TOWARDS VISION ZERO
A Guide for Business Leaders
Towards a Safer and Healthier Workplace
“The commitment and leadership provided by senior leaders in a company is the fundamental requirement for achieving excellence in WSH performance.”
Mr Matthew J. Aguiar, Chairman and Managing Director
ExxonMobil Asia Pacific Pte Ltd

“The leadership in WSH demonstrated by the Keppel Corporation Board and senior executives is seen as fundamental to developing the overall culture within the company. The Board sets the tone and principles and adopts a ‘hands-on’ approach towards management of WSH issues.”
Mr Choo Chiau Beng, Chief Executive Officer
Keppel Corporation Limited

“NatSteel’s approach to safety is simple – ‘We Care’. We care for every person who works in our plant.”
Mr Vivek Kamra, President and Chief Executive Officer
NatSteel Holdings Pte Ltd

“Productivity and safety can go hand in hand. It’s the duty of every leader to show the way and lead by example.”
Mr Tan Puay Hin, Regional Chief Executive Officer
PSA Southeast Asia

“It is important that the CEO and his management team ‘walk the talk’. They need to be seen on the ground, engaging in conversations with the staff about their commitment to WSH. Most of all, they need to lead by example.”
Mr Tan Pheng Hock, President and Chief Executive Officer
ST Engineering

“When the leaders and management team of a company view WSH as a priority, it inadvertently shapes the company’s culture towards embracing WSH as a way of life. This is the key, only when it is a way of life, it becomes the norm.”
Mr Ng Sing Chan, President
ST Marine

“Safety begins with good planning, increasing productivity along the way through every continual WSH effort and mindset.”
Mr Pek Lian Guan, Executive Director and Chief Executive Officer
Tiong Seng Holdings Limited
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Foreword

Successful leadership begins with a vision – a clear picture of a goal yet to exist, with the commitment and wisdom to attain it. Leadership in workplace safety and health (WSH) is similar, business leaders need to visualise what excellence in WSH performance is, and be committed towards achieving that goal. To me, this is what “Vision Zero” encapsulates – a relentless striving towards zero work injury, ill health, disability and death, beyond our national goal of less than 1.8 work injury fatalities per 100,000 workers by 2018.

In our persistent efforts towards Vision Zero, we recognise that we cannot achieve WSH excellence on our own. This journey requires a close partnership with all stakeholders; business leaders in particular, play a critical role in influencing WSH behaviours at their workplaces. As leaders, your commitment to safety and health sets the tone of the WSH culture within the organisation and provides the strategic guidance to the organisational framework within which WSH can thrive. A study done by the Health and Safety Executive in 2007 found that companies whose directors took a personal responsibility for safety and health had decreased work-injury levels of up to 25% more compared to companies without director-level leadership.

Business leaders have responsibilities for bottom lines, but what is even greater is the responsibility to ensure that all workers, be it employees, contractors, or even subcontractors, are able to return home safely and healthily to their families. This is not all. Much of the present day’s problems and issues are not immediately recognisable. In fact, many of them only surface years later. Hence, we must extend Vision Zero to working life as a whole. Newcomers who enter the workforce in their 20’s should be able to continue working safely and healthily until they retire in their 60’s and beyond. When young, you think you can do almost anything for extended periods of time, for example, pushing yourself

“Leadership is the capacity to translate vision into reality.”

Warren Bennis

By Dr Jukka Takala
Executive Director
Workplace Safety and Health Institute

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to work more than 12 hours every day. This may work for months or even for a few years, but not for a lifetime. WSH needs to be kept at the forefront of every decision made and should be considered seriously. Not because of the recently extended WSH Act, but because as leaders, you value and genuinely care for each and every one of your colleagues and employees.

We must realise that safety and business outcomes are not mutually exclusive. The International Labour Organisation has demonstrated that the most competitive countries in the world are also the safest. No country has been able to attain high levels of productivity without a quality working environment. Can you find a successful global company where people are complaining of dirty, demanding and dangerous jobs? An increased focus in WSH can lead to higher productivity, better efficiency, enhanced corporate image, and improved competitive advantage. Eventually these would bring about a higher profit margin and business sustainability. I am convinced that most of you are already aware of this.

I would like to distinguish “leadership” from “management”. Management looks at oversight and maintenance of systems. Leadership goes beyond that to influencing behaviours and eventually the organisational culture. Leadership is about pushing boundaries, communicating a compelling WSH vision, making WSH expectations clear, being involved in key decisions on WSH issues, being positive and supportive of WSH efforts through the provision of resources, and creating and insisting on a safe, healthy and caring company culture. It is a constant demonstration of dedication towards safety and health by the leadership team and all others in the organisation.

As Steve Jobs said, what distinguishes leaders from followers is innovation. Through innovative thinking, we believe that Singapore companies will not only become more competitive and productive, but also be a global leader in WSH. Through you, Singapore will be recognised as a global leader in WSH. Your business can save money, manpower and resources, and more importantly, save precious human lives and health.

Together, we can eliminate death, disability and diseases from work. I would like to urge all business leaders to take on a “leadership role” in Singapore’s journey Towards Vision Zero – it is not an impossible dream, it is about taking the lead to make zero fatalities, zero disabilities and zero ill health a reality. Essentially, it is about taking care of the key asset of our country and our businesses – our people.

We hope that this publication will be useful in your WSH leadership journey by enhancing knowledge, stimulating innovation, and providing solutions as you lead the safety and health of employees in your organisation. We look forward to a close partnership in future, one that involves trust, mutual respect, and support, as we strive together Towards Vision Zero.

Thank you.

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1 Warren Bennis is an American scholar, organisational consultant and author, widely regarded as a pioneer of the contemporary field of Leadership studies.

2 Source: [http://www.hse.gov.uk/research/rrhtm/rr817.htm](http://www.hse.gov.uk/research/rrhtm/rr817.htm) The Health and Safety Executive (HSE) is the national independent regulator for work-related health, safety and illness across Great Britain.

Introduction


Compiled by the Workplace Safety and Health (WSH) Institute, Towards Vision Zero: A Guide for Business Leaders Towards a Safer and Healthier Workplace aims to be a useful and practical reference for business leaders and senior executives as you take the lead in striving towards zero work injury, ill health, disability and death in your workplace. This guide incorporates insights gained from a study conducted by the WSH Institute in early 2012, where 19 C-suite leaders and 60 middle management representatives shared their motivations, challenges and successes in leading their organisations towards WSH excellence.

Key Features

a) Plan-Do-Check-Action Practical Guide
Using the Plan-Do-Check-Action format, these guidelines include some of the best practices in WSH leadership demonstrated by the leaders we engaged during the leadership study, thus ensuring relevance for leaders.

b) WSH Leadership Case Studies
Be inspired by the strong commitment and leadership of six business leaders in safety and health, and find out about innovative programmes and initiatives that were successfully implemented and have achieved better WSH outcomes.

c) WSH Leadership Articles
This guide has incorporated selected articles written by prominent experts to provide insights and enhance your knowledge on WSH leadership as you strive for a safer and healthier workplace.

WSH Institute: Our Role in WSH Leadership

The WSH Institute was set up in 2011 as part of our endeavour to establish Singapore as a Centre of Excellence in WSH, to provide world-class knowledge, innovations and solutions.
10 Good Reasons for Business Leaders to Come On Board the WSH Bandwagon

1. A fundamental concern and moral responsibility to protect your workers

2. Employees look towards leaders in their commitment to safety and health

3. Positive corporate reputation for good governance and operational integrity

4. Research found companies to have lower work-injury levels when directors took a personal responsibility for WSH¹

5. Be part of Singapore’s national WSH 2018 strategy to achieve the vision of “A safe and healthy workplace for everyone”

6. 565,275 man days were lost due to workplace incidents in 2011²

7. SGD$68 million was paid out for work injury compensation in 2011²

8. A strong safety performance translates into strong business performance

9. 40% of work injuries every year occur in “low-risk” sectors covered under the WSH Act³

10. Avoid prosecution and claims for damages or work injuries

¹ Source: http://www.hse.gov.uk/research/rrhtm/rr817.htm
³ The WSH Act has been extended to cover all workplaces since September 2011.
PLAN the strategic direction

The demonstration of WSH leadership is to set the vision and to challenge the executive team to understand the importance of their role in WSH Leadership.
**PLAN the strategic direction**

For a start, plan the broad strategic direction for effective WSH leadership. Formalise it with a WSH policy statement that states the company's safety and health vision, WSH performance goals that management is seeking to achieve and commitment to provide adequate financial and manpower resources. This will send a strong signal that management takes the issue seriously.

*To plan effectively, it is recommended that business leaders:*

1. **Know the WSH issues related to your business**
   Have knowledge of what WSH hazards your employees are potentially exposed to and what control solutions are available to prevent injuries and ill health. Depending on the size of your organisation, you can consider the appointment of a WSH committee, an individual or a multi-disciplinary team trained in WSH, to oversee and monitor the state of WSH in your organisation.

2. **Understand your legal responsibilities and individual roles in governing WSH matters for your business**
   Every employee, including senior management, has an important role in maintaining good WSH standards in the organisation. You should be aware of your legal responsibilities as a business leader and exercise due diligence in WSH leadership.

3. **Recognise that WSH governance process is a critical part of the main corporate governance structure**
   To demonstrate this, the board of directors and senior management should have direct oversight of WSH issues. This could be achieved by having a board WSH committee and reporting WSH performance in the corporate annual report.

4. **Establish a framework that operationalises the WSH policy**
   This includes ensuring that competent persons conduct systematic WSH risk management and set up a WSH management system, and the provision of adequate resources for WSH initiatives for all business projects undertaken.

