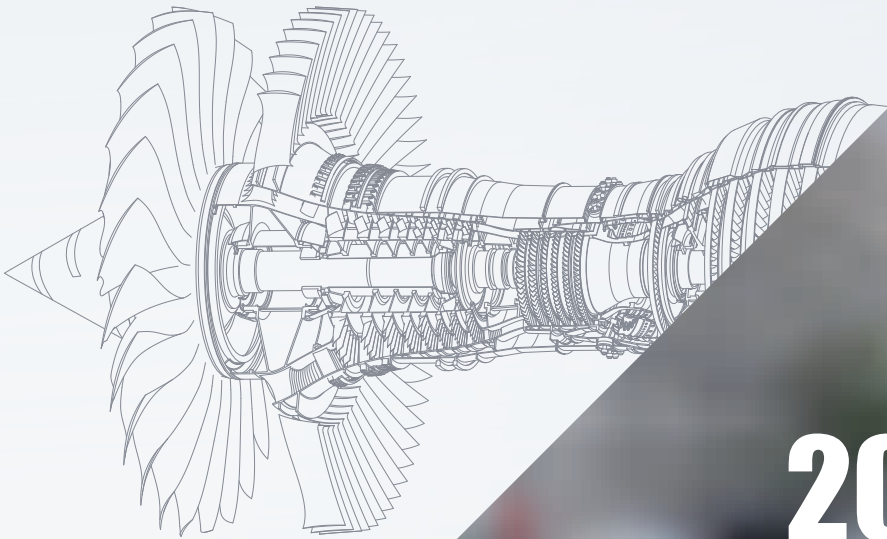


Best in the World
Best for the World



2018
Sustainable
Development
Report




2018 Highlights

Economic

- ✓ Engine output increased by 51% due to increased demand
- ✓ We completed **three** overhauls of Trent XWB-84 engines, the latest engine product from Rolls-Royce
- ✓ The new Phase VI four-storey workshop building opened, providing significantly extended workshop space and office areas to support growing business volume

Environmental

- ✓ Our energy intensity in 2018 (energy used per man-hour worked) reduced by 2.7% compared to the previous year
- ✓ Total water consumed in 2018 decreased by 10.3%, partly due to of the new wastewater treatment plant and improved staff awareness
- ✓ The amount of waste recycled during the year was **23.8%** more than that in 2017, supported by staff efforts following education and communication sessions
- ✓ We launched the "Say NO to a straw" campaign and introduced a polyfoam recycling programme
- ✓ We were certified as Hong Kong Green Organisation (), which affirmed our achievement on and commitment to environmental sustainability

Social

- ✓ Safety performance continued to improve, with our man day lost rate reducing by **27%**
- ✓ We engaged in 24 charitable events this year with more than 450 participants, an increase of over **50%**
- ✓ We were once again recognised as a  by the Hong Kong Council of Social Service
- ✓ We provided 52,294 hours of training to our people, 9% higher than 2017
- ✓ We proudly launched our **High Performance Culture (HPC)** Programme, creating a supportive working environment for our people to perform their roles at their best and deliver better service to our customers



Economic



Environmental



Social



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About this Report



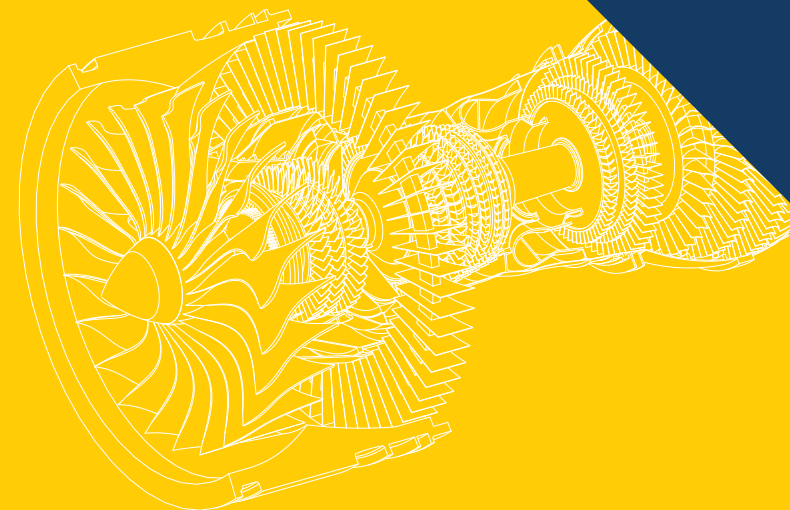
Our Sustainable Development Report describes the economic, environmental and social challenges and opportunities that are linked to our operations at Tseung Kwan O, Hong Kong SAR, China, and details the strategies and solutions that we are applying to meet them. In this report we aim to provide comprehensive, clear and concise information on all topics that we and our stakeholders consider to be of relevance for sustainability.

We published an annual Environmental, Health and Safety Report in 2004, 2005 and 2006, before migrating to a Corporate Social Responsibility Report in 2007 and a Sustainable Development Report from 2008 onwards. This report covers the calendar year from 1st January 2018 to 31st December 2018.

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. The material topics reported in this report in accordance with GRI topic-specific disclosures were defined through a materiality assessment, of which details are provided on page 12-14. We contracted the Hong Kong Quality Assurance Agency (HKQAA) to verify the completeness and accuracy of our report. You can find a statement to this effect and a summarised GRI Index in this report on page 44.

Recording Our Sustainability Indicators

Credible reporting is based on transparent and valid data. We register the data of all relevant organisational departments that fall within the scope of our activities. The data undergoes checks to ensure a high level of data integrity.



The reported indicators are rounded in accordance with standard commercial practice. In some cases, due to rounding, the sum of the figures given in this report may not exactly equal the stated totals and percentages may not precisely tally with the figures indicated.

Practical Information

The report is available in English and Traditional Chinese. Designations such as manager and employee refer equally to men and women; the masculine form of personal pronouns is used in such cases solely to simplify the text.

Whilst we have endeavoured to provide the most accurate view of our performance, we acknowledge the suggestion from HKQAA to improve on our data collection process. We will refine and improve in future reports.

Any feedback on our performance and initiatives, or suggestions as to how we may be able to improve the content and presentation of this report, would be most welcome. Please contact our Sustainable Development Department by email at sd@haesl.com or through our website at www.haesl.com.

Message from the Director and General Manager



2018 was a notable year of success for HAESL. We ended the year ahead of budget with engine output rising to 211 engines – a remarkable increase from the 114 engines in 2016. Along with our fast growing business volume, our safety and quality performance continued to improve. In the year we overhauled three Rolls-Royce Trent XWB-84 engines, at the global forefront of completing full refurbishments of this engine type. We also opened our brand new Phase VI building, providing us extended workshop and office areas to support our growth. We appreciate the trust and support from our customers and the hard work of our people, without which these achievements would not be possible. At HAESL we do not confine ourselves to short-term success, instead we aim to create long-term value for our stakeholders. This report details how we work to achieve this by developing our business in a sustainable and socially responsible way.

Understanding what matters to our stakeholders is essential to setting the right path for sustainable development. In 2018 we conducted a new materiality assessment, inviting our stakeholders, including our Directors of the Board, employees, shareholders, customers, suppliers and members of local community, to assess the materiality of a set of sustainability topics related to HAESL business. Through the assessment our stakeholders stressed great importance on how we safeguard the health and safety of our employees and customers, how we operate business in compliance with applicable laws and regulations, and how we manage our impact on the environment. The detailed process and results are set out in this report on page 12-14. The assessment is fundamental not only in moving our sustainable development reporting practice to the level of the Global Reporting Initiatives (GRI) Standards, but also for us to identify our sustainable development focus, form strategies and prioritise our work.

It is our people who form the foundation of HAESL's success. We seek continuously to refine the way we attract and retain talent, develop them, and support them to work to their best potential. In 2018 we continued our recruitment and reached a total number of 1,011 employees working in our world-class MRO (maintenance, repair and overhaul) facility. We place safety as our highest priority. We are committed to improving safety levels and advocating a safety culture throughout our organisation. In the year we were pleased to see improvement through our

safety indicators, as well as an ever more engaged workforce with 2,620 I Care I Report (ICIR) submissions received from our staff, proactively reporting safety hazards and seeking solutions. In addition to safety, with support from Rolls-Royce, in 2018 we launched the High Performance Culture programme into HAESL with every employee attending the initial training sessions. By introducing the programme we aim to provide all staff members with the training and tools to equip them to perform at their best through self-reflection and employing the key High Performance Culture concepts.

To support sustainable development, we aim to minimise our impact on the environment. We continue to invest in environmental improvement programmes, and enhance staff awareness on energy and water conservation and waste recycling. In 2018 we managed to reduce our energy consumed per man-hour worked by 2.7% and recycled 23.8% more waste than in 2017. We launched the "Say NO to a straw" campaign and a polyfoam recycle programme, and continued to involve ourselves in various environmental conservation events with our partners.

We are a part of the Hong Kong community and we aspire to be strong corporate citizens. In the year we organised 24 charitable events, devoting a total number of 2,200 volunteer hours. We are glad to partner with some well established not-for-profit organisations in Hong Kong, such as the World Wide Fund for Nature (WWF), the Evangel Children's Home, the Conservancy Association and the Salvation Army. We have the honour to once again be awarded the status of "Caring Company" by the Hong Kong Council of Social Service.

I would like to take this opportunity to thank all our staff for their hard work and devotion, and also to thank our stakeholders for their continuous support in 2018. As we strive to achieve our vision of being "Best in the World, Best for the World", sustainable development is central to our strategy and we shall remain committed to making positive and lasting economic, environmental and social impacts.

Angus Barclay

Director and General Manager


**About HAESL:
Best in the World,
Best for the World**



Our Story

Hong Kong Aero Engine Services Limited (HAESL) is a world-class maintenance repair organisation with core competencies in the maintenance, repair and overhaul (MRO) of large fan civil aero engines and their components.

HAESL's origins precede its official founding by extending back to the 1950's when the Swire group identified the aviation industry as a potential business opportunity. Having no experience in aviation but with expert engineering skills in ship maintenance, Swire formed the Pacific Air Maintenance & Supply Company (PAMAS), which later merged with Jardine Air Maintenance (JAMCo) to become Hong Kong Aircraft Engineering Company Limited ( HAECO).

The growing demand within the aviation industry and a desire from HAECO to grow within the Asia region led to an astute strategic decision to form a Joint Venture with a leading aero engine Original Equipment Manufacturer (OEM); hence HAESL was founded in Hong Kong in 1995 as an equal share joint venture between  **Rolls-Royce** and HEACO, located at Tseung Kwan O Industrial Estate, Hong Kong. It became operational in 1997 with the testing of the first Rolls-Royce Trent 700 engine. Over the years, HAESL has grown its capability of repair and overhaul of Rolls-Royce RB211 and the Trent series of engines. Up to 31 December 2018, HAESL has overhauled more than 3,700 Rolls-Royce engines since its establishment.

