

Sustainability Report 2019



## **VISION**

A trusted global company building a sustainable future.

## **MISSION**

We deliver solutions for sustainable urbanisation safely, responsibly and profitably.

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# WE ARE BUILDING A SUSTAINABLE FUTURE FOR ALL OUR STAKEHOLDERS.

Keppel is an eco-system of companies providing solutions for sustainable urbanisation, whether in terms of meeting energy and environmental needs, or providing various urban development, connectivity and asset management solutions. We are making sustainability our business, through creating diverse solutions which are good for the planet, for people and for Keppel.



#### **LETTER TO STAKEHOLDERS**

GRI 102-14



# KEPPEL IS COMMITTED TO SUPPORTING THE EFFORTS OF THE INTERNATIONAL COMMUNITY AND THE SINGAPORE GOVERNMENT TO ADVANCE CLIMATE ACTION. WE WILL PUT OUR ENGINEERING CAPABILITIES TO WORK ON SOLUTIONS TO COMBAT CLIMATE CHANGE.

#### DEAR STAKEHOLDERS,

#### A TEST OF RESILIENCE

COVID-19 is having a significant impact on the lives of countless people around the world. Many governments have responded by taking unprecedented steps, including lockdowns and border controls, to flatten the infection curve. The pandemic has caused considerable hardship for affected communities, sharply slowed down global economic activity, and disrupted many aspects of modern life that we have come to take for granted. For companies, COVID-19 has also underscored the importance of looking at long-term risks, having comprehensive business continuity plans, and ultimately of building sustainable businesses that remain resilient amidst adversity and can respond nimbly to unexpected developments.

While COVID-19 is currently the focus of media and public attention, climate change remains one of the most serious challenges facing the world today. Like COVID-19, it transcends borders and can fundamentally transform the world as we know it. Unlike COVID-19, its impact may be even greater, more devastating, and longer lasting. There is no quick fix or vaccine for climate change. Efforts to combat climate change require coordinated and sustained international effort, long-term commitments, and trade-offs that we must each be prepared to make.

#### **COMMITTED TO CLIMATE ACTION**

Over the past few years, there has been growing international consensus on the importance of sustainable development and climate action. At the United Nations Climate Action Summit last September, 70 countries committed to deliver more ambitious national climate plans in 2020, in pursuit of the goal of net-zero emissions by 2050. Singapore has also enhanced its pledge under the Paris Agreement, with an aim to peak its emissions around 2030, half the emissions from its 2030 peak by 2050, and achieve net zero emissions as soon as viable. To incentivise industries to improve energy efficiency and reduce emissions, Singapore implemented a carbon tax in 2019, with the intention of increasing it over the next 10 years, and is actively pursuing cleaner energy solutions.

Keppel is committed to supporting the efforts of the international community and the Singapore government to advance climate action.

In 2019, the Board reviewed the Company's sustainability reporting framework and material environmental, social and governance (ESG) factors. We have included Environmental Stewardship as a key strategic thrust, and climate action as a material ESG factor that we should focus on.

Environmental sustainability is a key consideration in our business decisions,

and has been woven into the performance appraisal of senior management across the Group. We will avoid highly pollutive businesses such as coal-fired plants, and focus more on renewables and cleaner energy such as gas. We will also include an internal carbon price in the evaluation of all major investment decisions. For our existing businesses and assets, we will focus on enhancing energy efficiency, including harnessing renewable energy where possible.

We will put our engineering capabilities to work on solutions to combat climate change, and in the process, also create new business opportunities for the Group. Last year, we established a new business unit, Keppel Renewable Energy, to pursue opportunities for Keppel as a developer, owner and operator of renewable energy infrastructure.

Our pivot towards renewables and cleaner fossil fuels can already be seen in some of our businesses such as Keppel Offshore & Marine, with renewables and LNG-related solutions making up over 60% of new orders secured in 2019.

On 1 January 2020, Keppel Bay Tower, where Keppel Corporation is headquartered, became Singapore's first commercial development to be fully powered by renewable energy. Through energy efficiency initiatives implemented across the Group in 2019, as well as energy savings from Keppel Land's Green Mark-certified developments, we have saved an estimated 862,264 GJ of energy in the past year, translating to an estimated \$60 million in cost savings.

Since 2014, we have set ourselves a target to reduce carbon emissions intensity by 16% from 2020 business as usual levels. In 2018, we set a longer-term target to achieve a 28.8% reduction in carbon emissions intensity from 2010 levels by 2030. Both targets are aligned with national goals set by the Singapore Government over the years. I am pleased to report that as at end-2019, we have achieved a more than 30% average reduction in carbon emissions intensity from our 2010 baseline, and are well on track to achieving our 2020 target.

We will continue to explore how we can push ourselves to do even more for climate change. Starting from this year, we have expanded our tracking of carbon emissions from Scope 1 and 2 to include



Scope 3 emissions, such as emissions from business travel. We have also set long-term targets to reduce water consumption and waste intensity, and increase renewable energy generation.

#### STRONG FOUNDATIONS

Commitment to good corporate governance is essential to the sustainability of any business. In 2019, Keppel Offshore & Marine became one of the first companies in Singapore to achieve global certification for the ISO 37001 Anti-Bribery Management System. We are progressively implementing the same standard throughout the Group. We have also enhanced the Group's whistle-blower policy with centralised procedures and whistle-blower reporting channels including email and local toll-free hotlines.

Our people are our most valuable resource. We respect and uphold fair employment practices, and human rights principles. In 2019, we formalised our corporate statement on diversity and inclusion, which is publicly available on our website. We are committed to investing in people development to grow the capabilities of our workforce to drive Keppel's growth and continue creating value for our stakeholders. This year, in the Company's Employee Engagement Survey, we achieved

an overall employee engagement score of 86%, higher than the 82% and 80% achieved in 2017 and 2015 respectively, and significantly higher than the average of 76% among Singapore companies. We were also recognised in Forbes' Global 2000 rankings as one of the World's Best Regarded Companies 2019 and World's Best Employers 2019.

Safety is a core value at Keppel, and we are guided by a robust Health, Safety and Environment policy which all our employees and suppliers are required to adhere to. Amid COVID-19, the health and well-being of our employees, contractors and other stakeholders have been our top priority and we have put in place various measures to minimise the spreading of the virus, including working from home where possible and safe distancing measures at the workplace. I am also pleased to share that we achieved our goal of zero fatalities in 2019, for the first time in over 25 years. We will continue to innovate and improve our safety standards. to ensure that everyone goes home safe every day.

Suppliers of the Keppel Group of companies are expected to abide by the Keppel supplier code of conduct, which covers business conduct, labour

#### **LETTER TO STAKEHOLDERS**

and environmental aspects. We are committed to engaging with our suppliers to evaluate their sustainability performance. In 2019, all new suppliers were screened in accordance with ESG criteria, and 99.97% of qualified suppliers endorsed the code or have their own codes which met Keppel's requirements.

As we seek to build a sustainable future, we look forward to deepening collaboration with all our stakeholders to create diverse solutions which are good for the planet, for people and for Keppel.

#### **CARING FOR THE COMMUNITY**

Keppelites are making a positive impact in communities wherever we operate. I am proud to share that Keppel Volunteers contributed more than 18,000 hours to serving the community, more than our target of 10,000 hours, and an increase of over 4,000 hours compared to 2018. Our volunteer outreach includes activities in Singapore such as packing and distributing food and household items to low-income households, as well as overseas programmes such as poverty alleviation efforts in Mabian County in Sichuan Province, China, and the Words on Wheels initiative in Ho Chi Minh City, Vietnam, to promote literacy. During the COVID-19 pandemic, we also committed more than \$5 million to support international and local efforts to combat the coronavirus.

We are committed to care for the underprivileged and uplift lives. In 2019, Keppel pledged \$500,000 over the next three years to support the sheltered workshop programme run by SPD, a local charity supporting persons with disabilities. The programme aims to help persons with disabilities improve their job prospects through providing vocational training, therapy and employment support services. Beyond financial support, Keppel will bring the Group's capabilities in areas such as engineering, workplace safety, business development and marketing to help enhance the sheltered workshop programme through skills-based volunteerism.

More recently, in 2020, we have also pledged to donate \$3 million to support NParks' One Million Trees movement. The donation will

support the planting of 10,000 trees over the next five years in parks and nature reserves in Singapore, reflecting our heightened commitment to environmental stewardship and climate action. NParks has announced that this is the single largest donation pledged for tree planting in Singapore to date.