5. **Nominate a director as the WSH champion to drive the organisation's safety and health efforts**
   The Chief Executive or a board member is often the best champion of WSH leadership. *Pledge for Zero* by WSH Council is an initiative which provides a platform for top management to publicly commit towards establishing a zero injury workplace.
An excerpt from Pledge for Zero: A CEO Commitment Charter

We acknowledge that
Safety is fundamental to the well-being of human life. It must be a core value upheld by individuals and organisations as every workplace safety incident carries with it personal and social costs to all individuals, organisations, communities and ultimately the nation.

We believe that
• Safety is vital in everything we do
• All safety incidents are preventable
• All workplace exposures can be managed and controlled
• Everyone is responsible for safety and management is ultimately accountable for the outcome
• Good safety values bring good business results

We demonstrate our Commitment by
Reporting our workplace safety and health challenges, progress, successes, initiatives and performance on a yearly basis.

For more information, visit www.wshc.sg or email contact@wshc.sg

Pledge for Zero by WSH Council: Advancing Safety from the Top

• “Pledge for Zero (PFZ) – A CEO Commitment Charter” is a public demonstration of top management’s commitment to establish a zero injury workplace.

• A CEO Summit is organised by WSH Council in collaboration with the Ministry of Manpower (MOM), to provide a platform for top management representatives from various companies to publicly sign the charter and pledge their commitment to embark on the “zero” journey.

• To help top management monitor their annual WSH performance, the WSH Council developed an online performance tracking tool, named Safety and Health Annual Performance (SHAPE). SHAPE helps provide an overview of WSH policy, planning and management programmes as well as proactive and reactive performance monitoring.

• As a follow-up, a CEO Roundtable is organised annually for pledge companies to share insights and perspectives on WSH best practices and to review their WSH performance.

• PfZ was introduced to the Construction and Marine sectors in 2008 and 2009 respectively.
Workplace Safety & Health: What Have Directors Got To Do With It?

Singapore is a country where a large number of businesses, whether hardcore construction and marine industry based or otherwise, are carried out by corporate entities which are regulated by the Companies Act. Entities regulated by the Companies Act have directors at their helm managing the company and directing its strategy, very broadly put. Directors also have oversight functions, which include ensuring that the best people are hired for specific tasks. Whilst this function can be delegated downwards to management, the function of the directors will nevertheless be to ensure that the management team hired were capable of ensuring that appropriate persons were hired, and that there were processes in place to ensure the hiring and compliance.

It is this oversight role that directors have that requires them to be aware of the new workplace safety and health laws, not that they do not need to be aware of any other laws. Directors must be alert to the environment they operate within, which includes the legal environment. Directors can be taken to task under the Companies Act as well as under the provisions of the Workplace Safety and Health Act.

This short article explores the Workplace Safety and Health Act, the implications for directors under that legislation, and relooks the directors’ duty to act with due skill and care under the provisions of the Companies Act as well as under common law principles. Importantly, it stresses that directors cannot take workplace safety and health complacently.

The Workplace Safety and Health Act
Extended Coverage of the Act to All Workplaces
Since 1 September 2011, the Workplace Safety and Health (WSH) Act has been extended to cover all workplaces, bringing on board more than 100,000 organisations employing more than 1.6 million workers (about 57% of Singapore’s workforce). In this regard, the then Minister for Manpower had said that the limited coverage previously was archaic, as every worker deserved to be protected against safety and health risks. He also noted that the WSH legislation in other developed countries, including the US and the UK, have long moved on to cover all workplaces.

The extended coverage means that employers, amongst other persons, of any workplace must take reasonably practicable steps to ensure the safety and health of its employees. This is managed primarily by identifying who is responsible and the duties attributable to them, along the entire line of the hierarchy. Hence, directors of companies must ensure that they are taking positive steps to ensure that proper processes are put in place, suitable people are employed, including in certain instances, safety officers, and changing the culture.
When the Act First Came into Force and Reasonably Practical Steps

The Workplace Safety and Health Act first came into force on 1 March 2006. The Act replaced the Factories Act, taking a drastic step of moving away from a typical prescriptive approach to a more principal based approach, requiring all employers, amongst other stakeholders, to take reasonably practicable steps to ensure the safety and health of workers and others who may be affected by their work. The reason for this was that the prior regulatory regime promoted a mindset of simply following the letter of the law, without applying one’s mind to how the measures should be implemented to be effective or if there is a better or more efficient solution. Further, it was easy for directors to just leave to the personnel on the ground to manage risks.

Responsibility for Safety Should Lie on Those Who Create Risks

With the movement to a performance-based approach, the burden is put on the party responsible to show that he has taken such reasonably practicable measures. For example, the law does not prescribe that your factory windows must be 10% of the floor size. The duty is simply to ensure that there is sufficient ventilation according to the number of people at work. The intention is to let the employer, which in a company must involve the directors as the mind of the company, decide how to achieve this.

Additionally, with the changes in the way business has been undertaken, including outsourcing, specialisation of work and more diverse employment relationships, workplaces often have workers employed by third parties and other specialists. Hence, a more direct liability regime which assigned legal responsibility to those who created and had control over safety and health risks has been created. Specifically, a person may at any one time be two or more of the following: employer, contractor, subcontractor, principal, a self-employed person, an occupier of a workplace, and the Act may impose duties or liabilities in the various capacities. In this regard, the Act expanded responsibility and better defined persons who are accountable for safety outcomes.

To illustrate, the Act requires all principals to ensure that any contractor they engage is able to carry out the work safely, whether these contractors work under their direction or not. This covers principals who engage contractors for specialised tasks or the services of workers from third party labour suppliers. In such situations, there is no contract of employment between the principal and the contractor or the worker supplied. This is because traditionally, a principal would engage the specialist services of the contractor, and would not direct the contractor on how to do the work. However,

The Workplace Safety and Health (WSH) Act provides for the following:

- Secure the safety, health and welfare of persons at work in workplaces;
- Impose specific duties on various persons, which include employers, self-employed persons, principals, occupiers of workplaces, persons at work, manufacturers or suppliers of machinery or equipment for use at work, persons who erect, install or modify machinery or equipment and persons having control over common areas, etc;
- Provide a range of enforcement methods, so as to enable an appropriate response to a failure to comply with the Act depending on its nature;
- Provide for the appointment of authorised examiners and inspectors to carry out such safety and health inspections as are prescribed under the Act; and
- Provide for safety and health management arrangements.
this practice has changed, and principals often engage “contractors” and third party labour not for their specialist expertise, but precisely so that they can avoid entering into direct employment relationships, for organisational or other reasons. Hence, the Act places on the principal responsibility for the worker’s safety and health as if he were his employer. If this were not the case, then the duties under the Act could be simply circumvented by a careful crafting of the legal relationship.

Changing Culture and Top Management Support
For directors, whilst these changes are not new, it is something that not all would have taken seriously. This is especially so if the director works in an office environment traditionally not covered by the Act and one not traditionally viewed as being high risk, such as a bank or a professional services firm.

To engender a strong safety culture, commitment of top management is critical. Hence, the Act holds managers and directors of companies accountable for safety and health practices at their workplace. This is so even if the managers may not be able to police safety and health on the ground. This means that even though physical supervision of workers may be delegated, management must show that they have taken active steps to implement sound WSH management systems, including proper risk assessments and reporting systems, provide adequate resources, and ensure that full information is disseminated to workers and other persons exposed to risks. This is in effect already a requirement for directors, who are required under the Companies Act to act with due skill and care in the discharge of their duties.

The Act, however, adopts a balanced approach. It recognises that whilst management commitment is critical, management cannot necessarily be taken to task if employees ignore clear instructions. Thus, responsibility for the safety and health of others will lie not only with employers, but also extend to employees, whether they be supervisors or rank-and-file workers. In this regard, persons at work are required to use the personal protective equipment provided by their employer and co-operate with the employer on WSH matters. They also have a duty to not wilfully or recklessly endanger the safety and health of themselves or others, with appropriate penalties in place to deter such behaviour.

Practically, some of the questions that would be asked in the event of a violation include the following (as drawn from the Singapore case PP v Guthrie Engineering (S) Pte Ltd [2007], which had reviewed various cases from across the world on health and safety):

a. How far short of the appropriate standard the company fell in meeting the reasonable practical test of ensuring the safety of the employees?

b. Was this a deliberate breach of the legislation with a view to profit at the expense of proper protective action?

c. Was this an isolated incident or a culmination of practices continued over long periods?

d. Was it aggravated by failure to heed warnings?

e. Had the company deliberately profited financially from a failure to take the necessary health and safety steps to run a risk order to save money?

f. Was there a prompt admission of responsibility and steps taken to remedy the deficiencies upon discovery?
g. Was there a good general safety record?

It follows therefore that to ensure that employers are taking reasonably practicable measures, they ought to be able to respond to the queries raised above in a responsible manner. More importantly, in doing so, they should be taking a proactive approach and providing responses. Anything short of this, would suggest that a breach of the Workplace Safety and Health Act would have occurred.

For directors, it would mean having an understanding of what the business is about and the type of risks that typically arise. From this, and working with management, the following minimum steps must be taken:

a. Appropriate personnel and processes need to be put in place;

b. Regular training and dialogue sessions must also take place with clear communication being transmitted to all employees;

c. Directors must then ensure that there are regular reports to the board on the safety and health standards maintained in the company, whether within its premises, on various sites that the company operates in as well as with sub-contractors that it appoints;

d. Directors must ensure that safety and health rules are updated regularly and communicated to all relevant people.