The winning combination of leveraging on Rolls-Royce's strength as an OEM and HAESL's experience as a maintenance repair organisation in Asia allows HAESL to offer high quality and comprehensive services to its customers and to be recognised as a prominent and sustainable business which powers various wide-body civil aircraft globally. Looking forward, HAESL is currently developing full capability for overhauling the Trent XWB engine. With the opening of the 15,000m² new workshop building, Phase VI, HAESL will continue to grow and strive to achieve its vision of being **"Best in the World, Best for the World"**.

More information about our business and latest developments is available in this Report on page 34, and on our website www.haosl.com.

Did you know?

The MRO services of an aircraft engine in HAESL are mainly comprised of two functions: engine overhaul and component repair.

The engine overhaul function includes the process of inspecting an aircraft engine and stripping it to modules, and then to individual components, such as a fan blade or an oil tube. Upon replacement of unserviceable components, the engine overhaul team rebuilds the components back to a complete engine and conducts engine test runs in HAESL's state-of-the-art engine test cell to ensure its serviceability.

The component repair team inspects components and establishes their serviceability. Repairable components are repaired using various methods and technologies. Repaired components are then inspected and sent to the engine overhaul team for engine rebuild.



Our Vision and Sustainability Strategy

“ Best in the World, Best for the World ”

HAESL’s vision is to be the best aero engine maintenance, repair and overhaul organisation in the world and share long-term value with our stakeholders through sustainable development of our business. This is founded on our ability to continually deliver our services within an agreed time frame and to maintain a high standard of quality.

All information with regard to HAESL sustainability policy, sustainability framework and methodology are documented in a HAESL Engineering Procedures Manual that is open to each and every employee.



Our Sustainable Development Charter

The four building blocks that underpin the HAESL Sustainable Development Charter are developed to support HAESL to achieve its vision.

The first two elements are vital in building trust from our customers in providing dependable and economical maintenance services and in return continuously generate value for our shareholders and stakeholders. By excelling this, we shall retain and grow our customers and be able to develop new business and capabilities, which in turn allows us to contribute to our local society by providing employment opportunities.

The following two elements focus us on minimising the negative impact made to the environment and contributing to community development. Through these two elements, we endeavour to be a responsible corporate citizen and to achieve our goal of “Best for the World”.

By exercising our Sustainable Development Charter, together with our core values of **“Tea & RICE” – Teamwork & Respect, Integrity, Commitment and Excellence** – we are working to turn our vision into reality.

Ethics and Compliance

Doing business in an ethical way and in compliance with all applicable laws is essential to HAESL as a sustainable and social responsible business. Our Board of Directors and Senior Management Team place the highest priority on overseeing and managing ethics and compliance issues related to our business. We hold a quarterly ethics and compliance link call with Rolls-Royce, where our senior management and function heads review any issues, whilst providing the opportunity for the sharing of best practices.

Our Code of Conduct, which is available online at www.haesl.com, sets out the detailed principles and standards expected. In addition, the following policies and procedures in the areas of anti-corruption, competition compliance and customer privacy are available:



Gifts and Hospitality Policy



Competition Law Compliance Manual



Information Security Policy

All new staff members are all briefed on these policies and we conduct refresher training to staff. Two training sessions were conducted during the second half of 2018: Anti-bribery and Corruption Training conducted by the Hong Kong Independent Commission Against Corruption (ICAC), and Equal Opportunities Training by the Equal Opportunity Commission.

We also take steps to create and foster a business culture in which our people feel comfortable to “speak up”. We have introduced the practice of Ethical Dilemma

Discussion from Rolls-Royce, through which our employees are made aware of what to do and to whom to speak with when they are faced by an ethical dilemma. We have established an anonymous reporting facility, the Ethicspoint System, operated by a third party company, to provide our staff a safe and direct channel to report potential unethical or non-compliant activity.

Our Senior Management Team reviews occurrence reports on any potential unethical or non-compliant behaviours and reports any issues raised directly to the Board of Directors. In 2018, we did not find any non-compliance issues and did not receive any complaints with respect to customer privacy issues.

Governance Structure and Committees

Company Governance

HAESL's Board of Directors conveys the highest priority to strategic governance and provides the guidance by which HAESL is directed in the interests of all its stakeholders. The effectiveness of HAESL's approach towards strategic governance forms the foundation for HAESL's strength in its values, reputation and ability to achieve its objectives.

The Board of Directors comprises six Non-Executive Directors who are appointed by the shareholders according to their business expertise and qualification. HAECO and Rolls-Royce appoint three directors respectively, meeting four times a year.

Senior Management Team

HAESL's Senior Management Team is led by our Director and General Manager Mr. Angus Barclay, and also comprises three other General Managers with individual executive responsibility for Commercial activities, Finance & Administration and Operations. This team acts as the HAESL Executive Committee to establish long-term objectives and strategies for HAESL and define directives and principles for the resulting company policy. The Senior Management Team decides on the portfolio, develops and deploys managerial staff, allocates resources and holds responsibility for the company's financial steering and reporting.

Sustainable Development Committee

Within the business, HAESL's sustainable development issues are governed by the Senior Management Team, the Human Resources Manager, and the Sustainable Development Manager, who form the Sustainable Development Committee and meet on a regular basis.

The role of the Sustainable Development Committee is to ensure that the company's business objectives and operations are in alignment with its commitments to sustainable development and that the expectation for sustainability from our

shareholders and stakeholders is fulfilled by implementing appropriate and effective policies. These policies include planning, executing, reviewing and improving Corporate Social Responsibility and environmental protection programmes that are aligned with our Sustainability Strategy.

Safety Review Board

HAESL's Safety Review Board governs the management systems for Risk, Safety and Quality. It is formed by the Senior Management Team, Quality Assurance Manager, and Safety and Improvement Manager. They provide support and resources for the execution of these management systems as well as monitoring the effectiveness of each system.

Other Committees

Over 1,000 employees work to support MRO activities in our facility. A close relationship among different functions is vital to our success. The HAESL management team is committed to ensure that everyone is working towards our vision.

In order to maintain strong communication between the management and all levels of staff, a number of committees representing key elements of the business have been established. These include the Occupational Safety & Health (OSH) Performance Review Group, the General Staff Consultative Committee (GSCC) and the Contract Staff Association (CSA). The OSH Performance Review Group comprising of all Function Heads is chaired by the General Manager Operations. It meets bi-monthly to discuss OSH related issues, risks and improvement opportunities. The General Staff Consultative Committee and the Contract Staff Association are forums where staff representatives and a member of the Senior Management Team, along with Human Resources Manager, meet on regular basis to discuss issues and concerns that may arise from the staff community. All HAESL employees, depending on their job grade, are members of either the GSCC or the CSA upon joining the company and are eligible for electing their representatives.

Materiality Assessment in Moving to GRI Standards



Understanding What Matters

Understanding the materiality of various sustainability issues is essential to our sustainable development. In 2018, HAESL undertook a detailed materiality assessment to identify and evaluate sustainability topics that matter most to our business and stakeholders.

In line with the GRI Standards, the materiality of a topic is defined on two dimensions, i.e. 1) whether the topic reflects HAESL's significant economic, social and environmental impact, and 2) whether the topic has significant influence on the decision making of HAESL's stakeholders. The following stakeholders were identified and engaged in our assessment:



**Employees
(including managerial staff
and general staff)**



Board Members



Shareholders



Customers



**Suppliers and
business partners**



**Organisations
from our local community**

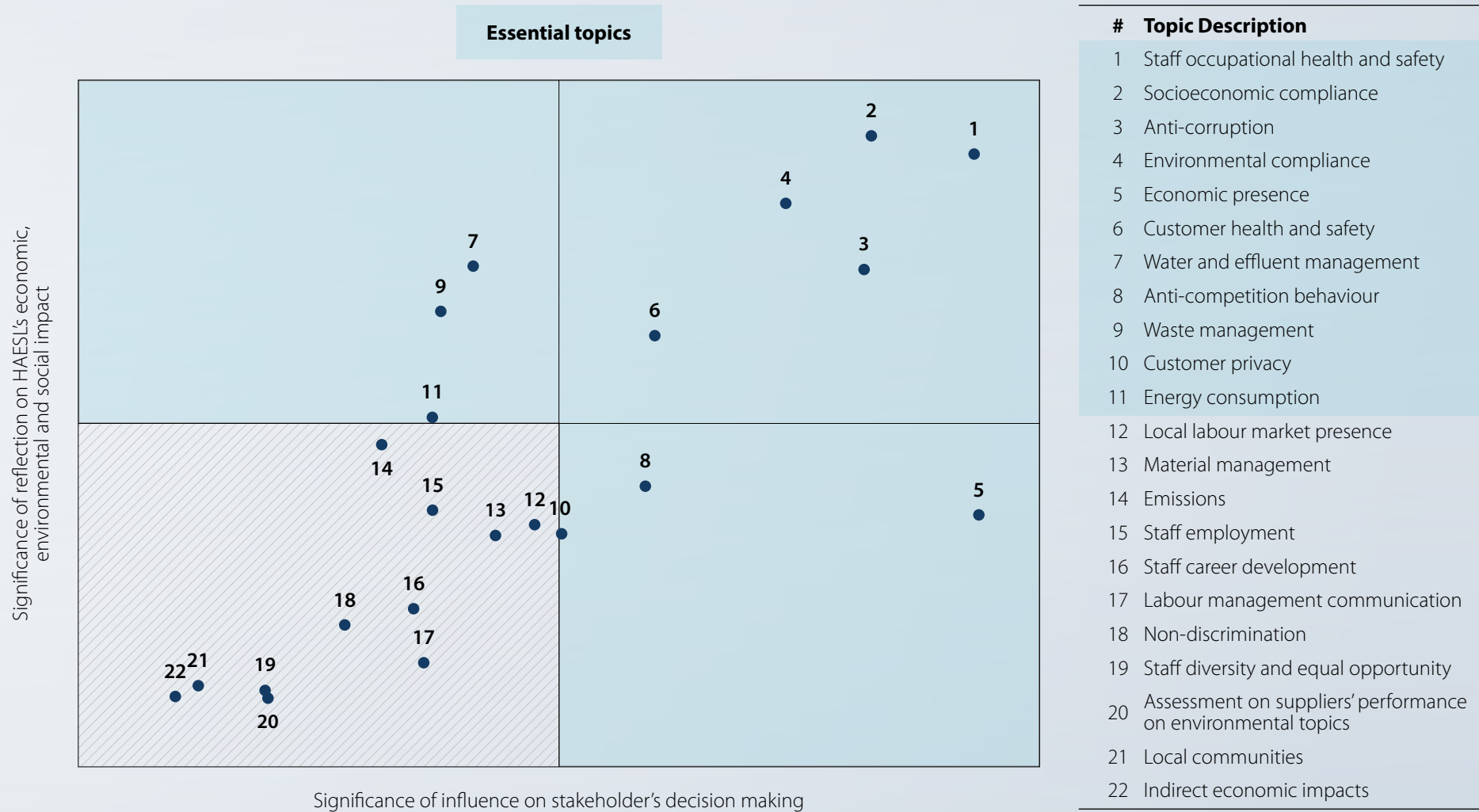


**Government
authorities**

All the stakeholders we engaged were briefed on the purpose of the assessment, and were then invited to access the materiality of 22 sustainability topics through face-to-face interviews or email questionnaires. The overall response rate to the materiality assessment was 86%. Responses given by our stakeholders were consolidated and developed into the materiality matrix below.

