

Assessing Materiality

In assessing materiality the Group looks at both the financial and non-financial impact which we are prepared to absorb to meet corporate objectives. In the materiality assessment, we also take into account the significance of

such impact on the various key internal and external stakeholders comprising: shareholders and investors; customers; regulators and governments; employees and other workers; and suppliers. See the table below.

IMPACT CONSIDERATION

STAKEHOLDER	FINANCIAL	QUALITY, HEALTH & SAFETY	COMPLIANCE	REPUTATION
Shareholders & Investors	○			○
Customers		○		○
Regulators & Governments			○	○
Employees & Other Workers		○		○
Suppliers	○			○

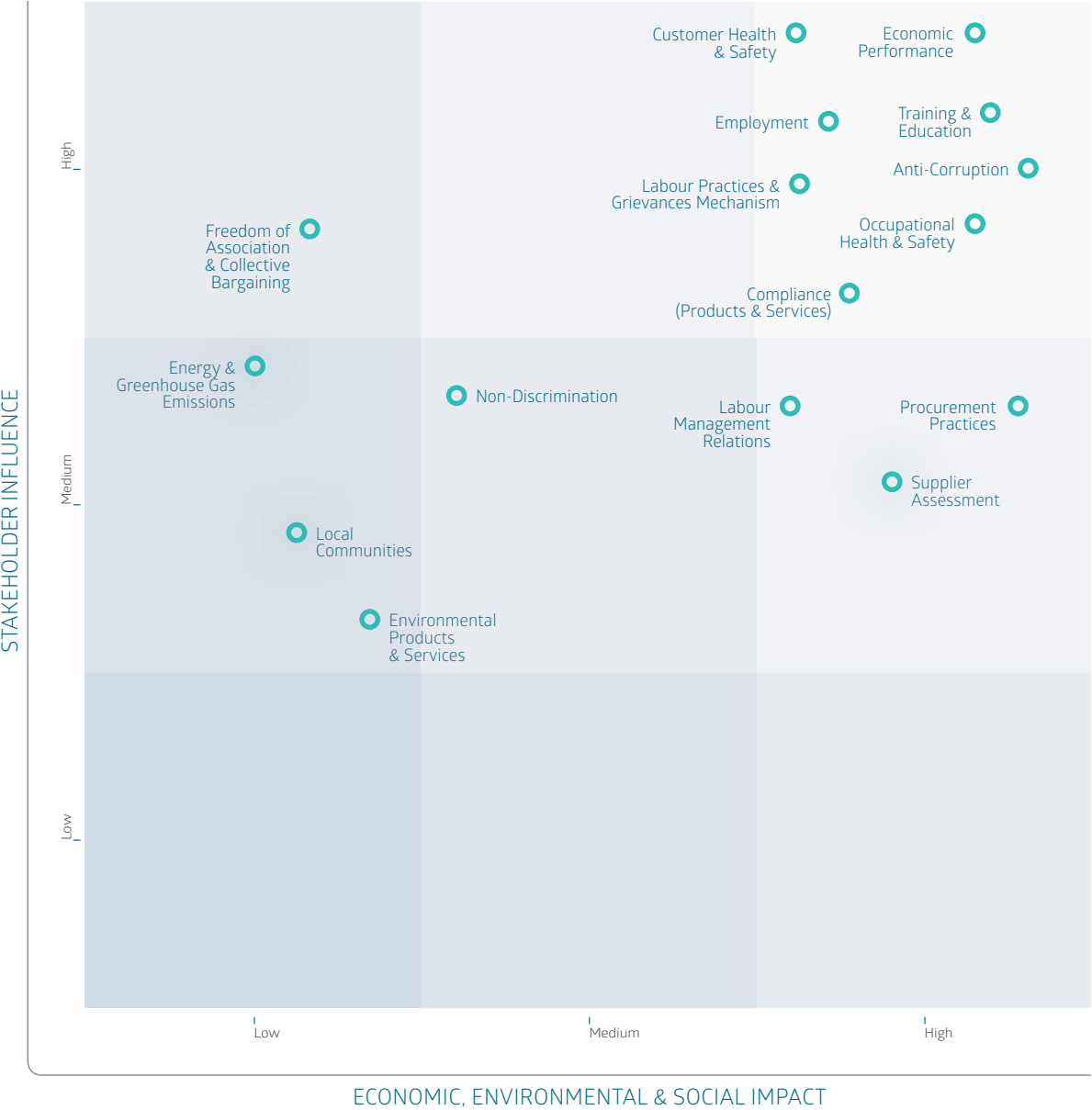
In 2013, the Group conducted a materiality assessment of aspects in the Global Reporting Initiative (GRI) G4 guidelines led by the Risk Management department. Responsibilities for management and reporting were assigned for each material aspect. The material aspects were mapped onto the key business risks of the Group to ensure completeness and a clear understanding of areas of risks each material aspect posed.

In 2015, the key business risks and material aspects were reviewed and revised where relevant.

The inherent risks identified and discussed on pages 65 to 70 determine the level of influence each key stakeholder group has on the material aspects.

The Group is satisfied that the ERM framework is sufficiently robust in capturing financial and non-financial impact arising from sustainability issues. Notwithstanding, ST Engineering recognises that there is room for improvement in strengthening our capacity and practices in the sustainability journey.