Concluding Words

The Act is to be welcomed as it heralds a risk-based approach to managing the operational safety and health concerns at workplaces. This will, if rightly implemented, indeed help to reduce workplace accidents. This article has only provided a quick overview of the critical elements of the Act and what directors must potentially be aware of. It has not gone into details at this time. Nevertheless, directors must take it upon themselves to ensure that, as with financial auditing, there is a safety and health auditing going on as well. A life loss is never replaceable; and a limb loss is no consolation.

This is an updated and condensed version of the original article which was first published in The Directors’ Bulletin, Issue 2, 2011. For the original article, please refer to this link: (http://www.sid.org.sg/uploads/bulletin/documents/600_SID1117-FA.pdf). The Director’s Bulletin is the monthly magazine of the Singapore Institute of Directors (SID).
Commitment to WSH has to be overtly visible with personal involvement from the CEO and senior management. This is possibly the critical key to success.

DO by walking the talk
DO by walking the talk

Leadership is most effective when visible. You can demonstrate this by personally championing the company’s WSH journey, by spearheading an effective WSH management system, by upholding all core WSH values and standards, and by actively engaging the workforce in implementing the WSH policy and risk management activities. This will set the right tone and promote a positive WSH culture throughout the organisation.

In providing visible leadership, it is recommended that business leaders:

1. Take the lead in communicating and consulting with all stakeholders on key WSH matters
   Create an environment that promotes good communication, one which engages and empowers employees in WSH. This includes communicating the top management’s commitment to WSH and seeking feedback from all employees as well as contractors on decisions affecting their safety and health.

2. Be personally involved in your organisation’s WSH initiatives and programmes
   This can be achieved by demonstrating visible leadership on the ground such as participating in WSH inspections, to reinforce and renew the management’s emphasis on safety and health.

3. Oversee and commit to all necessary WSH arrangements
   This involves allocating adequate manpower and financial resources to address WSH issues promptly and avoiding wastage of time and effort on unnecessary bureaucracy.

4. Clearly articulate safety and health as a key agenda at board meetings
   This sends a strong signal that WSH is taken seriously and its strategic importance is understood. WSH as a key agenda helps the board of directors to consider the risks, opportunities and market pressures associated with WSH issues, and establish strategies in response.

5. "Design-in" safety and health when implementing change
   It is important to consider the WSH implications when introducing new processes, work practices and even personnel, by seeking competent advice where necessary.
Leadership, Job Well-being and Health Effects

Research published by the Journal of Occupational and Environmental Medicine¹ in 2008 suggests that good leadership has positive effects on employee health and well-being. A research analysis based on 27 best-quality studies revealed strong evidence linking effective leadership to reduced sick days and disability.

Why is leadership one of the most important factors mediating the relationship between work and health?

• Workers were 40% more likely to be in the highest category of job well-being (i.e. lower rates of anxiety, depression and job stress symptoms)
• 27% reduction in sick leave
• 46% reduction in disability pensions

These results highlight the financial benefit of effective leadership.

Safety: A View from the Top

By Zachary S. Wochok
Chairman and CEO (retired)
PGP International Inc., Woodland, California

As a senior executive or senior manager for any type of manufacturing company, you undoubtedly are concerned about the quality of your company’s safety programme and how it effectively provides a safe work environment for your employees.

You probably have a safety manual; safety guidelines; appropriate signage throughout your facility; training programmes; an environment, health safety manager; a strong, worker-based safety committee meeting weekly; and safety discussions with management monthly and quarterly. Or do you?

It was not until an associate severed several fingers in some milling machinery that I realised we had a serious problem. We were relying too heavily on manuals and meetings, and not instilling into our employees what safety really was all about. The first time I heard the ambulance pulling up in front of our front door was a moment I did not ever want to experience again. Unfortunately, it happened again, and it was evident we had serious problems.

And the problem began at the top, with me. The fact is I was being reactive but not truly engaged in the process.

Reality Strikes
By the time reality struck, we had been acquired by a much larger company, Associated British Foods (ABF), and they were very much attuned to safety in the workplace and the need for total ownership. We became part of the ABF Ingredients Group consisting of five different operating businesses with numerous plants around the world.

The ingredients group had a manager assigned to a corporate EHS position. This manager visited all of our locations and then came back to report his findings to the group. He based his assessment on the CEOs’ understanding of what constituted a best-in-class safety programme.

He compared the road to true safety awareness to knowing the way to Damascus. In doing so, he concluded that some of us knew where Damascus was and were on our way there but were not really sure of how to get there; some had heard of Damascus and knew it was important to get there but had no idea quite how; and some had never even heard of Damascus let alone how to get there. His report was direct and to the point: We were not all on the same page with respect to our understanding of how safety programmes should and could be most effectively implemented in our businesses.

In 1996, when I first became CEO of Pacific Grain Products – a food ingredients company in Woodland, California – it appeared as though we had all the components for a safety programme that was sufficient for our business. Yes, there were some accidents, but we had procedures in place to handle them.

In the beginning, our strategy included benchmarking visits to companies with very high safety standards, implementing vigorous trainings on a continuous basis, placing safety at the top of every agenda and having every CEO own safety and push it throughout the organisation.
Eventually, safety evolved to the point that it begins when people walk through our front door. We require all visitors to view a safety orientation video at our plant because we expect everyone in our plant — whether employee, contractor or visitor — to share the same passion for safety as we do.

Each day we have two employees from different departments conduct behavioural-based audits of our plant. They walk the entire plant and enter their observations on a white board in the break room for all employees to review. Every employee is expected to submit a safety observation form each month that details an observation made regarding safety. We average over 3,000 safety observations annually and track for completion. These observations range from behavioural — such as a fork lift driver going too fast or an office employee leaving a file drawer open or running an extension cord across a foot path — to the physical — a line of site to a fire extinguisher being blocked by a pallet. Observations also can include installation or equipment issues that might pose a safety hazard.

We have learnt that we must be diligent in quickly addressing preventive actions through risk assessment. This has led to placing guards in certain locations to prevent employees from accidentally getting too close to a potentially dangerous location, for example.

Despite every precaution management takes, it is amazing how many things can be missed. Engaging employees who are on the floor every day and training them to look for risks helps them gain a keen understanding of their important role in achieving a safe workplace environment.

**Safety Management**

Today, we have an HSE manager responsible for these programmes. I believe this is a full-time, dedicated position at companies that are serious about doing safety right. Our safety committee is comprised of employees who volunteer for membership. It meets every month and on an ad hoc basis for special projects. Management is always invited to attend, but the employees run the meeting. They own it.

Once a quarter, a safety management meeting is held with the divisional CEO and the divisional HSE director in London. Divisional meetings are held once or twice a year and all the operating companies can assemble and share their experiences, best practices and learnings. You see, when I first mentioned that the CEO has to own safety, I was not just referring to myself, but to the divisional CEO and ultimately the CEO of the entire corporation as well.

How do you gain engagement and empowerment? Simple: If you're the CEO, you lead. It has to be the CEO who leads the way for the safety effort to be meaningful and to create the awareness of safety throughout the organisation. When the CEO provides direct leadership and then empowers the employees to take ownership, you are on your way to having a meaningful safety culture.

After providing this brief overview of our personal experiences at PGPI, you might be wondering how we are doing today as compared to when we began our journey. Well, we still have not arrived at Damascus. We are so much better than we were but we still have not achieved our goal of zero lost-time incidents or some of the other metrics we have put in place.

As an example, our incident rate decreased from 16 to four in just over two years. We truly are on a journey and there is a sense of great accomplishment among our associates and a clear awareness that we want them to be safe in their work environment and to take that same awareness home each day.

Besides the achievement of creating a safer workplace and the fulfilment that comes from making great strides in worker safety is the clear business benefit. Working safe simply is good business. Reducing injuries of any kind reduces workers’ compensation claim expenses, reduces or eliminates OSHA fines, reduces lost time from work and improves the P&L.

If you have not already done so with your company, I urge you to join us on the road to a safer workplace. You will not regret the decision.

*This article was first published on EHS Today, 1 June 2011 at: http://ehstoday.com/safety/news/safety-view-top-0601/
The major focus in managing WSH from the CEO’s perspective is to have a solid integrated proactive plan. This requires an approach of continuous monitoring and improvement.
CHECK to monitor performance

Giving appropriate weight to robust monitoring processes and internal controls safeguards the company's WSH standards. An effective reporting system for WSH incidents and near misses, periodic audits, regular inspections for unsafe behaviours and unsafe conditions, and investigations to determine root causes are vital to secure responsibility and ensure that relevant safety and health occurrences in the interim are brought to the top management's attention.

For effective monitoring, it is recommended that business leaders:

1. Establish an effective monitoring and reporting structure to the Board and senior management
   This can be achieved by establishing formal procedures for auditing and reporting of WSH performance. Directors can also consider extra “shop floor” visits to gather information.

2. Use leading and lagging indicators to assess WSH performance
   Most companies typically utilise lagging indicators (reactive) or actual incident data, such as accident and sickness absence rates. Leading indicators (proactive) refer to preventive information, such as WSH training progress and maintenance programmes which can provide an early indication of the organisation's WSH performance.

3. Ensure major safety and health incidents are reported immediately to you
   This ensures that reviews can be conducted as soon as possible following major shortcomings or events. Management can also consider being directly involved in the investigation of major incidents.

4. Monitor the WSH arrangements of your partners, key suppliers and contractors regularly
   An effective contractor management system has clearly defined WSH goals, monitoring system and appropriate incentive schemes. The bizSAFE programme by WSH Council can help contractors and suppliers who are SMEs build their risk management capabilities. bizSAFE also enables large corporations to set their level of expectation of their contractor’s WSH management system.

