutory board under the Ministry of the Environment and Water Resources.
Environmental Impact Assessment (EIA)	An evaluation on the environmental consequences of a plan or project before the decision on the next course of action.
Global Reporting Initiative (GRI)	The GRI is a non-profit organisation that promotes the use of sustainability reporting in organisations to achieve sustainable development and operations.
Greenhouse Gas (GHG)	Greenhouse gases" mean those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation.
Harbour craft	A category of vessels that ply within the waters of Singapore only, and do not travel into international waters.
Institute of Chemical and Engineering Sciences (ICES)	An organisation that oversees public sector research activities in the physical sciences & engineering
International Maritime Centre (IMC)	A global maritime hub that provides comprehensive and high quality maritime services and support.
Integrated Reporting (IR)	A concise corporate report outlining how a company organised itself to create economic value over time.
International Integrated Reporting Council (IIRC)	A coalition of government, businesses and accounting professionals to develop a globally-accepted Integrated Reporting framework.
International Maritime Organization (IMO)	A specialised United Nations agency that sets the global regulatory standard for the safety, security and environmental performance of international shipping.
Information Sharing Centre (ISC)	The ISC is the executive unit of ReCAAP based in Singapore.
Jurong Port (JP)	A Singapore port operator owned by Jurong Town Corporation.
Land Transport Authority (LTA)	A Singapore statutory board under the Ministry of Transport.
Liquefied natural gas (LNG)	A natural gas that has been converted to liquid form for ease of storage or transport.
Maritime Cluster Fund (MCF)	A fund created by MPA to facilitate the growth of Singapore's maritime industry in the key areas of business development, manpower development and productivity improvement.
Maritime Outreach Network (MaritimeONE)	A manpower initiative by maritime stakeholders to raise awareness of the industry and the scholarship and career opportunities available to students.
Maritime Singapore Green Initiative (MSGI)	A voluntary initiative started by MPA in 2011 to promote clean and sustainable shipping in Singapore.
MARPOL Convention	The International Convention for the Prevention of Pollution from Ships is the main IMO legal instrument to prevent pollution of the marine environment from accidents or operational incidents.

Term & Abbreviation	Definition
Mass flow meter (MFM)	A device that measures the flow rate through a tube by mass per unit time.
Next Generation Port (NGP)	A new energy efficient and sustainable port that will be developed in Tuas by 2030.
Non-Governmental Organisation (NGO)	An organisation that does not belong to the government and does not operate like a conventional for-profit business.
Nanyang Technological University (NTU)	One of the two largest public and autonomous universities in Singapore.
Pleasure craft	A category of vessel used for sports or pleasure; it does not include craft used for sightseeing by tour operators.
Port of Singapore	The collective facilities and terminals that conduct maritime trade and handle shipping in Singapore.
Port Operations Control Centre (POCC)	A 24-hour operational unit under MPA's Port Division, and the headquarters for a maritime search and rescue region covering Singapore and over 1 million square kilometres of the South China Sea.
Port State Control (PSC)	The inspection of foreign ships by a national port to verify that the competency of the personnel, and the condition of the ship and its equipment comply with international conventions, and that the vessel is manned and operated in compliance with applicable international maritime law.
PSA International (PSA)	One of the world's largest port operators headquartered in Singapore.
Quality Shipping for the 21 st Century (QUALSHIP 21)	A United States Coast Guard initiative to identify high quality ships and incentivise them to continue with their commitment to safety and quality.
Regional Co-operation Agreement on Combating Piracy and Armed Robbery Against Ships in Asia (ReCAAP)	A regional government-to-government agreement that came into effect in 2006 with the purpose of promoting and enhancing cooperation against piracy and armed robbery against ships in Asia.
Sea Lines of Communications (SLOC)	The primary maritime routes between ports.
Singapore Armed Forces (SAF)	The military arm of the Total Defence of the Republic of Singapore; as well as the military component of the Ministry of Defence.
Singapore Registry of Ships (SRS)	A Singapore ship registry ranked among the top five largest registries in the world.
Singapore Shipping Association (SSA)	A Singapore maritime association that strives to enhance the competitiveness of Singapore as an international maritime centre.
Standards, Productivity and Innovation Board (SPRING Singapore)	A Singapore statutory board under the Ministry of Trade and Industry.
SS600	The Singapore Standard Code of Practice for Bunkering that outlines the best practices for documentation of equipment requirements, and verification procedures during a bunkering operation.
Tropical Marine Science Institute (TMSI)	A centre for research, development and consultancy in tropical marine science as well as environmental science
Twenty-foot Equivalent Unit (TEU)	A standard unit for describing a ship's cargo carrying capacity or a shipping terminal's cargo handling capacity.
Waste-to-Energy (WTE) plant	An incineration plant that burns waste materials to generate superheated steam in boilers. An efficient cleaning system is used to remove dust and pollutants from the flue gas before releasing into the atmosphere, negative pressure within the refuse bunker prevents odour from escaping into the environment, scrap metals are recovered and recycled, and the fly ash disposed at a landfill.

OUR APPROACH TO INTEGRATED REPORTING

We are pleased to embark on our journey in Integrated Reporting <IR>. The emphasis on connectivity and long-termism resonates with perspectives that underpin our work at MPA.

We embrace <IR> as a continuous process not only to improve external reporting, but as a tool to promote cohesive, streamlined and integrated thinking for our organisation.

The impetus to adopt <IR> was driven by members of senior management team who learnt of <IR>. Our first step was to ensure the Board and senior management understood and supported <IR>; we were privileged to be guided by representatives from the International Integrated Reporting Council (IIRC).

For this report, our focus was to integrate our environmental and social reporting, and also address each of the Content Elements (see table below). We conducted a materiality assessment, guided by the Global Reporting Initiative and IIRC guidelines. We articulated our business model, connecting our capitals and activities to our six outcomes and material issues.

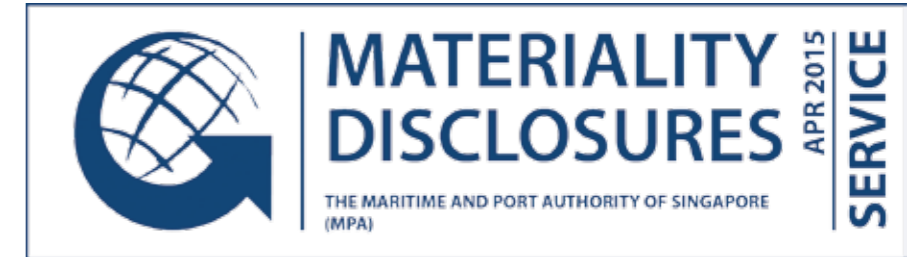
CONTENT ELEMENTS	WHERE IN THE REPORT IT IS COVERED
A. Organisational overview and external environment	Chairman's Foreword, page 02 Chief Executive's Foreword, page 03 About MPA, page 11-12 Singapore 2014 Maritime Performance, page 13-14
B. Governance	Corporate Governance section, page 61-64
C. Business model	Mapping Key Material Issues, page 15-16
D. Risks and opportunities	Mapping Key Material Issues, page 15-16 Corporate Governance, page 61-64
E. Strategy and resource allocation	Chief Executive's Foreword, page 03 Mapping Key Material Issues, page 15-16
F. Performance	Singapore 2014 Maritime Performance, page 13-14 MPA Performance Indicators, page 63
G. Outlook	Chief Executive's Foreword, page 03 Mapping Key Material Issues, page 15-16
H. Basis of preparation and presentation	Mapping Key Material Issues, page 15-16 About this report, back of inside cover

A challenge we face is delivering concise information, while minimising the burden of producing multiple reports. Unlike a corporate organisation for which investors are identified by IIRC as the target audience, our readers range from International Maritime Organizations to the local community.

In the next few reports, we aim to achieve greater alignment against the IIRC principles. We recognise that our articulation of several Content Elements have much room for improvement, such as Risks and opportunities for connectivity and conciseness.

We look forward to your support and feedback on areas so that we can improve to meet your needs. Thank you for joining us in this journey.