#### STRENGTHENING DISCLOSURES

Since 2018, Keppel has been a signatory of the United Nations Global Compact, the world's largest corporate sustainability initiative promoting sustainable business practices. We affirm our support of the Global Compact's 10 principles on human rights, labour, environment and anti-corruption, and this report serves as our Communication on Progress.

We also support the Taskforce on Climate-related Financial Disclosures and are working towards incorporating its recommendations on voluntary climate-related disclosures in our reporting framework.

#### **BUILDING A SUSTAINABLE FUTURE**

Today, Keppel is an eco-system of companies providing solutions for sustainable urbanisation, whether in terms of meeting energy and environmental needs, or providing various urban development, connectivity and asset management solutions.

We are encouraged by the international recognition of our sustainability efforts. Keppel Corporation was upgraded to the highest triple-A rank in the Morgan Stanley Capital International (MSCI) ESG ratings in February 2020, and ranks among the top 11% of industrial conglomerates in the MSCI All Country World Index based on ESG criteria. For the first time, Keppel also won the Singapore Environmental Achievement Award in the services category at the Singapore Environmental Council's Environmental Achievement Awards 2019.

As we seek to build a sustainable future, we look forward to deepening collaboration with all our stakeholders to create diverse solutions which are good for the planet, for people and for Keppel.

LOH CHIN HUA Chief Executive Officer 8 May 2020

#### **HIGHLIGHTS**

#### **Sustainability Benchmarks**



## AAA

Rating achieved in the MSCI ESG ratings. Ranked top 11% of all industrial conglomerates in the MSCI All Country World Index, based on ESG criteria.

#### **Accolades**



#### Singapore Environmental Achievement Award

In the services category at the Singapore Environment Council's Environmental Achievement Awards 2019.

#### **Economic Value**



\$8.2b

Of economic value generated for our stakeholders.

#### **Emissions Reduction**



>30%

Average reduction in carbon emissions intensity from our 2010 baseline achieved by operations in Singapore and overseas.

#### **Energy Savings**



# \$60m

In estimated cost savings from energy efficiency initiatives implemented in 2019 and from Keppel Land's Green Mark-certified developments.

#### **Suppliers**



100%

Of all new suppliers were screened in accordance with environmental, social and governance criteria.

#### Safety



O

Workplace fatalities across our global operations in 2019, for the first time in more than 25 years.

#### Accolades



#### Forbes' Global 2000 Rankings

Top 250 World's Best Regarded Companies, and Top 500 World's Best Employers in 2019.

#### **Employee Engagement**



86%

Overall engagement score, significantly higher than the average of 76% among Singapore companies.

#### **Training & Development**



27.6hrs

Of training per employee globally.

#### **Social Investments**



\$9.6m

Invested in worthy social causes, including caring for the underprivileged, supporting education, and protecting the environment.

#### Volunteerism



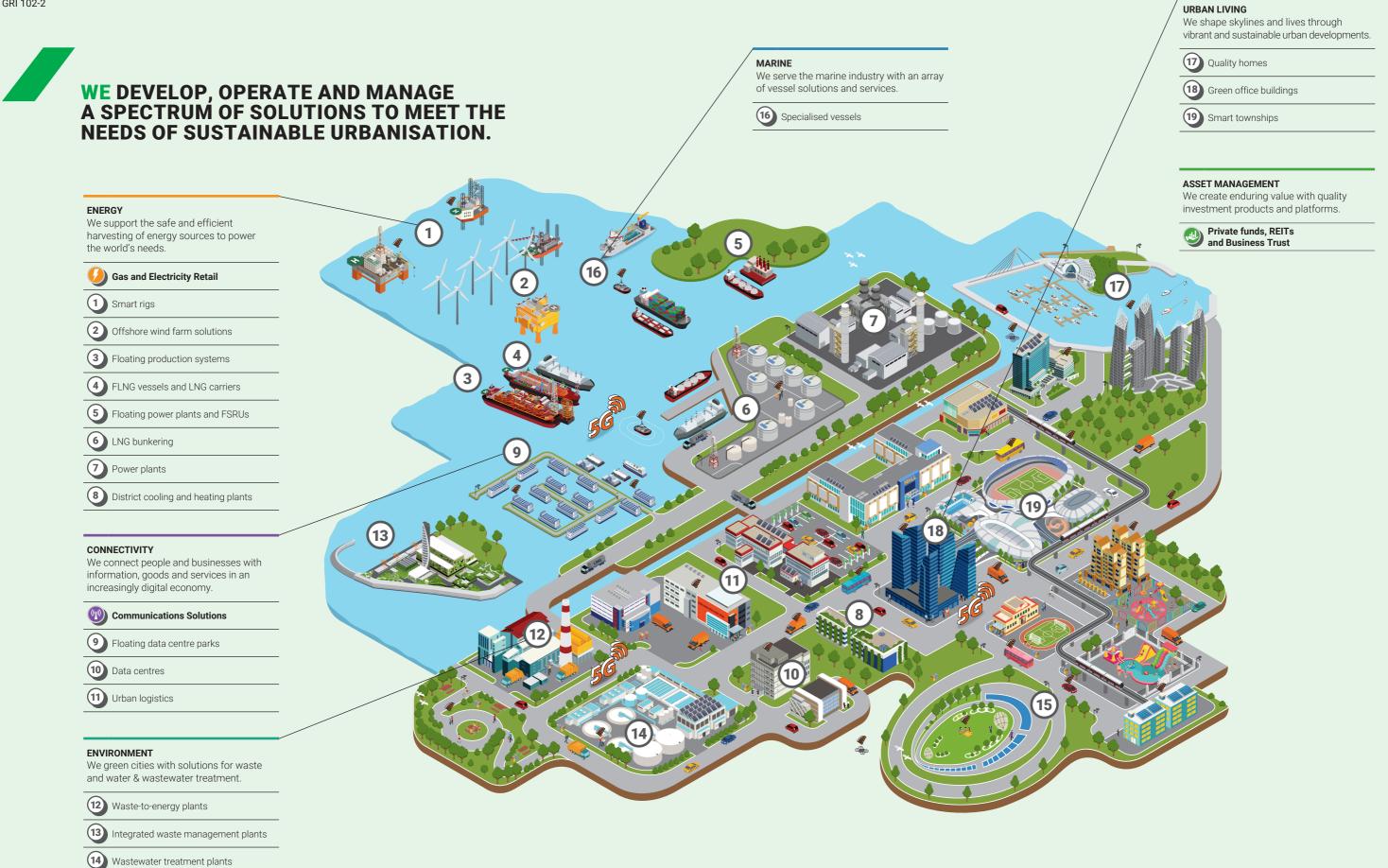
>18,000hrs

Of community service achieved by Keppel Volunteers, an increase of over 4,000 hours compared to 2018.

5

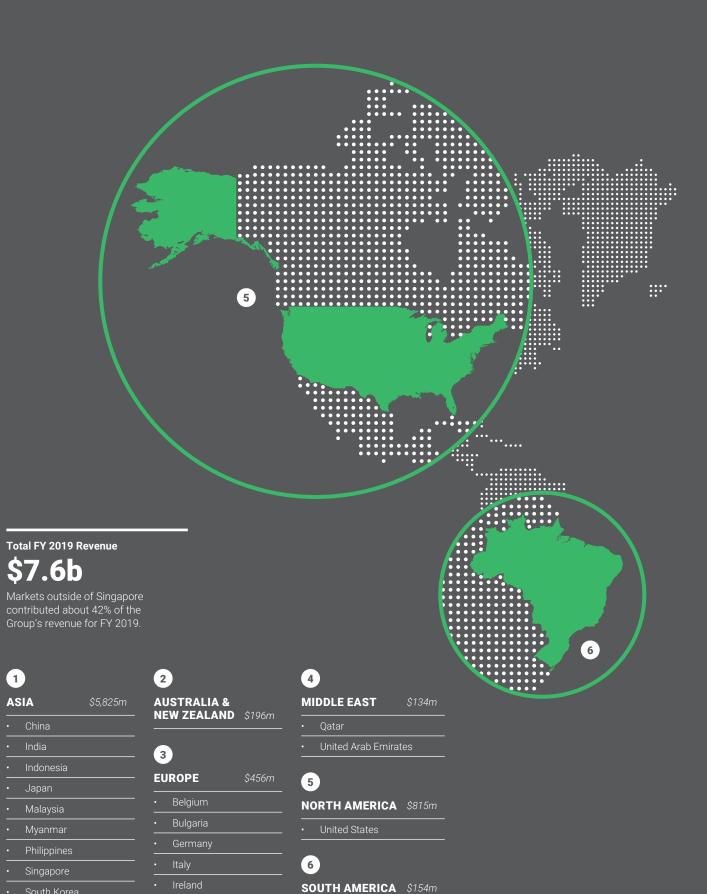
#### **BUILDING A SUSTAINABLE FUTURE**

15 Desalination plants



#### **GLOBAL PRESENCE**

GRI 102-4 | 102-6 | 102-7





United Kingdom

1

#### **GROUP STRUCTURE**

GRI 102-5 | 102-7 | 102-45

#### KEPPEL CORPORATION LIMITED

#### **Offshore & Marine**

- Offshore rig design, construction, repair and upgrading
- Ship conversion and repair
- Specialised shipbuilding