5. Encourage the involvement of your employees in the monitoring and control processes
   This can be achieved by allowing non-punitive reporting and encouraging workers to take ownership by recommending a course of action, such as rectifying observed WSH risks.
bizSAFE by WSH Council: Building Safety and Health in Your Business

Risk assessment is the cornerstone of any workplace safety and health (WSH) management system and it is critical that businesses are equipped with the capability to conduct risk assessment effectively. Recognising that not all companies, particularly small and medium-sized enterprises (SMEs), have the resources or the know-how to build risk management capabilities, the Ministry of Manpower (MOM) in conjunction with WSH Council, launched the bizSAFE programme in 2007.

- The bizSAFE programme is a structured five-step programme to help enterprises build risk management (RM) capabilities and provide endorsement of their progress in this area.

- As with any successful initiative, top management commitment must be the first step to embark on the bizSAFE journey. Their commitment is then carried through the other levels with the achievement and maintenance of a good RM and WSH management system.

- As of 1 August 2012, more than 11,000 SMEs have signed up as bizSAFE Enterprises, together with 275 organisations as bizSAFE Partners and 17 large corporations as bizSAFE Mentors.

For more information on the bizSAFE programme, visit www.wshc.sg/bizsafe or email bizsafe@wshc.sg

There are three kinds of membership in the bizSAFE programme

- **bizSAFE Enterprises** are mostly SMEs that raise their WSH capabilities through the bizSAFE programme, and along with it, enjoy recognition and business privileges by bizSAFE partners.

- **bizSAFE Partners** are big corporations that give priority in the contracting of services to bizSAFE-certified SMEs, and help to shape their behaviour by encouraging them to progress through the five-step recognition process. As a result, bizSAFE Partners benefit from safer and more productive suppliers.

- **bizSAFE Mentors** are large corporations with strong WSH capabilities and leadership that are enlisted as mentors to guide enterprises. The bizSAFE programme provides an opportunity to impact WSH Culture inter/intra-industry and be involved in corporate social responsibility.
Does Your Organisation Have a Safe and Healthy Culture?

By Workplace Safety and Health Council

It has been established that leadership and commitment by top management can shape the organisation’s WSH values and behaviours, and is a key attribute that accounts for superior WSH performance in companies.

Six Attributes of WSH CultureSAFE Model

What is WSH Culture?
A set of deep-seated values and practices prevalent in an organisation that guides the behaviour of its management and staff towards workplace safety and health (WSH).

Why is it Important?
Having a good WSH culture in your organisation is vital to achieving a quantum leap in WSH performance after a WSH Management System (WSHMS) and engineering controls have been implemented. A good WSH culture can transform the mindset of stakeholders from one of compliance to one in which WSH becomes a natural and integral part of daily operations where WSH excellence is realised.

How Does it Work?
The Workplace Safety and Health Council has established a WSH CultureSAFE Model, comprising six organisational attributes that have been ascertained to be correlated with superior WSH performance.
A WSH Culture Assessment has been developed based on the six attributes of the WSH CultureSAFE Model. This will help to diagnose and identify gaps in the WSH culture of an organisation. Appropriate plans and intervention measures may then be formulated to enhance the WSH culture of the organisation.

What Can Management Do?
More specifically, the extent of management influence on WSH is determined by the following: credibility in “talking the talk” and “walking the talk”; involvement in day-to-day WSH assurance; engagement in strategic WSH initiatives; technical knowledge of the company’s operations; and communication and stakeholder engagement skills.

The following 10 statements have been extracted from the attribute Leadership & Commitment to give business leaders a preview of how they can positively influence the WSH Culture of their organisations:

1) Our senior management is constantly upgrading their WSH competencies.

2) Our management has accepted that they are ultimately responsible for WSH.

3) When project deadlines are tight, managers are consistent in conscientiously reminding us that WSH is the top priority.

4) Our managers inspect the workplace to identify potential hazards and review with us our WSH performance.

5) Senior management reviews WSH performance regularly and conveys to us the status, actions and effectiveness of the specific measures taken.

6) The planning of WSH enhancement programmes and activities are led by our management.

7) The WSH performance, enhancement plans and initiatives of our organisation are reviewed at the Board level as standing agenda items.

8) Our senior management reviews the outcome of change management cases regularly to determine how future processes and decision-making may be improved.

9) Our senior management is well-informed about WSH requirements and contingency actions, and will challenge proposed operational changes on their potential consequences for WSH.

10) Our management actively encourages us to voice our WSH concerns and challenge and/or report unsafe acts.

All six attributes of the WSH CultureSAFE Model are important for achieving WSH excellence in an organisation. Please refer to the WSH Council’s website (www.wshc.sg) for more information on the full WSH Culture Assessment and be part of the WSH CultureSAFE initiative.
WSH should be seen as a journey, not a project. A review allows the management team to establish new goals and performance targets in striving towards WSH excellence.
ACTION for review

In striving for excellence, a formal boardroom review is essential as it allows top management to establish progress and performance of the organisation in its WSH journey. This helps the organisation to reflect on the challenges faced, celebrate past achievements, establish new priorities, plans and targets, and to develop an action plan that will bring WSH standards to a higher level.

To facilitate the review, it is recommended that business leaders:

1. Conduct a formal review on safety and health at least once a year  
   This can be integrated into your annual boardroom reviews where financial and non-financial key performance indicators to the business are considered.

2. Personally oversee WSH performance on a regular basis  
   This process can utilise existing internal control and audit structures, and can be reviewed by the board’s audit sub-committee. Personal involvement in field checks can be a clear indicator of commitment and will promote engagement on the ground.

3. Nominate one or more directors to have the additional role of overseeing and challenging the WSH governance process  
   It is important that governance structures enable WSH management systems, actions and levels of performance to be challenged. A non-executive director to act as an independent internal auditor can be considered.

4. Record WSH performance in corporate annual reports and benchmark against others in the same sector  
   By accounting to investors and stakeholders, this also signals your company’s commitment to an excellent WSH reputation. One such measure is the use of global sustainability indexes to benchmark against the triple bottom line, taking in account economic, environment and social performance.

5. Develop a formal action plan with a system to monitor implementation to address WSH challenges and gaps raised in the boardroom review  
   This involves the development of a strategic plan that maps out how the company will raise its WSH standards in moving forward.
Global Sustainability Indexes – “It’s not just about WSH, it’s about the way you run your business”

Many well-established companies are realising that it is no longer just about the money. Instead, more and more companies are adopting a “triple bottom line – financial, environmental and social”. One clear indicator is the recent increase in number of companies participating in Global Sustainability Indexes.

A company listed on these Indexes has many advantages, both tangible and intangible. Not only does it gain public recognition of its leadership in strategic economic, environmental and social areas but there is the important recognition by investors, customers and even lawmakers.

The brief description of three main Global Sustainability Indexes is provided below:

• **Dow Jones Sustainability Indexes (DJSI)**  
  Launched in 1999, the DJSI are the first global indexes tracking the financial performance of leading sustainability-driven companies worldwide. Widely regarded as one of the world’s foremost sustainability indices, benchmarking is based on Economic, Environmental, and Social performance. *Occupational Health & Safety* forms a component of the Social dimension.
  
  For more information, visit [http://www.sustainability-indexes.com/](http://www.sustainability-indexes.com/)

• **FTSE4Good Index series**  
  Launched in 2001, the FTSE4Good Index Series is a series of benchmark and tradable indices for investors wishing to identify and invest in companies that exhibit good corporate responsibility practice. Inclusion criteria are based on Environmental, Social & Stakeholder, Human Rights, and Supply Chain Labour Standard. *Health and Safety Management Systems* are evaluated by one or more of the following: awards, details of health and safety training, and published accidents rates.
  
  For more information, visit [www.ftse.com/Indices/FTSE4Good_Index_Series/index.jsp](http://www.ftse.com/Indices/FTSE4Good_Index_Series/index.jsp)

• **Global 100 Most Sustainable Corporations in the World**  
  The Global 100 is the most extensive data-driven corporate sustainability assessment with inclusion limited to a select group of the top 100 large-cap companies in the world. Criteria and weights are based on company performance driven by a set of 11 key performance indicators (KPIs), including *Safety Productivity*, which constituted a component when the BP Gulf incident (Deepwater Horizon Oil Spill) in 2010 brought safety to the forefront as a core factor in corporate valuations and competitiveness.
  
  For more information, visit [www.global100.org/](http://www.global100.org/)
Reaching Zero Harm

“I refused to accept that fatalities were an inevitable by-product of mining.”

Cynthia Carroll
Anglo American, CEO

When Cynthia Carroll became CEO of one of the world’s largest mining company, Anglo American, in 2007, she encountered one of her biggest challenges as well – close to 200 workers had died on-the-job over a span of five years prior to her arrival. Determined to transform the safety landscape at Anglo American, Cynthia started with South Africa, one with a particularly poor track record. In her first move, Cynthia decided to shut down the world’s largest platinum mine at Rustenburg, and it would not reopen till safety standards were improved – “I wanted an indefinite shutdown, during which we would fundamentally overhaul our safety procedures with a top-to-bottom audit of our processes and infrastructure followed by a complete retraining of the Rustenburg workforce.”

This was not an easy move and Cynthia faced many detractors; it even prompted the departure of the platinum division’s CEO and many managers. Most believed that in a high-risk industry such as mining, fatalities were simply a by-product. To Cynthia however, this was not going to happen – “I fundamentally rejected that assumption.” She was determined to reach her goal of zero harm. During the period of shut down which lasted seven weeks, Anglo American began retraining more than 30,000 employees, conducting intensive consultations with individual employees on safety and health, and the entire workforce was engaged in sports stadiums. Anglo American was undergoing a visible overhaul of its safety performance, and this was a perfect example of how influential organisation leaders could be. Cynthia’s commitment was moving Anglo American towards excellence in safety and health.