¹ The 22 topics are selected from 33 topics listed in GRI Standards by HAESL Management according to their relevance to HAESL's business

Consolidated Materiality Matrix Based on Stakeholders' Assessment



Among 22 listed topics, 11 topics were scored higher by our stakeholders and were assessed as essential to HAESL's sustainable development. In this Report, essential topics are prioritised with topic-specific disclosure according to the GRI Standards. The table below indicates the location of relevant information for each topic.

Essential topics	Location to find the relevant information	Page
Staff occupational health and safety	Our People	15-23
Socioeconomic compliance	About HAESL: Best in the World, Best for the World	6-10
Anti-corruption	About HAESL: Best in the World, Best for the World	6-10
Environmental compliance	Our Environment	29-33
Economic presence	Our Business and Value Chain	34-39
Customer health and safety	Our Business and Value Chain	34-39
Water and effluent management	Our Environment	29-33
Anti-competition behaviour	About HAESL: Best in the World, Best for the World	6-10
Waste management	Our Environment	29-33
Customer privacy	About HAESL: Best in the World, Best for the World	6-10
Energy consumption	Our Environment	29-33

In addition to defining the content of this report, the materiality assessment is critical for HAESL to understand what matters to our Stakeholders and hence will shape how we set our SD strategies and how we carry out SD related activities.

Our People



At HAESL, an engaged workforce with a strong safety culture and ambition for continuous development is central to making our business successful and sustainable. One of our key strategies is to constantly refine our way of attracting and retaining talented people, through engagement, development, and providing a supportive culture.

We put safety as our highest priority and work together with our people to build a strong safety culture and eliminate safety hazards in workplace. We have developed ways to engage our people and support them to grow to their potential. On-Job Training, soft skills training, departmental offsite training and team building events are organised throughout the year. Each year we conduct a remuneration policy review to ensure that we remain competitive in the market.

We believe in equal opportunities for all our employees and recognise that our business benefits from the diversity of our people. While the MRO industry is traditionally male dominated, at HAESL we wish to ensure our workplace provides a positive working environment for both men and women. Noting the smaller proportion of women in HAESL's workforce, in 2018 we initiated the establishment of a HAESL Women's Network, which will be in early 2019. The purpose, further to our Diversity and Inclusion Policy, is to build stronger communication channels to promote equality for female employees by sharing information, identifying learning opportunities, supporting peers and raising awareness of women's issues.

About Our Workforce

Employment statistics (by type of employment by gender, age and years of service)

Figure 1: Total workforce by year by gender

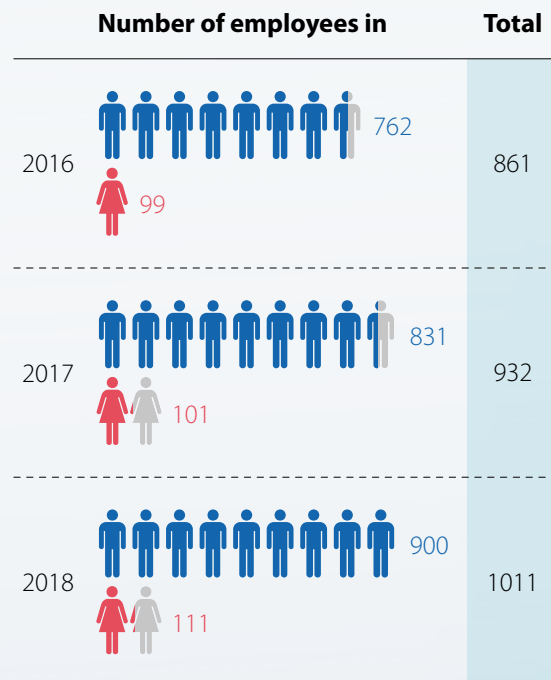


Figure 2: Total workforce by age group

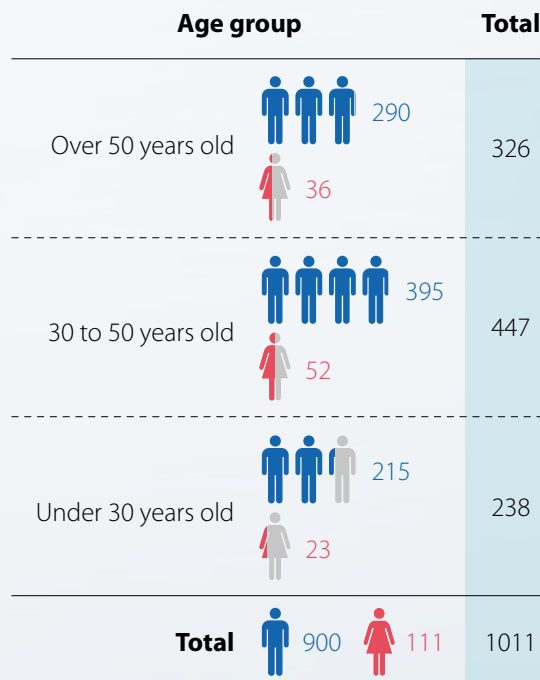
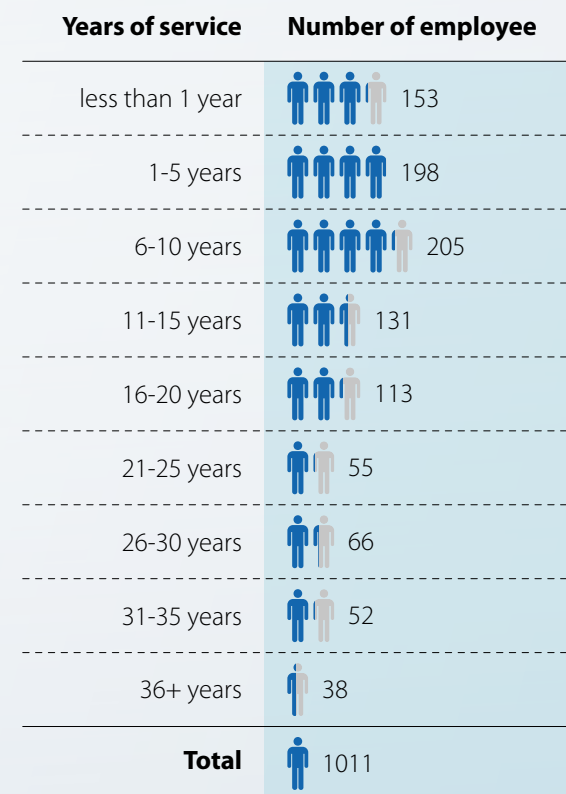


Figure 3: Total workforce by years of service



Building a Strong Workforce

Employee Engagement

HAESL continuously engages with its people and seeks comprehensive feedback from employees through multiple channels. We want all of our people to be able to perform to the best of their potential and we encourage open collaboration, engagement and involvement.

Our Employee Engagement Survey, for example, is conducted every year and covers 12 areas: Teamwork, Respect, Integrity, Commitment, Excellence, Health & Safety, Community & Voluntary Work, Communication, Staff Recognition, Work Design, Training & Development, and Job Satisfaction. This anonymous Survey encourages every employee to provide their feedback to a set of questions. All feedback is analysed and discussed directly with the Senior Management Team, which helps HAESL to understand the factors that empower our people to perform at their best. To provide more granular insight, the Survey results are discussed in multiple focus group sessions between the management and staff, where staff members raise suggestions and concerns. Management's responses to these suggestions and concerns are then shared with the staff community through the company newsletter and departmental meetings. The Employee Engagement Survey is well received by our staff, and in 2018, the response rate was 77% with broadly positive feedback.

HAESL values the ideas and opinions of its people. Further to the Employee Engagement Survey, staff are encouraged to raise their ideas through the Staff Suggestion Scheme where suggestions are collected and passed to relevant departments for review and action. On a regular basis we evaluate the suggestions collected and those who contribute the most valuable suggestions are recognised and rewarded.



Communication Channels

Effective communication between management and staff community is an essential element in enhancing employee engagement. HAESL has established various channels to ensure voice of the employees is well received by the management team.

Our Director and General Manager hosts staff briefing sessions twice a year as a direct communication platform for our employees to release the latest updates on the Company's key financial results, operational performance, business outlook and priorities. At the briefings, staff are encouraged to raise questions and suggestions directly to the Senior Management.


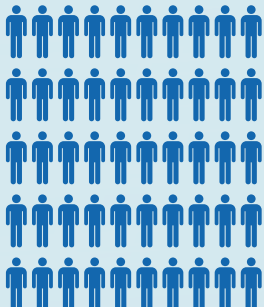


Our management holds regular meetings with the General Staff Consultative Committee (GSCC) and the Contract Staff Association (CSA) to address concerns and opinions on employee welfare.

Company information such as policy updates, health & safety campaigns, latest announcements and staff activities are shared through posters and signage TVs, as well as via our intranet Portal and the HAESL Mobile App. The intranet Portal can be accessed through company computers located all around our facility, while the Mobile App can be installed to our staff's own mobile phones, providing an effective and real-time platform for day-to-day information such as medical service locations, coach arrangements, staff purchase offers, the daily canteen menu and various event updates.

Our staff newsletter "HAESL.com" is published on a quarterly basis, providing our people with a broad view of what is happening in HAESL. The content ranges from business performance, safety and quality updates, to interviews with experienced colleagues, staff benefits, sustainable development events and recreational activities.

HAESL Storyboard Briefing

To provide a communication springboard within the company, each year our Director and General Manager prepares a video overview of the company's progress and focus, known as the "Storyboard". The Storyboard is shown to all staff members in small group meetings held by departmental managers, followed by Q&A sessions. The Storyboard provides a platform for holding discussions relevant to the latest company developments directly between staff members and the management. In 2018, the Storyboard covered the Business Outlook, Trent XWB -97 Capability Development, the move into Phase VI, Direct Workforce Expansion, and the roll-out of the High Performance Culture programme.

Frequency	Channel	Spread/Session
Annually	HAESL Storyboard	 ~ 40
Half Yearly	DGM Briefing	 ~ 500
Monthly / Weekly	GSCC & CSA Meeting, Departmental Briefing	 ~ 20-100
Day to Day	Team Briefing, Portal & HAESL App	 ~ 1-10

Staff Amenities and Wellness

Providing our people with good amenities and helping them to achieve positive physical and mental health is a key element of HAESL's approach to supporting Employee Wellness. At HAESL, our people are provided with broad medical benefits and access to medical services at various locations in Hong Kong and with physiotherapy treatment both offsite and onsite at HAESL. To make the everyday commute easier, staff coaches are arranged between HAESL and most major residential areas at subsidised rates. Our onsite staff canteen provides meals every day at discounted prices. HAESL also has an active sports association and provides various recreational facilities including a basketball court, a tennis court and table tennis facilities.