GRI G4 CONTENT INDEX



STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
GENERAL STANDARD DISCLOSURES			
STRATEGY AND ANALYSIS			
G4-1	Provide a statement from the most senior decision-maker of the organisation (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organisation and the organisation's strategy for addressing sustainability.	- Chairman's Foreword, page 02 - Chief Executive's Foreword, page 03	No
G4-2	Provide a description of key impacts, risks, and opportunities.	- Chairman's Foreword, page 02 - Chief Executive's Foreword, page 03 - Mapping Key Material Issues page 15-16	No
ORGANISATIONAL PROFILE			
G4-3	Report the name of the organisation.	- About MPA, page 11	No
G4-4	Report the primary brands, products, and services.	- About MPA, page 11	No
G4-5	Report the location of the organisation's headquarters.	- About MPA, page 11	No
G4-6	Report the number of countries where the organisation operates, and names of countries where either the organisation has significant operations or that are specifically relevant to the sustainability topics covered in the report.	- About MPA, page 11-12 - Operations are only in Singapore	No
G4-7	Report the nature of ownership and legal form.	- About MPA, page 11	No
G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	- About MPA, page 11-12 - Strong Partnerships, page 69-74	No
G4-9	Report the scale of the organisation.	- Financial Report - Singapore 2014 Maritime Performance, page 13-14 - Choice Employer, page 81-86	No
G4-10	a. Report the total number of employees by employment contract and gender. b. Report the total number of permanent employees by employment type and gender. c. Report the total workforce by employees and supervised workers and by gender. d. Report the total workforce by region and gender. e. Report whether a substantial portion of the organisation's work is performed by workers who are legally recognised as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors. f. Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).	- Choice Employer, page 81-86	No
G4-11	Report the percentage of total employees covered by collective bargaining agreements.	- Choice Employer > Managing Labour Relations, page 95	No
G4-12	Describe the organisation's supply chain.	- Strong Partnerships > Providing fair & open opportunities to suppliers, page 77-78	No
G4-13	Report any significant changes during the reporting period regarding the organisation's size, structure, ownership, or its supply chain	- About this Report, inside front cover	No
G4-14	Report whether and how the precautionary approach or principle is addressed by the organisation.	- About this Report, inside front cover	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
GENERAL STANDARD DISCLOSURES			
ORGANISATIONAL PROFILE			
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses.	- About this Report, inside front cover - MPA's Sustainability Journey, page 65-66 - Safeguard Strategic Maritime Interests & an Influential Voice > Supporting the International Maritime Community, page 45-46	No
G4-16	List memberships of associations (such as industry associations) and national or international advocacy organisations	- Safeguard Strategic Maritime Interests & an Influential Voice > Supporting the International Maritime Community, page 45-46	No
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
G4-17	List all entities included or not included in organisation's financial statements	- About this Report, inside front cover	No
G4-18	Describe process for defining Report Content	- About this Report, inside front cover - About MPA, page 12 - Singapore 2014 Maritime Performance > Mapping Key Material Issues, page 16	No
G4-19	List all the material Aspects identified in the process for defining report content	- Singapore 2014 Maritime Performance > Mapping Key Material Issues, page 16	No
G4-20	For each material Aspect, report the Aspect Boundary within the organisation	- Singapore 2014 Maritime Performance > Mapping Key Material Issues, page 16	No
G4-21	Report the Aspect Boundary outside the organisation	- Singapore 2014 Maritime Performance > Mapping Key Material Issues, page 16	No
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	- This is MPA's first Sustainability Report	No
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	- This is MPA's first Sustainability Report	No
STAKEHOLDER ENGAGEMENT			
G4-24	List of stakeholder groups engaged by the organisation	- Strong Partnerships > Stakeholder Engagement, page 71 & 73	No
G4-25	Basis for identification and selection of stakeholders with whom to engage	- Strong Partnerships > Stakeholder Engagement, page 71	No
G4-26	Approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group	- Strong Partnerships > Stakeholder Engagement, page 71 & 74 - Culture of Excellence > Nurturing a Culture of Excellence, page 67	No
G4-27	Key topics and concerns raised through stakeholder engagement, and how the organisation has responded	- Strong Partnerships > Stakeholder Engagement, page 73 - Engaging the Community, page 35	No
REPORT PROFILE			
G4-28	Reporting period for information provided	- About this Report, inside front cover	No
G4-29	Date of most recent previous report	- About this Report, inside front cover	No
G4-30	Reporting cycle	- About this Report, inside front cover	No
G4-31	Contact point for questions regarding the report or its contents	- About this Report, inside front cover	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
GENERAL STANDARD DISCLOSURES			
REPORT PROFILE			
G4-32	Report on 'In accordance' option, GRI Content Index, reference to External Assurance	- About this Report, inside front cover - GRI G4 Content Index, page 100-114	No
G4-33	Policy and current practice with regard to seeking external assurance for the report	- About this Report, inside front cover	No
GOVERNANCE			
G4-34	Governance structure of the organisation	- Culture of Excellence > Corporate Governance, page 61, 66	No
G4-35	Process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees	- Culture of Excellence > Corporate Governance > Organisation and Structure, page 61	No
G4-36	Whether the organisation has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body	- Culture of Excellence > Corporate Governance > Organisation and Structure, page 61 - Culture of Excellence > MPA's Sustainability Journey, page 65-66	No
G4-37	Processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics	- Mapping Key Material Issues, page 15-16 - Culture of Excellence > Corporate Governance > Organisation and Structure, page 61 - MPA's Sustainability Journey, page 65-66	No
G4-38	Composition of the highest governance body and its committees	- Culture of Excellence > Corporate Governance > Organisation and Structure, page 61 - Financial Report	No
G4-39	Whether Chair of the highest governance body is also an Executive Officer	- Culture of Excellence > Corporate Governance > Organisation and Structure, page 61 - Chairman of the MPA Board, the highest governance body, is a non-executive office for MPA	No
G4-40	Nomination and selection process for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members	- Culture of Excellence > Corporate Governance > Organisation and Structure, page 61	No
G4-41	Processes in place for the highest governance body to ensure conflicts of interest are avoided	- Culture of Excellence > Corporate Governance > Managing Conflict of Interests, page 62 - Choice Employer > Managing Labour Relations, page 95	No
G4-42	Highest governance body's and senior executive's roles in the development, approval and updating of the organisation's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental, and social impacts	- Culture of Excellence > Corporate Governance > Organisation and Structure, page 61-62	No
G4-43	Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social impacts	- Culture of Excellence > MPA's Sustainability Journey, page 65-66 - Culture of Excellence, page 67 - Corporate Governance > Disclosures on Compensation, page 62	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
GENERAL STANDARD DISCLOSURES			
GOVERNANCE			
G4-44	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	- Culture of Excellence > Corporate Governance > Strategy Planning Cycle, page 63 - Culture of Excellence > Corporate Governance > Aligning Performance to Strategy, page 63 - Culture of Excellence > Corporate Governance > Disclosures on Compensation, page 62 - Culture of Excellence > Corporate Governance > MPA's Performance Indicators, page 63 - Board is not assessed on performance against environment and social objectives	No
G4-45	Highest governance body's role in the identification and management of economic, environmental, and social impacts, risks and opportunities. Whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental and social impacts, risks and opportunities	- Culture of Excellence > Corporate Governance > Enterprise Risk Management, page 64 - About this Report, inside front cover - Stakeholders consultation by the Board is not part of the materiality assessment process	No
G4-46	Highest governance body's role in reviewing the effectiveness of the organisation's risk management processes for economic, environmental and social topics	- Culture of Excellence > Corporate Governance > Enterprise Risk Management, page 64	No
G4-47	Frequency of the highest governance body's review of economic, environmental and social topics	- Culture of Excellence > Corporate Governance > Organisation and Structure, Strategy Planning Cycle, page 63	No
G4-48	Highest committee or position that formally reviews and approves the organisation's sustainability report and ensures that all material Aspects are covered	- Mapping Key Material Issues, page 15-16	No
G4-49	Process for communicating critical concerns to the highest governance body	- Culture of Excellence > Ethics and Integrity, page 79	No
G4-50	Nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them	- Strong Partnership > Ethics and Integrity, page 79	No
G4-51	Remuneration policies for the highest governance body and senior executives	- MPA Board and Board Committees > Disclosures on Compensation, page 62	No
G4-52	Process for determining remuneration	- MPA Board and Board Committees > Disclosures on Compensation, page 62	No
G4-53	How stakeholders' views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals	- MPA Board and Board Committees > Disclosures on Compensation, page 62	No
G4-54	Ratio of the annual total compensation for the organisation's highest-paid individual in each country of significant operations to the median total compensation for all employees (excluding the highest-paid) individual in the same country	- MPA Board and Board Committees > Disclosures on Compensation, page 62	No
G4-55	Ratio of percentage increase in annual total compensation for the organisation's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country	- MPA Board and Board Committees > Disclosures on Compensation, page 62	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
GENERAL STANDARD DISCLOSURES			
ETHICS AND INTEGRITY			
G4-56	Organisation's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics	- Choice Employer> FIRST' Values, page 84 - Culture of Excellence > Ethics and Integrity, page 79	No
G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organisational integrity, such as helplines or advice lines	- Culture of Excellence > Ethics and Integrity, page 79	No
G4-58	Internal and external mechanisms for reporting concerns about ethical and lawful behavior, and matters related to organisational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines	- Culture of Excellence > Ethics and Integrity, page 79	No
SPECIFIC STANDARD DISCLOSURES			
CATEGORY: ECONOMIC			
ASPECT: ECONOMIC PERFORMANCE			
G4-DMA	Generic Disclosures on Management Approach	- Culture of Excellence > Financial Sustainability, page 68	No
G4-EC1	Direct economic value generated and distributed	- Financial Report - Vibrant IMC Eco-System, page 39-42	No
G4-EC2	Financial implications and other risks and opportunities for the organisation's activities due to climate change	- MPA has not formally assessed the financial implications of climate change to the organisation.	No
G4-EC3	Coverage of the organisation's defined benefit plan obligations	- Choice Employer > Engaging and Caring for Employees > Staff Benefits, page 91 - The pension liabilities are not relevant in local context	No
G4-EC4	Financial assistance received from government	- Culture of Excellence > Financial Sustainability, page 68	No
ASPECT: MARKET PRESENCE			
G4-DMA	Generic Disclosures on Management Approach	- Not Material - MPA's operations are only in Singapore	No
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	- Not Material - MPA's operations are only in Singapore. There is no minimum wage in Singapore	No
G4-EC6	Proportion of senior management hired from the local community at significant locations of operation	- Not Material - MPA's operations are only in Singapore	No
ASPECT: INDIRECT ECONOMIC IMPACTS			
G4-DMA	Generic Disclosures on Management Approach	- About MPA, page 11-12 - Vibrant IMC Eco-system > Building a thriving eco-system, page 41	No
G4-EC7	Development and impact of infrastructure investments and services supported	- Vibrant IMC Eco-system > Building a thriving eco-system, page 41	No
G4-EC8	Significant indirect economic impacts, including the extent of impacts	- Vibrant IMC Eco-system > Developing Maritime Services, page 41-42 - MPA's development of the port has significant positive impact on the maritime community, including the support of jobs, foreign investments and promotion of environmental and social best practices	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
SPECIFIC STANDARD DISCLOSURES			
ASPECT: PROCUREMENT PRACTICES			
G4-DMA	Generic Disclosures on Management Approach	- Strong Partnerships > Providing fair & open opportunities to suppliers, page 77 - Strong Partnerships > Upholding safety and standards throughout the supply chain, page 78	No
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	- Strong Partnership > Providing fair & open opportunities to suppliers, page 77	No
CATEGORY: ENVIRONMENTAL			
ASPECT: MATERIALS			
G4-DMA	Generic Disclosures on Management Approach	- Safe, Efficient & Sustainable Global Hub Port > Running a clean and efficient port, page 33 - Safe, Efficient & Sustainable Global Hub Port > Reclaiming Land for our Port, page 34 - Safe, Efficient & Sustainable Global Hub Port > Building a Next Generation Port, page 34	No
G4-EN1	Materials used by weight or volume	- Safe, Efficient & Sustainable Global Hub Port > Running a clean and efficient port, page 33 - Safe, Efficient & Sustainable Global Hub Port > Reclaiming Land for our Port, page 34 - Safe, Efficient & Sustainable Global Hub Port > Building a Next Generation Port, page 34	No
G4-EN2	Percentage of materials used that are recycled input materials	- Safe, Efficient & Sustainable Global Hub Port > Running a clean and efficient port, page 33 - Safe, Efficient & Sustainable Global Hub Port > Reclaiming Land for our Port, page 34 - Safe, Efficient & Sustainable Global Hub Port > Building a Next Generation Port, page 34	No
ASPECT: ENERGY			
G4-DMA	Generic Disclosures on Management Approach	- Safe, Efficient & Sustainable Global Hub Port > Minimising waste, water usage and energy consumption, page 37-38	No
G4-EN3	Energy consumption within the organisation	- Safe, Efficient & Sustainable Global Hub Port > Minimising waste, water usage and energy consumption, page 38	No
G4-EN4	Energy consumption outside of the organisation	- Not applicable	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
SPECIFIC STANDARD DISCLOSURES			
ASPECT: ENERGY			
G4-EN5	Energy intensity	- Safe, Efficient & Sustainable Global Hub Port > Minimising waste, water usage and energy consumption, page 38	No
G4-EN6	Reduction of energy consumption	- Safe, Efficient & Sustainable Global Hub Port > Minimising waste, water usage and energy consumption > Box Story: LED for a Brighter Future, page 37-38	No
G4-EN7	Reductions in energy requirements of products and services	- Safe, Efficient & Sustainable Global Hub Port > Environmental Sustainability > The Maritime Singapore Green Initiative, page 27-28	No
ASPECT: WATER			
G4-DMA	Generic Disclosures on Management Approach	- Safe, Efficient & Sustainable Global Hub Port > Protecting our waters from contaminants and pollutants, page 38 - Safe, Efficient & Sustainable Global Hub Port > Keeping our Sea Lanes Open and Safe, page 20	No
G4-EN8	Total water withdrawal by source	- Not material. MPA's only water use is in its offices	No
G4-EN9	Water sources significantly affected by withdrawal of water	- Not material. MPA does not withdraw water. Our water use is only for office use, supplied by public utilities. We do conduct dredging work as part of our operations to keep shipping lines clear. The impacts from our dredging are covered in page 34 - Environmental Sustainability > Reclaiming land for our port, page 34	No
G4-EN10	Percentage and total volume of water recycled and reused	- Not Material. MPA is not a significant user of water.	No
ASPECT: BIODIVERSITY			
G4-DMA	Generic Disclosures on Management Approach	- Safe, Efficient & Sustainable Global Hub Port > Building a Next Generation Port, page 34 - Safe, Efficient & Sustainable Global Hub Port > Engaging The Community, page 35 - Safe, Efficient & Sustainable Global Hub Port > Box Story: Relocating corals to preserve marine biodiversity, page 36	No
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	- Safe, Efficient & Sustainable Global Hub Port > Staying Ahead of Competition, page 19 - Safe, Efficient & Sustainable Global Hub Port > Building a Next Generation Port, page 34	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
SPECIFIC STANDARD DISCLOSURES			
ASPECT: BIODIVERSITY			
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	- Safe, Efficient & Sustainable Global Hub Port > Protecting our waters from contaminants and pollutants, page 32 - Safe, Efficient & Sustainable Global Hub Port > Engaging The Community, page 35 - Safe, Efficient & Sustainable Global Hub Port > Box Story: Relocating corals to preserve marine biodiversity, page 36	No
G4-EN13	Habitats protected or restored	- Safe, Efficient & Sustainable Global Hub Port > Building a Next Generation Port, page 34	No
G4-EN14	Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	- Not Material. MPA's do not affect any IUCN Red List species or national conservation list species	No
ASPECT: EMISSIONS			
G4-DMA	Generic Disclosures on Management Approach	- Safe, Efficient & Sustainable Global Hub Port > Environmental Sustainability > Reducing greenhouse gas (GHG) emissions and energy usage, page 27 - Safe, Efficient & Sustainable Global Hub Port > Minimising waste, water usage and energy consumption, page 37	No
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	- Safe, Efficient & Sustainable Global Hub Port > Minimising waste, water usage and energy consumption, page 38	No
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	- Safe, Efficient & Sustainable Global Hub Port > Box Story: LED for a Brighter Future, page 38	No
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	- Safe, Efficient & Sustainable Global Hub Port > Environmental Sustainability > Local Air Quality, page 24-30	No
G4-EN18	Greenhouse gas (GHG) emissions intensity	- Safe, Efficient & Sustainable Global Hub Port > Minimising waste, water usage and energy consumption, page 38	No
G4-EN19	Reduction of greenhouse gas (GHG) emissions	- Safe, Efficient & Sustainable Global Hub Port > Minimising waste, water usage and energy consumption, page 37 - Safe, Efficient & Sustainable Global Hub Port > Box Story: LED for a Brighter Future, page 38	No
G4-EN20	Emissions of ozone-depleting substances (ODS)	Not Material. MPA is not a significant emitter of ODS.	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
SPECIFIC STANDARD DISCLOSURES			
ASPECT: EMISSIONS			
G4-EN21	NO _x , SO _x , and other significant air emissions NO _x , SO _x , and other significant air emissions	- Not Material. MPA is not a significant emitter of NO _x or SO ₂ . We have addressed our role in influencing local air quality through our regulatory role on page 29-30 - Safe, Efficient & Sustainable Global Hub Port > Going Green With The Maritime Singapore Green Initiative, page 27-28	No
ASPECT: EFFLUENTS AND WASTE			
G4-DMA	Generic Disclosures on Management Approach	- Safe, Efficient & Sustainable Global Hub Port > Running a clean and efficient port / Minimising waste, water usage and energy consumption, page 38	No
G4-EN22	Total water discharge by quality and destination	- Not material. MPA does not discharge water.	No
G4-EN23	Total weight of waste by type and disposal method	- Not material. Our waste generation is only from our offices, and is not material.	No
G4-EN24	Total number and volume of significant spills	- Not material. MPA has not had any significant spills.	No
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	- Not material. MPA does not transport, import or export waste deemed hazardous.	No
G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organisation's discharges of water and runoff	- Not Material. MPA does not discharge water.	No
ASPECT: PRODUCTS AND SERVICES			
G4-DMA	Generic Disclosures on Management Approach	- Safe, Efficient & Sustainable Global Hub Port > Environmental Sustainability, page 27	No
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	- Safe, Efficient & Sustainable Global Hub Port > Environmental Sustainability, page 27 - Safe, Efficient & Sustainable Global Hub Port > Going green with the Maritime Singapore Green Initiative, page 29-30	No
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	- Not applicable.	No
ASPECT: COMPLIANCE			
G4-DMA	Generic Disclosures on Management Approach	- Culture of Excellence > MPA's Sustainability Journey, page 65-66	No
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	- MPA has not received any significant fines or non-monetary sanctions for non-compliance during the reporting period	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
SPECIFIC STANDARD DISCLOSURES			
ASPECT: TRANSPORT			
G4-DMA	Generic Disclosures on Management Approach	- Safe, Efficient & Sustainable Global Hub Port > Environmental Sustainability > Reducing greenhouse gas (GHG) emissions and energy usage, page 27 - Safe, Efficient & Sustainable Global Hub Port > Minimising congestion of port roads, page 34	No
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organisation's operations, and transporting members of the workforce	- Safe, Efficient & Sustainable Global Hub Port > Environmental Sustainability, page 34 - Safe, Efficient & Sustainable Global Hub Port > Minimising congestion of port roads, page 34	No
ASPECT: OVERALL			
G4-DMA	Generic Disclosures on Management Approach	- About this Report, inside front cover - Safe, Efficient & Sustainable Global Hub Port > Environmental Sustainability, page 27 - About MPA > Reinforcing Singapore's Economy, page 11 - MPA's Organisational Structure, page 09-10	No
G4-EN31	Total environmental protection expenditures and investments by type	- Not applicable.	No
ASPECT: SUPPLIER ENVIRONMENTAL ASSESSMENT			
G4-DMA	Generic Disclosures on Management Approach	- Upholding safety and standards throughout the supply chain	No
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	- Upholding safety and standards throughout the supply chain	No
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	- Upholding safety and standards throughout the supply chain	No
ASPECT: ENVIRONMENTAL GRIEVANCE MECHANISMS			
G4-DMA	Generic Disclosures on Management Approach	- Not applicable	No
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	- MPA has not received any grievances about environmental impacts during the reporting period	No
ASPECT: SUPPLIER ENVIRONMENTAL ASSESSMENT			
G4-DMA	Generic Disclosures on Management Approach	- Upholding safety and standards throughout the supply chain	No
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	- Upholding safety and standards throughout the supply chain	No
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	- Upholding safety and standards throughout the supply chain	No
ASPECT: ENVIRONMENTAL GRIEVANCE MECHANISMS			
G4-DMA	Generic Disclosures on Management Approach	- Not applicable	No
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	- MPA has not received any grievances about environmental impacts during the reporting period	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
SPECIFIC STANDARD DISCLOSURES			
CATEGORY: SOCIAL SUB-CATEGORY: LABOUR PRACTICES AND DECENT WORK			
ASPECT: EMPLOYMENT			
G4-DMA	Generic Disclosures on Management Approach	- Strong Partnerships > Upholding safety and standards throughout the supply chain, page 78	No
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	- Choice Employer > Providing Fair Employment and Meaningful Career > Promotions, staff rotations and postings, page 85	No
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	- Not applicable. MPA provides the same benefits to part-time workers as to full-time workers	No
G4-LA3	Return to work and retention rates after parental leave, by gender	- Choice Employer > Engaging and Caring for Employees > Work-Life Harmony, page 91	No
ASPECT: LABOUR/MANAGEMENT RELATIONS			
G4-DMA	Generic Disclosures on Management Approach	- Choice Employer, page 83 - Choice Employer > Managing Labour Relations, page 95	No
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	- Choice Employer > Managing Labour Relations, page 95	No
ASPECT: OCCUPATIONAL HEALTH AND SAFETY			
G4-DMA	Generic Disclosures on Management Approach	- Choice Employer > Ensuring Workplace Safety and Health, page 96	No
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	- All of our employees are represented by our Workplace Safety and Health programs. We do not have a health & safety Committee	No
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	- Choice Employer > Ensuring Workplace Safety and Health, page 96	No
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	- Not material	No
G4-LA8	Health and safety topics covered in formal agreements with trade unions	- Not material	No
ASPECT: TRAINING AND EDUCATION			
G4-DMA	Generic Disclosures on Management Approach	- Choice Employer > Building a Competent Workforce, page 87-90	No
G4-LA9	Average hours of training per year per employee by gender, and by employee category	- Choice Employer > Building a Competent Workforce > Talent and Leadership Development, page 89	No
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	- Choice Employer > Building a Competent Workforce > Gearing for broader learning experiences, page 88 - Choice Employer > Building a Competent Workforce > Fulfilling personal aspirations, page 89	No
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	- Choice Employer > Building a Competent Workforce > Recognising Achievement, page 90	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
SPECIFIC STANDARD DISCLOSURES			
ASPECT: DIVERSITY AND EQUAL OPPORTUNITY			
G4-DMA	Generic Disclosures on Management Approach	- Choice Employer > Providing fair employment and meaningful careers > Fair Employment, page 85	No
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	- Choice Employer > Providing fair employment and meaningful careers, page 85-86	No
ASPECT: EQUAL REMUNERATION FOR WOMEN AND MEN			
G4-DMA	Generic Disclosures on Management Approach	- Culture of Excellence > Corporate Governance > Disclosures on Compensation, page 62	No
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	- Culture of Excellence > Corporate Governance > Disclosures on Compensation, page 62	No
ASPECT: SUPPLIER ASSESSMENT FOR LABOUR PRACTICES			
G4-DMA	Generic Disclosures on Management Approach	- Strong Partnership > Providing Fair and Open Opportunities to Suppliers, page 77-78	No
G4-LA14	Percentage of new suppliers that were screened using labour practices criteria	- Strong Partnership > Providing Fair and Open Opportunities to Suppliers > Upholding safety and standards throughout the supply chain, page 78 - At present, we do not screen new suppliers for labour practices	No
G4-LA15	Significant actual and potential negative impacts for labour practices in the supply chain and actions taken	- Strong Partnership > Providing Fair and Open Opportunities to Suppliers > Upholding safety and standards throughout the supply chain, page 78	No
ASPECT: LABOUR PRACTICES GRIEVANCE MECHANISMS			
G4-DMA	Generic Disclosures on Management Approach	- Choice Employer > Managing Labour Relations, page 95	No
G4-LA16	Number of grievances about labour practices filed, addressed, and resolved through formal grievance mechanisms	- Choice Employer > Managing Labour Relations, page 95	No
SUB-CATEGORY: HUMAN RIGHTS			
ASPECT: INVESTMENT			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	- Not material	No
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	- Not material	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
SPECIFIC STANDARD DISCLOSURES			
ASPECT: NON-DISCRIMINATION			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-HR3	Total number of incidents of discrimination and corrective actions taken	- Not material	No
ASPECT: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	- Not material	No
ASPECT: CHILD LABOUR			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour	- Not material	No
ASPECT: FORCED OR COMPULSORY LABOUR			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour	- Not material	No
ASPECT: SECURITY PRACTICES			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-HR7	Percentage of security personnel trained in the organisation's human rights policies or procedures that are relevant to operations	- Not material	No
ASPECT: INDIGENOUS RIGHTS			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	- Not material	No
ASPECT: ASSESSMENT			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	- Not material	No
ASPECT: SUPPLIER HUMAN RIGHTS ASSESSMENT			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	- Not material	No
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	- Not material	No
ASPECT: HUMAN RIGHTS GRIEVANCE MECHANISMS			
G4-DMA	Generic Disclosures on Management Approach	- Not applicable	No
G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	- MPA has not received any grievances about impacts on society during the reporting period	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
SPECIFIC STANDARD DISCLOSURES			
SUB-CATEGORY: SOCIETY			
ASPECT: LOCAL COMMUNITIES			
G4-DMA	Generic Disclosures on Management Approach	- Strong Partnership > Contributing to the Community, page 79 - Safe, Efficient & Sustainable Global Hub Port > Engaging the Community, page 35	No
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	- Safe, Efficient & Sustainable Global Hub Port > Getting the basics right – Promoting Safety@Sea, page 21-22 - MPA's operations are only in Singapore, hence our local community engagement is focused around Singapore.	No
ASPECT: LOCAL COMMUNITIES			
G4-SO2	Operations with significant actual and potential negative impacts on local communities	- Safe, Efficient & Sustainable Global Hub Port > Engaging the Community, page 35 - MPA's overall mission is to have a positive impact Singapore community	No
ASPECT: ANTI-CORRUPTION			
G4-DMA	Generic Disclosures on Management Approach	- Strong Partnership > Ethics & Integrity, page 79	No
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	- Culture of Excellence > Financial Sustainability, page 68 - Strong Partnership > Ethics & Integrity, page 79	No
G4-SO4	Communication and training on anti-corruption policies and procedures	- Strong Partnership > Ethics & Integrity, page 79	No
G4-SO5	Confirmed incidents of corruption and actions taken	- Strong Partnership > Ethics & Integrity, page 79	No
ASPECT: PUBLIC POLICY			
G4-DMA	Generic Disclosures on Management Approach	- Not applicable	No
G4-SO6	Total value of political contributions by country and recipient/beneficiary	- Not applicable - MPA does not make any political contributions.	No
ASPECT: ANTI-COMPETITIVE BEHAVIOR			
G4-DMA	Generic Disclosures on Management Approach	- Not applicable	No
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	- Not applicable	No
ASPECT: COMPLIANCE			
G4-DMA	Generic Disclosures on Management Approach	- Not applicable	No
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	- MPA has not received any significant fines or non-monetary sanctions for non-compliance during the reporting period	No
ASPECT: SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY			
G4-DMA	Generic Disclosures on Management Approach	- Upholding safety and standards throughout the supply chain	No