Keppel FELS Limited

Kennel Marine &

# **KEPPEL OFFSHORE &** 100%

100%

86%

Keppel Shipyard Limited	100%
Keppel Singmarine Pte Ltd	100%
Keppel LeTourneau	100%
Keppel Nantong Shipyard Company Limited China	100%
Offshore Technology Development Pte Ltd	100%

Deepwater Technology Pte Ltd	100%
Keppel AmFELS LLC United States	100%
Keppel FELS Brasil SA Brasil	100%
Keppel Philippines Marine Inc The Philippines	98%

Dyna-Mac Holdings Limited <sup>4</sup>	24%
Floatel International Ltd Bermuda	50%
The Philippines	

Keppel Subic Shipyard Inc

#### **Property**

- Property development
- Investments

#### Infrastructure

- Energy infrastructure
- Environmental infrastructure
- Infrastructure services
- Logistics and data centres Investments

#### **Investments**

- Asset management Master development
- Investments
- Communications

KEPPEL LAND LIMITED	
	100%

Keppel Land	100%
<ul> <li>various holding companies</li> <li>Southeast Asia and India</li> </ul>	

Keppel Land China China	100%
Keppel Bay Pte Ltd	100%
Kennel RFIT <sup>3,4</sup>	49%

KEPPEL INFRASTRUCTURE	
HOLDINGS PTE LTD	
	100%

#### **ENERGY INFRASTRUCTURE**

Keppel Gas Pte Ltd	100%
Keppel Electric Pte Ltd	100%
Keppel DHCS Pte Ltd	100%
Keppel Merlimau Cogen Pte Ltd <sup>5</sup>	49%
ENVIRONMENTAL INFRACT	DUOTUDE

#### **ENVIRONMENTAL INFRASTRUCTURE**

Ceppel Seghers Pte Ltd	100%
NFRASTRUCTURE SERVICES	

100%

#### Keppel Infrastructure Services Pte Ltd

INVESTMENTS	
Keppel Infrastructure Trust <sup>4</sup>	18%

# KEPPEL TELECOMMUNICATIONS & TRANSPORTATION LTD

LOGISTICS & DATA CENTRES	
Keppel Logistics Pte Ltd	100%
Keppel Data Centres Holding Pte Ltd <sup>7</sup>	100%
UrbanFox Pte Ltd	85%
Keppel DC REIT <sup>4</sup>	23%

KEPPEL CAPITAL HOLDINGS PTE LTD	
	_
Kannal DEIT Managament	

00%

Keppel REIT Management Limited	100%
Alpha Investment Partners Ltd	100%

Keppel Infrastructure Fund Management Pte Ltd	100%
Cennel DC REIT	100%

Management Pte Ltd<sup>6</sup> Keppel Pacific Oak US REIT 50%

Management Pte Ltd 7% Keppel Pacific Oak US REIT4

**KEPPEL URBAN SOLUTIONS** 

KRISENERGY LTD<sup>4</sup> Cayman Islands

SINO-SINGAPORE TIANJIN ECO-CITY INVESTMENT AND DEVELOPMENT CO., LTD1 China

50%

#### GROUP CORPORATE SERVICES

Human Resources	Tax
Legal	Treasury
Risk & Compliance	Information Systems
Audit	Health, Safety & Environment
	Legal Risk & Compliance

#### Notes:

- Owned by a Singapore Consortium, which is in turn 90%-owned by the Keppel Group.
  Owned by Keppel Telecommunications & Transportation Ltd (19%), a wholly-owned subsidiary of Keppel Corporation, and Konnectivity (81%), a joint venture between
- Keppel Corporation and Singapore Press Holdings. Owned by Keppel Land Limited (44%) and Keppel Capital Holdings Pte Ltd (5%).
- Public listed company.
- Owned by Keppel Infrastructure Holdings Pte Ltd (49%) and Keppel Infrastructure Trust (51%).
- Owned by Keppel Capital Holdings Pte Ltd (50%) and Keppel Telecommunications & Transportation Ltd (50%). Owned by Keppel Telecommunications & Transportation Ltd (70%) and Keppel Land Limited (30%).

Updated as at 11 March 2020. The complete list of subsidiaries and significant associated companies is published on pages 201 to 210 of Keppel Corporation's Report to Shareholders 2019

#### SUSTAINABILITY FRAMEWORK

GRI 102-49

WE REGARD SUSTAINABLE URBANISATION BOTH AS A CORPORATE RESPONSIBILITY AND A SOURCE OF BUSINESS OPPORTUNITIES.

#### **OUR STRATEGY**

Keppel is an eco-system of companies, collaborating to provide solutions for a fast-urbanising world. We regard sustainable urbanisation both as a corporate responsibility and a source of business opportunities. We are harnessing the Group's capabilities and proven track record in engineering, project development, operating and managing specialised assets, capital and asset management, and growing new businesses aligned with these competencies.

In 2019, Keppel Corporation's sustainability reporting framework and material ESG factors were updated and refined, taking into account changes in the external environment as well as a comprehensive review of the Company's material ESG factors which was conducted from December 2018 to April 2019.

Reflecting our increased focus on environmental sustainability, the three strategic pillars under the framework have been updated to (1) Environmental Stewardship; (2) Responsible Business; and (3) People and Community.



#### **ENVIRONMENTAL STEWARDSHIP**

We will do our part to combat climate change, and are committed to resource efficiency and reducing our environmental impact. We will avoid highly pollutive businesses such as coal-fired plants, emphasise renewables and cleaner energy such as gas, and channel our engineering capabilities as a solutions provider to contribute to the fight against climate change. We have set targets to reduce waste, water and carbon emissions intensity, and to invest in renewable energy generation.



#### **RESPONSIBLE BUSINESS**

The long-term sustainability of our business is driven at the highest level of the organisation through strong corporate governance and prudent risk management.

Through our integrated business model, we seek to improve both the magnitude and quality of our earnings with more recurring income, while enhancing returns through active capital recycling. We work closely with stakeholders in our value chain to enhance their sustainability performance, and continue to drive innovation and seize new opportunities.



#### **PEOPLE AND COMMUNITY**

People are the cornerstone of our businesses. We are committed to providing a safe and healthy workplace, as well as investing in training and developing our people to help them reach their full potential.

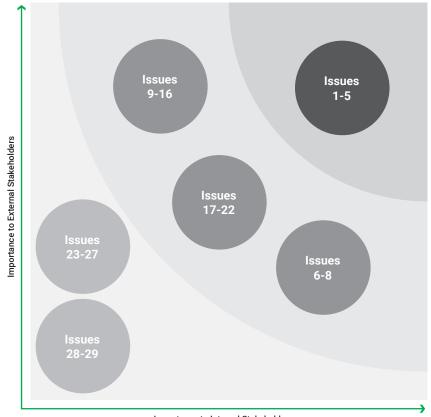
As a global citizen, Keppel believes that as communities thrive, we thrive. We are committed to uplifting communities wherever we operate, and supporting initiatives that protect the environment, promote education and care for the underprivileged, with the goal of building a sustainable future together.

#### **MATERIALITY**

GRI 102-21 | 102-46

# MATERIALITY ASSESSMENTS ARE IMPORTANT COMPONENTS OF KEPPEL'S SUSTAINABILITY STRATEGY AND REPORTING.

#### **MATERIALITY MATRIX**



Importance to Internal Stakeholders

The outcome of the materiality review was a matrix illustrating the degree of importance that internal and external stakeholders accord to the company's material issues.



25. Land Degradation & Contamination

27. Rights of Local Communities

24. Biodiversity

26. Employee Wellness

28. Noise Pollution29. Collective Bargaining

#### Legends



GRI 102-46 | 102-47 | 102-49

Our materiality assessments are based on Reporting Principles from the GRI Standards on Defining Report Content – stakeholder inclusiveness, sustainability context, materiality and completeness.