Still, unsatisfied with just changing the safety performance of Anglo American mines alone, Cynthia widened her focus towards the entire mining industry – “Anglo American’s safety record wasn’t out of line with those of its competitors, and I was horrified by safety statistics for the industry as a whole.” Cynthia decided to establish partnerships with the National Union of Mineworkers and the minister of South Africa’s Department of Mineral Resources. This put Anglo American’s poor safety records under public scrutiny. But to Cynthia, this was necessary – “Our partnership with the government and the union was unusual but necessary. Making mines safer would be so complex and have such widespread ramifications that a single organisation couldn’t do it alone.”

Note by Dr Jukka Takala, Executive Director, WSH Institute:
I don’t believe that “accidents go with the job” anywhere, although that argument is still common. Now hearing that by one of the top leaders in the business world is, indeed, heartening. This summary of the Harvard Business Review article written by the CEO of mining company, Anglo American, contains an exceptionally positive and strong message to other leaders and managers of companies around the globe. I have visited the Anglo American mines in South Africa down in the depth measured by kilometres rather than metres, talked to their staff, South African Chamber of Commerce and Industry, former Minister of Labour Mr Mdladlana at many occasions, inspectors and unions, and received the same impression as Cynthia Carroll. If such a reform of safety and health systems and culture can be done in Anglo American, it can be done anywhere in the world. This is not rocket science; this is responsible leadership at its best. Readers cannot come and say that “this is another country, another industry, another culture – it would not work here” once it has been shown to work in one of the most challenging operations globally.
A public summit was initiated, gathering mining industry leaders and the media together – “It was an uncomfortable experience: Facts and figures relating to the industry’s death toll were discussed openly, and everyone had to face a harsh reality.” This marked the beginning of close partnerships between the government and mining companies, and universal safety standards were set. Anglo American embarked on a training programme for all its employees; from the frontline worker, to the managers, and to the senior leaders, inculcating a safety mindset in the entire Anglo American workforce. The safety culture of Anglo American was surely shifting.

It worked. The fatality rate in the South African mining industry was reduced by about 25% and Anglo American’s fatality rate was reduced by 62% over the five years – 17 lives were lost in 2011 compared to 44 in 2006. Moreover, this was accompanied by an increase in revenue and operating income of US$10,365 million in 2011 from 2006. This was no surprise to Cynthia, a firm believer of the benefits of safety and health – “I have always said that safety is a leading indicator of wider performance—if you get safety right, then other things will follow, from stronger relationships with unions and governments to greater productivity and efficiency across the board.” Till today, Cynthia is not satisfied, and strives to continue improving Anglo American’s performance in safety and health. Her concluding statement says it all – “We’re not perfect. But I’m determined to reach my goal of zero harm.”

This is a comprehensive summary of an article published in Harvard Business Review’s The Magazine (June 2012) – The CEO of Anglo American on Getting Serious About Safety – written by Cynthia Carroll herself. To read a short excerpt or purchase a full copy of the original article, please refer to this link: http://hbr.org/2012/06/the-ceo-of-anglo-american-on-getting-serious-about-safety/ar/1
Case Study: ExxonMobil

ExxonMobil Asia Pacific Chairman and Managing Director
“Walks the Talk” in Driving WSH

“The commitment and leadership provided by senior leaders in a company is the fundamental requirement for achieving excellence in WSH performance.”

Mr Matthew J. Aguiar
Chairman and Managing Director
ExxonMobil Asia Pacific Pte Ltd

ExxonMobil operates a multi-billion dollar manufacturing and marketing business in Singapore, which includes its largest refinery in the world, and a world-scale petrochemical complex. Ensuring an excellent WSH culture in a work environment that large is no easy task, especially when potential risks are inherent in its extensive operations. Driven by committed leaders, the company has achieved success in managing and mitigating risks through a capable workforce and practices designed to ensure safe, secure and environmentally responsible operations.

At the heart of this success is ExxonMobil’s Operations Integrity Management System (OIMS), supported by ExxonMobil Asia Pacific Chairman and Managing Director Mr Aguiar, whose passion in building an accountable and safe working environment, has created a culture of responsibility among the workforce. Safety is not only a priority at ExxonMobil; it is a value that is at the core of their culture. “Nobody Gets Hurt” has been ExxonMobil’s ethos in driving excellence in Safety, Security, Health and Environment (SSH&E) and underpins the company’s approach towards a proactive WSH culture.

Walking the Talk
Every year, ExxonMobil employees are required to develop their own personal SSH&E plan based on their work responsibilities. This defines their leadership roles in driving WSH within their own environment and is also reviewed annually as part of the performance appraisal process.

Mr Aguiar also provides leadership and direction during the implementation of the
The Operations Integrity Management System (OIMS)

OIMS is the cornerstone of ExxonMobil’s commitment to managing SSH&E risks. It integrates safety, security, environmental and social risk management into every aspect of the business. The management is responsible for ensuring that systems in the Framework are in place as well as providing support. Since its inception, OIMS has improved SSH&E performance radically.

**OIMS 11 Elements**

1. **Management Leadership, Commitment and Accountability**
2. **Risk Assessment and Management**
3. **Facilities Design and Construction**
4. **Information/Documentation**
5. **Personnel and Training**
6. **Operations and Maintenance**
7. **Management of Change**
8. **Third-party Services**
9. **Incident Investigation and Analysis**
10. **Community Awareness and Emergency Preparedness**
11. **Operations Integrity Assessment and Improvement**

Loss Prevention System (LPS™), a behaviour-based system that equips personnel at all levels of the organisation with tools to build a safety excellence culture. A culture where supervisors conduct an adequate number of safety touches with their workers and where workers take personal accountability for their own safety and the safety of their colleagues.

Being accountable for the achievement of certain key performance measures, Mr Aguiar himself has been closely involved in reviewing the site LPS metrics as well as participating in the field checks of its effectiveness.

**Contractor Management**

There are many challenges that ExxonMobil has had to face in striving for an incident-free workplace. This includes changing the mindset of contractors and foreign workers, with their cultural and language differences, to embrace the ExxonMobil “methodology”. One of the main ways that this challenge is being tackled is through a continuous improvement approach towards the management of contractors and their workers. The safe conduct of work activities is a condition for contracting companies to continue with ongoing work. Not only do they need to demonstrate that they have WSH systems in place, they are also

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**Mr Aguiar has defined his own personal SSH&E action goals using the headings C.A.R.E.**

- **Credibility:** Say what you do, do what you say
- **Action:** Commit yourself and others to achieve desired results
- **Resolve:** Never give up on the pursuit of SSH&E excellence
- **Engagement:** Listen, consult, involve, and communicate
required to train their workers to perform to the levels of safety expected of ExxonMobil employees as well.

The introduction of the “Buddy Manager” programme has been a key initiative in raising the knowledge and expertise at the contractor-management level. This programme manages risks associated with less experienced workers used by contractors and subcontractors. By assigning an ExxonMobil manager to each of their contractors as a “buddy” to help them develop and comply with the organisation’s WSH requirements, it promotes ownership and responsibility in ensuring a safe and secure working environment for all.

Persistence and Determination
The hard work in improving WSH performance has improved ExxonMobil’s SSH&E performance. In recent years, recordable injury rates have been maintained at a low level. Risk to the environment has been lowered as well, with a decline in marine spills and emissions.

Finding the right formula has always been about involving everyone, from the CEO to the hourly workers, to play an active role with a continuous focus on hazard recognition and mitigation. At ExxonMobil, safety never takes a backseat to commercial goals. The organisation constantly strives to manage their work environment with a firm belief that holistic involvement will eventually lead them to achieve their “Nobody Gets Hurt” vision.

- ExxonMobil’s Buddy Manager programme has 57 managers working with 28 long-term and 29 short-term project-based contractors.
- The ExxonMobil buddy manager’s target is to achieve a continuous and sustainable safety performance by reinforcing ExxonMobil’s safety standards and reviewing the Contractor Focused Safety Plan (CFSP), which is currently executed annually and monitored periodically.

All contractors’ buddy managers are mostly senior managers who are expected to spend quality time in the field, interacting with workers and gathering their feedback.

Source: ExxonMobil Asia Pacific Pte Ltd

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Case Study: Keppel

Leadership in Safety and Health Starts from the Top

“The leadership in WSH demonstrated by the Keppel Corporation Board and senior executives is seen as fundamental to developing the overall culture within the company. The Board sets the tone and principles and adopts a ‘hands-on’ approach towards management of WSH issues.”

Mr Choo Chiau Beng
Chief Executive Officer
Keppel Corporation Limited

Keppel Corporation established a Board Safety Committee (BSC) in 2006, the first by a public-listed company in Singapore, to set the direction and the framework across its multiple business units to manage their safety issues and improve their safety performance. Chaired by an independent board director, the committee also includes Keppel Corporation’s Chairman Dr Lee Boon Yang, and Chief Executive Officer Mr Choo Chiau Beng. The formation of the BSC provides strong and visible leadership and is a strong signal of commitment from the top.

Keppel’s Board Safety Committee (BSC): Roles and Responsibilities

1. Review and examine the effectiveness of the safety management systems of the companies under the Keppel Group, including training and monitoring systems, to ensure that a robust safety management system is maintained in each business unit that supports the Group’s objectives in safety management.

2. Review and examine safety procedures against industry best practices, and monitor its implementation across Keppel Group.

3. Provide a discussion platform for developments and best practices in safety standards and practices, and the feasibility of implementing such developments and best practices across the Keppel Group.