STANDARD DISCLOSURE TITLE	WHERE IN MPA'S REPORT	EXTERNAL ASSURANCE	
SPECIFIC STANDARD DISCLOSURES			
ASPECT: SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY			
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	- Upholding safety and standards throughout the supply chain	No
G4-SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	- Upholding safety and standards throughout the supply chain	No
ASPECT: GRIEVANCE MECHANISMS FOR IMPACTS ON SOCIETY			
G4-DMA	Generic Disclosures on Management Approach	- Not applicable	No
G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	- MPA has not received any grievances about impacts on society during the reporting period	No
SUB-CATEGORY: PRODUCT RESPONSIBILITY			
ASPECT: CUSTOMER HEALTH AND SAFETY			
G4-DMA	Generic Disclosures on Management Approach	- Not applicable	No
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	- Not applicable	No
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	- Not applicable	No
ASPECT: PRODUCT AND SERVICE LABELING			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-PR3	Type of product and service information required by the organisation's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	- Not material	No
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	- Not material	No
G4-PR5	Results of surveys measuring customer satisfaction	- Not material	No
ASPECT: MARKETING COMMUNICATIONS			
G4-DMA	Generic Disclosures on Management Approach	- Not material	No
G4-PR6	Sale of banned or disputed products	- Not material	No
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	- Not material	No
ASPECT: CUSTOMER PRIVACY			
G4-DMA	Generic Disclosures on Management Approach	- Not Material	No
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	- Not Material	No
ASPECT: COMPLIANCE			
G4-DMA	Generic Disclosures on Management Approach	- Culture of Excellence > Financial Sustainability, page 68 - Strong Partnership > Ethics & Integrity, page 79	No
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	- MPA has not received any significant fines or non-monetary sanctions for non-compliance during the reporting period	No

OUR CONTRIBUTORS

Brought to you by:

Yvonne Chan
Au Kheng Sheng
Goh Siew Min
Evelyn Lim
Ernie Leong

Contributors:

Tan Suan Jow
Bernardette Low
Chika Chow
Cindy Sim
Colin Yong
Eugene Lim
Gary Chew
Gary Low
Jenny Lin
Manin Kaur
Ng Wei Ling
Song Tiancheng
Tay Yeow Min
Winnie Lim
Yao Yikai

Designed by Moxie Design

Sustainability Guidance by Paia

TOWARDS

A FUTURE READY
MARITIME SINGAPORE

FINANCIAL REPORT 2014

MPA FINANCIAL REPORT 2014



MPA
SINGAPORE



MPA
SINGAPORE

460 Alexandra Road #19-00
PSA Building Singapore 119963

www.mpa.gov.sg

CONTENTS

STATEMENT BY BOARD OF MEMBERS	01
INDEPENDENT AUDITOR'S REPORT	02
CONSOLIDATED BALANCE SHEET	04
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME	05
CONSOLIDATED STATEMENT OF CHANGES IN RESERVES	06
CONSOLIDATED STATEMENT OF CASH FLOWS	07
NOTES TO THE FINANCIAL STATEMENTS	08

STATEMENT BY BOARD OF MEMBERS

For the financial year ended 31 December 2014

In the opinion of the Board of Members,

- (a) the consolidated financial statements of the Maritime and Port Authority of Singapore and its subsidiary (the "Authority") as set out on pages 4 to 59 are properly drawn up so as to present fairly, in all material respects, the state of affairs of the Authority as at 31 December 2014 and of the results of the business, changes in reserves and cash flows of the Authority for the financial year then ended in accordance with the provisions of the Maritime and Port Authority of Singapore Act (Cap. 170A) and Statutory Board Financial Reporting Standards; and
- (b) at the date of this statement, there are reasonable grounds to believe that the Authority will be able to pay its debts as and when they fall due.

On behalf of the Board of Members,



Lucien Wong
Chairman



Andrew Tan
Chief Executive and Board Member

5 March 2015

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF THE BOARD OF THE MARITIME AND PORT AUTHORITY OF SINGAPORE

Report on the Financial Statements

We have audited the accompanying consolidated financial statements of the Maritime and Port Authority of Singapore and its subsidiary (the "Authority") set out on pages 4 to 59, which comprise the consolidated balance sheet as at 31 December 2014, the consolidated statement of comprehensive income, consolidated statement of changes in reserves and consolidated statement of cash flows of the Authority for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the provisions of the Maritime and Port Authority of Singapore Act, Chapter 170A (the "Act") and Statutory Board Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Singapore Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements of the Authority are properly drawn up in accordance with the provisions of the Act and Statutory Board Financial Reporting Standards so as to present fairly, in all material respects, the state of affairs of the Authority as at 31 December 2014 and the results, changes in reserves and cash flows of the Authority for the year ended on that date.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF THE BOARD OF THE MARITIME AND PORT AUTHORITY OF SINGAPORE (continued)

Report on Other Legal and Regulatory Requirements

Management's Responsibility for Compliance with Legal and Regulatory Requirements

Management is responsible for ensuring that the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the Act. This responsibility includes implementing accounting and internal controls as management determines are necessary to enable compliance with the provisions of the Act.

Auditor's Responsibility

Our responsibility is to express an opinion on management's compliance based on our audit of the financial statements. We conducted our audit in accordance with Singapore Standards on Auditing. We planned and performed the compliance audit to obtain reasonable assurance about whether the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the Act.

Our compliance audit includes obtaining an understanding of the internal control relevant to the receipts, expenditure, investment of moneys and the acquisition and disposal of assets; and assessing the risks of material misstatement of the financial statements from non-compliance, if any, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Because of the inherent limitations in any accounting and internal control system, non-compliances may nevertheless occur and not be detected.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on management's compliance.

Opinion

In our opinion:

- (a) the receipts, expenditure, investment of moneys and the acquisition and disposal of assets by the Authority during the year are, in all material respects, in accordance with the provisions of the Act; and
- (b) proper accounting and other records have been kept, including records of all assets of the Authority whether purchased, donated or otherwise.