INFLUENCE AND ASSESSMENT IMPACT OF MATERIAL ASPECTS



Sustainability Performance

Targets and Priorities

	2014 PERFORMANCE	WHAT WE SAID WE WOULD DO IN 2015	WHAT WE DID IN 2015	WHAT WE WILL DO IN 2016
PROPELLING SUSTAINABLE GROWTH				
Sustainability Governance	Commenced alignment of environmental management approach of US operations	Start to include US operations in sustainability report progressively from 2015	Reported qualitatively on US sustainability efforts	To report targets and performance of the US sustainability efforts
Innovation	Met target spending on R&D	Meet target spending on R&D	Met target spending on R&D	Review the existing R&D model with the aim of renewing and refreshing our approach where necessary
People Excellence	Reviewed annual Team Excellence Competition assessment criteria	Review questions for Employee Opinion Survey 2015	Conducted the Employee Opinion Survey 2015 with updated questions	Implement action plans to address issues raised in the Employee Opinion Survey 2015
	Organised Team Excellence Convention 2014 based on enhanced assessment criteria	Organise Team Excellence Convention 2015 Organise Business Excellence Seminar 2015	Organised Team Excellence Convention 2015 Organised Business Excellence Seminar 2015	Organise the Team Excellence Convention 2016
EXECUTING OPERATIONS RESPONSIBLY				
Environment	Implemented energy management system in line with ISO 50001	Continue journey to reduce GHG intensity by 16% on a business as usual basis for Singapore operations by 2025 with 2010 as the base year	Implemented various initiatives to reduce GHG emission	Installation of Solar PV system
	Participated in the Carbon Disclosure Project (CDP) report for first time	Achieve ISO 50001 certification for all Singapore operations	All Singapore operations achieved ISO 50001 certification	Validation of GHG via ISO 14064 Certification
	Tracked water consumption	Measure water efficiency for Singapore operations	All significant business entities in Singapore developed and submitted their respective Water Efficiency Management Plans to local regulators	Implement ISO 14001:2015
	No significant fines or sanctions for non-compliance with environmental laws and regulations	No significant fines or sanctions for non-compliance with environmental laws and regulations	No significant fines or sanctions for non-compliance with environmental laws and regulations	Benchmark Pollution Control and Waste Management practices Continue journey to reduce GHG intensity by 16% on a business as usual basis for Singapore operations by 2025 with 2010 as the base year

	2014 PERFORMANCE	WHAT WE SAID WE WOULD DO IN 2015	WHAT WE DID IN 2015	WHAT WE WILL DO IN 2016
Health & Safety	<p>Improved noise conservation programme for employees identified to be at risk for Early Noise Induced Deafness (E-NID)</p> <p>No significant fines or sanctions for non-compliance with safety laws and regulations</p> <p>Achieved accident frequency rate (AFR) and accident severity rate (ASR) below national benchmarks</p>	<p>Strengthen safety culture and improve health and safety performance through continuous review of programmes</p> <p>No significant fines or sanctions for non-compliance with safety laws and regulations</p> <p>To strive towards zero injury while aiming for AFR and ASR below national benchmarks</p>	<p>Reviewed and improved upon crane safety procedures, as well as those relating to from heights, and preventing slips, trips and falls.</p> <p>Reviewed and updated practices relating to Ergonomics, back injury, and the prevention of musculoskeletal disorders.</p> <p>No significant fines or sanctions for non-compliance with safety laws and regulations</p> <p>AFR and ASR were below national benchmarks</p>	<p>Review existing practices against Total WSH Guidelines and identify areas for improvement</p> <p>Organise campaigns and activities to promote health and safety</p> <p>Benchmark best practices through cross audits</p> <p>Improve on both the AFR and ASR</p>
Sustainable Procurement	<p>Engaged a consultant to help develop a Group-wide sustainable procurement strategy</p>	<p>Develop ST Engineering Sustainable Procurement Policy and Code of Conduct for Suppliers</p>	<p>Established the statement of commitment to sustainable procurement, and reported on the subject</p>	<p>Develop a work plan to implement sustainable procurement</p>

SUPPORTING COMMUNITIES

Community	<p>Adopted London Benchmarking Group (LBG) guidelines</p> <p>Extended strategic community development partnership that leverages ST Engineering's unique expertise</p>	<p>Improve reporting based on LBG guidelines</p> <p>Continue community initiatives, including strategic and long-term partnerships</p>	<p>Continued reporting based on LBG guidelines, but with more focus on community benefits and their impacts</p> <p>Focused community efforts to benefit the persons with disabilities</p>	<p>Develop other strategic areas that would leverage ST Engineering's unique expertise</p>
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Sustainability Performance

FY2015 Initiatives & Performance



INNOVATION & PRODUCTIVITY

ST Engineering's strong capabilities in engineering allow us to translate our research into industry applications, generating new products and services.

Our efforts to nurture an innovative spirit continue. In 2015, the Technology, Intellectual Property and Innovation Committee organised the ThinkerSparks and InnoChamps Competitions as well as the Intellectual Property Workshop. The latter is organised every other year to promote innovation and awareness of intellectual property in ST Engineering. About 1,000 employees including senior and middle management and technical employees from various business areas and units attended the workshop. The theme of the workshop was 'Enhancing Business Competitiveness'.

We met our target spending in R&D. Additionally, more than 75% of employees were involved in contributing towards productivity initiatives during the year. Below are some examples.

Technology to improve everyday lives – ST Engineering-NTU Corporate Lab

With the rising trend in robotics and autonomous systems, the vision for

ST Engineering is to develop the next generation of robotics and autonomous systems that can be applied to various areas such as airport gateways, logistics, healthcare, urban development, transportation, environmental conservation, defence and homeland security. These will be solutions that improve and impact everyday life.

During the year, the Group started a joint laboratory with Nanyang Technological University of Singapore (NTU) to spearhead research and development in advanced robotics and autonomous systems that will improve airport operations and disaster rescue efforts. The two main research areas of the ST Engineering-NTU Corporate Lab will be in airport precision and airside technology and in enhancing intelligence support for crisis management.

The purpose of this Corporate Lab is to tap NTU's nascent technologies, develop proprietary intellectual property rights and translate these technologies to higher Technology Readiness Level 6 through joint research. The business sectors will actively participate in research projects that are aligned to their core businesses,

with Aerospace sector focusing on Unmanned Aerial Vehicle technologies, Land Systems sector on Unmanned Ground Vehicle technologies, Advanced Engineering Centre on Multi-robot Collaborative and Scene Understanding technologies, and Electronics sector on Unmanned Surface Vehicles, Autonomous Underwater Vehicles and C2 technologies. The outcome of any successfully applied research will be channelled to the respective sectors for application in their projects and solutions.

Power on the go – JerryE

Inspired by the jerry can, ST Engineering designed and developed the JerryE, a high capacity portable energy storage system based on lithium battery technology. Its metal-nylon construction is tough and durable, designed to withstand high impact. The JerryE comes with an IP67 rating, making it suitable for all-weather operation. Its 2000 Watt-hour capacity can be rapidly charged in 30 minutes. While in operation, the JerryE is silent and fume-free, making it a safe and tactical alternative to diesel generators. It can be configured as a portable off-grid energy system for sustained electrical loads to power critical systems (medical equipment, refrigeration equipment), command posts (computers, servers, projectors) and communications and sensor grids (nodes, networks, satellite uplinks).



Collaborative teaming of UGV and UAV as part of Crisis Response Intelligence Support Programme (CRISP) initiative led by ST Engineering-NTU Corporate Laboratory.