Materiality with respect to sustainability reporting, as defined by GRI Standards, includes topics and indicators that reflect the organisation's significant economic, environmental, and social impacts; and would substantively influence the assessments and decisions of stakeholders.

A comprehensive review of the Company's material Environmental, Social and Governance (ESG) factors was conducted from December 2018 to April 2019. The process was supported by an independent consultant and involved surveys, workshops and interviews with around 170 internal and external stakeholders, an assessment of long-term global trends and an internal review of our businesses. The review resulted in a comprehensive matrix categorising factors according to their importance to internal and external stakeholders. Factors were prioritised according to their importance to both internal and external stakeholders.

Arising from the review, a revised sustainability reporting framework and an updated set of material ESG factors were presented to and approved by Keppel Corporation's Board of Directors.

#### **PROCESS**

#### Identify

#### Step 1

We identify the Company's material ESG factors through stakeholder consultations, an assessment of long-term global trends and an internal review of our businesses

#### **Prioritise**

#### Step 2

From the list of material issues identified, we prioritise those that have the most significant impact on our ability to successfully execute our strategy and deliver long-term value to our stakeholders.

#### Integrate

#### Step 3

Important
material matters
are managed
as part of
our business
processes, with
mechanisms in
place to monitor
the effectiveness
of our approach,
and targets set to
drive behaviour
and measure
performance.

#### **Review & Validate**

#### Step 4

The material issues are reviewed and validated annually, taking into account changes to our businesses and societal trends.

#### SUSTAINABILITY FRAMEWORK

Strategic Pillar

**Material ESG Factors** 

# **Environmental Stewardship**







Environmental Management

# Responsible Business



Economic Sustainability



Corporate Governance & Risk Management



Supply Chain & Responsible Procurement



Product Quality & Safety

13

# People and Community



Occupational Safety & Health



Labour Practices, Talent Management & Human Rights



Community Development

#### SUSTAINABILITY MANAGEMENT

GRI 102-18 | 102-19 | 102-20 | 102-22 | 102-26 | 102-29 | 102-31 | 102-32

SUSTAINABILITY
ISSUES ARE
MANAGED AND
COMMUNICATED
AT ALL LEVELS
OF THE GROUP.



The Sino-Singapore Tianjin Eco-City (pictured) is a model for sustainable development, and brings together Keppel's capabilities to create a highly liveable, smart and green community.

#### **BOARD STATEMENT ON SUSTAINABILITY**

"The key material environmental, social and governance factors for Keppel Corporation have been identified and are regularly reviewed by Keppel Corporation's Board of Directors and management. The Board oversees the management and monitoring of these factors and takes them into consideration in the determination of the Company's strategic direction and policies."

**Keppel Corporation Board of Directors** 

The Board and management of Keppel Corporation regularly review as well as oversee the management and monitoring of the material Environmental, Social and Governance (ESG) factors of the Company, and take them into consideration in the determination of the Company's strategic direction and policies.

The Group Sustainability Steering Committee provides guidance on strategic and operational issues. The committee is chaired by Mr Loh Chin Hua, Keppel Corporation's Chief Executive Officer (CEO) and Executive Director, and comprises CEOs of key business units across the Group. Supporting the Steering Committee is the Group Sustainability Working Committee, co-chaired by Mr Sebastien Lamy, Director of Group Strategy & Development and Managing Director of Keppel Technology & Innovation, and Mr Ho Tong Yen, Director of Group Corporate Communications, Keppel Corporation.

The working committee, comprising discipline-specific working groups with representatives from across our different businesses, executes and reports on the Group's efforts across the material ESG aspects of climate action, environmental management, economic sustainability, corporate governance & risk management,

supply chain & responsible procurement, product quality & safety, occupational safety & health, labour practices, talent management & human rights, and community development.

#### STAKEHOLDER ENGAGEMENT

GRI 102-21 | 102-42 | 102-43

Regular engagement with our stakeholders helps us determine our material areas of focus.

We have applied Reporting Principles from the GRI Standards on defining report content, which include stakeholder inclusiveness, whereby stakeholders are defined as entities or individuals that can reasonably be expected to be significantly affected by Keppel, or whose actions can reasonably be expected to affect the ability of Keppel to implement the Company's strategy or achieve its objectives.

Keppel conducted a stakeholder consultation exercise from December 2018 to April 2019. All stakeholder groups were represented in the consultation exercise, and their inputs informed our comprehensive review of the Company's material ESG factors. Arising from the review, a revised sustainability reporting framework and an updated set

of material ESG factors were presented to and approved by Keppel Corporation's Board of Directors. Please refer to pages 11 to 13 for more details.

#### **MEMBERSHIPS IN ASSOCIATIONS**

GRI 102-13

In addition to engaging our stakeholders, we participate as members of various organisations, including:

- United Nations (UN) Global Compact as a Signatory, and Global Compact Network Singapore as a member. We are committed to the 10 principles of the Global Compact and support the UN sustainable development goals;
- Singapore Institute of Directors to promote the professional development of directors and corporate leaders and uphold the highest standards of corporate governance and ethical conduct;
- · Securities Investors Association (Singapore) to engage the investment community and promote good corporate governance;

- · Singapore National Employers Federation to promote excellence in employment practices;
- Workplace Safety & Health Council to build industry capabilities to better manage WSH and promote safety and health at work;
- · The Institute of Policy Studies to support the analysis and discussion of public policy in Singapore;
- Singapore Institute of International Affairs to deepen understanding and forge stronger partnerships between countries in the region; and
- GRI Singapore as a member of the Founding Consortium to support companies in ASEAN with relevant services and training to manage and report their most material ESG impacts1.
- Please refer to www.globalreporting.org/information/news-and-press-center/Pages/ ASEAN-Regional-Hub-opens-in-Singapore.aspx for more information on this new initiative.

#### KEPPEL GROUP'S SUSTAINABILITY MANAGEMENT STRUCTURE



#### THE KEPPEL CORE VALUES\*

Core Values	Agility Adapt to change & innovate for growth
People-focus Value people & partnerships	Accountability Do the right thing for people, planet & company
Can Do With passion & vigour, together we can	Safety Committed to safe & healthy workplaces

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#### SUSTAINABILITY MANAGEMENT

#### **OUR STAKEHOLDERS**

GRI 102-21 | 102-40 | 102-42 | 102-43 | 102-44



People are our most valuable asset. We are committed to investing in the development of our people. We adopt merit-based recruitment practices and emphasise diversity and inclusiveness.

#### **Key Topics & Concerns**

Vision, strategy and direction; innovation; productivity; collaboration; talent management; people development.

Annual employee engagement surveys; regular townhalls and other engagement programmes; training; mentorship programmes.

#### **Our Response**

Read more about how we manage our global workforce on pages 64 to 70.



Customer satisfaction is crucial to the success of our businesses. We are committed to continually improving our range of products to better meet customers' needs, including through harnessing insights from customer engagement.

#### **Key Topics & Concerns**

Product quality & safety; Health, Safety and Environment (HSE) excellence.

Regular meetings; ongoing communication via different channels; regular customer satisfaction surveys.

#### Our Response

Read more about how we engage customers on pages 54 to 56.



## GOVERNMENTS

Governments shape the business environments in which we operate. Political factors, policies and regulations can affect how businesses are run and also create new opportunities for companies. We track topics of concern to governments and regulatory bodies wherever we operate, and seek to not only comply with but also support the policies of national and regional governments.

#### **Key Topics & Concerns**

Opportunities for business collaboration and investment; sharing of industry best practices; setting industry benchmarks.

Periodic visits and meetings; industry forums; support for national and regional initiatives.

#### Our Response

Read more about how we collaborate with governments to raise industry standards on pages 62 and 63 as well as page 69.



#### **SHAREHOLDERS** ₩ & INVESTORS

#### Significance

Shareholders play an important role in the financing and governance aspects of our business. Our Investor Relations Policy sets out the principles that the Company abides by to ensure a level playing field and help shareholders and prospective investors make well-informed decisions.

#### **Key Topics & Concerns**

Business strategy and direction; economic performance.

#### Approach

Regular conference calls; shareholder meetings; briefings to retail shareholders; facility visits; results webcasts; ongoing email and phone communications.

#### Our Response

Read more about how we engage the investment community on pages 40 and 41 of Keppel Corporation's Report to Shareholders 2019.