PricewaterhouseCoopers LLP

Public Accountants and Chartered Accountants

Singapore, 5 March 2015

CONSOLIDATED BALANCE SHEET

As at 31 December 2014

		2014	2013
	Note	\$	\$
ASSETS			
Non-current assets			
Property, plant and equipment	4	106,143,918	117,367,023
Capital work-in-progress	4	15,683,030	11,965,586
Financial assets	7	587,783,886	430,013,410
		709,610,834	559,346,019
Current assets			
Financial assets	7	88,000	88,000
Trade receivables	8	39,552,725	34,569,316
Deposits, prepayments and other receivables	9	6,270,685	6,262,720
Cash and cash equivalents	10	678,346,081	739,562,058
		724,257,491	780,482,094
Total assets		1,433,868,325	1,339,828,113
EQUITY			
Capital and reserves			
Establishment account	11	147,375,155	147,375,155
Equity financing account	12	3,978,616	3,978,616
Fair value reserve		14,743,450	12,732,247
Accumulated surplus		1,171,896,237	1,078,271,192
Total capital and reserves		1,337,993,458	1,242,357,210
LIABILITIES			
Non-current liabilities			
Employment benefits	13	422,377	1,063,575
Deferred capital grant	14	23,202,484	24,589,864
		23,624,861	25,653,439
Current liabilities			
Trade and other payables	15	36,364,670	31,373,318
Advances, deposits and unearned income	16	14,329,531	14,713,440
Provision for contribution to Consolidated Fund	20	21,555,805	25,730,706
		72,250,006	71,817,464
Total liabilities		95,874,867	97,470,903
Total equity and liabilities		1,433,868,325	1,339,828,113
Funds managed/held on behalf of others	25	9,045,582	13,467,113
Funds' net assets managed/held on behalf of others	25	(9,045,582)	(13,467,113)

The accompanying notes form an integral part of these financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the financial year ended 31 December 2014

Note	2014	2013
	\$	\$
Operating revenue		
Port dues and marine services	263,941,008	264,950,410
Shipping services	8,123,775	8,925,067
Rental income	3,768,346	3,912,476
Training	1,055,263	1,047,342
Miscellaneous revenue	534,579	1,115,479
	277,422,971	279,950,774
Operating expenditure		
Staff cost	74,411,580	67,980,671
Depreciation of property, plant and equipment	23,208,987	20,821,721
Hire of marine craft and sea garbage services	9,212,741	9,930,293
Fuel, repairs and maintenance	9,483,112	8,304,530
Other operating expenses	49,354,088	46,324,980
	165,670,508	153,362,195
Operating surplus	111,752,463	126,588,579
Other operating surplus	13,624,007	23,347,135
Surplus from operations	125,376,470	149,935,714
Amortisation of deferred capital grant	1,387,380	1,387,380
Surplus before contribution to Consolidated Fund	126,763,850	151,323,094
Contribution to Consolidated Fund	(21,555,805)	(27,702,706)
Surplus for the year	105,208,045	123,620,388
Other comprehensive income/(loss):		
Items that may be reclassified subsequently to income or expenditure:		
Net change in fair value of:		
- Available-for-sale debt and equity securities placed by fund managers	(9,437,488)	(18,579,995)
- Available-for-sale equity securities managed internally	386,308	409,032
Transfer to income or expenditure on sale of available-for-sale debt and equity securities placed by fund managers	9,563,948	1,139,643
Transfer to income or expenditure on sale of available-for-sale equity securities managed internally	(1,647,490)	-
Impairment loss on available-for-sale debt and equity securities placed by fund managers transferred to income or expenditure	3,145,925	3,610,995
Other comprehensive income/(loss) for the year	2,011,203	(13,420,325)
Total comprehensive income for the year	107,219,248	110,200,063

The accompanying notes form an integral part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN RESERVES

For the financial year ended 31 December 2014

	Establishment account	Equity financing account	Fair value reserve	Accumulated surplus	Total
	\$	\$	\$	\$	\$
2014					
Beginning of financial year	147,375,155	3,978,616	12,732,247	1,078,271,192	1,242,357,210
Total comprehensive income	-	-	2,011,203	105,208,045	107,219,248
Dividends paid	-	-	-	(11,583,000)	(11,583,000)
Return of surplus funds to government	-	-	-	-	-
End of financial year	147,375,155	3,978,616	14,743,450	1,171,896,237	1,337,993,458
2013					
Beginning of financial year	147,375,155	3,978,616	26,152,572	1,165,521,804	1,343,028,147
Total comprehensive income	-	-	(13,420,325)	123,620,388	110,200,063
Dividends paid	-	-	-	(10,871,000)	(10,871,000)
Return of surplus funds to government	-	-	-	(200,000,000)	(200,000,000)
End of financial year	147,375,155	3,978,616	12,732,247	1,078,271,192	1,242,357,210

The accompanying notes form an integral part of these financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

For the financial year ended 31 December 2014

	Note	2014 \$	2013 \$
Cash flows from operating activities			
Surplus before contribution to Consolidated Fund		126,763,850	151,323,094
Adjustments for:			
- Depreciation of property, plant and equipment	4	23,208,987	20,821,721
- Provision for employee benefits	13	(109,797)	44,591
- Amortisation of deferred capital grant	14	(1,387,380)	(1,387,380)
- Impairment loss/(write back) loss on trade receivables	18	983	(150,355)
- Write back on unquoted equity securities, managed internally	19	-	(1,105,804)
- Net investment gain from funds with fund managers	19	(8,981,444)	(21,774,844)
- (Gain)/loss on disposal of equity securities, managed internally	19	(1,647,490)	1,870,285
- Interest income on bank deposits and staff loans	19	(2,103,377)	(1,873,024)
- Dividend income on equity securities, managed internally	19	(77,262)	(190,882)
- (Gain)/loss on disposal of property, plant and equipment	19	(234,972)	216,749
- Write off of capital work-in-progress	4	1,097,435	-
		136,529,533	147,794,151
Changes in working capital:			
- Trade receivables		(4,984,392)	938,714
- Deposits, prepayments and other receivables		358,871	251,440
- Trade and other payables		4,919,284	4,467,177
- Advances, deposits and unearned income		(383,909)	(1,291,474)
Cash generated from operations		136,439,387	152,160,008
Payment of employee benefits	13	(531,401)	-
Contribution paid to Consolidated Fund	20	(25,730,706)	(24,559,651)
Net cash provided by operating activities		110,177,280	127,600,357
Cash flows from investing activities			
Withdrawal of industry funds with Accountant-General's Department		89,826	153,354,576
Proceeds from sale of property, plant and equipment		243,089	168,789
Purchases of property, plant and equipment and capital work-in-progress		(16,808,878)	(17,039,724)
Sale of unquoted equity securities, managed internally		-	591,925
Sale of quoted equity securities, managed internally		4,544,800	-
Deposit of funds with fund managers		(303,172,168)	(1,839,734)
Interest received		1,734,469	1,507,171
Dividends received		77,262	190,882
Net cash (used in)/provided by investing activities		(313,291,600)	136,933,885
Cash flows from financing activities			
Dividends paid		(11,583,000)	(10,871,000)
Return of surplus funds to Government		-	(200,000,000)
Net cash used in financing activities		(11,583,000)	(210,871,000)
Net (decrease)/increase in cash and cash equivalents		(214,697,320)	53,663,242
Cash and cash equivalents at beginning of financial year		283,659,901	229,996,659
Cash and cash equivalents at end of financial year	10	68,962,581	283,659,901

The accompanying notes form an integral part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

These notes form an integral part of and should be read in conjunction with the accompanying financial statements.

1. General information

The Maritime and Port Authority of Singapore ("MPA") under the purview of Ministry of Transport, was established on 2 February 1996 under the Maritime and Port Authority of Singapore Act (Cap. 170A) with the merger of the following organisations:

- The National Maritime Board (NMB);
- The Marine Department (MD); and
- The regulatory departments of the Port of Singapore Authority (PSA).

MPA is domiciled in Singapore and the address of its registered office is 460 Alexandra Road, 19th Storey, PSA Building, Singapore 119963.

The principal activities of MPA include the control of vessel movements to ensure a safe and secure port, and also the regulation of the port and marine services and facilities. MPA is the champion agency to develop and promote Singapore as an International Maritime Centre. MPA also represents Singapore regionally and internationally to safeguard Singapore's maritime interests.

The principal activities of its subsidiary and associated companies are set out in Note 6.

2. Significant accounting policies

2.1 Basis of preparation

These financial statements have been prepared in accordance with the provisions of the Maritime and Port Authority of Singapore Act (Cap. 170A) and Statutory Board Financial Reporting Standards ("SB-FRS").

The financial statements have been prepared under the historical cost convention except as disclosed in the accounting policies below.

The preparation of financial statements in conformity with SB-FRS requires management to exercise its judgement in the process of applying the Authority's accounting policies. It also requires the use of certain critical accounting estimates and assumptions. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 3.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.1 Basis of preparation (continued)

Interpretations and amendments to published Standards effective in 2014

On 1 January 2014, the Authority adopted the new or amended SB-FRS and Interpretations of SB-FRS ("INT SB-FRS") that are mandatory for application for the financial year. Changes to the Authority's accounting policies have been made as required, in accordance with the transitional provisions in the respective SB-FRS and INT SB-FRS.

The adoption of these new or amended SB-FRS and INT SB-FRS did not result in substantial changes to the Authority's accounting policies and had no material effect on the amounts reported for the current or prior financial years, except for the following:

SB-FRS 110 Consolidated Financial Statements

The Authority has adopted the above new SB-FRS on 1 January 2014. The amendment is applicable for annual periods beginning on or after 1 January 2014. SB-FRS 110 replaces all of the guidance on control and consolidation in SB-FRS 27 *Consolidated and Separate Financial Statements* and INT SB-FRS 12 *Consolidation – Special Purpose Entities*. The same criteria are now applied to all entities to determine control. Additional guidance is also provided to assist in the determination of control where this is difficult to assess.

The adoption of SB-FRS 110 does not have any material impact on the accounting policies of the Authority. The Authority has incorporated the additional required disclosures into the financial statements.

SB-FRS 112 Disclosures of Interests in Other Entities

The Authority has adopted the above new SB-FRS on 1 January 2014. The amendment is applicable for annual periods beginning on or after 1 January 2014. It sets out the required disclosures for entities reporting under the new SB-FRS 110 *Consolidated Financial Statements* and SB-FRS 111 *Joint Arrangements*, and replaces the disclosure requirements currently found in SB-FRS 27 (revised 2011) *Separate Financial Statements* and SB-FRS 28 (revised 2011) *Investments in Associates and Joint Ventures*.

The adoption of SB-FRS 112 does not have any material impact on the accounting policies of the Authority. The Authority has incorporated the additional required disclosures into the financial statements.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.1 Basis of preparation (continued)

Interpretations and amendments to published Standards effective in 2014 (continued)

SB-FRS 113 Fair Value Measurement

The Authority has adopted the above new SB-FRS on 1 January 2014. The amendment is applicable for annual periods beginning on or after 1 January 2014. SB-FRS 113 aims to improve consistency and reduce complexity by providing a precise definition of fair value and a single source of fair value measurement and disclosure requirements for use across FRSS. The requirements do not extend the use of fair value accounting but provide guidance on how it should be applied where its use is already required or permitted by other standards within FRSS.

The adoption of SB-FRS 113 does not have any material impact on the accounting policies of the Authority. The Authority has incorporated the additional disclosures required by SB-FRS 113 into the financial statements.

2.2 Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the rendering of services in the ordinary course of the Authority's activities. Revenue is presented, net of goods and services tax, rebates and discounts.

The Authority recognises revenue when the amount of revenue and related cost can be reliably measured, it is probable that the collectability of the related receivables is reasonably assured and when the specific criteria for each of the Authority's activities are met as follows:

(a) *Port dues and maritime welfare fees*

Port dues and maritime welfare fees are recognised as and when services are performed.

(b) *Marine services*

Marine services are recognised as and when services are performed.

(c) *Shipping services*

Shipping services, which comprise registration fees and seaman engagement and discharge fees, are recognised as and when services are performed.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.2 Revenue recognition (continued)

(d) *Interest income*

Interest income is recognised using the effective interest method.

(e) *Dividend income*

Dividend income is recognised when the right to receive payment is established.

(f) *Rental income*

Rental income from operating leases (net of any incentives given to the lessees) is recognised on a straight-line basis over lease term.

2.3 Government grants

Government grants received for the purchase or the construction of depreciable assets are accounted for as deferred capital grants. The deferred capital grants are amortised and charged to income or expenditure over the period necessary to match the annual depreciation charge of these assets or when the assets are disposed or written off. Where the grants relate to an expense item, they are recognised in income or expenditure over the periods necessary to match them on a systematic basis, to the costs, which they are intended to compensate.

2.4 Group accounting

(a) *Subsidiary*

A subsidiary is an entity over which the Authority has control. The Authority controls an entity when the Authority is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. A subsidiary is fully consolidated from the date on which control is transferred to MPA. It is deconsolidated from the date on that control ceases.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.4 Group accounting (continued)

(b) *Associated companies*

Associated companies are entities over which the Authority has significant influence, but not control, generally accompanied by a shareholding giving rise to voting rights of 20% and above but not exceeding 50%.

Investments in associated companies are accounted for in the consolidated financial statements using the equity method of accounting less impairment losses, if any.

To the extent MPA's associated companies are limited by guarantee and it does not share in their profits or losses, MPA records its contributions to associated companies as grants in the consolidated statement of comprehensive income.

2.5 Property, plant and equipment

(a) *Measurement*

Property, plant and equipment are initially recognised at cost and subsequently carried at cost less accumulated depreciation and accumulated impairment losses.

The cost of an item of property, plant and equipment initially recognised includes its purchase price and any cost that is directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

The cost of a self-constructed asset includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, and the cost of dismantling and removing the items and restoring the site on which they are located. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Assets previously from the former National Maritime Board, the Marine Department and the regulatory departments of the Port of Singapore Authority were taken in at their transacted cost.

Property, plant and equipment acquired and funded under Government grants are capitalised and depreciated over their useful lives so as to match the related accretion of deferred capital grants (please refer to Note 2.3).

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.5 Property, plant and equipment (continued)

(b) *Depreciation*

Depreciation on property, plant and equipment is calculated using the straight-line method to allocate their depreciable amounts over their estimated useful lives as follows:

	<u>Useful lives</u>
Leasehold land	Over the remaining lease periods ranging from 4 to 59 years
Building structures	5 to 39 years
Wharves, hard-standing and roads	10 to 39 years
Renovations	5 years
Plant, machinery and equipment	3 to 15 years
Vehicles	5 years
Computers	3 to 5 years
Furniture and fittings	10 years
Floating crafts	5 to 10 years

The residual values, estimated useful lives and depreciation method of property, plant and equipment are reviewed, and adjusted as appropriate, at each balance sheet date. The effects of any revision are recognised in income or expenditure when the changes arise.

(c) *Subsequent expenditure*

Subsequent expenditure relating to property, plant and equipment that has already been recognised is added to the carrying amount of the asset only when it is probable that future economic benefits associated with the item will flow to the Authority and the cost of the item can be measured reliably. All other repair and maintenance expenses are recognised in income or expenditure when incurred.

(d) *Disposal*

On disposal of an item of property, plant and equipment, the difference between the disposal proceeds and its carrying amount is recognised in income or expenditure within "Other operating surplus".

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.6 Capital work-in-progress

Capital work-in-progress is stated at cost. Expenditure relating to the capital work-in-progress is capitalised when incurred. No depreciation is provided until the capital work-in-progress is completed and the related property, plant and equipment are ready for use.

2.7 Impairment of non-financial assets

Property, plant and equipment
Investments in subsidiary and associated companies

Property, plant and equipment and investments in subsidiary and associated companies are tested for impairment whenever there is any objective evidence or indication that these assets may be impaired.

For the purpose of impairment testing, the recoverable amount (i.e. the higher of the fair value less cost to sell and the value-in-use) is determined on an individual asset basis unless the asset does not generate cash inflows that are largely independent of those from other assets. If this is the case, the recoverable amount is determined for the CGU to which the asset belongs.