THE AIR+ SMART MASK



The Air+ Smart Mask is designed with a unique vent valve and attachable micro ventilator to improve breathing comfort, and fits a wider range of face sizes.

The AIR+ Smart Mask is an example of how the Group invented the next generation of respirators through the application of innovation and engineering expertise. The AIR+ Smart Mask, comprising a new protective mask (the Smart Mask) and the world's first attachable micro ventilator (the AIR+), better protects mask wearers against airborne contaminants while creating an enhanced level of comfort during use. Certified to meet both the EN 149:2001+A1:2009 (European) and the N95 NIOSH-approved (American) standards, the AIR+ Smart Mask was the result of more than a year's R&D and trial testing by ST Engineering Advanced Engineering Centre and Innosparks (a subsidiary of the Group).

The AIR+ Smart Mask features three new innovations – three sizes in small, medium and large designed to fit the typical Asian face profile; a built-in valve to improve the ease and speed in which exhaled air vents from the mask; and an attachable, lightweight and rechargeable micro ventilator that eliminates the unpleasant build-up of heat, moisture and carbon dioxide inside a conventional mask after prolonged use. The micro ventilator (the AIR+) when used with the Smart Mask, is able to reduce relative humidity inside the mask by up to 40% and reduce temperature by up to 4°C.

The AIR+ Smart Mask provides better seal protection for all ages including children and the elderly, and is recommended for frontline workers who have to wear masks for prolonged periods in exposed areas in the healthcare, construction, and mining industries.

AIR+ Smart Mask was named Design of the Year in 2015 President's Design Award Singapore

"AIR+ Smart Mask is truly an innovation brought to life through advanced engineering ingenuity and intuitive industrial design. The task was simple: to challenge the status quo by engineering a protective mask that delivers protection without compromising comfort. Users can choose from three mask sizes, as well as two types of detachable ventilators to suit individual requirements."

– Jury Citation, President's Design Award Singapore 2015

It is easy to transport, store and set up, requires little to no training to use, and eliminates the labour and training required to maintain a diesel generator fleet.

MD500 – the new Infinidrive transmission engine

Amphibious assault vehicles require flexibility in terms of switching between land and sea modes as well as a blended operation of both. Besides having to overcome weight and space constraints, there is also a need to preserve high operational reliability. Kinetics Drive Solutions (KDS), a company in the Land System sector, was able to innovate and adapt its existing Infinidrive transmission engine HMX3000 to come up with a new marine drive transmission engine, the MD500. This highly advanced solution provides an efficient and high power dense package which results in a more powerful vehicle with improved mobility, without compromising the unique amphibious operational needs of amphibious vehicles in the marketplace.

Lightweight Aircraft Seat – saving energy and costs

ST Aerospace has embarked on the development of economy class seats for commercial aircraft that are more comfortable and elegant but lighter. Lightweight seats help airlines save on fuel costs, while comfort and elegance help provide a competitive edge in the airlines' marketing. The seat is designed to be of modular construction, allowing for cost-effective customisation and differentiation.

About one-third of the weight of a seat comes from its frame, which provides support and rigidity. Through intelligent load path design, coupled with finite element modelling simulations and measured results from various actual tests, ST Aerospace has achieved the most optimum frame design. Making up the other two-thirds of the weight are modules that comprise seat back,

Sustainability Performance

seat pan, upholstery, covers and supports. ST Aerospace incorporates advanced plastics, specially rated suspension systems, advanced foams and a patent-pending design that interfaces seat back and seat pan to achieve ergonomic lumbar support. Together with the uniquely shaped headrest providing improved neck support, and modern amenities like in-seat power supply and personal electronic device holder packed within, this new range of seats offers digital-age travellers with superb overall comfort while minimising seat weight.

Littoral Mission Vessel (LMV)

ST Marine launched its first Littoral Mission Vessel (LMV), *LMV Independence*, built for the Republic of Singapore Navy on 3 July 2015. Incorporating innovative operating concepts and design, complemented by a high level of automation, the LMVs can operate with a leaner crew size. They are versatile and can be quickly configured with mission modules to meet specific operational needs.

Smarter, faster and with sharper capabilities, the LMV comes with many innovative features. These include having an integrated and centralised operations centre – comprising the

Bridge, Combat Information Centre and Machinery Control Room – that boosts effectiveness and efficiency, especially for maritime security operations. The ship is capable of speeds in excess of 27 knots, and can support a medium-lift helicopter and rigid hull inflatable boats allowing for rapid response to maritime security incidents. It also comes with greater endurance and the ability to stay at sea for longer periods of time. Equipped with lethal and non-lethal options to deliver calibrated responses, the LMV can deter and defend against a wide range of threats. Advanced radars and sensors and a 360-degree bridge provide an all-round visual awareness of surroundings in congested waters.

Improving manufacturing turnaround time

In investment casting, the manufacturing turnaround time could be as long as 16 weeks. ST Aerospace has successfully implemented 3D printing of wax patterns, a prerequisite process for making the shell mould and thus cutting manufacturing turnaround time by 50%. In addition, ST Aerospace invented a new VAC LOC system which innovatively enables a 3D printer to 'print beyond' its print build size. VAC LOC is an enabler for

hybrid manufacturing where 3D printing technology is integrated with the conventional manufacturing method. This innovative process gives ST Aerospace competitive gains through factory space optimisation, improved material utilisation and improved turnaround time for manufacturing the wax pattern.

ST Aerospace also invented a 'water-bath' post processing for the removal of support material in 3D printouts. This new process is eco-friendly as it replaces chemicals with water. The project has been well received by many major aerospace companies, and it has enabled ST Aerospace to penetrate into a new market of supplying high value casting.

Automated testing to enhance productivity

Project M is a turnkey manufacturing project which required the production team to deliver three types of Radio Frequency (RF) modules in various quantities to the customer. The time required to set up the tester was substantial due to the large volume of modules and because only 50% to 60% of the test processes were automated.

The production team acquired new test equipment, re-designed the set-up of the RF modules and Highly Accelerated Stress & Screening testers, and modified the test programme to improve the capability of the testers to function automatically. These initiatives enabled testing to be performed with minimal intervention from the engineers.

The improvements resulted in a 20% manpower reduction in the project. Production throughput also increased, allowing the organisation to take on bigger production contracts.



ST Marine launches Littoral Mission Vessel built for the Republic of Singapore Navy.