5. Ensure that the safety functions in Group companies are adequately resourced (in terms of number, qualification, and budget) and has appropriate standing within the organisation.

6. Consider management’s proposals on safety-related matters.

7. Initiating such investigations into safety-related matters as the Committee deems fit.

8. Report to the Board on material safety matters, findings and recommendations.

9. Perform such other functions as the Board may determine.

10. Sub-delegate any of its powers within its terms of reference as listed above from time to time as the Committee may deem fit.

Through the BSC, five key safety principles were developed to help encourage and drive the right behaviour in daily operations across the Keppel Group.

Since 2010, led by the BSC Chairman, Keppel’s business unit heads conducted visits to several Keppel sites in Singapore and overseas, to better understand safety measures in the various operating environments. As one of each business unit’s key performance indicator, safety is a key driver for all senior management in the company, and is fundamental to their personal performance expectations. In fact, Chief Executive Officer Mr Choo Chiau Beng delivers the opening speech at Keppel Group’s annual Group Safety Convention, setting the company’s safety and health expectations for the year. This is a visible demonstration of Mr Choo’s personal commitment and passion towards safety. At the annual Safety Convention, the Chairman Safety Challenge

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**Adoption of Five Key Safety Principles:**

1. If safety is expensive, disasters cost more
2. Value everyone’s safety
3. Zero tolerance for incidents
4. Recognise safe behaviour
5. Passion for Health, Safety and Environment (HSE) excellence

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*Source: Keppel Corporation Limited*
Trophy is awarded to the Keppel business unit which has demonstrated a consistent strong safety culture and outstanding safety performance for the year. It is named the Keppel Corporation Chairman Safety Challenge Trophy as a reflection of the top management’s commitment in supporting safety and recognising outstanding safety performance.

**Keppel WSH 2018**

Embracing the philosophy that safety is everyone’s business, the Keppel Group believes that creating a safe workplace requires collaboration from all stakeholders. In this regard, stakeholders from employees to customers and subcontractors are encouraged to take ownership of safety, exchange experiences and knowledge as well as foster positive behavioural changes.

Through the Keppel Workplace Safety and Health (WSH) 2018 strategy introduced in 2010, efforts are focused on four key thrusts to align Group efforts and improve safety and health practices. The strategy, which was introduced to Keppel’s Singapore operations, was extended to overseas business units in 2011.

Keppel is the first company to launch a corporate initiative in line with the National WSH 2018 strategy.

The strategic thrusts of this strategy are:
- Establishing an integrated framework;
- Implementing an effective management system;
- Enhancing ownership; and
- Strengthening partnerships.

*Source: Keppel Corporation Limited*
Over $26.7 million Invested in Safety

In 2011, Keppel invested over $26.7 million across the Group on safety alone. A dedicated e-Safety Portal was launched to enhance WSH knowledge sharing at a global level across the Group. The e-Safety Portal complements a centralised electronic Global Incident Reporting System adopted by Keppel, which ensures that senior management and relevant safety personnel are kept abreast of incidents and lessons learnt are shared and can be printed out for sharing at toolbox meetings. For Keppel, reportable incidents and high potential near misses are promptly reported and brought to the attention of senior management. Stand downs are promptly conducted on the spot to brief the workers on what has happened and how to ensure that similar incidents do not recur.

Managing Challenges Head-on

A Diverse Workforce

Keppel’s key challenges in WSH include working with a multi-national and multi-cultural workforce in Singapore, especially subcontractors, to ensure that they have proper knowledge on safety practices and procedures, despite their different backgrounds and work experiences. In 2010, Keppel Offshore & Marine1 established the Keppel Safety Training Centre, an integrated health, safety and environment (HSE) training hub to provide a conducive learning environment. Employing the latest equipment, simulations and methodologies, all Keppel Shipyard’s direct and subcontracted workers have to undergo training at the Centre before they can start work, to inculcate a strong safety mindset and a uniformed level of competencies.

Keppel Land opened a Safety Awareness Centre in Ho Chi Minh City in June 2011 to facilitate training to raise safety standards among its contractors. The objective is to increase the safety awareness of the contractors’ employees through a series of courses on various topics, ranging from working at height to firefighting.

A range of programmes has also been introduced to target the WSH needs of foreign workers. In Keppel Shipyard, experienced foreign workers have been identified and trained as mentors to carry out discussions on WSH incidents and near misses with fellow workers in their own languages. Additionally, managers from Keppel Offshore & Marine conduct regular WSH engagement visits to workers’ dormitories, to encourage informal interactions on WSH issues with workers. These initiatives help to raise the engagement and awareness of multi-national and multi-cultural workers in WSH.

High Impact Risk Activities (HIRA)

For better focus on work activities that pose higher risk at the workplace, Keppel Offshore & Marine yards identified six key High Impact Risk Activities (HIRA). These HIRA include Confined Space Safety, Working at Height Safety, Fire & Explosion, Incompatible Work, Lifting Safety and Electrical Safety, and require special focus. Mandatory guidelines for the HIRA were developed, and compliance has been made mandatory for all Keppel Business Units to implement. HIRA icons were developed and a booklet was made to promote awareness and reinforce the risks posed by such activities at the workplace. Keppel Safety Training Centre also conducted training for 3,088 workers and subcontractors in 2011, in key courses associated to HIRA awareness.

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1 Keppel Offshore & Marine (Keppel O&M) is a global leader in offshore rig design, construction and repair, ship repair and conversion and specialised shipbuilding. It has three divisions: Keppel Shipyard, Keppel FELS and Keppel Singmarine.
Cultivating Safety Mindsets
The demonstration of WSH leadership by senior executives has also focused on their commitment towards cultivating safety mindsets across the Keppel Group. One example is the launch of Group-wide campaign “Safety Starts with Me, Together We Care” in 2009, where the importance of personal and collective accountability for safety was emphasised. Workers were empowered to remove at-risk behaviours and conditions at the workplace through active observation and intervention regardless of their designation.

Beyond attitude and vigilance, cultivating a safety mindset also meant thinking of ways to make the workplace safer, either through processes or innovations. To encourage this, Keppel organises safety innovation competitions, and winners from respective business units compete at the annual Group Safety Convention and at the national level.

Seeing Results
Since Keppel embarked on their safety journey exactly a decade ago, their dedicated and persistent efforts have paid off. Keppel’s Accident Frequency Rate and Accident Severity Rate has significantly reduced between 2002 and 2012, and is below the national average in Singapore, a commendable safety record for working in high-risk sectors. Over the years, the Keppel Group has also garnered numerous safety awards, such as the Lloyd’s List Asia Awards for Achievement in Safety by Keppel FELS, and a record of 34 awards by Keppel Group companies at the Workplace Safety and Health (WSH) Awards 2012 from Singapore’s Ministry of Manpower (MOM).

For Keppel, safety is an ongoing journey. As business activities grow, new workers are constantly needed to join the workforce. As such, from time to time, incidents can still happen. Keppel is mindful of the challenges and is committed towards creating an incident-free workplace by ensuring a safe and healthy environment for everyone, from employees to subcontractors and customers.

In Keppel, Safety is Everyone’s Business and nothing is more important than for everyone to be able to go home safely at the end of every workday.

Keppel’s safety efforts have seen its Accident Frequency Rate (AFR) improve from 3.48 reportable accidents for every million man-hours worked in 2002 to 0.15 reportable accidents for every million man-hours worked in 2012 (January-June).
Case Study: NatSteel Holdings

Caring is Leadership in Safety and Health

“NatSteel’s approach to safety is simple – ‘We Care’. We care for every person who works in our plant.”

Mr Vivek Kamra
President and Chief Executive Officer
NatSteel Holdings Pte Ltd

NatSteel Holdings is the only steel plant integrated with metal recycling services in Singapore. NatSteel constantly pushes the frontiers in manufacturing processes, service, as well as environment, safety and health measures.

At NatSteel Holdings, the leadership team believes that a safe and secure work environment drives higher productivity, employee morale and above all, personal safety for all. With the philosophy “Nothing is more important than your safety”, the motivation for driving safety comes from an internal corporate value system of caring for people and respect for all. Mr Vivek Kamra, President and CEO of NatSteel, has always believed that effective leadership in workplace safety and health (WSH) is the only way to create the type of culture where WSH becomes a top priority for everyone.

For him, three key principles drive his philosophy in WSH – caring is leadership, operational discipline, and systems mindset.

NatSteel’s WSH Philosophy: Three Key Principles

Caring is Leadership
The primary assets of concern for a business are its people.

Operational Discipline
The leadership team needs to develop strategies and implement organisational structures and systems to manage WSH.

Systems Mindset
The success of WSH systems depends on thorough analysis and evaluation of each incident and injury.
All three elements emphasise that people are the core and primary concerns of the business; structures and systems drive the strategies towards a safe working environment; and that each incident, big or small, must be investigated.

**Four Key Mechanisms**
At NatSteel Holdings, the leadership team drives a culture of safety and health through a focus on four key mechanisms:

1. **Everything Starts With Safety**
   WSH is driven from the most senior level of the company. The focus of parent company, Tata's Board of Directors, provides the foundation for NatSteel's commitment towards safety and health. Committed to driving the Board's leadership in the area of safety, Chairman of Tata Board, Mr Hemant Nerurkar, personally delivers a safety address as the first agenda at all board meetings. Board meetings also include a review of specific safety data for the group, such as Lost Time Injury Frequency (LTIF) rates and medical treatment injuries.