#### **SUPPLIERS**

Strong, effective relationships with our suppliers give our businesses strategic and operational advantages. By effecting stringent procurement processes and a supplier code of conduct, we aim to encourage our suppliers to adopt more sustainable practices.

#### Key Topics & Concerns

Compliance; HSE excellence; fair treatment; responsible procurement practices.

#### Approach

Regular meetings by project managers and HSE teams with key subcontractors and suppliers; regular site visits by management.

#### Our Response

Read more about how we work with suppliers to influence their sustainability performance on pages 51 to 53.



#### LOCAL **COMMUNITIES**

As active members of our communities, we aim to contribute towards their continued well-being. We engage community leaders to develop impactful programmes that drive community development.

#### **Key Topics & Concerns**

Community investments; donations to charitable and environmental causes; volunteer programmes.

Regular meetings and community outreach initiatives.

#### Our Response

Read more about how we collaborate with community partners to support social development and environmental causes on pages 71 to 81.

#### **AWARDS & RECOGNITION**

#### MSCI World ESG Leaders Index

Keppel Corporation has been upgraded to a triple-A rating in the MSCI environmental, social and governance (ESG) ratings¹ as at February 2020. Keppel Corporation is ranked among the top 11% of industrial conglomerates, based on ESG criteria, in the MSCI All Country World Index (ACWI), MSCI's flagship global equity index, which covers more than 3,000 constituents. Keppel Corporation is a constituent on the MSCI ACWI and World ESG Leaders Indexes, and has been included on the MSCI ESG Leaders Indexes since 2014.



#### FTSE4Good Index Series

Keppel Corporation has been included as an index constituent of the FTSE4Good Index Series for the first time in 2019. The FTSE4Good Index Series identifies companies demonstrating strong ESG policies and practices. To be included in this index, companies are independently assessed on more than 300 indicators, which are applied according to each company's unique ESG risk exposure.



#### iEdge SG ESG Indices

Keppel Corporation continued to be listed among the top 10 constituents of the iEdge SG ESG Leaders Index (formerly SGX ESG Leaders Index) and iEdge SG ESG Transparency Index (formerly SGX ESG Transparency Index) for the fifth consecutive year. The iEdge SG ESG Indices are composed of SGX-listed companies that are considered ESG leaders with established and leading ESG practices, and meet sustainability reporting requirements.



#### **Euronext Vigeo World 120**

Keppel Corporation was listed as an index component of the Euronext Vigeo World 120 for the seventh consecutive year. Developed by Euronext, the primary exchange in the Eurozone, and Vigeo, the leading European agency in corporate social responsibility ratings, the Euronext Vigeo World 120 comprises 120 of the highest-ranking listed companies globally in terms of performance in corporate responsibility.



#### Singapore Environmental Achievement Awards

Keppel Corporation was recognised for its sustainable business practices, winning the Singapore Environmental Achievement Award in the services category at the Singapore Environment Council's Environmental Achievement Awards 2019. The annual Singapore Environmental Achievement Awards is one of the most prestigious awards in the region, and recognises organisations for their excellence in environmental stewardship.



#### Workplace Safety and Health Awards

The Keppel Group was conferred 18 awards at the Workplace Safety and Health (WSH) Awards 2019 organised by Singapore's Ministry of Manpower and the WSH Council. The Group received accolades in the following categories: Safety and Health Award Recognition for Projects Awards, WSH Performance Awards, WSH Innovation Awards and WSH Awards for Supervisors. This is the largest number of awards won by a single organisation in 2019.



#### Forbes Global 2000 Top 250 World's Best Regarded Companies

Keppel has been recognised in Forbes' Global 2000 rankings as one of the World's Best Regarded Companies in 2019. To create the list of top 250 World's Best Regarded Companies, Forbes partnered online statistics portal Statista to whittle Forbes' annual list of the world's 2,000 largest public companies down to 250, based on criteria of trustworthiness, social conduct, the strength of their products and services and how they fare as employers.



#### Forbes Global 2000 Top 500 World's Best Regarded Employers

Keppel has been recognised in Forbes' Global 2000 rankings as one of the World's Best Employers in 2019. Forbes partnered with Statista to shortlist the top 500 World's Best Employers from Forbes' annual list of the world's 2,000 largest public companies based on 1.4 million employment recommendations sourced from a global poll and regional surveys.



#### Sustainable Business Awards

Keppel Corporation received special recognition in the workforce category at the Sustainable Business Awards 2019. The awards, organised by Global Initiatives in partnership with PwC Singapore, recognise businesses with sustainable business practices.

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#### SUSTAINABLE DEVELOPMENT GOALS

GRI 102-12

WE ARE COMMITTED TO THE INTERNATIONAL SUSTAINABLE DEVELOPMENT AGENDA, AND WILL LEVERAGE COLLABORATION AND PARTNERSHIP TO SUPPORT THE ACHIEVEMENT OF THE SUSTAINABLE DEVELOPMENT GOALS (SDGs). WE HAVE INCORPORATED 10 OF THE SDGs AS A SUPPORTING FRAMEWORK TO GUIDE OUR SUSTAINABILITY STRATEGY.

Strategic Pillars	Material Issues	SDGs	Approach	Highlights
Environmental Stewardship	Climate Action	6 CLEAN WAITER AND SANITATION	Our suite of solutions for energy, urban living, clean environments and connectivity help cities urbanise in a sustainable manner.	As part of our environmental sustainability strategy, we will avoid highly pollutive businesses such as coal, and will work towards growing and expanding renewables and circular economy solutions.
		7 AFFORDABLE AND CLEAN EXERCY		We will be introducing an internal carbon price in the evaluation of all major investment decisions and enhancing our climate risk assessment.
		13 CLIMATE		We support the Taskforce on Climate-related Financial Disclosures (TCFD), and are working towards incorporating its recommendations in our reporting framework.
	Environmental Management	12 RESPONSBLE CONSUMPTION AND PRODUCTION	We are committed to minimising our environmental impact, and are focused on sustainable management and efficient use of natural resources.	To support the climate change agenda, we have targets to reduce our carbon emissions intensity. We have also set new targets to reduce waste generation and water
		13 CLIMATE ACTION	We aim to reduce waste generation through resource efficiency, recycling and reuse of natural resources.	consumption, as well as invest in renewable energy generation. We have been tracking our
Responsible Business	Economic Sustainability	9 NOUSTRY, INNOVATION AND INFRASTRUCTURE	We regard sustainability both as a corporate responsibility and a source of business opportunities.	Keppel's business operations generate employment, opportunities for suppliers and tax revenues for governments.
			We are committed to applying our knowledge, skills and technology to drive innovation and support economic development and the well-being of our communities.	The Keppel Technology Advisory Panel is a key platform to advance the Group's technology leadership. Separately, Keppel Technology & Innovation serves as a Group-wide resource to sharpen focus on innovation and be a catalyst for change.
				We have set targets to invest in sustainability-linked innovation.
	Corporate Governance & Risk Management	16 PEACE JUSTICE AND STRONG INSTITUTIONS	We will conduct ourselves according to the highest ethical standards and comply with all applicable laws and regulations wherever we operate. Our tone on regulatory compliance is clear and consistently reiterated from the top of the organisation. We have zero tolerance for	Keppel Offshore & Marine has become one of the first companies in Singapore to achieve global ISO 37001 anti-bribery certification in 2019. We will work progressively towards ISO 37001 certification for all other Keppel entities.
			fraud, bribery, corruption and violation of laws and regulations.	An e-training and assessment exercise covering key policies, including Keppel's Employee Code of Conduct, is carried out on an annual basis.