PEOPLE EXCELLENCE

During the year, our People Excellence and Learning Organisation (PELO) committee successfully organised the Business Excellence Seminar which was attended by 945 employees in Singapore from the junior management level and up. The theme for the year was 'Embracing Challenges to Achieve Excellence'. At the seminar, awards for Ideas and Innovation, Team Excellence and Environment, Occupational and Workplace Safety were presented and the winners recognised. Our President & CEO, Deputy CEOs and the Chairmen of the respective Business Excellence Committees engaged the participants in the lively 'Conversation with Our Leaders' segment.

In celebration of Singapore's 50th birthday in 2015, we took the opportunity to thank our pioneers who have played a key role in bringing

the Group to where it is today. A total of 162 pioneer employees, all with at least 40 years of service, were invited to an appreciation lunch cum certificate award ceremony. At the Business Excellence Seminar where they were invited to attend, they received special mention in our President & CEO's opening speech, and a standing ovation by all participants.

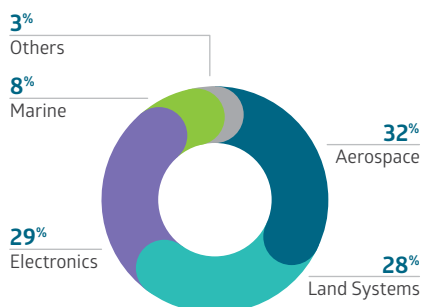
During the year the PELO committee organised the Team Excellence Convention to promote people engagement, team excellence and continuous improvements at the workplace. The convention also recognises high performing teams within the Group who demonstrate team excellence through creativity, use of technology, innovation, concepts and continuous improvement tools to enhance their process, product, services and work environment.

The Convention promotes employee recognition and motivates staff to create, innovate and embrace quality and excellence. The 2015 convention was held on 20 November 2015 with 14 participating teams. The teams were assessed by a panel of external judges against a set of assessment criteria set by Singapore Productivity Association for Star, Gold, Silver and Bronze awards.

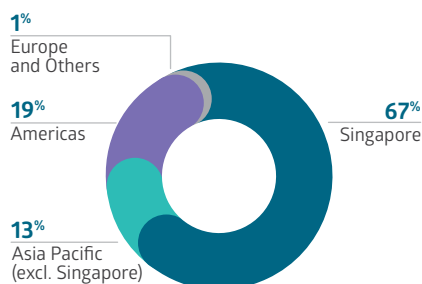
The business sectors carried out the Employee Opinion Survey in December 2015 to obtain feedback on organisational style, systems and policies, climate, and effectiveness. The last survey was conducted 2013. Since then, the survey questions have been reviewed and streamlined to provide greater clarity. The results of the 2015 survey will be analysed and necessary action will be taken to address areas requiring improvement.

GLOBAL EMPLOYEE PROFILE (2015) TOTAL: 22,363

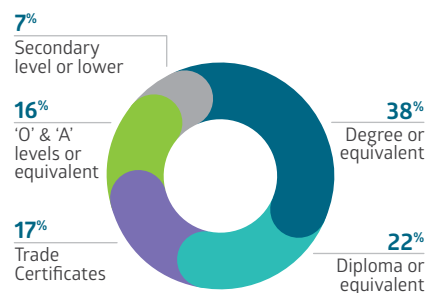
By Sector



By Geography



By Qualifications



Sustainability Performance

WORKFORCE PROFILE FOR SINGAPORE OPERATIONS (2015) TOTAL: 17,379

Employees



Supervised Workers*



Employee Turnover Rate

8.1%

Average training hours per employee

38.6

* Supervised workers refer to foreign workers we hire through local contractors. They are on short-term contracts, work in our facilities and are supervised by ST Engineering.

Total workforce refers to employees and supervised workers

Promoting Work-Life Harmony

A formal framework for flexible work arrangements has been introduced.

Nurturing a Talent Pool

During the year we awarded 19 scholarships to outstanding students who have demonstrated leadership qualities, and selected 24 students for the Young Engineers Programme. We also offered internships to 416 tertiary students to provide exposure to various business and career opportunities.

Grooming Our Leaders

ST Engineering engages consultants to facilitate leadership competency assessments. 12 senior employees were selected for the Senior Leadership Development Programme and Executive Education Programmes.

Diversity and Inclusion

There were no reported incidences of discrimination by employees in 2015, and there were 590 employees aged 62 and above. ST Engineering also had 22 interns from China and eight from India in 2015.

Career Development

During the year, 50 employees received sponsorships for undergraduate and graduate studies, including the Master of Defence Technology and Systems Programme.

Rewarding Our People

In 2015, the Group gave out awards to recognise deserving employees. To inculcate a culture of innovation, teamwork and safety, Innovation, Team Excellence, and EHS (Environment, Health & Safety) awards are given out to employees during the annual ST Engineering Business Excellence Seminar.

To promote work-life harmony as well as improve camaraderie among our employees, we organised a comprehensive range of social and recreational activities throughout the year. Events included social activities such as paintball and karaoke as well as sporting activities such as bowling, football and badminton. Some of these events were also open to employees' families so as to build a more close-knit organisation.

Union Relations

In 2015, 31% of our employees were covered under collective bargaining agreements. We achieved zero stoppage of work arising from any industrial action to date.



HEALTH AND SAFETY

Product Quality and Safety

ST Engineering achieved full compliance with product quality and safety requirements in 2015.

We continued to participate actively in the annual International System Safety Conference to learn and share processes, methods and techniques in Systems Safety. In 2015, a paper we submitted was selected for presentation at the conference. In addition, each business sector also presented at the internal Annual System Safety Seminar, held in September 2015.

We aim to better our practices and learn from experts in the field. This was the second year that ST Engineering engineers attended the Safety Critical Systems Development course conducted by the Head of the School of Computing Science, University of Glasgow.

We carried out a benchmarking exercise on safety critical items across the four business sectors. In addition, we undertook a study of industries in developed countries to understand how organisations manage safety-critical items, with the aim of adopting best practices.

Occupational Health and Safety

In 2015, our occupational health programmes focused on management of noise induced deafness (NID), occupational health and training programmes, as well as sharing of best practices in Workplace Safety and Health (WSH). A new NID management checklist was introduced to standardise the follow-up actions for handling NID cases. The Occupational Health Sub-Committee recommended adopting the Guide to Total WSH published by the WSH Council. The guide will be used as a reference and benchmark for our existing programme.

Besides ergonomics and training programmes, the sub-committee studied the return to work programme and concluded the programme would be effective in shortening the time away from work and allay employees' concerns over their ability to work after work related injury.