Healthy employees are happier, better engaged and more productive. Through the year, we provide health talks to staff focusing on both emotional and physical wellness to enhance physical wellness in the workplace, healthy behaviours and emotional well-being. In 2018, talks featured "Emotional Health of Children and Teenagers", "The Latest Trends in Dietary Advice", "Anti-Allergy with Chinese Medicines", "Anger Management" and "Nutrition Labelling".



High Performance Culture

Building on HAESL's core values and employee engagement culture, in 2018 HAESL launched the "High Performance Culture" (HPC) Programme, to further create a supportive working environment for our people to perform at their best in their role and, as a consequence, deliver better service to our customers. HPC originated with Rolls-Royce and it has been successfully adopted by HAESL. Initial training was delivered by Rolls-Royce trainers from November 2017 for our management team and in-house facilitators. HPC was fully rolled out in 2018 across the business, with over 1,000 employees undertaking training and awareness sessions. The objective of HPC is to provide all members of staff with the training and tools to perform at their best and so to enable the business to build and improve on its well established and respected values of "Tea & RICE" – Teamwork, Respect, Integrity, Commitment and Excellence.



The HPC provides team-based training and an experiential, insight-based learning methodology. Through self-reflection and adoption of the key concepts, it aims to create a sustainable change in behaviours of the participants.

Over 34 HPC classes have been provided to staff. In 2018, 53 HPC Champions from different departments or teams were identified to support the adoption of HPC. The role of a champion is to assist their team and leader to reinforce and apply the HPC mindsets in their daily operation. We believe that the implementation of HPC will not only benefit organisational and team effectiveness, but also help employees to live healthier and more fulfilling lives.

Staff Development

Training

As an aero engine overhaul and component repair company, our employees are required to maintain high level of competency with the correct skills and appropriate knowledge of a broad set of requirements including safety, repair techniques, aviation regulation and customer requirements. We provide professional and approved training programmes to every employee at all levels of the organisation.

Our training is provided according to the results of an annual training needs analysis and is administrated through an employee training matrix for all employees. Every employee's training plan is reviewed and updated on annual basis. In 2018, HAESL provided in excess of 52,000 training hours to its employees, a 9% increase compared to 47,990 hours in 2017.

Average hours of training per year per employee by employee category		Number of employees	Total training hours	Average hours of training
<u>By employee category</u>				
Executive	– Top/Senior management	4	52	13
	– Middle/Junior management & supervisory	209	9,949	48
Non-executive	– Customer facing staff	14	271	19
	– Non-customer facing operational/technical staff	709	38,466	54
	– Others	75	3,556	47
Total		1,011	52,294	52

Safety Training

Safety training is provided to every new employee as part of their induction into HAESL. The training ensures that new staff are made well aware of the hazards in their new environment and the role they must play in maintaining a safe and healthy work place.

In addition to induction training, safety management training, mandatory safety training, human factors training and job specific safety training are provided according to individual needs.



Skill Development for New Employees and Lifelong Learning

HAESL has grown its workforce significantly in recent years to support the growth of its business. To ensure all our staff are competent in performing their work correctly and effectively, a structured Skill Development Plan is developed for newly recruited technical trainees. The plan covers job skills, competencies, and functions. Relevant instructor-led technical courses, such as Engine Overhaul Practical Skill and Product Safety, are also planned and delivered.

New technical staff are required to attend induction training for a period of approximately two weeks. The induction provides initial basic technical skills, knowledge and working approach. Within the first six months, in addition to technical training, new staff will also take such courses as Basic Lean Transformation, High Performance Culture and Environmental Conservation. The Skill Development Plan is designed to help new employees adapt quickly to our working environment and culture.

HAESL supports lifelong learning for staff which involves both refresher training and the opportunity to attend further training programmes.



The Mentor Programme, the Buddy Scheme and the Caring Programme

At HAESL we fully understand the importance of helping new staff members adapt to the new working environment, especially the younger generation who are new to career. Therefore we first introduced the Mentor Programme, through which the company assigns experienced staff as mentors of new staff to help them learn the skills and techniques they need in the workplace.

To provide peer support and encouragement to new employees, we then introduced the Buddy Scheme in 2017. Buddies will be assigned to each new employee to provide guidance and support, connect the new employee with other people and accompany the new employee as a friend through the early days in HAESL.

The Mentor Programme provides a platform to learn essential skills for new employees, while the Buddy Scheme helps them to adapt to the new working environment. To supplement these two programmes, in 2018, we rolled out the Caring Programme, aiming to help new staff to develop their career path at HAESL. In this Programme, selected senior and experienced staff members are appointed as Caring Officers to carry out induction and career development activities from the first working day of new employees through the course of their first-year traineeship. The Caring Officers will also monitor the development progress of new employees, provide them with advice and feedback, and identify their strengths and areas for development.



Safety Culture

Occupational safety in the work place is of paramount importance to HAESL. Our Senior Management puts safety as the highest priority. We adopt the OHSAS 18001 international standard for occupational health and safety management for maintaining our health and safety environment. We continuously monitor our safety performance, identify hazards in workplace and enhance the safety awareness of our people. Our ultimate goal is to achieve zero harm in all of our operations.

Senior Management Commitment

HAESL recognises that leadership is fundamental in creating a culture that supports and promotes occupational safety and health. Our Senior Management conducts a weekly Safety Walk around the business to check for potential hazards, supported by the responsible managers and the Health & Safety team. This demonstrates to staff in the workplace Senior Management's high commitment to safety. The exercise also identified over 350 potential safety hazards during 2018. The Occupational Safety & Health (OSH) Performance Review Group oversees the safety of all activities. The Group meets regularly to monitor the safety performance and response the hazards identified in the workplace. All workplace incidents are reported in accordance with the Incident Reporting Procedure and the statistics are reported in the OSH Performance Review Group Meeting.

Staff Involvement

Hazard Management

Staff participation in ensuring safety is vital, they are the ones who are most knowledgeable about specific work environments processes. Frontline staff work together with HAESL's risk practitioners to identify, analyse and mitigate hazards under the Job Safety Analysis programme (JSA).

The JSA process identifies, evaluates and manages job related hazards to reduce their impact and likelihood of occurrence to as low as reasonably practical. All potential hazards identified are risk assessed against individual standard scoring schemes for occupational safety and product safety. Hazards deemed as high or medium risks are mitigated within a scheduled time frame.

Proactive Reporting

We encourage staff to proactively report health and safety concerns to minimise the potential for accidents to occur. The I Care I Report (ICIR) + I Resolve Programme encourages the reporter to cooperate with other colleagues in resolving safety problems together.

Each ICIR submitted is assessed and scored against four criteria – quality of the report, severity of the impact, likelihood of occurrence and effort made to correct the problem. In 2018, 2,620 ICIR observations were submitted, which was more than twice as many as those in 2017. The Lost Time Injury Rate reduced from 0.39 in 2017 to 0.34. Our man day lost rate reduced by 27% in 2018, reflecting a significant reduction in the severity of injuries.

We believe that the I Care I Report mechanism continuously encourages everyone to proactively engage in safety related issues and to take collective responsibility for health and safety.

Occupational Safety & Health Work Group

The Occupational Safety & Health Work Group connects the OSH Performance Review Group with our employees. Members of the group are staff representatives and are elected every year. The group meets every month with the aim of assisting with the implementation of the Safety Policy, proposing new initiatives, conducting periodic site inspections, advising on the practicality of compliance with OSH rules, arranging OSH promotional campaigns and positively influencing OSH across the business.


HAESL 10 Safety Principles

With reference to the Rolls-Royce “Zero Harm Life-saving Rules” and HAESL’s local working environment and business nature, the “HAESL 10 Safety Principles” were developed in 2018 to guide our staff on safety.


The “HAESL 10 Safety Principles” consist of 10 essential safety principles that everyone should always follow in the workplace. The “HAESL 10 Safety Principles” campaign was launched in July 2018. It included employee safety briefings, wall posters, Intranet Portal banners and signage TV slideshows. These safety principles have also been incorporated into our health and safety induction training for new recruits. Through promotion and training of the “HAESL 10 Safety Principles”, we support the safety awareness of our people and to create a safer workplace.

HAESL 10 SAFETY PRINCIPLES

HEALTH & SAFETY . EVERYONE . EVERYDAY




ALWAYS...



- ✓ speak up to report unsafe acts or conditions when you see them
- ✓ confirm your equipment is fit for purpose and work environment is safe
- ✓ wear mandated personal protective equipment (PPE) correctly, including seatbelts when on coaches
- ✓ protect against fall and use the specific protective equipment when working at height
- ✓ follow the correct lifting methods

NEVER...



- ✗ undertake any job unless you are competent and have been trained to do so
- ✗ handle hazardous chemicals unless you are authorized, trained and equipped with suitable PPE
- ✗ deactivate or bypass safety critical equipment when using machinery
- ✗ run within HAESL premises
- ✗ use mobile phone while walking in production workshops or using machinery


2018 HAESL Safety Week

To reinforce safety awareness during peak holiday periods, i.e. Christmas and Chinese New Year, we launched a HAESL Safety Week in November 2018. The campaign focused on enhancing safety awareness through a series of engagement activities, such as a safety quiz, seminars, a family drawing activity, the production of an in-house safety video, and was supported by safety posters and banners around the HAESL premises.

Our Community



At HAESL we recognise that the business cannot stand alone without connection with and the support from Hong Kong community. Throughout the years since our establishment, we have developed various channels and programmes to exercise our corporate social responsibility, and to encourage and support our staff members to become involved in supporting our local community.

Our community investment programmes focus on two major areas: children and youth development, and environment conservation. In 2018 we participated in 24 charitable events with partners in the community, to which over 450 participants consisting of our employees and their guests devoted over 2,200 hours, a 52% increase from 2017. HAESL has been recognised as a “  ” by the Hong Kong Council of Social Service for good corporate citizenship through 2015 - 2019.

HAESL continues to make charitable contributions to important causes and non-profit organisations working on issues in the areas of children and youth development and environment conservation. We operate a Volunteer Service Leave Policy to encourage our staff to offer volunteer services to the community.

Children and Youth Development

Supporting Educational Needs

HAESL provides bursaries to employees who embark on further education in Hong Kong in fields related to their work and to staff’s children who study in local universities. We also support an endowed scholarship benefiting mechanical engineering students at the Hong Kong Polytechnic University. In 2018, we continued to invite students from secondary schools, Hong Kong Institute of Vocational Education, social welfare organisations and universities to participate in plant visits and career talks at HAESL. Starting with a brief company introduction, followed by guided tours in the workshops, we provided students with a deeper understanding of aircraft engine repair processes and demonstrated the high level of skill and expertise in the industry.



Caring for Evangel Children’s Home

HAESL continues its support of the Evangel Children’s Home (ECH), which provides food, shelter, counselling and spiritual guidance to children and youth from disadvantaged families.