Strategic Pillars Material Issues SDGs Approach Highlights Responsible Supply Chain & We work closely with our suppliers to make All our suppliers are qualified in accordance Responsible a positive impact on their sustainability with our requisition and purchasing policies, **Business** Procurement performance. screened based on ESG criteria, and are expected to sign and abide by the Keppel Supplier Code of Conduct. Product Quality We exercise due care and diligence in the We consider proper design, handling, storage & Safety design, construction and operation of our and disposal of materials as early as the products and services to ensure that they planning stage of our projects. At the project do not pose hazards to customers. execution stage, we carry out project reviews and quality assurance programmes. We will continue to engage our customers for continuous service improvements. Occupational Providing a safe and healthy working We achieved our goal of zero fatalities across People and Safety & Health environment for all stakeholders is fundamental our global operations in 2019. Community to our commitment to conduct business responsibly. We are strong advocates for safety Keppel also clinched 18 awards at the and health in the broader community, and Workplace Safety and Health Awards 2019, champion national and industry initiatives which is the highest number of awards won to raise standards and drive innovation in by a single organisation for the year. these aspects. Labour Our businesses spark economic growth, We achieved an Employee Engagement Score Practices, productivity and jobs. Our hiring policies of 86% in 2019, an improvement over our score of 82% in 2017 and significantly higher than the Talent ensure equal employment opportunities for all, and we are committed to invest Management & average of 76% among Singapore companies. Human Rights in nurturing our human capital. Our stance on human rights is articulated in We uphold and respect the fundamental our corporate statement on human rights, principles set out in the UN Universal while our stance on diversity and inclusion Declaration of Human Rights and the is articulated in our corporate statement on International Labour Organisation's declaration diversity and inclusion, which was formalised in early-2019. Both statements are publicly on fundamental principles and rights at work. available online. Community Through collaboration with our stakeholders, Keppel commits up to 1% of the Group's net profit to worthy social causes. we mobilise and share knowledge, expertise Development and technology, as well as financial and human resources to support the achievement We invested \$9.6 million in social causes of the SDGs. in 2019. This included a donation to assist deserving students from low income families We encourage and promote effective public. via the Institute of Technical Education (ITE) Education Fund, a contribution to SPD, public-private and civil society partnerships through the sponsorship and support of a Singapore charity supporting persons with disabilities, greening efforts in Singapore, thought leadership and dialogue platforms. as well as to the China Foundation for Poverty Alleviation as part of an ongoing partnership to aid impoverished rural communities in China. Keppel Volunteers achieved over 18,000 hours of community work in 2019. Keppel Care Foundation, the Group's philanthropic arm, has disbursed over \$44 million since its

launch in 2012. The foundation supports care for the underprivileged, education and

environmental causes.

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#### UNITED NATIONS GLOBAL COMPACT

#### **WE ARE A SIGNATORY OF THE UNITED NATIONS (UN) GLOBAL COMPACT AND ARE COMMITTED TO UPHOLDING ITS 10 PRINCIPLES ON HUMAN RIGHTS.** LABOUR, ENVIRONMENT AND ANTI-CORRUPTION.

principles and rights at work.



The following index describes the progress we have made in 2019.

Approach

#### PERFORMANCE DATA

Principle

ниман	RIGHTS
Principle 1	1

Support of human rights

Principle 2 Exclusion of human rights abuses

Keppel upholds and respects the fundamental principles set out in the UN universal declaration of human rights and the International Labour Organisation's (ILO) declaration on fundamental

Our approach to human rights is informed and guided by general concepts from the UN Guiding Principles on Business and Human Rights.

We respect the values and cultures of the people and the communities in which we operate, and aim to serve as a positive influence

#### Measures

Our stance on human rights is formalised in our corporate statement on human rights which is publicly available online.

Our suppliers are expected to abide by the Keppel supplier code of conduct, which sets our expectations for suppliers to respect and uphold fundamental human rights in their operations.

Where applicable, our business units conduct outreach programmes and briefings to subcontractor workers to inform them of their employment rights, and the available channels to report any violation of their rights.

In the broader community, we contribute towards providing educational opportunities to the disadvantaged through scholarships and bursaries, as well as offer skills development and job training opportunities at our workplaces.

- Read more about how we screen and qualify our suppliers on pages 52 and 53.
- Read more about how we support education for the disadvantaged on pages 72 and 73.

#### **LABOUR** Principle 3

Assurance of freedom of association

Principle 4

Elimination of all forms of forced and compulsory labour

Principle 5 Abolition of child labour We have zero tolerance for unethical labour practices such as child labour, forced labour, slavery and human trafficking in any of our operations. Keppel also supports the elimination of exploitative labour.

Unions are our partners and we place great emphasis on maintaining a harmonious relationship. Approximately 19.3% of our global workforce are bargainable employees covered by collective agreements.

We adhere to national labour laws and regulations wherever we operate. In Singapore, both local and foreign workers receive protection under the Penal Code and employment legislation such as the Employment Act and Workplace Safety and Health Act. In addition, foreign workers, especially the lower-skilled and lower-income workers, are accorded additional protection under the Employment of Foreign Manpower Act and the Employment Agencies Act.

The Keppel supplier code sets out the standards of conduct which our suppliers are expected to adhere to in relation to child labour, forced labour, freedom of association, equal opportunity and fair compensation.

 Read more about our labour practices and supplier code of conduct on pages 64 to 70, and 52 and 53.

#### Principle 6

Elimination of discrimination

Our hiring policies ensure equal employment opportunities for all. New hires are considered based on individual competencies as well as organisational and job fit. Our employment statistics are reviewed regularly.

In Singapore, Keppel adheres to the tripartite guidelines on fair employment practices and endorses the employers' pledge of fair employment practices. A key principle espoused in the guidelines is that the recruitment of employees should be on the basis of merit and regardless of race or other characteristics, such as age and gender. Keppel is also a signatory to the Singapore Business Federation's Sustainable Employment Pledge to uplift employees and partners.

The Keppel Group Code of Conduct sets the tone in relation to the Group's stance against discrimination on any basis.

We formalised a Corporate Statement on Diversity and Inclusion in 2019 to promote diversity and equal opportunity in the workplace, and have made this publicly available at our corporate website.

We adhere to provisions of national laws and regulations concerning discrimination wherever we operate. Our company policies and procedures make qualifications, skills and experience the basis for the recruitment, placement, training and advancement of staff at all levels. If any discrimination is identified, guidelines are in place for the appropriate handling of any grievance cases to address complaints, handle appeals and provide recourse for employees.

#### PERFORMANCE DATA

#### Principle

#### **ENVIRONMENT** Principle 7

Precautionary approach to environmental challenges

#### Principle 8

Initiatives to promote greater environmental responsibility

#### Principle 9

Development and diffusion of environmentally friendly technologies

**ANTI-CORRUPTION** 

Measures against corruption

Principle 10

#### Approach

Sustainability is a key consideration in the Company's investment decisions, and environmental sustainability has been woven into the performance appraisal of senior management across the Group.

The Group's risk-based strategies are used to assess, avoid, reduce and mitigate environmental risks and impacts. Climate-related risks, including physical and transition risks, are incorporated in our Enterprise Risk Management framework.

The proactive management of our environmental impact enables us to improve resource efficiency, reduce cost and support the global climate change agenda.

Our approach to environmental management covers the following aspects:

- · fulfilling compliance obligations;
- · protecting the environment by preventing or mitigating adverse environmental impacts;
- enhancing environmental performance;
- · achieving financial and operational benefits that can result from implementing environmentally sound alternatives that strengthen Keppel's market position; and
- communicating environmental information to relevant interested parties.

#### Guided by our core values and the Keppel Group Code of Conduct, we are fully committed to ensuring

that compliance is a central pillar of our management and an integral part of our corporate culture and business processes. We will do business the right way and comply with all applicable laws and regulations wherever we operate

Our tone for regulatory compliance is clear and consistently reiterated from the top and throughout all levels of the Group. We have zero tolerance for fraud, bribery, corruption and violation of laws and regulations.

Our regulatory compliance governance structure is designed to strengthen our corporate governance. The board risk committee supports the Board in its oversight of regulatory compliance and is responsible for driving the Group's implementation of effective compliance and governance systems.

We continue to improve our risk-based due diligence process for all third-party associates who represent the Keppel Group in business dealings, including our joint venture partners, to assess the compliance risk of the business partner. In addition to background checks, the due diligence process incorporates requirements for third-party associates to acknowledge understanding and compliance with our code of conduct.

Keppel's Whistle-Blower Policy encourages the reporting of suspected bribery or misconduct through a clearly-defined process and reporting channel, by which reports can be made in confidence and without fear of reprisal.

#### Measures

We have defined the kinds of pollutive sectors we will not go into, such as coal-fired plants, the businesses we will maintain and those which we will focus more on, such as renewables. In addition, an internal carbon price will be applied in the evaluation of all major investment decisions.

We support the Taskforce on Climate-related Financial Disclosures (TCFD), and are working towards incorporating its recommendations in our reporting framework

We have established a new business unit, Keppel Renewable Energy, to pursue opportunities for Keppel as a developer, owner and operator of renewable energy infrastructure. We will also look into re-purposing our technology for renewables.

All our key business units are certified to the ISO 14001 environmental management system, which guides how we identify, manage, monitor and control environmental issues.

Read more about our initiatives to promote greater environmental responsibility on pages 22 to 33.