In January 2015, the annual ST Engineering EHS Excellence Awards were given for the following:

- (1) a customised hydraulic turntable which, when used during inspections in the Aerospace sector, reduces Musculoskeletal Disorder. This improves working conditions and increases efficiency and productivity;
- (2) ST Marine's enhanced method of changing the Voith Schneider Propeller blades on ships, which not only reduces the number of processes and workers involved, but also eliminates the need for hot works, enhances transportation, and reduces the incidence of heavy manual lifting which may cause work injuries.

In September 2015, employees from all the sectors participated in the Business Excellence EHS forum, a platform for sharing EHS initiatives. The topics shared included Energy Efficiency Project Funding, Total Workplace Safety and Health and Managing Excessive Noise at Workplaces.

In 2015, the WSH teams also won various WSH awards in both industry and national conventions.

NO.	COMPANY	AWARD TYPE	NO. OF AWARDS
1	ST Aerospace	WSH Innovation Awards (Manufacturing)	1 Gold 1 Silver
		WSH Innovation Award (National)	1
2	ST Electronics	SHARP Award [^]	6

[^] The Safety and Health Award for Projects (SHARP) is an annual award presented by the Workplace Health and Safety Council in collaboration with the Ministry of Manpower to give recognition to companies or organisations that have performed well in safety and health through implementation of sound safety and health management systems.

Sustainability Performance

Accident Frequency Rate (AFR) and Accident Severity Rate (ASR) figures across sectors remained below national industry averages. Nevertheless, ST Marine continued to face some challenges in the area of Behaviour Based Safety, with two cases incurring high number of

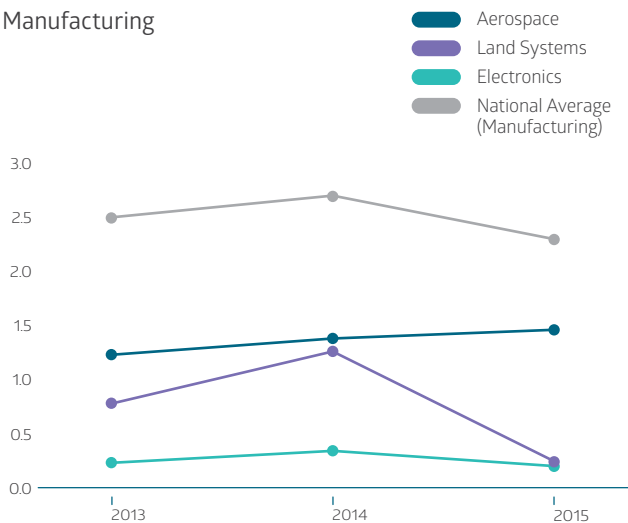
medical leave days. A mass review session was convened to address these areas and to look into ways to improve the safety record.

In ST Aerospace, the inclusion of new business units and the higher numbers

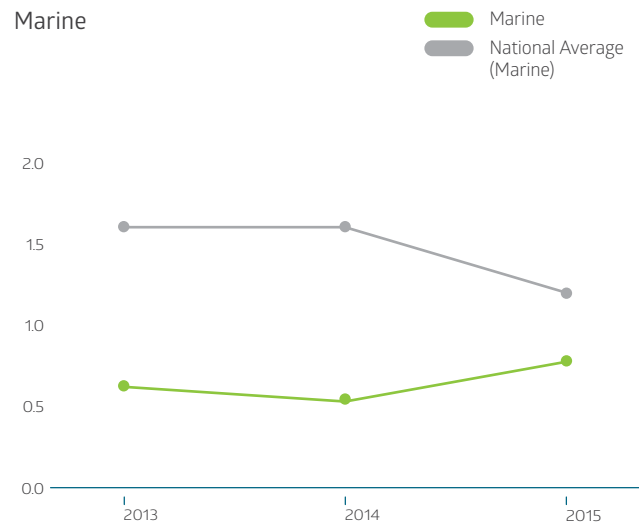
of medical certificates incurred from 'slips/trips/falls' were contributing factors to the higher AFR. A task force was formed to look into lowering the number of 'slips/trips/falls', for example through a better work-stand/ platform design.

ACCIDENT FREQUENCY RATE (NUMBER OF INCIDENTS PER MILLION MAN HOURS)

Manufacturing

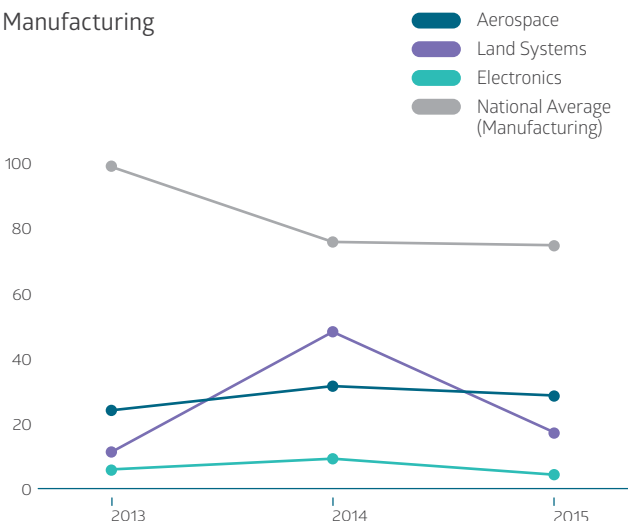


Marine

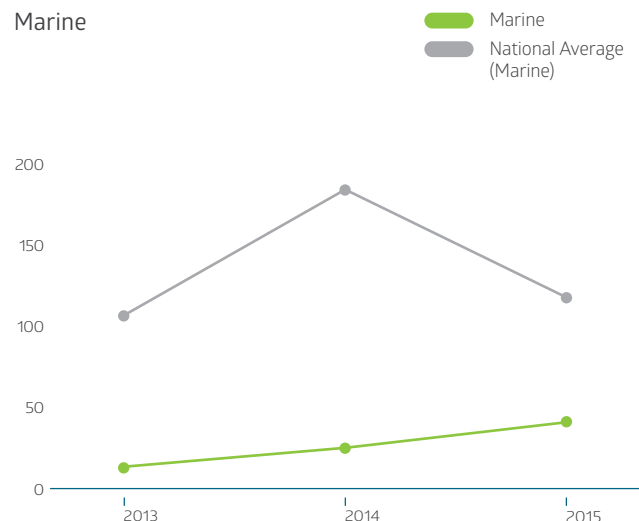


ACCIDENT SEVERITY RATE (NUMBER OF INCIDENTS PER MILLION MAN HOURS)