In July 2018, ten HAESL volunteers joined teenagers at ECH with various summer workshops and activities. In August 2018, a Summer Charity Sale was held, in which teenagers of ECH produced handmade lip balm and soap and sold it to HAESL staff. More than HK\$5,500 was raised and was fully donated to ECH. In October, HAESL volunteers joined ECH, together with The Boys’ & Girls’ Clubs Association of Hong Kong (BGCA), in a leather crafting class where teenagers had the opportunity to learn leather crafting together with our staff members.

Engagement in the Broader Community

Pedal Kart 2018

HAESL entered two pedal karts to join the F1 and Fun Categories in the Hong Kong 24-Hour Charity Pedal Kart Grand Prix held on 10-11 November 2018. This annual race is a charitable fundraising event organised by the Association of Round Tables Hong Kong. The race runs over a 24 hour period with teams of drivers taking shifts pedalling with the goal of raising as much money as possible for charity. More than 100 staff members from different HAESL departments participated in the event, starting from the fundraising for the event through charity hiking and snack sales, to design and build-up of the karts, and finally sweating and pedalling on the race day. The event was an excellent opportunity for our staff members to raise their awareness of fundraising activities, and was a great reflection of the HAESL spirit of working as a team and striving for the best.



Partnering with the Salvation Army

This year, a group of HAESL volunteers joined the Salvation Army in a 2-hour orienteering challenge in the Central & Western District, raising funds for the development of the "Alternative 5** School" project. Newly launched by the Salvation Army, this project aims to help children and youths with special educational needs to discover their non-academic strengths, achieve a sense of accomplishment and get a boost of self-esteem.

Fundraising and Donation for the Community



- On 4 March our volunteers participated in the Outward Bound Adventure Race 2018 and on 8 December the Corporate Challenge respectively, with donations raised for Outward Bound to support the growth of underprivileged youth
- In April, HAESL continued its Scholarship for students at The Hong Kong Polytechnic University to support their degrees
- On 7 June, HAESL and staff members made a donation to support the "3A Hot Meal" programme which gave out of free hot meals to the poor, organised by the Joyous Kitchen and the Christian Family Service Centre (CFSC)
- On 11 October, we had our Orbis World Sight Day to raise staff awareness of blindness and support Orbis in improving eye health of the greater community

Protecting the Environment

Support the World Wide Fund For Nature Hong Kong (WWF)

HAESL is a long-standing supporter of WWF, making contributions to the Fund and its initiatives. In 2018 we continued our participation in the WWF Earth Hour event. On 23 March we switched off all computer displays and non-essential lighting between 19:30 and 20:30. During lunch time we organised a competition in which our staff members made their own solar powered air-boat and competed round a course. This activity demonstrated how renewable energy could be used and promoted the innovation of ways to conserve the environment in the context of reducing electricity and water consumption as well as minimising waste generation.

In May, we partnered with WWF in the citizen science project, in which HAESL volunteers collected data of species of plankton, fish and corals in the underwater world of Hong Kong's first Marine Park, Hoi Ha Wan. The event aimed to help WWF to facilitate the monitoring of marine life system at Hoi Ha Wan and to raise the awareness of our volunteers on the needs of environmental conservation.



Cleaning up the Shoreline

In January, HAESL volunteers joined WWF in a coastal clean-up activity at Island House to restore the habitat for mangrove and remove invasive plants in the garden. In November, we conducted another shoreline clean-up at Tsing Lung Tau. The events helped our volunteers to be aware of the marine debris issues in Hong Kong and encouraged them to eliminate behaviours that contribute to pollution in daily life.



Planting for the Future

Trees are an essential part of our ecosystem. HAESL actively promotes the importance of tree conservation by participating in various planting events. In April, our staff members participated in the Tree Planting Challenge 2018 organised by Friends of the Earth (Hong Kong), which combined tree-planting, hiking and a test of participants' endurance to reduce the carbon footprint and stop climate change. In May, we partnered The Conservancy Association for another tree planting event, in which our volunteers experienced the challenge of tree-planting work and helped to spread the message of "Save Trees, Conserve Nature".



Our Footprint in the Community



Our Environment



As a leading aero engine MRO Company, we endeavour to conduct our business in a responsible and sustainable manner.

Over the course of 21 years of operation in Tseung Kwan O, we have implemented a number of initiatives to minimise our impact on the local environment and continually work to make further improvements. In recognition of our work and commitment, the Environmental Campaign Committee and the Environmental Protection Department of Hong Kong has certified HAESL as a Hong Kong Green Organisation in 2018.

Energy and Emission

Our overall energy usage includes direct and indirect sources. Direct energy sources include aviation fuel and Towngas. Jet A1 is the aviation fuel used for engine testing after maintenance work has been undertaken. Towngas is used for food preparation in the staff canteen.

The main indirect energy source is electricity, followed by fuel for air travel and gasoline used in our company vehicle. These are required to support our ongoing business activities.



All Forms of Energy Consumption

We measure our impact on the environment based on energy consumed per man-hour worked. There were a total of 2,376,007 man-hours worked in 2018 which consumed 243,639 GJ of energy. This represents an energy intensity of 102.5 MJ per man-hour worked in 2018, 2.7% less than 2017. The overall energy usage increased by 11.7% compared with the previous year. This was primarily due to the increase in engine volume and associated workload. The increase in total man-hours worked in 2018 was 14.8% more than 2017.

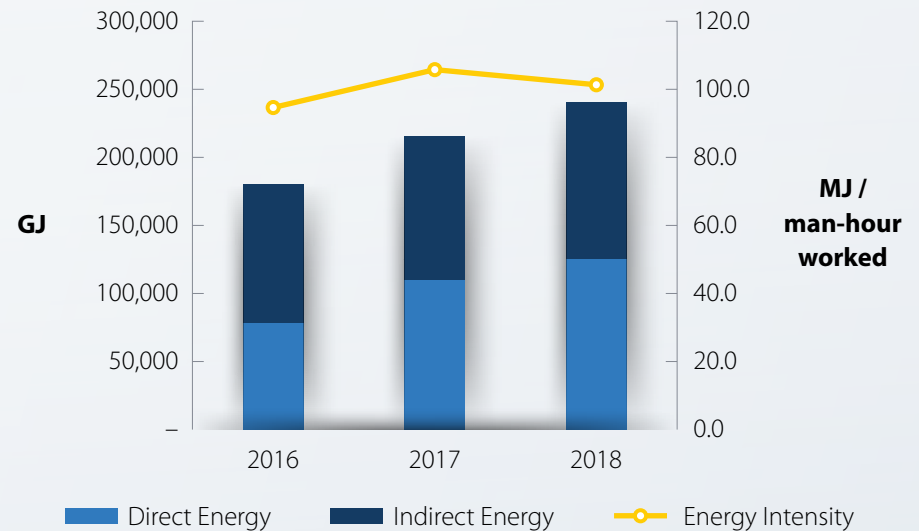


Figure 4: Total Energy Consumption and Energy Intensity

In order to further analyse the amount of Greenhouse Gas (GHG) produced from consuming energy, energy consumption figures are translated into GHG emission equivalent. The increase in overall energy usage in 2018 led to an increase of GHG emission when comparing with previous year. Our total GHG emission generated from operations amounted to 27,711 tonnes of carbon dioxide equivalent (CO₂e), an increase of 16% from 2017. The carbon intensity representing the amount of carbon emission per man-hour worked for 2018, was 11.7, the same level as in 2017. This figure includes the carbon offset we purchased to cover the GHG emission related to our business travel.

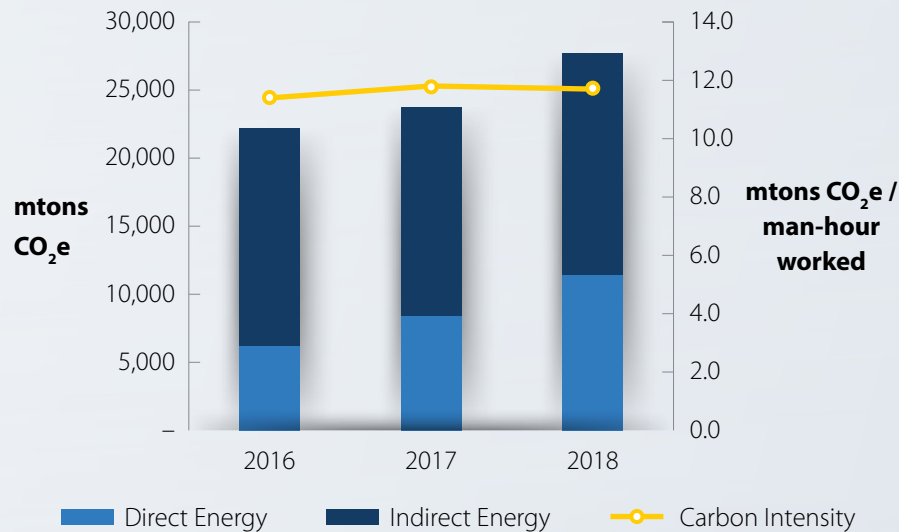


Figure 5: Greenhouse Gas (GHG) Emission and Carbon Intensity of Operation

Aviation Fuel

HAESL had a year of growth in 2018 and the number of engine tests increase from 187 to 236 which was 26.2% more than the previous year. 236 engine tests consumed 2,902 tonnes of jet fuel. Total fuel used increased by 13% compared to 2017. The average jet fuel consumed per test was 12.3 tonnes. This was 10.6% lower than 2017, predominantly due to the type of engine test required.

Towngas

Towngas is used to support the canteen operation. During recent years, we have changed over some of the cooking equipment from gas to electric. Towngas consumption decreased from 502,512 MJ in 2017 to 476,640 MJ in 2018, a reduction of 5.1%, despite an 11.4% increase in meals served.

Electricity

Electricity Intensity (energy consumption / worked hours) improved by 3.3% compared to 2017. In 2018 HAESL consumed 32GWh of electricity, 11% more than 2017. The increase in electricity usage was driven by the additional workload which outweighed activity to reduce usage such as: retrofitting LED lights, improved management of the company Heating, Ventilation & Air Conditioning (HVAC) system and staff engagement. As a result of the improvements made and increased work hours, the electricity intensity improved.

Water Management

Water consumption in 2018 decreased by 10.3% to 157,384 cubic metres. HAESL continues to operate its long-established air conditioning condensate recovery system to save the cooling tower water. The reduction in consumption is attributable to better management of water usage through the new wastewater treatment plant and enhancing staff awareness of the importance of water management.