If the recoverable amount of the asset (or CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or CGU) is reduced to its recoverable amount.

The difference between the carrying amount and recoverable amount is recognised as an impairment loss in income or expenditure.

An impairment loss for an asset other than goodwill is reversed only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. The carrying amount of this asset is increased to its revised recoverable amount, provided that this amount does not exceed the carrying amount that would have been determined (net of any accumulated amortisation or depreciation) had no impairment loss been recognised for the asset in prior years. A reversal of impairment loss for an asset other than goodwill is recognised in income or expenditure.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.8 Financial assets

(a) Classification

The Authority classifies its financial assets in the following categories: loans and receivables and available-for-sale. The classification depends on the nature of the asset and the purpose for which the assets were acquired. The Authority determines the classification of its financial assets at initial recognition.

(i) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are presented as current assets except for those expected to be realised later than 12 months after the balance sheet date which are presented as non-current assets. Loans and receivables are presented as "trade receivables" (Note 8), "other receivables" (Note 9) and "cash and cash equivalents" (Note 10) on the balance sheet.

(ii) Available-for-sale financial assets

Financial assets, available-for-sale are non-derivatives that are either designated in this category or not classified in any of the other categories. They are presented as non-current assets unless the investment matures or the Authority intends to dispose of the assets within 12 months after the balance sheet date.

The Authority's investments in equity and debt securities, including equity and debt securities placed by fund managers, intended to be held on a continuing basis, are classified as available-for-sale financial assets.

(b) Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date – the date on which the Authority commits to purchase or sell the asset.

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Authority has transferred substantially all risks and rewards of ownership. On disposal of a financial asset, the difference between the carrying amount and the sale proceeds is recognised in income or expenditure. Any amount previously recognised in other comprehensive income relating to that asset is reclassified to income or expenditure.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.8 Financial assets (continued)

(c) Initial measurement

Financial assets are initially recognised at fair value plus transaction costs.

(d) Subsequent measurement

Available-for-sale financial assets are subsequently carried at fair value. Loans and receivables are subsequently carried at amortised cost using the effective interest method.

Interest and dividend income on available-for-sale financial assets are recognised separately in income. Changes in the fair values of available-for-sale debt securities (i.e. monetary items) denominated in foreign currencies are analysed into currency translation differences on the amortised cost of the securities and other changes; the currency translation differences are recognised in income or expenditure and the other changes are recognised in other comprehensive income and accumulated in the fair value reserve. Changes in fair values of available-for-sale equity securities (i.e. non-monetary items) are recognised in other comprehensive income and accumulated in the fair value reserve, together with the related currency translation differences.

(e) Impairment

The Authority assesses at each balance sheet date whether there is objective evidence that a financial asset or a group of financial assets is impaired and recognises an allowance for impairment when such evidence exists.

(i) Loans and receivables

Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy and default or significant delay in payments are objective evidence that these financial assets are impaired.

The carrying amount of these assets is reduced through the use of an impairment allowance account which is calculated as the difference between the carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. When the asset becomes uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are recognised against the same line item in income or expenditure.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.8 Financial assets (continued)

(e) Impairment (continued)

(i) Loans and receivables (continued)

The impairment allowance is reduced through income or expenditure in a subsequent period when the amount of impairment loss decreases and the related decrease can be objectively measured. The carrying amount of the asset previously impaired is increased to the extent that the new carrying amount does not exceed the amortised cost had no impairment been recognised in prior periods.

(ii) Available-for-sale financial assets

In addition to the objective evidence of impairment described in Note 2.8(e)(i), a significant or prolonged decline in the fair value of an equity security below its cost is considered as an indicator that the available-for-sale financial asset is impaired.

If any evidence of impairment exists, the cumulative loss that was recognised in other comprehensive income is reclassified to income or expenditure. The cumulative loss is measured as the difference between the acquisition cost (net of any principal repayments and amortisation) and the current fair value, less any impairment loss previously recognised as an expense. The impairment losses recognised as an expense on equity securities are not reversed through income or expenditure.

2.9 Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously.

2.10 Trade and other payables

Trade and other payables represent liabilities for goods and services provided to the Authority prior to the end of financial year which are unpaid. They are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). Otherwise, they are presented as non-current liabilities.

Trade and other payables are initially recognised at fair value, and subsequently carried at amortised cost using the effective interest method.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.11 Derivative financial instruments

The Authority engages external fund managers to manage some of its surplus funds. The Authority is exposed primarily to the financial risks of foreign exchange and interest rate fluctuations on debt and equity securities and cash and cash equivalents placed by the fund managers. The fund managers also hold derivative financial instruments to manage these risks. The use of hedging instruments is governed by the Authority's investment mandate which provides guidelines on the use of financial instruments consistent with the Authority's risk management strategy.

A derivative financial instrument is initially recognised at its fair value on the date the contract is entered into and is subsequently carried at its fair value. Changes in fair value are recognised in income or expenditure.

2.12 Fair value estimation of financial assets and liabilities

The fair values of financial instruments traded in active markets (such as exchange-traded and over-the-counter securities and derivatives) are based on quoted market prices at the balance sheet date. The quoted market prices used for financial assets are the current bid prices; the appropriate quoted market prices for financial liabilities are the current asking prices.

The fair values of financial instruments that are not traded in an active market are determined by using valuation techniques. The Authority uses a variety of methods and makes assumptions based on market conditions that are existing at each balance sheet date. Where appropriate, quoted market prices or dealer quotes for similar instruments are used. Valuation techniques, such as discounted cash flow analysis, are also used to determine the fair values of the financial instruments.

The fair values of current financial assets and liabilities carried at amortised cost approximate their carrying amounts.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.13 Leases

(a) *When the Authority is the lessee*

Lessee – Operating leases

Leases where substantially all risks and rewards incidental to ownership are retained by the lessors are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessors) are recognised in income or expenditure on a straight-line basis over the period of the lease.

Contingent rents are recognised as an expense in income or expenditure when incurred.

(b) *When the Authority is the lessor*

Lessor – Operating leases

Leases of leasehold land where the Authority retains substantially all risks and rewards incidental to ownership are classified as operating leases. Rental income from operating leases (net of any incentives given to the lessees) is recognised in income or expenditure on a straight-line basis over the lease term.

Initial direct costs incurred by the Authority in negotiating and arranging operating leases are added to the carrying amount of the leased assets and recognised as an expense in income or expenditure over the lease term on the same basis as the lease income.

Contingent rents are recognised as income in income or expenditure when earned.

2.14 Provisions

A provision is recognised when the Authority has a present legal or constructive obligation as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.15 Employee compensation

Employment benefits are recognised as an expense, unless the cost qualifies to be capitalised as an asset.

(a) *Defined contribution plans*

Defined contribution plans are post-employment benefit plans under which the Authority pays fixed contributions into separate entities such as the Central Provident Fund on a mandatory, contractual or voluntary basis. The Authority has no further payment obligations once the contributions have been paid.

(b) *Pension benefits*

Provision for pensions is made for the payment of retirement benefits to pensionable officers transferred to the Authority on 2 February 1996.

The cost of pension benefit due to pensionable officers is determined based on the estimated present value of the future cash outflows to be made in respect of services provided by these pensionable officers up to the balance sheet date.

(c) *Employee leave entitlement*

Employee entitlements to annual leave are recognised when they accrue to employees. A provision is made for the estimated liability for annual leave as a result of services rendered by employees up to the balance sheet date.

2.16 Currency translation

(a) *Functional and presentation currency*

The financial statements are presented in Singapore Dollars, which is the functional currency of the Authority.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

2. Significant accounting policies (continued)

2.16 Currency translation (continued)

(b) Transactions and balances

Transactions in a currency other than Singapore Dollar ("foreign currency") are translated into Singapore Dollars using the exchange rates at the dates of the transactions. Currency exchange differences resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at the closing rates at the balance sheet date are recognised in income or expenditure. Non-monetary items measured at fair values in foreign currencies are translated using the exchange rates at the date when the fair values are determined. Currency translation differences on these items are included in the fair value reserve.

2.17 Cash and cash equivalents

For the purpose of presentation in the consolidated statement of cash flows, cash and cash equivalents include cash on hand, deposits with financial institutions, commercial papers, short-term bills and notes which are readily convertible to cash and are subject to an insignificant risk of change in value, and bank overdrafts, except those which are managed by the fund managers or which are placed under the Statutory Board Approved Funds with the Accountant-General's Department. Bank overdrafts are presented as current borrowings on the consolidated balance sheet.

2.18 Funds managed/held on behalf of others

Funds are set up to account for contributions received from external sources for specific purposes.

The assets and liabilities of funds – Singapore Stranded Seafarers' Fund, Aids to Navigation Fund, and agency funds held in trust for Ministry of Transport are presented as a line item at the bottom of the consolidated balance sheet of the financial statements as prescribed by SB-FRS Guidance Note 3 *Accounting and Disclosures for Trust Funds*. Income or expenditure relating to these funds are accounted for directly in these funds. Details of income, expenditure, assets and liabilities are disclosed in Note 25 to the financial statements.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

3. Critical accounting estimates, assumptions and judgements

Estimates, assumptions and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

3.1 Critical accounting estimates and assumptions

(a) Useful lives of property, plant and equipment

The Authority reviews the estimated useful lives of property, plant and equipment regularly, in accordance with the accounting policy in Note 2.5, in order to determine the amount of depreciation expense to be recorded for each financial year. Changes in the expected level of use of the assets and the Authority's historical experience with similar assets after taking into account anticipated technological changes could impact the economic useful lives and the residual values of the assets, and therefore, future depreciation charges could be revised. Any changes in the economic useful lives could impact the depreciation charges and consequently affect the Authority's results. Refer to Note 4 for the carrying value of property, plant and equipment at the balance sheet date.

3.2 Critical judgements in applying the entity's accounting policies

(a) Measurement of impairment losses for financial assets, available-for-sale

The Authority follows the guidance of SB-FRS 39 in determining when a financial asset is considered impaired. This determination requires significant judgement exercised by management. Refer to Note 7 for details on how the Authority determines the impairment of each class of available-for-sale financial assets.

(b) Accounting for investments in and contributions to associated companies

MPA has determined that it has significant influence over its associated companies based on the voting rights of 20% and above but not exceeding 50%, held by its representatives at the board of directors of the associated companies. As the associated companies are incorporated as companies limited by guarantee and MPA does not share in their profits or losses, MPA has recorded the contributions of \$3,635,465 (2013: \$4,936,002) made to the associated companies as grant expenditure in the consolidated statement of comprehensive income.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

4. Property, plant and equipment

	Leasehold land	Building structures	Wharves, hard-standing and roads	Renovations	Plant, machinery and equipment	Vehicles	Computers	Furniture and fittings	Floating crafts	Capital work-in-progress	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2014											
Cost											
Beginning of financial year	7,641,956	56,748,073	95,466,860	10,667,864	12,279,244	291,435	60,911,354	1,750,068	11,845,613	11,965,586	269,568,053
Additions	-	818,583	-	-	938,237	-	2,367,033	30,442	45,900	12,608,683	16,808,878
Transfers	-	20,761	2,634,712	149,186	372,565	-	4,578,753	37,827	-	(7,793,804)	-
Disposals/write-off	-	-	-	(3,753)	(241,221)	-	(135,826)	(21,530)	(2,019,688)	(1,097,435)	(3,519,453)
End of financial year	7,641,956	57,587,417	98,101,572	10,813,297	13,348,825	291,435	67,721,314	1,796,807	9,871,825	15,683,030	282,857,478
Accumulated depreciation											
Beginning of financial year	2,534,441	31,128,396	44,116,023	6,851,017	9,731,942	255,501	38,189,574	600,857	6,827,693	-	140,235,444
Depreciation charge	241,296	1,667,528	8,009,219	1,050,982	901,017	3,921	10,623,095	170,824	541,105	-	23,208,987
Disposals/write-off	-	-	-	(1,188)	(241,221)	-	(135,825)	(15,979)	(2,019,688)	-	(2,413,901)
End of financial year	2,775,737	32,795,924	52,125,242	7,900,811	10,391,738	259,422	48,676,844	755,702	5,349,110	-	161,030,530
Net book value	4,866,219	24,791,493	45,976,330	2,912,486	2,957,087	32,013	19,044,470	1,041,105	4,522,715	15,683,030	121,826,948
2013											
Cost											
Beginning of financial year	7,641,956	57,134,043	94,146,860	10,451,649	11,989,200	252,235	67,931,684	831,459	6,998,113	8,013,659	265,390,858
Additions	-	-	1,320,000	-	590,880	39,200	1,670,107	-	4,835,000	8,584,537	17,039,724
Transfers	-	-	-	216,215	84,614	-	3,369,250	950,031	12,500	(4,632,610)	-
Disposals/write-off	-	(385,970)	-	-	(385,450)	-	(12,059,687)	(31,422)	-	-	(12,862,529)
End of financial year	7,641,956	56,748,073	95,466,860	10,667,864	12,279,244	291,435	60,911,354	1,750,068	11,845,613	11,965,586	269,568,053
Accumulated depreciation											
Beginning of financial year	2,293,145	29,547,931	36,436,378	5,510,492	9,342,665	252,235	41,166,971	566,984	6,773,913	-	131,890,714
Depreciation charge	241,296	1,738,877	7,679,645	1,340,525	774,387	3,266	8,942,258	47,687	53,780	-	20,821,721
Disposals/write-off	-	(158,412)	-	-	(385,110)	-	(11,919,655)	(13,814)	-	-	(12,476,991)
End of financial year	2,534,441	31,128,396	44,116,023	6,851,017	9,731,942	255,501	38,189,574	600,857	6,827,693	-	140,235,444
Net book value	5,107,515	25,619,677	51,350,837	3,816,847	2,547,302	35,934	22,721,780	1,149,211	5,017,920	11,965,586	129,332,609

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

5. Capital work-in-progress

Capital work-in-progress relates to the cost of computer systems and maritime and port projects under development. Additions during the year amounted to \$12,608,683 (2013: \$8,584,537).

6. Investments in subsidiary and associated companies

(a) *Subsidiary*

Cost of investment
At beginning and end of financial year

	2014	2013
	\$	\$
At beginning and end of financial year	2	2

Details of the subsidiary are as follows:

Name of subsidiary	Country of incorporation	Effective equity held by the Authority	
		2014 %	2013 %
MPA Venture Pte. Ltd.	Singapore	100	100

The principal activity of the subsidiary is to act as a holding company to own jointly intellectual properties and manage investments in maritime technology start-ups and companies and joint ventures with partners.