We have a strict code of conduct that applies to all employees, who are required to acknowledge and comply with the code. The code covers areas from conduct in the workplace to business conduct, including clear provisions on prohibitions against bribery and corruption, and conflicts of interests, amongst others

We ensure that our compliance policies and procedures are communicated effectively to all employees and directors. These include policies on anti-bribery, gifts and hospitality, agent fees, donations and sponsorships, solicitation and extortion, conflict of interest, and insider trading, amongst others.

The procedures and rules defined in the Group's global anti-bribery policy encapsulate key points of the Group's zero-tolerance approach towards bribery.

An e-training and assessment exercise covering all key policies, including the Keppel Group Code of Conduct, is carried out an annual basis, and targeted training focused on line manager responsibilities and employee obligations were conducted in 2019. All 16,544 directors and employees completed the e-training and toolbox training in 2019.

Enhancements were made to the Whistle-Blower Policy, with centralised procedures and whistle-blower reporting channels, including an email hotline, local toll-free whistle-blower hotlines for Singapore, Brazil, China, USA, Vietnam, Indonesia, Philippines, Australia, UK and Germany, and an online reporting portal. The manning of these reporting channels is outsourced to a third party (KPMG).

In 2019, Keppel Offshore & Marine completed the ISO 37001 (Anti-Bribery Management System) certification for its global operations in USA, Brazil, Middle East, China, Philippines, India and Bulgaria, thus completing the attainment of ISO 37001 certification at all Keppel O&M operating entities globally. We will work progressively towards ISO 37001 certification for all other Keppel business units.

Read more about our regulatory compliance framework, as well as policies and procedures to reinforce a strong compliance culture on pages 38 to 45.

Sustainability Report 2019 Sustainability Report 2019 Keppel Corporation Limited Keppel Corporation Limited

# CLIMATE ACTION ENVIRONMENTAL MANAGEMENT

WE ARE COMMITTED TO CLIMATE ACTION, IMPROVING RESOURCE EFFICIENCY AND REDUCING OUR ENVIRONMENTAL IMPACT.



#### **PERFORMANCE OVERVIEW**

GRI 103-2 | 103-3

#### **2019 TARGETS**

Achieve a 28.8% reduction in carbon emissions intensity by 2030 from 2010 levels, in addition to the target of a 16% improvement in carbon emissions intensity from 2020 business-as-usual levels.

Increase the generation and usage of renewable energy in our operations.

Review climate change risks and refine climate change strategy.

#### 2019 PERFORMANCE

Achieved a 30.1% average reduction in carbon emissions intensity from our 2010 baseline.

Keppel Offshore & Marine installed 21,000 solar panels with a peak capacity of 8.8 MW at its yards in 2019 to offset its energy demand.

Keppel Bay Tower is the first commercial development in Singapore to utilise renewable energy to power all its operations, including the offices of tenants in the building.

Refined the Group's environmental sustainability strategy, which incorporates climate change risks and opportunities.

#### **2020 TARGETS**

Achieve a 16% improvement in carbon emissions intensity from 2020 business-as-usual levels.

#### **LONGER TERM TARGETS**

Achieve a 28.8% reduction in carbon emissions intensity by 2030 from 2010 levels.

Achieve a 10% reduction in waste intensity by 2030 from 2019 levels.

Achieve a 20% reduction in water consumption intensity by 2030 from 2019 levels.

Grow portfolio of renewable energy to 7 GW by 2030.

#### **TOPICS**

Management systems

Sustainable design

Energy efficiency

Carbon emissions

Renewable energy

Water, waste and effluent management

Compliance

#### **SDGs**













#### **OVERVIEW**

GRI 103-1

There is growing international recognition that climate change can fundamentally affect the way the world operates in the twenty-first century.

Singapore has announced that it would be enhancing its nationally determined contribution under the Paris Agreement, with an aim to peak its emissions around 2030, halve the emissions from its 2030 peak by 2050, and achieve net zero emissions as soon as viable. In working towards this target, the Singapore government introduced a carbon tax, under the Carbon Pricing Act, which came into force in 2019. The tax is applied on the total direct emissions of facilities that emit 25,000 tonnes of carbon dioxide equivalent  $(tCO_2e)$  or more of emissions annually.

Keppel is committed to support efforts by the international community and the Singapore government to address climate change. Climate action has been identified as one of the material ESG factors for the Group. We have woven environmental considerations into our company strategy and set targets to reduce our carbon emissions, waste generation and water consumption intensities. Given Keppel's capabilities and track record, we are also well positioned to tap on business opportunities that may arise from providing solutions that support international efforts to combat climate change.

#### **REPORT BOUNDARY**

GRI 102-48 | 103-1 | 305-1 | 305-2 | 305-3

The boundaries for the material topics of climate action and environmental

performance report include the Group's major subsidiaries in Singapore and overseas operations in which the Group has operational control. This includes Keppel Offshore & Marine (Keppel O&M) and its significant subsidiaries – Keppel FELS and Keppel Shipyard, Keppel Land, Keppel Infrastructure, Keppel Telecommunications & Transportation and Keppel Capital. We expanded the scope of our reporting in 2019 to include contributions by M1, following the acquisition of M1 in 1H 2019.

Over the past year, we have strengthened our tracking of Greenhouse Gas (GHG) emissions. We have reviewed and adjusted our approach, reporting boundaries and calculation methodology for closer alignment with the requirements of an operational control approach under the GHG Protocol. We will account for 100% of Scopes 1 and 2 emissions from operations over which we have operational control. However, for assets that are considered as investments1, we will report our equity share of emissions under Scope 3. As part of our tracking of Scope 3 emissions, we have also started tracking emissions from business travel<sup>2</sup>. Our three-year environmental performance data, as disclosed on page 29, has been restated to reflect the changes in our reporting boundaries and methodology.

#### **MANAGEMENT APPROACH**

GRI 103-2 | 103-3

We are committed to do our part to combat climate change. As we grow our businesses and portfolios, our investment decisions will place greater focus on environmental sustainability. We will implement an internal carbon price to evaluate all major investment decisions.

We have defined the kinds of pollutive sectors we will not go into, such as coal-fired plants, the businesses we will maintain, and those which we will focus more on, such as renewables. We have established a new business unit, Keppel Renewable Energy, to pursue opportunities for Keppel as a developer, owner and operator of renewable energy infrastructure. We will also look into re-purposing our technology to seize opportunities in renewables.

As a signatory to the UN Global Compact, we are committed to upholding its principles, including taking a precautionary approach to environmental challenges, promoting greater environmental responsibility, and encouraging the development and diffusion of environmentally friendly technologies.

We support the Taskforce on Climate-related Financial Disclosures (TCFD), and are working towards incorporating its recommendations in our reporting framework.

- According to the GHG Protocol's definition of Investment, which includes equity investments, (including investments in subsidiaries, associate companies and joint ventures) debt investments, project finance, managed investments and client services.
- The Group's travel agency provides a centralised data source for business travel. Emissions from business travel are calculated using International Civil Aviation Organisation (ICAO)'s online amission calculator.

#### **KEPPEL CORPORATION'S CLIMATE ACTION PLEDGE**

As a solutions provider for sustainable urbanisation, Keppel Corporation pledges our commitment to support efforts by the international community and the Singapore government in tackling climate change.

#### **Our Climate Action Goals**

To factor in environmental considerations in our businesses.

To optimise our operations and processes to enhance energy efficiency.

To invest in green technology and increase usage of renewable sources of energy.

To include more eco-friendly features in our products.

To promote eco-consciousness among our stakeholders.

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#### **CLIMATE ACTION**

#### TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

GRI 102-12 | 102-15 | 103-2

We support the Taskforce on Climate-related Financial Disclosures (TCFD), and are working towards incorporating its recommendations in our reporting framework. In this report, we voluntarily disclose our approach in four key areas as recommended by the TCFD.