Manufacturing



Marine



OTHER OCCUPATIONAL HEALTH & SAFETY PERFORMANCE INDICATORS (2015)

	AEROSPACE	ELECTRONICS	LAND SYSTEMS	MARINE
No. of Occupational Health Activities Organised (target >4)	24	11	24	21
Audiometric Examination (Percentage of at-risk staff who attended)	100%	100%	100%	100%
Respiratory Protection Training (Percentage of at-risk staff who attended)	100%	100%	100%	100%
Number of Occupational Disease Cases (excluding NID Cases)	1	0	0	0
Number of Advanced Noise Induced Deafness ('NID') Cases	0	1	0	0

100% of employees identified to be at risk of hearing and respiratory occupational hazards attended audio metric examination and respiratory protection training respectively.



ENVIRONMENT

Climate Change & Energy

Climate change is a global issue that will require new and innovative technologies to mitigate its effects. ST Engineering acknowledges the role we play in international efforts to mitigate and adapt to the effects of climate change by developing low-carbon and clean energy technologies as well as the business risks and opportunities arising from climate change.

The Energy Sub-Committee, the Technology, Intellectual Property and Innovation Committee and the Business Foresight Committee keep abreast of climate change trends and issues and review the impacts and opportunities that arise.

Some of the trends and corresponding risk impacts reviewed by these committees included:

1. Countries and customers' requirements on emissions reporting prior to conduct of business;

2. Increasing fiscal measures such as additional taxes on fuel and energy, as well as changes in product efficiency regulations and standards imposed by countries as they seek to manage the impact of climate change;
3. Unpredictable weather such as heavy rain or heavy snowfall causing increasing incidents of disruption to businesses and the supply chain.

The workplan of the Energy Sub-Committee is adjusted annually to take into account actions that must be taken in response to the trends and issues. These actions included adopting ISO 14064 to monitor and report the level of greenhouse gas (GHG) emissions, as well as third party verification; implementing the ISO 50001 energy management system as a structured approach to manage operational energy efficiency and identify opportunities for better energy performance; building up the necessary technical capability and competency to respond to different

market needs and requirements in terms of green product design and manufacturing standards and regulations.

ISO 50001 EnMS (Energy Management System) is an ISO management system published and launched worldwide in 2011, with the aim of focusing on energy planning to attain efficient use of energy. By adhering to this ISO standard, ST Engineering will be able to improve overall energy performance, reduce energy costs and GHG emissions. The operating entities in Singapore achieved ISO 50001 certification in 2015.

In the same year, a subsidiary of ST Kinetics, Singapore Test Services (STS), signed a MOU with the Centre for Energy Research and Technology (CERT) of the Faculty of Engineering, National University of Singapore, and the Singapore Institute of Power and Gas (SIPG), to jointly collaborate in creating platforms and training opportunities for integrating Energy Storage Systems (ESS) with Singapore's power grid. The MOU underscores

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STS' interest in working with partners in the local energy industry to achieve Singapore's long-term plan to integrate renewable energy sources, such as solar energy, into the nation's electricity grid.

Other business opportunities, new products and services arising from the climate change trends are set out in the Innovation and Productivity Section on pages 76 to 78.

In 2015, our investments in innovation resulted in energy reductions from our products and services, with an estimated savings of 4,030 terajoules.

The Group is constantly exploring ways to improve energy efficiency in order to achieve our target of a 16%

reduction in GHG emissions intensity by 2025 (using 2010 as a base year). Several initiatives were evaluated, including alternative clean energy sources such as solar energy. We will explore the installation of solar panels at various locations around Singapore with the aim of supplementing existing energy sources with clean solar energy starting 2016.

Another simple but impactful energy efficiency initiative this year was the use of pizza tray LED lights to replace the High-Intensity Discharge (HID) high-bay lighting system in one of ST Aerospace's workshops. The HID lights were less durable, which translated to frequent maintenance and replacement. By reducing recurring maintenance and lamp replacements,

productivity is improved and the risk of accidents, due to 'fall from height' and 'struck by falling objects' is decreased. Energy consumption and carbon footprint is also reduced. These factors contributed to lower overall operating and maintenance cost.

While the amount of energy consumed is heavily dependant on the product mix delivered during the year, GHG intensity reduced 17% in 2015 compared to 2014. This is 18% decrease compared to the base year 2010.

Environmental Protection

In 2015, there were no significant fines or incidents relating to non-compliance with environmental laws and regulations.

STAGE OF DEVELOPMENT	NUMBER OF PROJECTS TO REDUCE INTERNAL ENERGY CONSUMPTION	TOTAL ESTIMATED ANNUAL CO ₂ SAVINGS
To be implemented	2	135
Implementation commenced	11	3,226
Implemented	4	411

ENERGY CONSUMPTION

	2013	2014	2015
Direct Energy Consumption (GJ)	336,243	364,311	338,334
Indirect Energy Consumption (GJ)	538,247	535,920	480,353
Energy Intensity* (GJ/\$ m)	226.05	238.09	207.76

2013 and 2014 figures were adjusted as a result of the greenhouse gas emission audit. Figures are restated accordingly.

Water

The total water consumption of the Group in 2015 was 728,000m³, which was lower than the target of 817,000m³. This substantial savings was a result of the implementation of the following initiatives:

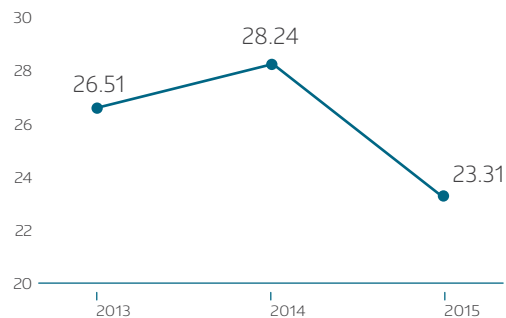
- (1) to collect and channel rain water for common toilet flushing;
- (2) to reduce the flotation pool water level for vehicle testing; and
- (3) to replace potable water with NEWater

Effluents & Waste

We manage trade effluents in accordance with the Environmental Protection and Management (Trade Effluent) Regulations. We continually look out for opportunities to reduce, reuse and recycle waste. These include:

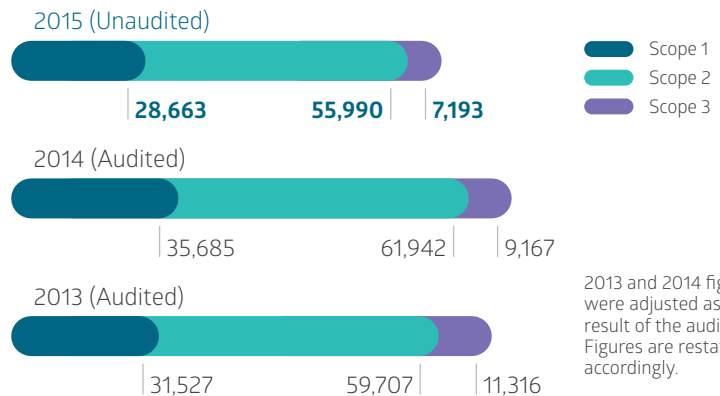
- a) Regularly monitor waste discharge;
- b) Segregate waste through waste bin management programme, where paper and electronics wastes are collected for recycling;
- c) Make conscious effort to replace toxic chemicals with environmentally friendly substitutes;
- d) Ensure toxic wastes such as heavy metals, are disposed by approved toxic waste collectors.

GREENHOUSE GAS INTENSITY* (tCO₂e/\$ M)



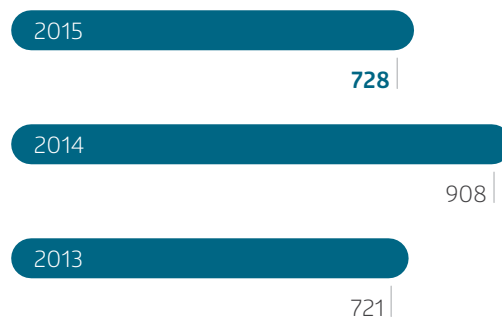
*Note: Intensity figures are normalised using revenue from Asia, which Singapore is a significant contributor.

GREENHOUSE GAS EMISSIONS (tCO₂e)



2013 and 2014 figures were adjusted as a result of the audit. Figures are restated accordingly.

WATER CONSUMPTION ('000 m³)



Sustainability Performance



SUSTAINABLE PROCUREMENT

In 2015 we formalised a Sustainable Procurement Vision and Statement which sets out the Group's commitment to incorporate the following principles into our procurement activities:

1. We practise value for money procurement
2. We do not compromise on the quality and safety of our products and services
3. We practise ethical procurement
4. We protect the health and safety of our workers
5. We protect the environment

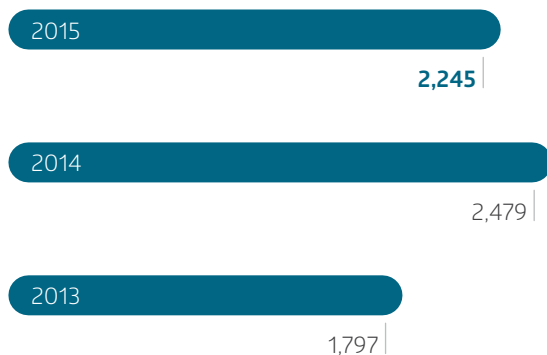
Through the Group Procurement Risk Management Framework we have for many years embraced value for money procurement, and put in place quality management systems to ensure the quality and safety of the products and services from our key suppliers.

Meanwhile, our fraud risk management framework, policies and processes place great emphasis on ethical procurement. Please refer to pages 66 to 68 for more information on this.

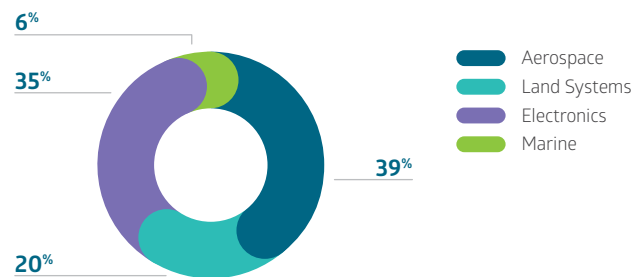
In 2015, we started the process of communicating the above vision and intent internally to all employees in Singapore.

We sent out a survey to our critical suppliers to establish their sustainability practices and the extent of their alignment to our principles. Critical suppliers are suppliers whom we have been actively dealing with and which have contributed significantly towards our procurement values during the past two years. The full results of the surveys will be analysed in 2016. Based on the results, we intend to develop a roadmap for implementing sustainable procurement, including assessment of potential and actual negative impacts.

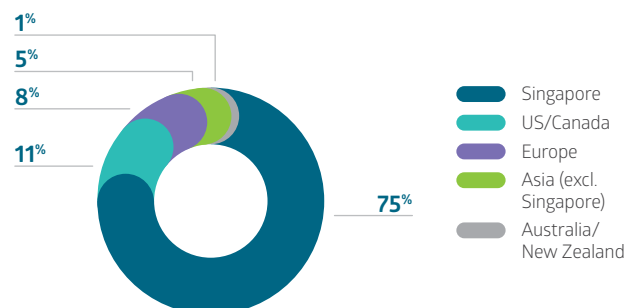
TOTAL PURCHASE VALUE (\$M)



PURCHASE VALUE BY SECTOR (2015)



NUMBER OF SUPPLIERS BY LOCATION (2015) TOTAL NUMBER OF SUPPLIERS: 11,147





We believe that technology can be a powerful force for good, making a difference to lives at a personal level and at the community level.

We are engineers driven by technology and innovation. We believe we make the most impact to our community when we leverage our unique technological expertise.

Our community focus is on the underprivileged, while we also endeavour to deliver innovative solutions that benefit the wider community.

As we explore and build long-term community partnerships that tap on our engineering expertise, we continue to contribute financially to various charities on a regular basis. Employees are also encouraged to leverage on our staff strength to raise funds and awareness for causes they feel passionate about.

The following are a few examples of our community initiatives in 2015:

Supporting technological improvements – ST Engineering Enabling Technology Centre

The ST Engineering Enabling Technology Centre, one of the centres housed within a facility called Tech Able in the Enabling Village, was opened in early October 2015.

The Centre focuses on assistive technology, equipped with an on-site team of specialists to assess users' needs, recommend and facilitate the trying out of suitable assistive devices, as well as provide advice on subsidies and the purchase of equipment.