(b) *Associated companies*

(i) *Singapore Maritime Institute*

In January 2011, the Authority, together with Agency for Science, Technology and Research ("A*STAR"), incorporated Singapore Maritime Institute ("SMI"), a company limited by guarantee. The principal activity of SMI is to develop strategies and programmes related to the academic, policy and research and development aspects of the maritime industry. As at 31 December 2014, the Authority had contributed a total amount of \$13.4 million (2013: \$9.8 million) of grants to SMI.

(ii) *Singapore Chamber of Maritime Arbitration*

Singapore Chamber of Maritime Arbitration ("SCMA") was reconstituted as a company limited by guarantee in May 2009. The principal activity of SCMA is to provide a framework for maritime arbitration in response to the needs of the maritime community. As at 31 December 2014, the Authority had not made any direct contribution to SCMA.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

7. Financial assets

	Note	2014	2013
		\$	\$
Non-current investments			
Available-for-sale securities:			
- Quoted equity securities managed by fund managers	7(a), 21	183,839,279	126,410,833
- Quoted debt securities managed by fund managers	7(b), 21	403,944,607	299,444,085
- Quoted equity securities managed internally	7(c)	-	4,158,492
- Unquoted equity securities managed internally	7(d)	-	-
		587,783,886	430,013,410
Current investments			
Unquoted debt securities			
		88,000	88,000
		587,871,886	430,101,410

(a) *Available-for-sale equity securities managed by fund managers*

For available-for-sale equity securities that are listed in an active market, management believes that there is an objective evidence of impairment if there is a significant or prolonged decline in the fair value of the equity security below its acquisition cost. As at the balance sheet date, an equity security is considered to be impaired if its fair value declines in excess of 20% against its acquisition cost. The Authority holds a diversified portfolio of equity securities that spans many industries in different geographical locations. Under this impairment assessment approach, the Authority recorded an impairment loss of \$3,145,925 (2013: \$3,610,995) during the current year. The impairment loss is presented under "Other operating surplus" in the current year's consolidated statement of comprehensive income.

(b) *Available-for-sale debt securities managed by fund managers*

For available-for-sale debt securities that are listed in an active market, management considers the debt security to be impaired if objective evidence indicates that one or more events ("loss events") occurring after its initial recognition have a negative impact on the estimated future cash flows of that asset.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

7. Financial assets (continued)

(b) *Available-for-sale debt securities managed by fund managers (continued)*

Management considers the following as evidence that a financial asset may be impaired:

- (1) Significant financial difficulty of the issuer of the debt security;
- (2) Payment defaults of the issuer;
- (3) Renegotiation of terms of an asset due to financial difficulty of the borrower;
- (4) Significant restructuring due to the financial difficulty or expected bankruptcy;
- (5) Disappearance of an active market for an asset due to financial difficulties; or
- (6) Observable data indicating that there is a measurable decrease in the estimated future cash flows.

The composition of debt securities at 31 December comprises the following:

	Original cost	Fair value	
	\$	\$	%
2014			
Corporate bonds	254,616,603	262,023,093	65
Government bonds	140,685,638	141,921,514	35
	395,302,241	403,944,607	100
2013			
Corporate bonds	246,314,781	247,703,246	83
Government bonds	51,439,322	51,740,839	17
	297,754,103	299,444,085	100

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

7. Financial assets (continued)

(b) *Available-for-sale debt securities managed by fund managers (continued)*

The composition of debt securities by credit rating category at 31 December is as follows:

Credit rating	Fair value	
	\$	%
2014		
AAA/Aaa	120,858,438	30
AA/Aa	23,556,142	6
A/A	153,414,574	38
BBB+/Baa1	47,661,771	12
BBB/Baa2	27,816,107	7
BBB-/Baa3	10,988,956	2
Not rated	19,648,619	5
	403,944,607	100
2013		
AAA/Aaa	49,163,058	16
AA/Aa	7,126,040	3
A/A	164,551,509	55
BBB+/Baa1	24,987,771	8
BBB/Baa2	33,944,405	11
BBB-/Baa3	5,683,697	2
Not rated	13,987,605	5
	299,444,085	100

In determining whether a loss event has occurred, management, based on the criteria listed above, did not find any debt securities that indicated evidence of impairment.

A significant portion of the invested debt securities representing 74% (2013: 74%) are rated "A" and above by the credit rating agencies; and for the remaining debt securities rated "BBB+" and below, management is of the view that these debt securities remain "investment grade" and are not impaired.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

7. Financial assets (continued)

(b) *Available-for-sale debt securities managed by fund managers (continued)*

Other considerations

The composition of government bonds by geographical region at 31 December is as follows:

	Fair value	
	\$	%
2014		
Asia (mainly Singapore)	47,985,997	34
European union	14,418,977	10
Australia	6,367,635	4
United States of America	73,148,905	52
	141,921,514	100
2013		
Asia (mainly Singapore and Malaysia)	30,541,386	59
European union	12,626,896	24
Australia	8,572,557	17
	51,740,839	100

(c) *Available-for-sale quoted equity securities managed internally*

For available-for-sale equity securities that are listed in an active market, management believes that there is an objective evidence of impairment if there is a significant or prolonged decline in the fair value of the equity security below its acquisition cost. As at the balance sheet date, an equity security is considered to be impaired if its fair value declines in excess of 20% against its acquisition cost. Under this impairment assessment approach, no impairment loss has been recognised in the current year.

(d) *Available-for-sale unquoted equity securities managed internally*

The investments in unquoted equity securities amounting to \$Nil (2013: \$Nil) are stated at cost less impairment losses. These securities represent investments in companies that are engaged in research and development activities and are involved in the commercial application of this knowledge. The fair value of these unquoted equity securities is not readily available as there are no quoted market prices in an active market. The recoverability of these investments is uncertain and is highly dependent on the outcome of the research and development activities, which cannot presently be determined. The Authority is also unable to disclose the range of estimates within which a fair value is highly likely to lie.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

8. Trade receivables

	2014	2013
	\$	\$
Trade receivables	40,218,450	35,234,058
Less: Allowance for impairment of receivables	(665,725)	(664,742)
Trade receivables – net	39,552,725	34,569,316

The Authority's primary exposure to credit risk arises through its trade receivables. Concentration of credit risk relating to trade receivables is limited due to the Authority's varied customers, who are internationally dispersed. Due to the nature of the Authority's business, credit risk is not concentrated in any specific geographical region but concentrated in many shipping companies exposed to business cyclical fluctuations.

Trade receivables are mainly denominated in Singapore Dollar, which is the Authority's functional currency.

Impairment losses

The ageing of trade receivables at the reporting date is as follows:

	Gross receivable	Impairment losses
	\$	\$
2014		
Not past due	33,237,672	-
Past due 0 - 30 days	4,378,927	67,096
Past due 31 - 60 days	490,825	1,499
More than 60 days	2,111,026	597,130
	40,218,450	665,725
2013		
Not past due	22,710,877	-
Past due 0 - 30 days	2,407,344	-
Past due 31 - 60 days	4,229,032	492
More than 60 days	5,886,805	664,250
	35,234,058	664,742

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

8. Trade receivables (continued)

The change in allowance for impairment in respect of trade receivables during the year is as follows:

	2014	2013
	\$	\$
Beginning of financial year	664,742	815,129
Allowance made	665,725	664,742
Amount written back	(95,472)	(815,097)
Allowance utilised	(569,270)	(32)
End of financial year	665,725	664,742

Based on historical default rate, the Authority believes that, apart from the above, no impairment allowance is necessary in respect of other trade receivables outstanding at the balance sheet date.

9. Deposits, prepayments and other receivables

	2014	2013
	\$	\$
Deposits	164,972	65,856
Prepayments	571,727	457,365
Other receivables	591,455	611,746
Amount due from subsidiary (non-trade)	299,358	942,559
	890,813	1,554,305
Interest receivable	4,643,173	4,185,194
	6,270,685	6,262,720

Other receivables mainly comprise dividends receivable, receivables on sale of financial instruments, receivables from forward foreign exchange purchases and derivative assets.

As at the balance sheet date, other receivables and accrued interest receivable include the following items managed by fund managers:

	2014	2013
	\$	\$
Interest receivable (Note 21)	3,083,941	2,994,870
Receivables on sale of financial instruments (Note 21)	-	118,197
Other receivables (mainly dividend receivables and withholding tax receivables) (Note 21)	243,678	216,624
	3,327,619	3,329,691

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

10. Cash and cash equivalents

	2014	2013
	\$	\$
Cash at bank and on hand	10,263,117	9,442,277
Placement with Accountant-General's Department	491,640,190	707,494,078
- Statutory Board Approved Funds ("SBAF")	423,718,290	423,808,116
- Centralised Liquidity Management Framework ("CLMF")	67,921,900	283,685,962
Short-term bills and notes	49,406,892	10,996,990
Fixed deposits	122,347,015	5,511,757
Others	4,688,867	6,116,956
	678,346,081	739,562,058

For the purpose of presenting the consolidated statement of cash flows, cash and cash equivalents comprise the following:

	2014	2013
	\$	\$
Cash and bank balances (as above)	678,346,081	739,562,058
Less: Cash and cash equivalents managed by fund managers	(185,665,210)	(32,094,041)
Less: Placement with Accountant-General's Department ("SBAF")	(423,718,290)	(423,808,116)
Cash and cash equivalents per consolidated statement of cash flows	68,962,581	283,659,901

The Authority's cash and cash equivalents (excluding those managed by fund managers) are mainly denominated in Singapore Dollar, which is the Authority's functional currency.

Placement with the Accountant-General's Department comprise \$67,921,900 (2013: \$283,685,962) which is centrally managed by the Accountant-General's Department under the Centralised Liquidity Management Framework ("CLMF"), as set out in the Accountant-General's Circular No. 4/2009 Centralised Liquidity Management for Statutory Boards and Ministries, and industry funds of \$423,718,290 (2013: \$423,808,116) which is placed under the Statutory Board Approved Funds ("SBAF") and is subject to restrictions.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

10. Cash and cash equivalents (continued)

As at the balance sheet date, cash and cash equivalents include the following managed by fund managers:

	2014	2013
	\$	\$
Cash at bank and on hand (Note 21)	13,911,303	15,585,294
Short-term bills and notes (Note 21)	49,406,892	10,996,990
Fixed deposits (Note 21)	122,347,015	5,511,757
	185,665,210	32,094,041

The effective interest rates of fixed deposits placed directly by the Authority vary from 0.60% to 0.81% (2013: 0.54% to 0.60%) per annum. Interest rates reprice at intervals of one, two, three or twelve months.

The effective interest rates of cash and cash equivalents managed by fund managers are as follows:

	2014	2013
	%	%
Short-term bills and notes	0.07 – 0.64	0.30 – 0.35
Fixed deposits	0.06 – 0.35	0.08 – 0.40

11. Establishment account

The establishment account comprises the net book value of assets transferred to the Authority from the former National Maritime Board, the Marine Department and the regulatory departments of the Port of Singapore Authority.

Capital management

The Authority defines "capital" to include establishment account and reserves. The Board's policy is to maintain a strong capital base to safeguard the ability to meet the long-term development needs of the Authority. The Board of Directors monitors the "Net Operating Surplus/Deficit" and the "Other Operating Surplus/Deficit" on a regular basis. The Board monitors the major capital expenditure which is strategic in nature and may draw on reserves.

There were no changes in the capital management approach during the year.

The Authority is not subject to externally imposed capital requirements.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

12. Equity financing account

The Equity financing account refers to equity injections by the Minister for Finance ("MOF") in its capacity as shareholder under the Capital Management Framework for statutory boards, implemented with effect from 1 September 2004.

13. Employment benefits

	2014	2013
	\$	\$
Beginning of financial year	1,063,575	1,018,984
Provision made	29,609	44,591
Provision utilised	(531,401)	-
Over provision in prior financial years	(139,406)	-
End of financial year	422,377	1,063,575

The Authority operates an unfunded employment benefit plan for a limited pool of employees under the provisions of the Pensions Act (Cap. 225). Benefits are payable based on the last drawn salary of the employees and the number of years of service with the Authority.

14. Deferred capital grant

	2014	2013
	\$	\$
Beginning of financial year	24,589,864	25,977,244
Amortisation to income	(1,387,380)	(1,387,380)
End of financial year	23,202,484	24,589,864

The above represents the unamortised portion of Government grant received in connection with specific property, plant and equipment acquired by the Authority.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

15. Trade and other payables

	2014	2013
	\$	\$
Trade payables	2,307,168	2,753,489
Forward foreign exchange purchases (net) (Note 21)	4,959,413	1,888,848
Accrued capital expenditure	5,398,741	5,042,803
Accrued operating expenses	21,385,639	16,099,522
Other payables	2,313,709	5,588,656
	36,364,670	31,373,318

Trade payables are mainly denominated in Singapore Dollar, which is the Authority's functional currency. Payables on purchase of financial instruments, managed by fund managers, are mainly denominated in Singapore Dollar.

Accrued operating expenses include accrual for performance bonus and group bonus of \$12,215,612 (2013: \$8,784,531) and accrued administrative fee payable to the fund managers and custodian bank amounting to \$467,000 (2013: \$394,932).

The following are the expected contractual undiscounted cash outflows of the financial liabilities, including interest payments and excluding the impact of netting agreements:

	Undiscounted cash flows within 1 year
	\$
2014	
Non-derivative financial liabilities	
Trade and other payables	(31,405,257)
2013	
Non-derivative financial liabilities	
Trade and other payables	(29,484,470)

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

16. Advances, deposits and unearned income

	2014	2013
	\$	\$
Advances and deposits	2,406,353	1,736,420
Unearned operating lease income [Note (a)]	10,903,269	11,759,177
Unearned annual port dues and Maritime Welfare Fee [Note (b)]	1,019,909	1,217,843
	14,329,531	14,713,440

(a) Unearned operating lease income mainly relates to sub-lease of a property to a third party for a period of 13 years (2013: 14 years).

(b) Unearned annual port dues and Maritime Welfare Fee relate to specific customers under annual and 6 months port dues schemes, and the advance payments of Maritime Welfare Fee. These customers, whose ships that call frequently at the port are allowed to pay port dues on an annual or 6 months basis in advance instead of on a per call basis.

Deposits due within 1 year approximate their carrying amount of \$2,326,128 (2013: \$1,721,269).