2. **Building an Organisational Structure for Safety**
   In 2008, NatSteel Holdings set up an Apex Safety Committee that meets monthly. Chaired by Mr Kamra, the committee oversees seven safety sub-committees headed by Senior Vice Presidents to demonstrate management commitment towards WSH. Each with their own proactive Key Performance Indicators (KPIs), these committees strategise NatSteel's direction and areas of prioritisation relating to safety and health.

<table>
<thead>
<tr>
<th>Seven Apex Safety Sub-committees</th>
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<tr>
<td>1. Safety Observation &amp; Audit</td>
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<td>2. Incident Investigation</td>
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<td>3. Contractor Safety</td>
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<td>4. Safety Communication</td>
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<td>5. Operational Discipline</td>
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<td>6. Corporate Safety</td>
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<td>7. Process Safety Management</td>
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Source: NatSteel Holdings Pte Ltd
3. Showing Visible Leadership Commitment
At NatSteel Holdings, all safety and health incidents are reported to the leadership team within 12 hours. As Mr Kamra puts it, “No injury is too small for attention, every injury must be tracked and analysed.” This is no empty talk; Mr Kamra and Chief Operations Officer (COO), Mr Joseph Yong, are personally involved in site investigations when an incident happens. To show their personal presence and commitment to WSH, both of them also conduct a site audit at least once a month, engaging workers personally in safety and health dialogues. As a good practice, Mr Kamra has also started an initiative to have daily safety messages on the intranet, so that each employee starts his day with safety in mind.

4. Providing Direction and Committing Resources
The key to NatSteel’s strong safety culture is its leadership. The main step was Mr Kamra’s personal involvement in leading WSH in the company. He believed that this was not something to be delegated to line managers. In essence, he summed up the role of leadership in safety and health with the following words, “I need to constantly demonstrate my personal commitment to WSH by allocating resources (time and money) and by providing clear direction.”

STOP™ Programme: Reducing LTIF to 0.4
In 2008, NatSteel initiated a corporate safety programme, Safety Training & Observation Programme (STOP™), to achieve its safety vision of achieving an LTIF rate of 0.4. STOP™ looked at the safety behaviours of people in addition to the implementation of safety controls. In this programme, there is a strong emphasis on communication of safe and unsafe behaviours observed at all worksites. It first involved the CEO, management team and supervisors, and is now continuously cascaded down to all levels of the organisation to achieve an effective and sustainable corporate safety programme. The primary goal was to engage and empower all employees to take ownership in making NatSteel a safe environment to work in. There are now about 250 trained observers in STOP™ and it remains one of NatSteel Holdings’ important safety tools.

Safety is Everyone’s Responsibility
In NatSteel, everyone has a contribution towards safety – the CEO and leadership are all part of a team driving initiatives to promote a robust safety culture and improve workplace safety. While safety is certainly not the responsibility of the senior management alone, they build rapport and spur employees through leading by example, and being closely involved in all safety activities, be it at the worksite or in the office. This role modelling motivates employees as they are able to see and feel the commitment of the management towards safety.
As a result, NatSteel’s LTIF performance has improved from over 10 in 2008 to 0.65 in 2012. Though a major improvement, NatSteel’s target is to achieve an LTIF of 0.4. Today, the key role of the CEO is to build an organisation with the capability to drive WSH over time with a distributed leadership. Only through this can they move further and faster on their safety journey at all levels in the organisation.

NatSteel’s Safety Performance
NatSteel’s LTIF performance has improved from over 10 in 2008 to 0.65 in 2012. Though a major improvement, NatSteel’s target is to achieve an LTIF of 0.4.
Case Study: PSA

PSA Strives for All to Go Home Safely to their Families

“Productivity and safety can go hand in hand. It’s the duty of every leader to show the way and lead by example.”

Mr Tan Puay Hin
Regional Chief Executive Officer
PSA Southeast Asia

PSA Singapore Terminals is a flagship terminal of PSA International, one of the leading global port groups, with investments in 29 port projects in 17 countries across Asia, Europe and the Americas. PSA Singapore has around 7,000 direct employees, with another 3,000 indirect contractor employees working at the five terminals located in Singapore. In 2011, PSA Singapore Terminals handled 29.37 million TEUs of containers. Mr Tan Puay Hin, Regional CEO of PSA Southeast Asia, manages and oversees the operations of all container terminals based in Singapore.

In 2005, the responsibility for managing safety and health was transferred from the Human Resources Division to the direct purview of PSA’s top management, modelled after best practices undertaken for safety and health internationally. This has ensured that workplace safety and health (WSH) is an important and integral part of PSA’s business operations, with its performance as one of the corporate Key Performance Indicators in the organisation.

PSA’s Safety Philosophy

• All accidents can be prevented.
• Safety is everyone’s responsibility.
• Working safely is a condition of employment.
• We must be proactive in improving safety.
• We can work safely and productively at the same time.
• We must train and equip people to work safely.

Taking the Lead Role

Regional CEO Mr Tan Puay Hin takes the lead role in driving all WSH initiatives by taking a direct interest in all matters relating to safety and health within the company’s infrastructure. As Chairman of the company’s Safety Council...
that sets the safety and health direction and policies, Mr Tan’s primary focus is towards the entitlement for “all to go home safely to their families”. The Safety Council holds quarterly meetings with department heads who lead their respective department’s Safety Committees and union members, representing PSA employees and contractors.

With safety and health as a line function, financial commitment through Mr Tan Puay Hin ensures that adequate budget and resources are allocated for safe operations at the worksite. In 2011, significant investment was made to address work-at-height risks, one of PSA’s key safety challenges with working on the top of freight containers. A “top lock” safety harness mechanism was acquired, and worn by every worker engaged in such duties, as a fall protection measure.

Beyond that, as a demonstration of his personal commitment towards safety and health, Mr Tan devotes time to read all incident reports submitted via an e-system, and review investigation outcomes and actions that have arisen from all WSH inspections. Going further, he also personally acknowledges employees who have submitted good inspection reports and raises questions to guide and provide pointers for WSH improvements. Apart from spending time on the ground during regular

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**PSA’s WSH Leadership: Three Key Ingredients**

1. **Strong Leadership** – The CEO’s personal involvement in WSH has a significant impact on establishing accountability and leadership in the WSH culture across PSA. It also encourages active participation and ownership of the safety outcomes.

2. **Constant Monitoring and Feedback** – The senior management’s direct involvement in monitoring incidents and inspections together with providing feedback through management and consultation meetings has raised the profile and importance placed on WSH across the company.

3. **Financial Support** – A substantial portion of the company’s budget is allocated towards making WSH improvements.
“Senior Management Walkabouts”, Mr Tan also chairs monthly management meetings with safety as the first agenda item. These management meetings are proactive dialogues, where all Terminal and Engineering managers from various departments are required to discuss safety and health performance data and incidents, creating an active learning environment where issues can be discussed openly. This encourages frontline department personnel to take ownership of safety and health.

Engaging the Hearts and Minds of PSA’s Workforce

One key challenge is engaging the hearts and minds of all levels of management and workers including contractors, to encourage their active participation and commitment to all of PSA’s WSH initiatives. While the organisation has invested heavily in capital equipment and safety programmes, the major focus is instilling safety mindsets and behaviours among its workforce. PSA also aims for an integration of safety best practices across all five terminals in Singapore, which is a challenge not only for its managers and employees, but also for contractors and suppliers working at the terminals.

In responding to this challenge, PSA has focused on translating the ownership for safety and health performance to senior managers and line managers of the various terminals. All deputy Heads of Department have been given the role of “Chief of Safety”, with a responsibility to assist the terminal’s Head of Department in driving all proactive safety programmes. The HSSE department only provides “light touch” support mainly through technical safety and process information, hence encouraging full ownership by the various terminals for high standards of safety and health performance.

Measuring WSH Performance: Injuries Per Million Containers

To standardise WSH performance goals between PSA Singapore’s various terminals, a range of measurements are utilised based on the number of injuries per million containers handled. In 2005, the senior management set a target for less than 5
injuries per million containers handled. Instead 5.7 was achieved. However, in a journey of continuous improvement, safety performance has significantly improved, and 3.3 injuries per million containers handled was achieved in 2011. With effect from 2012, PSA’s WSH performance goal has been revised downwards to 3.3 injuries per million containers handled.

The strong leadership and commitment by Regional CEO, Mr Tan Puay Hin, and the management team, places PSA on a path of continuous improvement, developing a culture of WSH in the company, which positions all PSA terminals as the “gold standard” in WSH performance.

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**Productivity and Safety can go hand in hand**

Although production level (containers in millions) has continued to grow, a reduction in accident rates (number of accidents) have occurred.

**Injury Accidents Trend**

![Injury Accidents Trend Chart](chart.png)

- **Boxes handled (in millions):** 11.6, 12.5, 14.0, 15.2, 16.3, 18.4, 19.6, 17.2, 18.7, 19.9
- **Accident Rate (AR):** 5.2, 4.6, 5.8, 5.7, 4.8, 4.6, 4.2, 3.8, 3.9, 3.3

Case Study: ST Marine

ST Marine’s Focus on WSH Comes Straight from the Top

“It is important that the CEO and his management team ‘walk the talk’. They need to be seen on the ground, engaging in conversations with the staff about their commitment to WSH. Most of all, they need to lead by example.”

Mr Tan Pheng Hock
President and Chief Executive Officer
ST Engineering

“When the leaders and management team of a company view WSH as a priority, it inadvertently shapes the company’s culture towards embracing WSH as a way of life. This is the key, only when it is a way of life, it becomes the norm.”