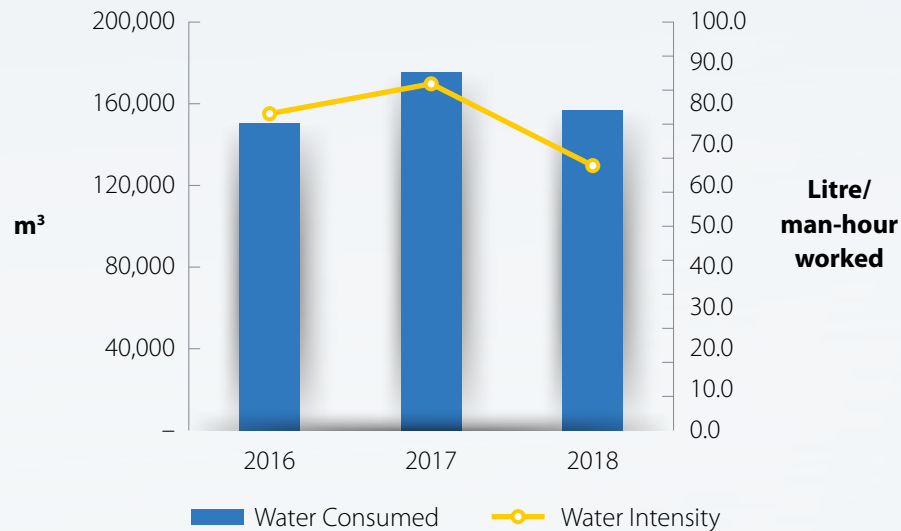


Figure 6: Water Consumption and Water Intensity



Effluents

The use of chemicals is unavoidable in the MRO industry. The management of chemical waste is therefore central to our sustainability policy. To meet our own environmental responsibilities, our chemical specialists ensure waste is handled appropriately with minimal impact to the community.

HAESL's waste water treatment plants process liquid chemical waste before discharging the treated waste into the mains sewerage system. The remaining sludge, resins and other waste, including heavy metals, are collected from site and processed by a government approved waste disposal company. During 2018, the Environmental Protection Department granted HAESL a licence to commence use of our new US\$2.5m waste water treatment plant, which will support our continued meeting of our obligations related to environmental regulations and laws as our business volume grows.

Waste Management

The amount of waste recycled during the year was 123 tons, 23.8% more than in 2017. The total amount of waste generated by HAESL in 2018 was 518 tons, a significant increase from 420 tons generated in 2017. The increase reflects the additional volume of workload in 2018. To maximise the amount of waste recycled, one of the key areas which we focused on during 2018 was to increase the amount of wooden waste that was recycled. We did this through education and sustained communication with staff. HAESL increased the amount of wooden waste recycled during the year to 86 tons, a 26.5% increase from the previous year.

Where possible HAESL has encouraged and practised the re-use and recycling of materials. The following chart gives the amount of materials recycled in 2018. All recycled materials are collected by a recognised recycling company.

HAESL will continue to review its waste management processes, in order to minimise the amount of waste sent to landfill.

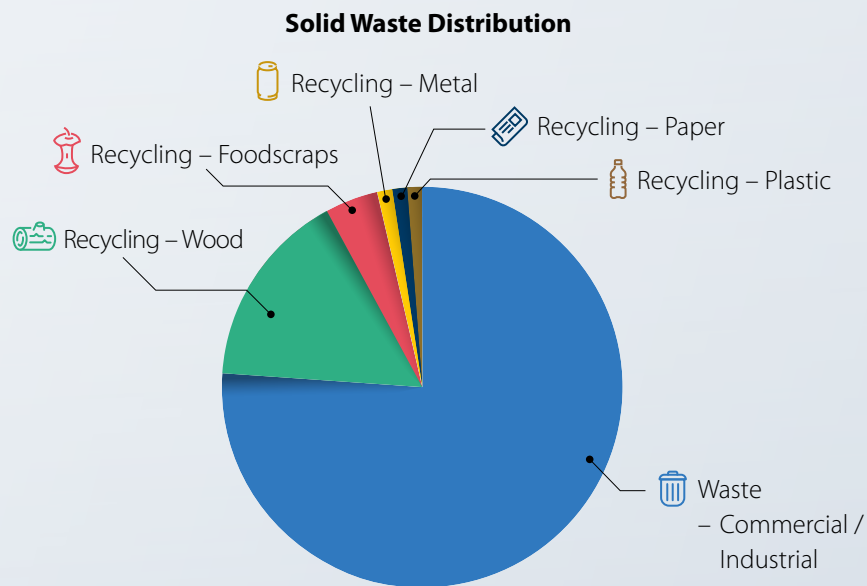


Figure 7: Solid Waste Distribution in 2018



Environmental Campaigns

Plastic Avoidance and Recycling

In the first quarter of 2018 HAESL launched a “Say NO to a straw” campaign. Staff are encouraged to stop using straws for drinks and the straws provided were changed from plastic to paper. In September the SD team introduced the recycling of polyfoam. The introduction of polyfoam recycling was as a result of a volunteering event in June jointly arranged by the HAESL SD team and the Finance Department. Since its introduction, 212kg of polyfoam, mainly package filling material, were recycled (a volume equivalent to one 40ft container). Visual aids and departmental briefings were used to keep the staff up-to-date and reminded to recycle.

Solar Panels on Phase VI rooftop

The Phase VI building has been designed with the environment in mind. In order to reduce any adverse impact to the environment, a set of solar photovoltaic panels were installed on the Phase VI rooftop.

Environmental Conservation Events

HAESL organised 13 events to promote environmental protection in 2018. Those events took place both within our premises and in other locations around Hong Kong. During 2018 over 100 participants dedicated over 400 hours helping conservation work and connecting at a personal level with the environment. Please refer to the “Protecting the Environment” section in “Our Community” for more details.

Our Business and Value Chain



About Our Services

HAESL provides world-class aero engine and component repair services to many of the world's most respected airlines that have chosen Rolls-Royce to power their fleet of Airbus and Boeing Aircraft.

HAESL has full capability to perform complete repair and overhaul of the Rolls-Royce RB211-524 and Trent 700, 800 and XWB engines. In addition to the main overhaul shop, we operate a state-of-the-art engine test facility. The test cell is designed and sized for testing a wide variety of high bypass turbo fan engines of up to 130,000 lbs. thrust over the full range of validation and certification requirements.

HAESL also has a broad range of specialised component repair capabilities, allowing it to offer customers cost effective alternatives to outright replacement. We are able to repair parts back to a fully restored condition, giving them the same integrity and durability as new parts. HAESL repairs parts from internal arisings and from the aero engine repair network worldwide. We have a 90% in-house core engine component repair capability.

In 2018, we overhauled engines for Rolls-Royce and 35 airlines flying globally, including those from Hong Kong, Mainland China, Asia Pacific, Middle East, Europe and the Americas. We understand that our customers demand a service that is both timely and cost effective. We offer industry leading turn times and competitive pricing through continuous productivity improvements.

To read more about the services we offer, the capabilities we have and the customers we serve, please visit our website www.haesl.com.



About Our Supply Chain

To support the HAESL operation, our Supply Chain Department provides solutions to satisfy Company needs. Our main categories of spend include goods and services used to run the company, such as replacement engine components, subcontracted repair services, machinery, IT services, and facility works. In 2018, HAESL engaged over 400 suppliers from all over the world.

HAESL proactively drives commitment of sustainability across its supply chain. Our environmental, social and ethical requirement and concern are communicated to our suppliers, partners and stakeholders through our Supplier Code of Conduct. We partner with suppliers who share our values and meet our standards. Compliance with the Supplier Code of Conduct is a core component when developing supplier relationships and making purchase decisions in an attempt to promote and build a responsible, sustainable and manageable supply chain.

Economic Performance

2018 was a successful year for HAESL financially, with improved safety levels and quality performance. Workload at HAESL during 2018 increased significantly. Engine output increased by 71 from 2017 resulting in a 62% rise in revenue. The following table summarises our economic performance.

Economic Performance	2016	2017	2018	Variance
Engine Output	114	140	211	51%
Revenues, US\$m	1,083	1,230	1,997	62%
Dividend, US\$m	51.3	56.5	86.9	54%
Employee Cost, US\$m	48.2	50.5	56.6	12%
Taxation, US\$m	10.5	11.8	18.8	59%
Charitable donations, US\$	51,298	50,202	48,001	-4%

Growing Our Business

At HAESL we do not confine ourselves to the current state of success, instead we continue to grow our business and prepare ourselves for further opportunities in the future.

Trent XWB

The Trent XWB is one of Rolls-Royce's latest engines and powers the Airbus A350 aircraft. Drawing on Rolls-Royce's unique three-shaft design, advanced materials and the latest fan system technology, the Trent XWB engine balances fuel efficiency and life cycle costs while delivering weight savings and improved aerodynamics. With a 15% fuel consumption advantage over the original Trent engines, it hits current and future emissions targets, goes further on less fuel and offers world beating performance and noise levels. Thanks to its great economic value and environmental efficiency, the Trent XWB has become the fastest-selling widebody engine in the world².

With full understanding of the importance of the Trent XWB to Rolls-Royce and airline customers, HAESL is dedicated in developing comprehensive MRO capability for both variants (-84 & -97) of the Trent XWB engine. Following the receipt of the full overhaul and testing capability approval in 2017 for the Trent XWB-84 engine, which powers the Airbus A350-900 aircraft, we have successfully overhauled three Trent XWB-84 engines in 2018.

In 2018, HAESL achieved another exciting milestone by obtaining test certification for the Trent XWB-97 engine, the second engine variant which powers the larger Airbus A350-1000 aircraft. Our training and development for Trent XWB-97 readiness is in progress with staff being sent to Rolls-Royce in Derby, UK to gain the necessary skills and knowledge to prepare for the XWB-97's induction to HAESL.

² Rolls-Royce plc. Trent XWB.
<https://www.rolls-royce.com/products-and-services/civil-aerospace/airlines/trent-xwb.aspx#/>.



Investing for Sustainable Growth

Further to the capability development of Trent XWB engines, HAESL is also investing and continues to develop sustainable growth in many areas.

- Our brand new workshop, the Phase VI building, was completed and became operational. We held an Opening Ceremony in December 2018 to celebrate the completion of this new facility, which provides us the opportunity to re-organise and grow our operation with additional workshop space and office areas in line with the increasing business volume.
- We continue to conduct “Train the trainer” Programmes in which we send HAESL staff to Rolls-Royce and train them to be competent to deliver on-job-training internally in HAESL
- HAESL is a founding member of the Aviation Services Research Centre (ASRC) of the Hong Kong Polytechnic University. In 2018, HAESL continued to partner with the ASRC on various projects.
- As our business grows, we have the pleasure to welcome more airline customers sending their engines to HAESL for MRO services.



New customers in 2018 included:

Aeroflot, Air Canada, Air New Zealand, Avianca, Azul Brazilian Airlines, Cebu Pacific Air, Garuda Indonesia, Hawaiian Airlines, Middle East Airlines, Qatar Airways, Turkish Airlines, and Virgin Australia



Customer Safety and Quality

Safety Management System (SMS)

HAESL's safety management framework comprises two major elements, which are aviation safety and occupational safety. These are essential to the safety of passengers and employees and to our business continuity. Our SMS is a systematic approach in reducing the risk of harm to persons or property damage to an acceptable level. It is the foundation for offering "Best in the World" services.

HAESL continues to deliver training to every employee to refresh their knowledge of the SMS requirements and assure the quality of our SMS. We promote a proactive safety culture, encouraging staff to feel responsible for safety. We have created an atmosphere of trust and openness where people are encouraged and recognised for providing safety-related information.