17. Staff cost

	2014	2013
	\$	\$
Wages and salaries	62,300,435	55,877,215
Employer's contribution to Central Provident Fund	7,507,158	7,343,778
Employer's contribution to other defined benefit plans (Note 13)	29,609	44,591
Other benefits	4,574,378	4,715,087
	74,411,580	67,980,671

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

18. Other operating expenses

Included in other operating expenses are the following:

	2014	2013
	\$	\$
Project grants	8,445,153	11,242,594
Contribution to the Maritime Cluster Fund projects	8,765,545	8,847,328
Contribution to the International Maritime Organisation	3,399,406	2,670,277
Non-claimable Goods and Services Tax	872,687	(2,354,815)
Utility charges	2,299,313	3,406,526
Telecommunication charges	2,445,196	2,788,036
Service fees to port operator	609,415	1,714,437
Contracted services	1,233,428	1,048,724
Rental/maintenance fees for office premises	1,773,944	1,886,772
Provision for/(write back of) impairment loss on trade receivables, net	983	(150,355)
Property tax	1,593,062	1,130,412
Professional fees	3,192,209	1,398,290
Overseas travelling	1,199,645	942,389
Disaster recovery subscription costs	807,210	832,636
Corporate publications	1,090,563	492,426
Printing and stationery	587,840	654,975
Insurance	250,164	297,824
IT costs	2,508,780	2,353,177
Others	8,279,545	7,123,327
	49,354,088	46,324,980

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

19. Other operating surplus

	2014	2013
	\$	\$
Gain from sale of investments in:		
- Debt securities (a)	1,895,224	1,225,055
- Equity securities (a)	6,826,984	10,631,564
- Equity securities, managed internally	1,647,490	(1,870,285)
Realised loss on foreign exchange on disposal of available-for-sale financial assets – net (a)	(1,206,328)	(2,267,540)
Impairment loss on investments in available-for-sale equity securities (a)	(3,145,925)	(3,610,995)
Unrealised gain on foreign exchange on debt securities and other monetary assets held by fund managers – net (a)	5,646,883	5,916,938
Write back on investments in available-for-sale unquoted debt and equity securities, managed internally	-	1,105,804
Net gain on available-for-sale financial assets	11,664,328	11,130,541
Interest income:		
- Debt securities (a)	8,160,203	8,793,366
- Fixed deposits placed by fund managers (a)	72,498	34,811
- Fixed deposits and cash at bank	2,035,898	1,727,225
- Staff loans and trade receivables	67,479	145,799
Total interest income for financial assets that are not fair value through income or expenditure	10,336,078	10,701,201
Fair value loss on derivatives (a)	(10,970,104)	(637,246)
Investment expenses (a)	(1,996,372)	(1,872,222)
Dividend income for funds with fund managers (a)	3,698,381	3,561,113
Dividend income for equity securities, managed internally	77,262	190,882
Net gain/(loss) on disposal of property, plant and equipment	234,972	(216,749)
(Loss)/gain on foreign exchange on other monetary assets, managed internally – net	(37,928)	9,275
Income from liquidated damages received	268,119	262,325
Others	349,271	218,015
	13,624,007	23,347,135

The total net investment gain from funds with fund managers amounted to \$8,981,444 (2013: \$21,774,844) (refer to (a) above).

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

20. Contribution to Consolidated Fund

The contribution to the Consolidated Fund is made in accordance with Section 3(a) of the Statutory Corporations (Contributions to Consolidated Fund) Act (Cap. 319A). The contribution is based on 17% (2013: 17%) of the surplus for the year.

Beginning of financial year
Amount contributed
Provision for the year
End of financial year

	2014	2013
	\$	\$
Beginning of financial year	25,730,706	22,587,651
Amount contributed	(25,730,706)	(24,559,651)
Provision for the year	21,555,805	27,702,706
End of financial year	21,555,805	25,730,706

21. Funds with fund managers

The Authority places its surplus funds with fund managers to manage its investment portfolio under a balanced mandate. These fund managers are given discretion in managing their portfolio, subject to the investment guidelines set out in the fund management agreements.

As part of risk management activities, the fund managers use financial derivatives for hedging purposes. Derivative financial instruments are not used for trading purposes. The financial derivatives used include financial futures, swaps and forward foreign exchange contracts.

As at the balance sheet date, the funds placed with fund managers comprised the following assets and liabilities:

	2014	2013
	\$	\$
Debt securities (Note 7)	403,944,607	299,444,085
Equity securities (Note 7)	183,839,279	126,410,833
Interest receivables (Note 9)	3,083,941	2,994,870
Receivables on sale of financial instruments (Note 9)	-	118,197
Other receivables (mainly dividend receivables and withholding tax receivables) (Note 9)	243,678	216,624
Fixed deposits (Note 10)	122,347,015	5,511,757
Cash balances (Note 10)	13,911,303	15,585,294
Short-term bills and notes (Note 10)	49,406,892	10,996,990
Forward foreign exchange purchases (net) (Note 15)	(4,959,413)	(1,888,848)
Accrued administrative fees (Note 15)	(467,000)	(394,932)
	771,350,302	458,994,870

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

21. Funds with fund managers (continued)

As at balance sheet date, the notional amounts of the financial derivatives held by the fund managers are as follows:

	2014	2013
	\$	\$
Notional amounts		
Futures contracts	82,611,483	131,283,344
Foreign currency swap and forward contracts	438,646,277	179,334,743

22. Commitments

(a) Capital commitments

Capital expenditures contracted for at the balance sheet date but not recognised in the financial statements are as follows:

	2014	2013
	\$	\$
Property, plant and equipment	6,625,938	1,089,267

(b) Operating lease commitments – Where the Authority is a lessee:

The Authority leases a number of office facilities under non-cancellable operating lease agreements. The leases typically run for an initial period of two years, with an option to renew the lease after that date. Lease payments are usually increased annually to reflect market rentals.

The future minimum lease payables under non-cancellable operating leases contracted for at the balance sheet date but not recognised as liabilities, are as follows:

	2014	2013
	\$	\$
Not later than one year	1,453,961	1,099,708
Between one and five years	2,529,653	964,222
Later than five years	-	-
	3,983,614	2,063,930

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

22. Commitments (continued)

(c) Operating lease commitments – Where the Authority is a lessor:

The Authority leases out rental space and buildings to non-related parties under non-cancellable operating leases.

The future minimum lease receivables under non-cancellable operating leases contracted for at the balance sheet date but not recognised as receivables, are as follows:

	2014	2013
	\$	\$
Not later than one year	2,267,800	1,734,017
Between one and five years	3,975,284	3,710,137
Later than five years	6,988,937	7,877,818
	13,232,021	13,321,972

23. Financial risk management

Financial risk factors

The Authority's activities expose it to market risk (including currency risk, interest rate risk and price risk), credit risk and liquidity risk.

Risk management is integral to the whole operations of the Authority. The Authority has a system of controls in place to create an acceptable balance between the cost of risks occurring and the cost of managing the risks. The management continually monitors the Authority's risk management process to ensure that an appropriate balance between risk and control is achieved.

Funds with fund managers

In connection with the funds placed with fund managers, the funds placed with fund managers are exposed to a variety of financial risk: credit risk, liquidity risk and market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk).

The fund managers appointed under the balanced mandate are held responsible in achieving the investment objectives set forth in their respective fund manager agreements entered with the Authority. All income and realised capital gains are to be reinvested by the fund managers unless otherwise instructed by the Authority.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

Funds with fund managers (continued)

The fund managers' overall risk management programme seeks to maximise the returns derived for the level of risk to which they are exposed and seeks to minimise the potential adverse effects on the fund managers' financial performance.

A significant proportion of the Authority's security investments present a risk of loss of capital except for the capital guaranteed portfolio of \$Nil million (2013: \$60 million) where the exposure to market risk is capped at the Authority's cost of fund invested. The maximum loss of capital is represented by the carrying values of those security investments.

The management of these risks carried out by the fund managers is governed by the mandate set forth in the fund manager agreements approved by the Investment Committee of the Authority. The mandate provides written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, the use of derivative and non-derivative financial instruments.

(a) Market risk

(i) Currency risk

The Authority invests in financial instruments and enters into transactions denominated in currencies other than its functional currency. Consequently, the Authority is exposed to risks that the exchange rate of its functional currency relative to other foreign currencies may change in a manner that has an adverse effect on the value of that portion of the Authority's assets or liabilities denominated in currencies other than the functional currency.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(a) Market risk (continued)

(i) Currency risk (continued)

The quoted equity securities managed by fund managers denominated in currencies other than the Authority's functional currency comprise the following:

	2014	2013
	\$	\$
Australian Dollars	3,557,766	-
Hong Kong Dollars	14,875,103	29,143,873
Indonesian Rupiah	1,758,111	5,377,784
Korean Won	15,824,249	14,367,708
Thai Baht	11,237,523	23,793,947
US Dollars	61,392,898	4,014,288
Various other foreign currencies	45,646,259	8,108,312
	154,291,909	84,805,912

The quoted debt securities managed by fund managers denominated in currencies other than the Authority's functional currency comprise the following:

	2014	2013
	\$	\$
Australian Dollars	7,521,877	9,793,842
Chinese Yuan	19,496,074	31,157,703
Euro	7,440,264	22,974,783
Sterling Pound	6,735,605	-
Thai Baht	3,284,453	3,031,334
US Dollars	270,935,591	142,281,777
Various other foreign currencies	1,752,714	-
	317,166,578	209,239,439

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(a) Market risk (continued)

(i) Currency risk (continued)

Cash and cash equivalents managed by fund managers denominated in currencies other than the Authority's functional currency comprise the following:

	2014	2013
	\$	\$
Euro	226,157	8,933
US Dollars	35,334,851	6,309,698
Various other foreign currencies	1,351,963	185,498
	36,912,971	6,504,129

Available-for-sale equity securities, managed by fund managers

At the balance sheet date, if there is a +/-5% movement in exchange rates relative to the Singapore Dollar, with all other variables held constant and assuming that the equity securities are not impaired, the increase/(decrease) in the fair value of equity securities in other comprehensive income and presented as fair value reserve in the consolidated statement of changes in reserves would be as follows:

	+5% scenario	-5% scenario
	\$	\$
2014		
Other comprehensive income and presented in fair value reserve in consolidated statement of changes in reserves	7,714,595	(7,714,595)
2013		
Other comprehensive income and presented in fair value reserve in consolidated statement of changes in reserves	4,240,296	(4,240,296)

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(a) Market risk (continued)

(i) Currency risk (continued)

Other monetary assets – debt securities, cash and cash equivalents

At the balance sheet date, if there is a +/-5% movement in exchange rates relative to the Singapore Dollar, with all other variables held constant, the increase/(decrease) in the fair value of monetary assets in income or expenditure would be as follows:

	+5% scenario	-5% scenario
	\$	\$
2014		
Managed by fund managers		
Debt securities	15,858,329	(15,858,329)
Cash and cash equivalents	1,845,649	(1,845,649)
	17,703,978	(17,703,978)
Cash and cash equivalents, managed internally	112,244	(112,244)
	17,816,222	(17,816,222)

	+5% scenario	-5% scenario
	\$	\$
2013		
Managed by fund managers		
Debt securities	10,461,972	(10,461,972)
Cash and cash equivalents	325,206	(325,206)
	10,787,178	(10,787,178)
Cash and cash equivalents, managed internally	57,987	(57,987)
	10,845,165	(10,845,165)

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(a) Market risk (continued)

(ii) Interest rate risk

Interest rate risk arises from the effects of fluctuations in the prevailing levels of market interest rates on the fair value of financial assets and liabilities and future cash flows. The Authority holds debt securities and derivatives that expose the Authority to fair value interest rate risk.

Available-for-sale debt securities, managed by fund managers

At the balance sheet date, assuming that all other variables are held constant and no loss event has occurred, a 100 basis point increase/(decrease) in the interest rate would (decrease)/increase the fair values of the debt securities in other comprehensive income and presented as fair value reserve in the consolidated statement of changes in reserves by the following amounts:

	+100 basis point scenario	-100 basis point scenario
	\$	\$
2014		
Other comprehensive income and presented in fair value reserve in consolidated statement of changes in reserves	(14,315,584)	14,934,105
2013		
Other comprehensive income and presented in fair value reserve in consolidated statement of changes in reserves	(8,951,387)	9,257,961

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(a) Market risk (continued)

(ii) Interest rate risk

At the balance sheet date, assuming that all other variables are held constant, a 100 basis point increase/(decrease) in interest rate would increase/(decrease) the interest income of the floating rate debt securities recorded in income or expenditure by the following amounts:

	+100 basis point scenario	-100 basis point scenario
	\$	\$
2014		
Income or expenditure	126,026	(76,391)
2013		
Income or expenditure	92,748	(69,666)

Derivatives (futures), managed by fund managers

At the balance sheet date, if interest rates had been 100 basis point higher/(lower) with all other variables held constant, the increase/(decrease) in the fair values of the interest rate derivatives in the income or expenditure would be as follows:

	+100 basis point scenario	-100 basis point scenario
	\$	\$
2014		
Income or expenditure	4,104,247	(4,316,210)
2013		
Income or expenditure	5,748,006	(6,039,967)

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(a) Market risk (continued)

(ii) Interest rate risk (continued)

The effective interest rates at balance sheet date of the debt securities held by the fund managers and the period in which they mature or reprice are as follows:

	2014	2013
	\$	\$
Fixed rate		
Maturing in less than 1 year	22,058,165	51,546,674
Maturing between 1 to 5 years	257,805,095	165,249,922
Maturing in more than 5 years	106,494,593	75,915,489
Floating rate		
Repricing in less than 3 months	17,062,599	6,732,000
Repricing between 3 to 6 months	524,155	-
	403,944,607	299,444,085

The Authority is exposed to equity price risk. This arises from investments held by the Authority for which prices in the future are uncertain. Where equity securities are denominated in currencies other than the functional currency of the Authority, the price initially expressed in foreign currency and then converted into the functional currency will also fluctuate because of changes in foreign exchange rates. Paragraph (a)(i) "Currency risk" sets out how this component of price risk is managed and measured.