Mr Ng Sing Chan
President
ST Marine

To ST Engineering’s President and CEO, Mr Tan Pheng Hock, and ST Marine’s President, Mr Ng Sing Chan, workplace safety and health (WSH) leadership is driving a “WSH culture of innovation and vision, and not one of compliance and reactive actions”. Emphasising that company leaders need to provide the right environment and right incentives, ST Engineering focuses on the needs of people by training and developing people as one of their primary engines of growth for WSH, supporting the workforce to emulate the right set of behaviours while working on site.
In addition, Mr Tan mandated all the Presidents of the sectors, including himself, to participate in behaviour-based safety training. In 2001, the programme started with the senior executives, managers, and then supervisors, workers, and finally the subcontractors. To him, the leadership team needs to clearly know their business and the types of risks that are faced by their workers. This cannot be done remotely through data analysis and briefings from others, but “getting out there and understanding what is going on in the workplaces”.

What Gets Measured Gets Managed
Mr Tan is also Chairman of ST Engineering’s Business Excellence Council, of which Environment, Health and Safety (EHS) is one component committee. The Group’s EHS Committee, headed by Mr Ng, consists of four sub-groups – Environment, Occupational Health, Workplace Safety and Systems Safety.

Benchmarking across ST Engineering

In 2011, the ST Engineering Group EHS Committee carried out quarterly benchmarking exercises in the following focus areas:

- Accident investigation methods
- Management of safety defaulters
- Control of transport vehicles
- Resources and risk assessment
- Movement of staff and accessibility in constrained work environment
- Handling of materials, manual handling and suspended loads
- Working at height involving work-stands, cranes and elevated structures
- Safety and health inspection methods, effectiveness of measurements such as key performance indicators and follow-up, as well as supervisory methods such as staff training and deployment

All Business Excellence component committees meet half yearly to set targets, review systems and practices and review the past year’s performance. Under this framework, a cross-sector safety assessment also enhances cross-learning and sharing of good practices among the various business units. At ST Marine, these learnings and good practices are shared at:

- Quarterly EHS steering committee meetings
- Monthly Yard and Contractor EHS committee meetings
- Daily Project and Production meetings with managers and workers where EHS is a standard agenda

To build a culture of safety ownership, each business unit of the ST Engineering Group has their own EHS work plan, which is reviewed and evaluated every quarter. This outlines the programmes and activities that are undertaken within the workplace.
Safety – The ST Marine Way
There are a number of initiatives in ST Marine that have been driven by its President, Mr Ng, to reduce injuries, including an “open reporting” process that encourages all levels of the workforce to report unsafe acts. This process empowers them to stop work if they foresee potential accidents.

Systems Safety – A Holistic Approach
ST Marine also utilises “systems safety” as a holistic approach to integrating EHS into all their key business activities such as shipbuilding to integrate good systems safety at each stage of the work process – design, development, manufacturing, upgrading, engineering services, integration, maintenance, servicing, repairs, overhaul and support of products and services. The company has worked with design and engineering consultants to develop new methods of ship construction. These new methods include modular construction processes where majority of the components are welded and fabricated as well as sophisticated pipe welding that can be done within a controlled work environment at the workshops.

ST Marine’s Strategic Thrusts
Thrust 1: Internalised Safety Culture and Develop Shared Ownership (Mind)
Thrust 2: Enhance Competencies (Body)
Thrust 3: Increase Connectivity (Soul)
Developing the Workforce in Safety and Health

The company has its own WSH induction programme apart from the Shipyard Safety Instruction course, which is mandatory for all new workers. Besides the compulsory General Trade module, workers who are assigned hot work and painting tasks are required to attend additional modules for these tasks. Moreover, ST Marine believes in providing a healthy and safe working environment. The company provides annual health screenings, medical surveillance, audiometric testing, as well as physical capability assessment by the company doctor to ensure that all workers are fit to undertake their assigned duties. ST Marine has also recently implemented an initiative on fatigue management at the workplace. This specifically monitors and manages the overtime hours spent on site and encourages a broader approach towards work-life balance. WSH component has also been integrated into ST Marine’s hiring process, whereby physical capability assessment is done by the in-house doctor. Finally, ST Marine has a range of awards given to workers and subcontractors as an encouragement and recognition for their good performance in WSH initiatives.

Overcoming Challenges of a Large Foreign Workforce

It is a known fact that the maritime industry workforce is supported by a large number of foreign workers from different countries. To tackle issues such as language barriers and cultural differences, foreign workers undergo progressive training and are eventually promoted to leaders within multi-cultural groups. ST Marine has found this to be rather effective in providing mentorship and support too.

EHS Excellence Drives Business Excellence

Together, the collective efforts of ST Marine’s leaders and the initiatives on the ground have made a significant impact towards reducing the number of injuries and their associated costs over the years. There has been marked improvement in productivity and quality due to the more reliable and consistent manufacturing methods that have been borne out of the organisation’s commitment to maintain high levels of safety and integrity within its work environment.
Case Study: Tiong Seng Holdings

Taking WSH to Another Level

“Safety begins with good planning, increasing productivity along the way through every continual WSH effort and mindset.”

Mr Pek Lian Guan
Executive Director and Chief Executive Officer
Tiong Seng Holdings Limited

The primary reason for Tiong Seng’s business leaders to drive workplace safety and health (WSH) initiatives is to ensure that every worker, including contractors and subcontractors, is able to work safely and productively at their workplaces. WSH is important to Tiong Seng’s core businesses, and the overall focus of the senior management is demonstrated through a company culture that does not compromise on the pursuit of WSH excellence, while increasing productivity in parallel.

Since 2006, Tiong Seng Executive Director and CEO Mr Pek Lian Guan has chaired monthly Project Management Forums, where WSH is a key item on the agenda. At this platform, project managers, who are responsible for ensuring and monitoring safety at individual worksites, engage in a vibrant discussion and sharing of good practices and lessons learnt with their fellow colleagues. Environment, Health and Safety (EHS) Officers also attend the monthly forums, where WSH improvements are recognised, and challenges identified are reviewed.

Making Time for Safety

One of the key challenges faced by the Board and CEO of Tiong Seng is finding time within their busy schedules to visit every single worksite on a regular basis to ensure that all employees are working in a safe and healthy environment. However, these on-the-ground missions are important to them because they allow senior management to connect with workers on WSH issues, recognising the leadership role they provide and being role models. To the leadership team, the solution
was to strike a balance between their busy assignments as they negotiate new projects and contracts, and make it a point to be physically present at the various worksites.

**Tiong Seng’s WSH Journey: Three Key Stages**

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<th>Stage 1: Zero Possible</th>
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<td>Stage 2: Zero Attainable</td>
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<td>Stage 3: Zero Sustainable</td>
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“In Tiong Seng’s WSH journey, we believe that zero accidents is possible, we collaborate to attain zero accidents throughout all our workplaces and last but not least, we are committed to sustain zero accidents in our WSH commitment pledge and we are proud to shout SAFETY LIVES IN TIONG SENG, ALWAYS!”

**Using Innovation**

The overall leadership and direction of Tiong Seng’s Board and CEO in the area of safety, is the focus on innovation to improve safety performance without compromising on efficiency and productivity at the workplace. In other words, safety has not been a cost but an investment to their core business. Over the years, Tiong Seng has been a first-mover by focusing on building methods and technologies which improve safety performance, and also productivity and core efficiencies.

The major initiative that was driven in 2011 related to the development and implementation of a new construction method – the use of pre-fabricated systems featuring creative solutions such as the modular design for high-rise concrete structures. This meant that much of the building and construction formwork elements could be formed on the ground and lifted into position using a crane, minimising the requirement to work-at-height. This took safety and efficiency of their construction methods to a new level, something that was observed in their NUS Kent Vale Staff Housing Project.

A range of other innovative construction methods developed in conjunction with their clients include impact resistant nets around maintenance walkway at facade, modular safe work platform systems for balcony railing installations, and ST100 birdcage work

**NUS Kent Vale Staff Housing Project: Safety and efficiency were taken to a new level in the use of innovative construction methods – Pre-fabricated Systems**

*Source: Tiong Seng Holdings Limited*
platforms for sky terrace garden soffit works such as mono-rail tracks installation, etc. These have all been made possible by the Board and CEO who are committed towards investing in and developing major changes to construction methods for their high-rise commercial and residential properties. In recognition for implementing these innovative risk control solutions that were effective in eliminating hazards, Tiong Seng won the WSH Practices Award 2011 and WSH Innovation Award 2012 for its NUS Kent Vale project. Tiong Seng is also one of the first construction companies to be conferred the UK’s Royal Society for the Prevention of Accidents (RoSPA) Gold Award for excellence in managing health and safety issues since 2007.

**Sustainability of Safety in the Workplace**
The key to the sustainability of safety in the workplace is through an investment in meticulous planning before any work is commenced. Safety considerations are integrated in Tiong Seng’s business operations, including the engagement of talented engineers to work with architects, in developing new and innovative construction methods. A recent programme, *Charge Hands Grooming*, has been introduced to train talented foreign workers to take up leadership roles (*charge hands*), and eventually build up their potential to become assistant supervisors. The role of the *charge hands* has been to focus and manage safety on a day-to-day basis directly with a small group of workers. A range of training courses are provided, including language skills and safety knowledge and processes. This transition to *charge hands* involves developing them in leadership, communication and organisational skills, together with specific skills relevant to their trade.

Adopting these initiatives such as the monthly Project WSH Performance Review by top management and sound WSH management systems, has allowed Tiong Seng to deal with WSH issues effectively. They have achieved 2.5 million man-hours without reportable injuries at the NUS Kent Vale Site since the start of their Project, and WSH performance as a company has benefitted. Since 2009, Tiong Seng has achieved its lowest Accident Frequency Rate as of June 2012.

![Tiong Seng’s Accident Frequency Rate (AFR)](image)