It is hoped that through our financial support, \$970,000 over a three-year period from 2014 to 2016, persons with disabilities and their caregivers can make better informed decisions on assistive devices.



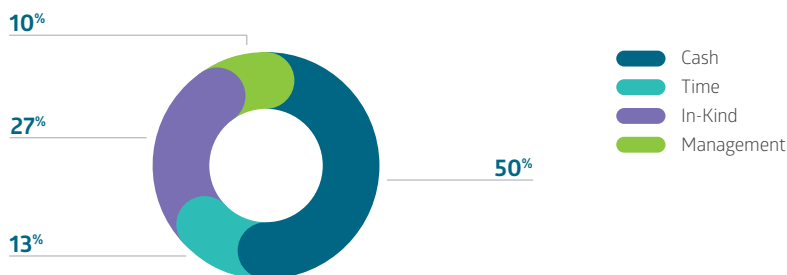
The ST Engineering Enabling Technology Centre focuses on assistive technology to help people with disabilities live and work independently.

Sustainability Performance

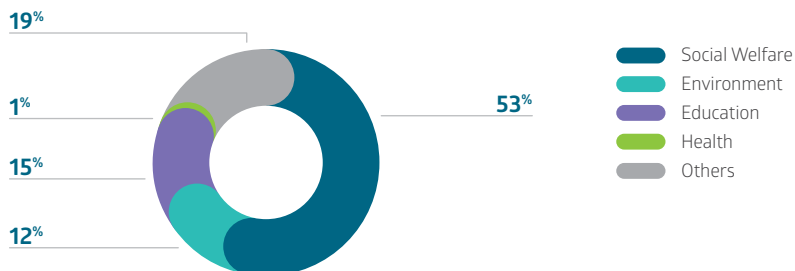
COMMUNITY CONTRIBUTIONS (2015)

TOTAL: \$1,888,202

Our Contributions



Issues Addressed



In addition, our employees raised \$0.9m and dedicated 5,665 hours to our Charity Partners in 2015.

Protection from severe haze – AIR+ Smart Mask

Our community efforts are focused on the less fortunate in society. We also seek to leverage our technological expertise in our community efforts. We believe that technology can be a powerful force for good, making a difference to lives at a personal level and at the community level.

The launch of the Air+ Smart Mask was one such effort that had a positive impact on the community. Since its launch in March, ST Engineering gave out more than 75,000 masks and 18,000 micro ventilators to children and the elderly through various nationwide and international initiatives.

Through initiatives by Temasek Cares, a non-profit organisation under Temasek Holdings, some 13,000 children from low-income families and children's homes received free Air+ Smart Masks and Air+ Micro Ventilators. More than 29,000



In support of Relief.sg, ST Engineering donated small and medium sized Air+ Smart Masks to children in the Central Kalimantan city of Palangkaraya.

Photo credit: RSG/Edwin Koo



Prime Minister Lee Hsien Loong distributed the Air+ Smart Mask to about 100 seniors at a senior activity centre in Ang Mo Kio.

Photo credit: Temasek Cares

masks and 6,000 micro ventilators were also distributed to 60 senior activity centres across Singapore, ensuring that the more vulnerable members of our community are adequately protected against the haze.

During August to October when Singapore was affected by severe smoke haze due to forest fires in the region, the Air+ Smart Mask, with its innovative Air+ Micro Ventilator, quickly became the most sought after mask in Singapore for its better seal protection and improved breathing comfort.

In support of Relief.sg, a humanitarian social enterprise, we also distributed Air+ Smart Masks to children in Kalimantan, South Sumatra, areas most affected by the haze. We also donated the Air+ Smart Masks to

the Samsung Medical Centre in South Korea for protection against the Middle East Respiratory Syndrome (MERS) outbreak.

Volunteering as an organisation – APSN Walkathon 2015

200 volunteers from across our business units helped in ticketing, manning the 30 games and merchandise stalls, ushering and providing logistical support for the 10,000 participants at the APSN Walkathon 2015.

The APSN Walkathon 2015, organised by the Association for Persons with Special Needs, raised more than \$300,000 for vocational training and the running of the APSN Centre for Adults.

Sustainability Performance



UNITED STATES

Vision Technologies Systems, Inc. (VT Systems) was established as the regional headquarters for all our legal entities in the US. Reporting to the President & CEO of ST Engineering, the CEO of VT Systems has profitability oversight for the US as a region. Additionally, he has legal and financial responsibilities, including sustainability management. The US headquarters provides the regional views and expertise, develops and promotes strategies that leverage US group synergies, as well as develops and manages key customer relationships.

Sustainability programmes are developed with due consideration to the legal and environmental legislation in the US. Beyond compliance, VT Systems, in November 2013, established an Environmental Sustainability Policy which has an environmental framework with four areas of focus: energy management, greenhouse gas emissions reporting, waste management and sustainable procurement. Features of this framework include alignment to ISO 50001, and reduction targets for energy and waste.

Each US subsidiary has an Energy Policy, trained Energy Managers and a programme manual to address the four areas of focus in the environmental framework. Given the diverse business operations, each business unit sets its own targets for energy, greenhouse gas emissions, waste reduction and sustainable procurement.

VT Systems is committed to providing equal opportunities for all employees

in a work environment free from discrimination and harassment of any type. Our inclusive policies protect applicants and employees from discrimination based on race, colour, religion, sex, age, marital status, national origin, sexual orientation, citizenship status, disabilities or protected veteran status. Discrimination is prohibited in any condition of employment or career development. Each of VT Systems' operating subsidiaries also appoints a Compliance Officer who is responsible for communicating the policies, training of the personnel, as well as developing and maintaining a violation reporting mechanism.

In order for employees to develop to their maximum potential and achieve their career goals, our employees undergo relevant periodic training. Training hours are tracked, reviewed and analysed (by employee categories and demographics).

As responsible corporate citizens, subsidiaries of VT Systems also serve the community where they operate. Notable charity partners include the American Cancer Society, St. Jude's Children Hospital and the Paralyzed Veterans of America's Operation PAVE (Paving Access for Veterans Employment).

VT Systems contributed US\$214,881 to the community in 2015, with 50% towards social welfare and 30% towards health issues. In addition, employees raised over US\$20,000 and dedicated 700 hours to charity partners.

WORKFORCE PROFILE FOR US OPERATIONS (2015) TOTAL: 5,386

Employees



Supervised Workers*



* Supervised workers refer to workers we hire through local contractors. They are on short term contract, work in our yard and are supervised by VT Systems.