The Authority's policy to manage price risk is via diversification and selection of securities and other financial instruments within specified limits set by the Investment Committee. The majority of the Authority's equity investments is publicly traded. The overall market position of these equity investments is monitored on a daily basis by the fund managers and is reviewed on a quarterly basis by the members of the Investment Committee. Compliance with the Authority's fund management mandate is reported to the members of the Investment Committee by an external investment consultant on a quarterly basis.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(a) Market risk (continued)

(iii) Price risk

Impaired available-for-sale equity securities, managed by fund managers and managed internally

At the balance sheet date, assuming that all other variables are held constant, a 5% increase/(decrease) in the underlying equity prices would increase/(decrease) the fair values of the equity securities in other comprehensive income and presented as fair value reserve in the consolidated statement of changes in reserves and income or expenditure by the following amounts:

	+5% scenario	-5% scenario
	\$	\$
2014		
Equity securities, managed by fund managers		
Other comprehensive income and presented in fair value reserve in consolidated statement of changes in reserves	387,454	-
Income or expenditure	-	(387,454)
Equity securities, managed internally		
Income or expenditure	-	-

	+5% scenario	-5% scenario
	\$	\$
2013		
Equity securities, managed by fund managers		
Other comprehensive income and presented in fair value reserve in consolidated statement of changes in reserves	390,697	-
Income or expenditure	-	(390,697)
Equity securities, managed internally		
Income or expenditure	-	-

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(a) Market risk (continued)

(iii) Price risk (continued)

Available-for-sale equity securities, managed by fund managers and managed internally, not impaired

At the balance sheet date, assuming that all other variables are held constant, a 5% increase/(decrease) in the underlying equity prices would increase/(decrease) the fair values of the equity securities in other comprehensive income and presented as fair value reserve in the consolidated statement of changes in reserves and income or expenditure by the following amounts:

	+5% scenario	-5% scenario
	\$	\$
2014		
Equity securities, managed by fund managers		
Other comprehensive income and presented in fair value reserve in consolidated statement of changes in reserves	8,804,510	(6,626,513)
Income or expenditure	-	(2,177,997)
Equity securities, managed internally		
Other comprehensive income and presented in fair value reserve in consolidated statement of changes in reserves	-	-
Income or expenditure	-	-
2013		
Equity securities, managed by fund managers		
Other comprehensive income and presented in fair value reserve in consolidated statement of changes in reserves	5,929,845	(3,189,989)
Income or expenditure	-	(2,739,856)
Equity securities, managed internally		
Other comprehensive income and presented in fair value reserve in consolidated statement of changes in reserves	207,925	(207,925)
Income or expenditure	-	-

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(b) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Authority.

As at the balance sheet date, loans and receivables include the following items:

	2014	2013
	\$	\$
Trade receivable (Note 8)	39,552,725	34,569,316
Deposits (Note 9)	164,972	65,856
Other receivables (Note 9)	591,455	611,746
Interest receivable (Note 9)	4,643,173	4,185,194
Loans and receivables	44,952,325	39,432,112

The Authority has a credit policy in place which establishes credit limits for customers and monitors their balances on an on-going basis.

The Authority establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables. The main component of this allowance is a specific loss component that relates to individually significant exposures.

The allowance account in respect of trade and other receivables is used to record impairment losses unless the Authority is satisfied that no recovery of the amount owing is possible. At that point, the financial asset is considered irrecoverable and the amount charged to the allowance amount is written off against the carrying amount of the impaired financial asset.

Cash and fixed deposits are placed with banks and financial institutions which are regulated.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(b) Credit risk (continued)

Funds with fund managers

Credit risk is the risk that a counterparty to a financial instrument will fail to discharge an obligation or commitment that it has entered into with the Authority. The fund manager has a credit policy in place and the exposure to credit risk is monitored on an on-going basis.

At 31 December 2014, the following financial assets were exposed to credit risk: investment in debt securities, receivables on sale of financial instruments, forward foreign exchange purchases, cash and cash equivalents, derivative financial assets and other receivables. The total carrying amount of financial assets exposed to credit risk amounted to \$587,978,023 (2013: \$332,978,969).

The Authority limits its credit risk exposure in respect of investments in debt securities by restricting the fund managers to invest in debt securities that have a sound credit rating from Standard & Poor's and Moody's. Given these credit ratings, except for the impaired securities as described in Note 7, management does not expect any counterparty to fail to meet its obligations.

At the balance sheet date, the geographical concentration of the investments in available-for-sale debt securities managed by fund managers is disclosed in Note 7(b). Other than the above-mentioned, there are no other areas that the Authority is exposed to significant concentration of credit risk. The maximum exposure to credit risk is represented by the carrying amount of each financial asset on the consolidated balance sheet.

(c) Liquidity risk

The Authority monitors its liquidity risk and maintains a level of cash and cash equivalents deemed adequate by management to finance the Authority's operations and to mitigate the effects of fluctuations in cash flows.

Funds with fund managers

The Authority's listed debt and equity securities are considered readily realisable, as they are listed on the major stock exchanges. The fund managers are required to comply with the restrictions and limitations as stipulated in the investment mandate. All transactions carried out by the fund managers are settled daily through Northern Trust Company, the Authority's custodian of the portfolio of investments placed by fund managers.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(c) Liquidity risk (continued)

Funds with fund managers (continued)

The fund managers may periodically invest in some debt securities and derivative contracts on behalf of the Authority that are traded over the counter, which are not traded in an organised market and may be illiquid. As a result, the Authority may not be able to liquidate its investments in these instruments at an amount close to their fair value to meet its liquidity requirements or be able to respond to specific events such as the deterioration in the creditworthiness of any particular issuer.

At the balance sheet date, non-derivative financial liabilities held by the Authority are as disclosed in Note 15.

(d) Fair value measurements

The following presents assets and liabilities measured and carried at fair value and classified by level of the following fair value measurement hierarchy:

- (a) quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1);
- (b) inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices) (Level 2); and
- (c) inputs for the asset or liability that are not based on observable market data (unobservable inputs) (Level 3).

The fair value of financial instruments traded in active markets (the Authority's equity and debt securities managed by fund managers, and quoted equity securities managed internally) is based on quoted market prices at the balance sheet date. The quoted market price used for financial assets held by the Authority is the current bid price. These instruments are classified as Level 1.

Derivatives used by fund managers

Futures contracts are marked to market daily using listed market prices with any gains or losses posted to the related variation margin accounts.

The fair value of forward exchange contracts is based on their listed market price and the fair value of swaps is based on quotations from independent third party vendors and sources that apply fair value techniques. These instruments are classified as Level 2.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

23. Financial risk management (continued)

(e) Financial instruments by category

The carrying amounts of financial assets measured at fair value (available-for-sale) are disclosed on the face of the balance sheet.

The aggregate carrying amounts of loans and receivables and financial liabilities at amortised cost are as follows:

	2014	2013
	\$	\$
Loans and receivables	723,597,764	779,936,729
Financial liabilities at amortised cost	33,811,610	31,220,890
Derivative financial instruments through profit or loss	4,959,413	1,888,848

(f) Offsetting financial assets and financial liabilities

	Related amounts set off in the balance sheet			Related amounts not set off in the balance sheet		
	Gross amounts - financial liabilities	Gross amounts - financial assets	Net amounts - financial liabilities presented in balance sheet	Financial assets/ (liabilities)	Financial collateral pledged	Net amount
	(a)	(b)	(c) = (a)-(b)	(di)	(dii)	(f) = (c)+(d)
	\$	\$	\$	\$	\$	\$
At 31 December 2014						
Foreign forward exchange purchases	5,935,946	(976,533)	4,959,413	-	-	4,959,413
At 31 December 2013						
Foreign forward exchange purchases	2,011,466	(122,618)	1,888,848	-	-	1,888,848

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

24. Related party transactions

In addition to the information disclosed elsewhere in the financial statements, the following transactions took place between the Authority and related parties at terms agreed between the parties.

(a) Sales of services

Provision of dumping and monitoring services to

- Land Transport Authority
- Housing & Development Board

	2014	2013
	\$	\$
	7,117,145	13,825,470
	27,947,153	26,244,960

(b) Key management personnel compensation

Key management personnel of the Authority are those persons having the authority and responsibility for planning, directing and controlling the activities of the Authority. These key management personnel comprise the Board of Members and Executive Management Team of the Authority.

Key management personnel compensation is as follows:

	2014	2013
	\$	\$
Short-term employee benefits	4,027,305	3,745,041
Employment benefits	168,368	148,979
Directors' fees	185,635	185,635
	4,381,308	4,079,655

25. Funds managed/held on behalf of others - Funds held in trust

Funds held in trust and managed by the Authority comprise the following:

	2014	2013
	\$	\$
Singapore Stranded Seafarers' Fund	334,543	333,458
Agency funds held in trust of Ministry of Transport	523,246	5,320,692
Aids to Navigation Fund	8,187,793	7,812,963
	9,045,582	13,467,113

These funds are placed with financial institutions.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

25. Funds managed/held on behalf of others - Funds held in trust (continued)

Singapore Stranded Seafarers' Fund ("SSSF")

- (a) The SSSF was set up in September 1999 (following the Authority's Board approval for its creation at an earlier board meeting in July 1999). The SSSF is managed by a Committee made up of representatives from the Authority and the unions, namely Singapore Maritime Officers' Union and Singapore Organisation of Seamen.

The Fund is humanitarian in nature. It shall be used only as a last resort when it becomes evidently clear that the ship owners concerned are no longer able to bear responsibility towards their ship crew, e.g. due to insolvency. It is used mainly to buy fuel (i.e. to run the ship's generators) and provide food and portable water to sustain the stranded ship crew onboard Singapore-registered ships stranded in Singapore or overseas, until such time they are repatriated or the dispute is settled.

- (b) The assets and liabilities of the SSSF as at 31 December are as follows:

	2014	2013
	\$	\$
Accumulated fund	335,189	334,104
Current assets		
Interest receivable	646	646
Cash and cash equivalents	334,543	333,458
	335,189	334,104

- (c) The results of the SSSF for the year ended 31 December are as follows:

	2014	2013
	\$	\$
Interest income	1,085	1,082
Surplus for the year	1,085	1,082
Accumulated surplus as at 1 January	34,104	33,022
Accumulated surplus as at 31 December	35,189	34,104

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

25. Funds managed/held on behalf of others - Funds held in trust (continued)

Agency funds held in trust of Ministry of Transport

- (a) On 11 March 2005, the Authority was appointed by Ministry of Transport ("MOT") as its managing agent in connection with the proposed land reclamation at Pasir Panjang Terminal Phases 3 and 4 and Tuas Port.

- (b) The assets and liabilities of the agency funds held in trust as at 31 December are as follows:

	2014	2013
	\$	\$
Accumulated fund	599,872	13,008,020
Current assets		
Cash at bank	523,246	5,320,692
Amount due from various Government bodies	7,572,813	9,991,798
GST receivable	-	170,485
	8,096,059	15,482,975
Current liabilities		
GST payable	(101,650)	-
Amount due to various Government bodies	(7,394,537)	(2,474,955)
Net assets	599,872	13,008,020

- (c) The results of the agency funds held in trust for the year ended 31 December are as follows:

	2014	2013
	\$	\$
Grants received	238,179,074	151,124,676
Interest income	54,424	30,877
	238,233,498	151,155,553
Grants disbursed	(246,151,247)	(152,186,422)
Agency fees paid/payable	(4,490,399)	(1,498,570)
Deficit for the year	(12,408,148)	(2,529,439)
Accumulated surplus as at 1 January	13,008,020	15,537,459
Accumulated surplus as at 31 December	599,872	13,008,020

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

25. Funds managed/held on behalf of others - Funds held in trust (continued)

Aids To Navigation Fund ("ANF")

- (a) The Co-operative Mechanism, launched in 2007, is the key platform for the littoral States, user States, stakeholders, and the industry to exchange information, and share their perspectives on issues related to safety of navigation and environment protection in the Straits of Malacca and Singapore (SOMS). The ANF, one of three components of the Co-operative Mechanism, receives direct financial contributions from the international maritime community to maintain critical marine navigational aids in the SOMS. The 13 ANF Committee members are China, India, Japan, Republic of Korea, Saudi Arabia, United Arab Emirates, the International Foundation for Aids to Navigation (IFAN), International Maritime Organization (IMO), Malacca Strait Council and The Nippon Foundation, and the three littoral States.

Singapore took over the Chairmanship of ANF on 1 January 2013 for a period of three years ending 31 December 2015.

- (b) The assets and liabilities of the ANF as at 31 December are as follows:

	2014	2013
	\$	\$
Accumulated fund	8,302,913	7,986,933
Current assets		
Cash at bank	8,187,793	7,812,963
Other receivables	252,825	185,970
	8,440,618	7,998,933
Current liabilities		
Other payables	(137,705)	(12,000)
Net assets	8,302,913	7,986,933

The results of the ANF for the year ended 31 December are as follows:

	2014	2013
	\$	\$
Contribution received	982,276	4,224,879
Interest income	4,161	1,824
	986,437	4,226,703
Maintenance repair and miscellaneous expenses	(1,024,028)	(1,270,482)
(Deficit)/surplus for the year	(37,591)	2,956,221
Accumulated surplus as at 1 January	2,956,221	-
Accumulated surplus as at 31 December	2,918,630	2,956,221

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

26. New or revised accounting standards and interpretations

Below are the mandatory standards, amendments and interpretations to existing standards that have been published, and are relevant for the Authority's accounting periods beginning on or after 1 January 2015 and which the Authority has not early adopted:

- SB-FRS 24 *Related Party Disclosures* (effective for annual periods beginning on or after 1 July 2014)

The standard is amended to include, as a related party, an entity that provides key management personnel services to the reporting entity or to the parent of the reporting entity ('the management entity').

The reporting entity is not required to disclose the compensation paid by the management entity to the management entity's employees or directors, but it is required to disclose the amounts charged to the reporting entity by the management entity for services provided.

This amendment will not result in any changes to the Authority's accounting policies but will require more disclosures in the financial statements.

- SB-FRS 103 *Business Combinations* (effective for annual periods beginning on or after 1 July 2014)

The standard is amended to clarify that an obligation to pay contingent consideration which meets the definition of a financial instrument is classified as a financial liability or as equity, on the basis of the definitions in SB-FRS 32, *Financial Instruments: Presentation*. The standard is further amended to clarify that all non-equity contingent consideration, both financial and non-financial, is measured at fair value at each reporting date, with changes in fair value recognised in profit and loss.

The standard is also amended to clarify that SB-FRS 103 does not apply to the accounting for the formation of any joint arrangement under SB-FRS 111. The amendment also clarifies that the scope exemption only applies in the financial statements of the joint arrangement itself.

The Authority will apply this amendment for business combinations taking place on/after 1 January 2015.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 December 2014

26. New or revised accounting standards and interpretations (continued)

- SB-FRS 113 *Fair Value Measurement* (effective for annual periods beginning on or after 1 July 2014)

The amendment clarifies that the portfolio exception in SB-FRS 113, which allows an entity to measure the fair value of a group of financial assets and financial liabilities on a net basis, applies to all contracts (including non-financial contracts) within the scope of SB-FRS 39.

This amendment is not expected to have any significant impact on the financial statements of the Authority.

27. Authorisation of financial statements

These financial statements were authorised for issue by the Board of Members on 5 March 2015.