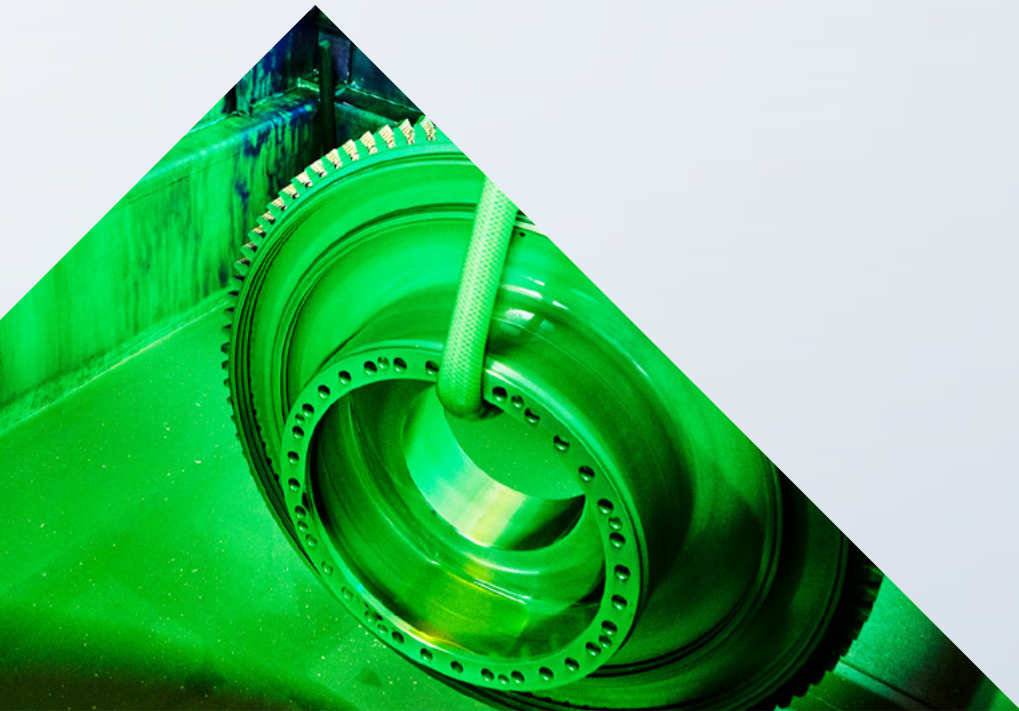
Auditing Systems

An effective auditing system is an essential tool for HAESL to manage our business quality. We understand the compliance of processes and procedures that have already taken place through audits. In HAESL, internal audits are carried out in a strict and professional manner. Corrective and preventive measures will be implemented to stop reoccurrence of non-conformance. There were 31 internal audits in 2018, excluding daily walk-around surveillance.

Furthermore, HAESL's customers, National Aviation Authorities and other certification bodies conduct annual external audits to ensure HAESL is compliant with their requirements. As a Rolls-Royce MRO service provider, HAESL goes through the Rolls-Royce Supplier Management System Requirements audit (SABRe). In 2018, a total of 30 external audits were carried out. No significant findings were identified during the audits.

Internal Audits	External Audits
Facility audit	National Aviation Authority audit
Procedure and process audit	Customer audit
Product audit	
Documentation audit	
Off-site audit	
Vendor audit	
Night shift audit	
Unscheduled audit	
Walk-around surveillance	

Figure 8: Different types of audit took place in HAESL each year



Reference



Performance Data

Economic Performance		2016	2017	2018	%
Engine output	No.	114	140	211	51%
Revenues generated	US\$M	1,083	1,230	1,997	62%
Dividends paid to shareholders	US\$M	51.3	56.5	86.9	54%
Employee Cost	US\$M	48.2	50.5	56.6	12%
Taxation	US\$M	10.5	11.8	18.8	59%
Charitable donations made directly by HAESL	USD	51,298.14	50,202.29	48,000.98	-4%

Environmental Performance		2016	2017	2018	%
Energy Consumption					
Direct Energy Consumption	GJ	77,859	113,494	128,056	13%
Indirect Energy Consumption	GJ	106,847	104,561	115,583	11%
Total Energy Consumption	GJ	184,706	218,055	243,639	12%
Greenhouse Gas Emission					
Direct Emission (Scope 1)	mtons CO2e	6,014	8,277	11,331	37%
Indirect Emission (Scope 2)	mtons CO2e	16,052	15,615	16,380	5%
Other Indirect Emission (Scope 3) by Business Air Travel	mtons CO2e	253	277	329	19%
Total GHG Emission	mtons CO2e	22,320	24,169	28,040	16%
Fuel					
Jet Kerosene - Engine Test	Tonnes	1,760	2,570	2,902	13%
Unleaded Petrol - Passenger Car (Hong Kong)	L	1,971	2,185	2,266	4%
Towngas	MJ	473,040	502,512	476,640	-5%

Performance Data

Environmental Performance		2016	2017	2018	%
Electricity					
Electricity - Hong Kong (CLP)	kWh	29,679,653	28,905,086	32,106,306	11%
Refrigerant / Fire Extinguishing Agent					
R134a	kg	338.2	113.6	1,659.1	1360%
Water					
Potable Water used	m3	151,483	175,487	157,384	-10%
Water discharged to sewer	m3	151,483	175,487	157,384	-10%
Materials					
Paper and paper products consumed	kg	15,288	18,146	18,134	-0%
Printing Cartridges purchased	No.	495	533	650	22%
Non-hazardous Waste Management					
Industrial / Commercial Waste disposed of	kg	382,880	310,080	394,650	27%
Grease trap waste disposed of	kg	84,640	75,440	46,000	-39%
Wood recycled	kg	46,169	68,270	86,350	26%
Food Waste recycled	kg	27,201	30,825	25,842	-16%
Paper products recycled	kg	3,397	2,859	3,050	7%
Plastic products recycled	kg	37	4072	4300	6%
Metal recycled	kg	2,465	3,808	3,311	-13%
Printing Cartridges recycled	No.	244	391	399	2%

Performance Data

Environmental Performance		2016	2017	2018	%
Hazardous Waste Management					
Chemical waste disposed (Liquid)	L	48,620	55,600	44,800	-19%
Chemical waste disposed (Solid)	kg	13,913	23,734	50,671	113%
Spent kerosene (aircraft fuel) recycled	L	5,000	4,000	4,800	20%
Lubrication oil recycled	L	12,800	17,200	17,200	0%
Significant chemicals / oil spills	No.	0	0	0	
Compliance					
Significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations ^(Note 1)	No.	1	0	0	

Occupational Health & Safety Performance		2016	2017	2018	%
Total workforce	No.	861	932	1,011	8%
Manhours worked (Total Attended Hour by all staff, in thousand)	Hour	1,952	2,070	2,376	15%
Work-related fatalities (employees)	No.	0	0	0	
Lost time injuries ^(Note 1)	No.	6	4	4	0%
Minor injuries / first aid cases	No.	1	0	2	
Total lost day	Day	68	34	29	-15%
Lost time injury rate ^(Note 2)		0.61	0.39	0.34	-13%
Man day lost rate ^(Note 3)		7.0	3.3	2.4	-27%

¹ Lost time injuries are defined as work-related injuries which result in lost time of a minimum of one scheduled working day.

² Lost time injury rate represents the number of injuries per 100 employees per year. It is calculated as the total lost time injuries multiplied by 200,000 and then divided by total hours worked. The factor 200,000 is the annual hours worked by 100 employees, based on 40 hours per week for 50 weeks a year.

³ Lost day rate represents total number of lost day per 100 employees per year. It is calculated as the total lost day multiplied by 200,000 and then divided by total hours worked. The factor 200,000 is the annual hours worked by 100 employees, based on 40 hours per week for 50 weeks a year.

GRI Content Index

GRI Standard	Disclosure	Location of Disclosure		Additional Notes to Reference	
		Page	Chapter		
GRI 101: Foundation 2016					
General Disclosures					
GRI 102: General Disclosures 2016	Organizational profile				
	102-1	Name of the organization	7	About HAESL: Best in the World, Best for the World → Our Story	
	102-2	Activities, brands, products, and services	35	Our Business and Value Chain → About Our Services	
	102-3	Location of headquarters	7	About HAESL: Best in the World, Best for the World → Our Story	
	102-4	Location of operations	7	About HAESL: Best in the World, Best for the World → Our Story	
	102-5	Ownership and legal form	7	About HAESL: Best in the World, Best for the World → Our Story	
	102-6	Markets served	35	Our Business and Value Chain → About Our Services	
	102-7	Scale of the organization	6 16 35 36	About HAESL: Best in the World, Best for the World Our People → About Our Workforce Our Business and Value Chain → About Our Services Our Business and Value Chain → Economic Performance	
	102-8	Information on employees and other workers	16	Our People → About Our Workforce	Number of employees scope includes all employment types (i.e. Permanent Full Time + Permanent Part Time + Fixed Term + Temporary) as at 31 December of the reporting year
	102-9	Supply chain	35	Our Business and Value Chain → About Our Supply Chain	
	102-10	Significant changes to the organization and its supply chain			There were no significant changes to our company and our supply chain in 2018.
	102-11	Precautionary Principle or approach			HAESL did not apply the Precautionary Principle or approach up to 31 December 2018.
	102-12	External initiatives			HAESL did not subscribe to any external initiatives up to 31 December 2018.
	102-13	Membership of associations			HAESL was not a member of any association up to 31 December 2018.
Strategy					
102-14	Statement from senior decision-maker	4	Message from the Director and General Manager		
Ethics and integrity					
102-16	Values, principles, standards, and norms of behaviour	9	About HAESL: Best in the World, Best for the World → Ethics and Compliance		

GRI Content Index

GRI Standard	Disclosure	Location of Disclosure		Additional Notes to Reference	
		Page	Chapter		
GRI 101: Foundation 2016					
General Disclosures					
GRI 102: General Disclosures 2016	Governance				
	102-18	Governance structure	10	About HAESL: Best in the World, Best for the World → Governance Structure and Committees	
	Stakeholder engagement				
	102-40	List of stakeholder groups	11	Materiality Assessment in Moving to GRI Standards	
	102-41	Collective bargaining agreements	10	About HAESL: Best in the World, Best for the World → Governance Structure and Committees	
	102-42	Identifying and selecting stakeholders	11	Materiality Assessment in Moving to GRI Standards	
	102-43	Approach to stakeholder engagement	11	Materiality Assessment in Moving to GRI Standards	
	102-44	Key topics and concerns raised	11	Materiality Assessment in Moving to GRI Standards	
	Reporting practice				
	102-45	Entities included in the consolidated financial statements			There were no entities included in HAESL's consolidated financial statements.
	102-46	Defining report content and topic Boundaries	11 44	Materiality Assessment in Moving to GRI Standards Reference → GRI Content Index	Refer to each specific topic in the GRI Content Index for where to find its boundaries
	102-47	List of material topics	11	Materiality Assessment in Moving to GRI Standards	
	102-48	Restatements of information			There were no restatements of information made in this Report.
	102-49	Changes in reporting	2	About this Report	The 2017 HAESL Sustainable Development Report was aligned with the Global Reporting Initiative (GRI) G4.0 Sustainability Reporting Guidelines in accordance with the Core option. In 2018, HAESL has changed to prepare this Report in accordance with the GRI Standards: Core option.
	102-50	Reporting period	2	About this Report	
	102-51	Date of most recent report			The 2017 HAESL Sustainable Development Report was published in mid 2018, which covered the reporting period of 1 January - 31 December 2017
	102-52	Reporting cycle			HAESL publishes Sustainable Development Report on an annual basis.
	102-53	Contact point for questions regarding the report	50	Reference → Request for Feedback	
	102-54	Claims of reporting in accordance with the GRI Standards	2	About this Report	
	102-55	GRI content index	44	Reference → GRI Content Index	
102-56	External assurance	49	Reference → Verification Statement		

GRI Content Index

GRI Standard	Disclosure	Location of Disclosure		Additional Notes to Reference
		Page	Chapter	
Material Topics				
200 series (Economic topics)				
Economic Performance				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	6	About HAESL: Best in the World, Best for the World	
	103-2 The management approach and its components	35	Our Business and Value Chain → About our Services	
	103-3 Evaluation of the management approach			
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	36 41	Our Business and Value Chain → Economic Performance Reference → Performance Data	
Anti-corruption				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	9	About HAESL: Best in the World, Best for the World → Ethics and Compliance	
	103-2 The management approach and its components			
	103-3 Evaluation of the management approach			
GRI 205: Anti-corruption 2016	205-3 Confirmed incidents of corruption and actions taken	9	About HAESL: Best in the World, Best for the World → Ethics and Compliance	HAESL did not have any confirmed incidents of corruption or actions taken in 2018.
Anti-competitive Behaviour				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	9	About HAESL: Best in the World, Best for the World → Ethics and Compliance	
	103-2 The management approach and its components			
	103-3 Evaluation of the management approach			
GRI 206: Anti-competitive Behaviour 2016	206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	9	About HAESL: Best in the World, Best for the World → Ethics and Compliance	HAESL was not involved in any legal actions for anti-competitive behaviour, anti-trust, and monopoly practices in 2018.
300 series (Environmental topics)				
Energy				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	6	About HAESL: Best in the World, Best for the World	
	103-2 The management approach and its components	30	Our Environment → Energy and Emission	
	103-3 Evaluation of the management approach			
GRI 302: Energy 2016	302-1 Energy consumption within the organization	30	Our Environment → Energy and Emission	Energy sources used by HAESL include jet fuel, electricity and Towngas purchased from other organisations. The majority of our electricity is consumed in Hong Kong where the supplier is franchised, such that we cannot lower the carbon intensity of our electricity by choice of supplier. Each kilowatt hours (kWh) registered by electricity meters represents 3.6 Mega joules. Towngas in Hong Kong is calculated according to "Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for buildings (Commercial, Residential or Institutional Purpose) in Hong Kong (2010)" published by Environmental Protection Department (EPD) of the Hong Kong Government. Each unit registered by a gas meter represents a heat value of 48 Mega joules.
	302-3 Energy intensity	41	Reference	
	302-4 Reduction of energy consumption		→ Performance Data	

GRI Content Index

GRI Standard	Disclosure	Location of Disclosure		Additional Notes to Reference	
		Page	Chapter		
Material Topics					
300 series (Environmental topics)					
Water					
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	6	About HAESL: Best in the World, Best for the World	
	103-2	The management approach and its components	32	Our Environment → Water Management → Effluents	
	103-3	Evaluation of the management approach			
GRI 303: Water and Effluents 2018	303-3	Water withdrawal	32	Our Environment → Water Management → Effluents	We use municipal water as water supply of which consumption is the amount reported in water bills. We assume that all water withdrawn are discharged eventually in our business with no consumption.
	303-4	Water discharge			
	303-5	Water consumption			
Effluents and Waste					
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	33	Our Environment → Waste Management	
	103-2	The management approach and its components			
	103-3	Evaluation of the management approach			
GRI 306: Effluents and Waste 2016	306-2	Waste by type and disposal method	33	Our Environment → Waste Management Reference → Performance Data	
	306-3	Significant spills	41		HAESL did not have any spills in 2018.
Environmental Compliance					
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	29	Our Environment	
	103-2	The management approach and its components	9	About HAESL: Best in the World, Best for the World → Ethics and Compliance	
	103-3	Evaluation of the management approach			
GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations			HAESL did not have any non-compliance occurrence related to environmental laws and regulations in 2018.
400 series (Social topics)					
Occupational Health and Safety					
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	22	Our People → Safety Culture	
	103-2	The management approach and its components			
	103-3	Evaluation of the management approach			
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	10	About HAESL: Best in the World, Best for the World → Governance Structure and Committees	
	403-2	Hazard identification, risk assessment, and incident investigation			
	403-3	Occupational health services	22	Our People → Safety Culture	
	403-4	Worker participation, consultation, and communication on occupational health and safety			
	403-5	Worker training on occupational health and safety	20	Our People → Talent Development → Safety Training	

GRI Content Index

GRI Standard	Disclosure	Location of Disclosure		Additional Notes to Reference
		Page	Chapter	
Material Topics				
400 series (Social topics)				
Occupational Health and Safety				
GRI 403: Occupational Health and Safety 2018	403-6 Promotion of worker health	17	Our People → Building a Strong Workforce	<p>HAESL reports the number of lost time injuries (LTI), the Lost Time Injury Rate (LTIR), the number of lost days, the Lost Day Rate (LDR) and employee fatalities as defined below.</p> <ol style="list-style-type: none"> Total injuries are the number of injuries in the year which result in a minimum lost time of one working day. Lost Time Injury Rate: represents the number of injuries per 100 equivalent employees per year. It is calculated as the Total Injuries multiplied by 200,000 and then divided by total hours worked. The factor 200,000 is the annual hours worked by 100 employees, based on 40 hours per week for 50 weeks a year. Lost Days: A Lost Day occurs when, in the opinion of the physician of record, the employee cannot work. Lost Days are counted as calendar days where counting begins the first day following the injury and ends when the person returns to full duty, receives a permanent job transfer, leaves employment. Lost Day Rate represents the number of lost work days per 100 equivalent employees per year. It is calculated as the Total Days Lost multiplied by 200,000 and then divided by total hours worked. The factor 200,000 is the annual hours worked by 100 employees, based on 40 hours per week for 50 weeks a year. Fatality (employee) A loss of life occurring to an employee, as the result of a work-related incident.
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	18	→ Staff Amenities & Wellness	
	403-8 Workers covered by an occupational health and safety management system	22	Our People → Safety Culture	
	403-9 Work-related injuries	22 41	Our People → Safety Culture Reference → Performance Data	
Customer Health and Safety				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	39	Our Business and Value Chain → Customer Safety and Quality	
	103-2 The management approach and its components			
	103-3 Evaluation of the management approach			
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	39	Our Business and Value Chain → Customer Safety and Quality	All services we provide to our customers are covered by our Safety Management System and Audit Systems to ensure the quality and safety of engines we overhauled.
Customer Privacy				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	9	About HAESL: Best in the World, Best for the World → Ethics and Compliance	
	103-2 The management approach and its components			
	103-3 Evaluation of the management approach			
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	9	About HAESL: Best in the World, Best for the World → Ethics and Compliance	HAESL did not receive any complaints from customers concerning breaches of customer privacy and losses of customer data in 2018.
Socioeconomic Compliance				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	9	About HAESL: Best in the World, Best for the World → Ethics and Compliance	
	103-2 The management approach and its components			
	103-3 Evaluation of the management approach			
GRI 419: Socioeconomic Compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area	9	About HAESL: Best in the World, Best for the World → Ethics and Compliance	HAESL did not have any non-compliance occurrence related to laws and regulations in the social and economic area in 2018.

Verification Statement



Scope and Objective

Hong Kong Quality Assurance Agency (“HKQAA”) was commissioned by Hong Kong Aero Engine Services Limited (hereinafter called “HAESL”) to undertake an independent verification for the Sustainability Report 2018 (hereinafter called “the Report”). The Report stated the overall sustainability performance and efforts made by HAESL in terms of economic, environmental and social aspect in the period of 1st January 2018 to 31st December 2018.

The aim of this verification is to provide a reasonable assurance on the reliability of the report contents. The Report has been prepared in accordance with the Core Option of the GRI Sustainability Reporting Standards (GRI Standards).

Level of Assurance and Methodology

The process applied in this verification was based on the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board. Our evidence gathering process was designed to obtain a reasonable level of assurance as set out in the standard for the purpose of devising the verification conclusion. The extent of this verification process undertaken covered the criteria set in the GRI Standards: Core Option.

In order to understand the process that HAESL adopted to ascertain the key sustainability issues and impacts, the Report compilation process was discussed including stakeholder engagement and materiality assessment processes. Also, system and process for collecting, collating and reporting the sustainability performance data, reviewing of relevant documentation, interviewing responsible personnel with accountability for preparing the reporting contents and verifying selected representative sample of data and information. Raw data and supporting evidence of the selected samples were also thoroughly examined during the verification process.

Independence

HAESL is responsible for the collection and presentation of the information presented. HKQAA does not involve in calculating, compiling, or in the development of the Report. Our verification activities are independent from HAESL.

Conclusion

Based on the verification results and in accordance with the verification procedures undertaken, HKQAA has obtained reasonable assurance and is in the opinion that:

- The Report has been prepared in accordance with the GRI Standards: Core Option;
- The Report illustrates the sustainability performance of HAESL, covering all material aspects, in a material, responsive, fair and balance manner; and
- The data and information disclosed in the Report are reliable and complete.

Nothing has come to HKQAA attention that the selected sustainability performance information and data contained in the Report has not been prepared and presented fairly and honestly, in all material aspects, in accordance with the verification criteria.

HAESL has reported specifically the sustainability issues identified as the most influencing matters to its business and stakeholders through a materiality identification exercise. The report illustrates the challenges and opportunities associating to HAESL’s sustainability context, it covers different projects undertaken in 2018 and the approaches that HAESL adopted to manage the result achieved. HAESL has developed a stringent data management mechanism where all data undergoes robust internal vetting, the basis of credible and transparent reporting is attained. In conclusion, the Report reflects appropriately the commitments and involvement of HAESL towards sustainable development.

Signed on behalf of Hong Kong Quality Assurance Agency

A handwritten signature in black ink, appearing to read 'Jorine', is written over a light blue background.

Jorine Tam
Director, Corporate Business
May 2019

Thank you for reading this Report.

Request for Feedback

We welcome your views on how we may further improve our economic, environmental and social commitments. Your comments on this report are also appreciated. Please contact us via our website, email at sd@haesl.com or direct mail to the following address:

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Tseung Kwan O Industrial Estate,
Tseung Kwan O, N.T., Hong Kong.