Recommended Disclosure	Our Approach	Page Reference
GOVERNANCE GOVERNANCE climate-related risks and opportunities.	The key material environmental, social and governance factors for Keppel Corporation, which include climate action and environmental management, have been identified and are regularly reviewed by Keppel Corporation's Board of Directors and management. The Board oversees the management and monitoring of these factors and takes them into consideration in the determination of the Company's strategic direction and policies.	47 to 49
	The Group Sustainability Steering Committee, chaired by Keppel Corporation's Chief Executive Officer Loh Chin Hua and comprising senior management from across the Group, provides guidance on the Group's sustainability strategy while the Group Sustainability Working Committee, comprising discipline-specific working groups, executes, monitors and reports on the Group's efforts.	
	Environmental sustainability has been woven into the performance appraisal of senior management across the Group.	
STRATEGY Actual and potential impacts of climate-related	Keppel's mission is to deliver solutions for sustainable urbanisation. Our suite of solutions for energy, urban living, clean environments and connectivity help cities urbanise in a sustainable manner.	22 to 26
risks and opportunities.	During the year, the Board reviewed the Company's material ESG issues and strengthened its focus on climate action.	
	As part of our environmental sustainability strategy, we have defined the kinds of pollutive sectors we will not go into, such as coal-fired plants, the businesses we will maintain, and those which we will work towards growing and expanding, such as renewables and circular economy solutions. We will also be introducing an internal carbon price in the evaluation of all major investment decisions.	
	The Group considers environmental factors during the planning and design of our projects and assets, such as property and infrastructure developments, as well as during their operational phases.	
	We have established a new business unit, Keppel Renewable Energy, to pursue opportunities as a developer, owner and operator of renewable energy infrastructure. We have also been re-purposing our technology, such as in the offshore and marine business, to seize opportunities in renewables.	
RISK MANAGEMENT Processes used to identify, assess, and manage climate-related risks.	Risks and opportunities relating to climate change have been recognised as fundamental to the Group. These relate to physical and transitional risks stemming from climate change and environmental management, which present both risks and opportunities for the Group.	47 to 49
	A Sustainability Risk Framework, aligned to the Group's Enterprise Risk Management (ERM) Framework, guides the Group on the specific processes and methods applied in identifying, assessing and managing sustainability-related risks and opportunities.	
	As part of an environmental sustainability strategy workshop, business units across the Group participated in a discussion by an external environmental consultant on opportunities and risks associated with climate change. The discussions were facilitated by the external environmental consultant, and covered risks specific to the industries in which Keppel operates.	
	Beyond managing climate-related risks and opportunities under the ERM framework, all our key business units are certified to the ISO 14001 environmental management system, which guides how we identify, manage, monitor and control environmental issues.	
	The Group is also actively pursuing opportunities to harness its capabilities to provide solutions for sustainable urbanisation, which can help to reduce climate-related risks.	
METRICS AND TARGETS Metrics and targets used	To support the climate change agenda, we have targets to reduce our carbon emissions intensity. We have also set new targets to reduce waste generation and water consumption, as well as invest in renewable energy generation.	22
to assess and manage climate-related risks and opportunities which are material to our business.	We have been tracking our Scopes 1 and 2 emissions since 2010, and will start tracking Scope 3 emissions from 2020.	
material to our publicas.	In measuring and reporting our greenhouse gas emissions, we reference global standards including the GHG Protocol Corporate Standard and Corporate Value Chain (Scope 3) Standard, and use the operational control approach in accounting for our emissions.	

The Group obtained its first green loan facilities in 2019 to finance eligible green projects including Seasons City (pictured) in the Sino-Singapore Tianjin Eco-City.



#### **SUSTAINABLE DESIGN**

In line with our mission of providing solutions for sustainable urbanisation, the Group considers environmental factors during the planning and design of our projects and assets such as property and infrastructure developments, as well as during their operational phases.

A leading green developer, Keppel Land has garnered a total of 84 Building and Construction Authority of Singapore (BCA) Green Mark Awards, of which 16 are Platinum. The total estimated reduction in energy consumption from all of Keppel Land's Green Mark-awarded projects when they are fully completed will be over 220 million kilowatt hours (kWh) per annum, which is the equivalent amount of energy required to power more than 40,000 homes<sup>1</sup> in Singapore for one year. This translates to cost savings of about \$45 million and a carbon emissions reduction of almost 95,000 tonnes annually. In addition, a total annual water savings of about 2.5 million cubic metres is also achieved.

To recognise Keppel Corporation, Keppel Land and Keppel Capital for their commitment towards environmental protection and efforts in improving staff health and well-being, BCA and Health Promotion Board (HPB) awarded all three companies the BCA-HPB Green Mark Platinum certification for Healthier Workplaces in 2019. All three locations are fully powered by clean energy and are equipped with smart LED lighting systems and indoor air-quality monitors.

In Singapore, The Garden Residences, a joint venture between Keppel Land and Wing Tai Asia, was certified to the BCA Green Mark Award GoldPlus standard for its green features, which includes the use of energy efficient air-conditioning units, LED light fittings and motion sensors, and rain water harvesting.

In China, Park Avenue Central achieved the LEED Gold and WELL Gold certification for its environmentally friendly features and efforts to improve the health and well-being of its occupants. In Vietnam, Keppel Land's Saigon Centre received the Green Mark Award for Buildings (Overseas) Gold standard for its well-insulated façade, highly efficient chiller plant, air distribution system and lightings, and efficient water fittings, among other green features.

In 2019, the Keppel Marina East Desalination Plant in Singapore achieved the Public Utilities Board's ABC Waters Certification (Gold), which is the highest accolade that can be attained by developers. With its integrated sustainable stormwater management system, stormwater run-off will flow from the plant's green roof into a natural filtration system, known as a bio-retention basin. The run-off is later collected in rainwater harvesting ponds to be recycled.

#### **RENEWABLE ENERGY**

The Group has a target to grow our portfolio of renewable energy to 7 GW by 2030, and has also continued to promote the generation and usage of renewable energy. Keppel installed a total capacity of 8.8 megawatt peak (MWp) at its yards in 2019, and currently has a total capacity of 8.95 MWp. Keppel will continue to grow its renewables capacity with plans to install an additional capacity of 1.11 MWp in 2020.

#### **Keppel Bay Tower**

On 1 January 2020, Keppel Bay Tower, where Keppel Corporation is headquartered, became Singapore's first commercial development to use renewable energy to power all its operations, including the offices of tenants in the building.

Keppel Land, the owner and operator of Keppel Bay Tower, will be installing an assembly of photovoltaic (PV) panels spanning about 400 square metres (m²) on the roof of the 18-storey Keppel Bay Tower, as well as its six-storey podium block. When completed in 1H 2020, Keppel Bay Tower's PV system is expected to generate an energy yield of about 100,000 kWh per annum. Keppel's latest initiative to install PV panels at Keppel Bay Tower reduces the building's reliance on grid power.

Based on the average energy consumption of a Housing Development Board five-room flat, which is 471 kWh/month (source: SP Group).

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#### STRATEGIC PILLAR: ENVIRONMENTAL STEWARDSHIP

#### **CLIMATE ACTION**

Keppel Land, through its electricity retailer, Keppel Electric, is also purchasing Renewable Energy Certificates (RECs), which are generated from PV panels installed in Keppel O&M's yards in Singapore.

Together with the purchase of RECs, these initiatives will result in a reduction of over 2,400 tonnes of carbon emissions per annum – an amount which would otherwise require about 12,000 trees to absorb over about 50 years.

#### **Offshore Renewables**

In 2019, Keppel O&M made significant strides into the renewable energy sector, with gas and renewable solutions making up over 60% of the company's new orders. Significantly, the company secured new contracts worth about \$720 million for offshore wind projects in the German sector of the North Sea and Taiwan.

In May 2019, Keppel O&M, through a consortium with Aibel AS, secured a contract from TenneT Offshore for the

design, engineering, procurement, construction, installation and commissioning of a 900MW offshore high voltage direct current converter station and an onshore converter station. Scheduled to be completed in 2024, the two converter stations will be deployed in the German sector of the North Sea. Keppel O&M also secured a contract from Ørsted for two offshore wind farm substations which will be deployed in Ørsted's Greater Changhua offshore wind sites in Taiwan. The substations are scheduled to be completed in 2021.

Keppel O&M will continue to seize opportunities in offshore renewables and gas, which is considered to be one of the safest and cleanest fossil fuels.

#### **GREEN FINANCING**

Reflecting the Group's commitment to sustainability, Keppel business units, namely Keppel REIT and Keppel Land China, obtained their first green loan facilities in 2019, amounting to a total of \$825 million<sup>1</sup>.

The loans are being used by Keppel REIT to finance or re-finance eligible green projects and by Keppel Land China to finance the development of Seasons City (Phase 1), a BCA Green Mark Platinum (Provisional) commercial project in the Sino-Singapore Tianjin Eco-City.

This includes a \$505 million green loan facility secured by Keppel REIT's nearly 80% owned subsidiary Ocean Properties; a \$170 million green loan facility secured by Keppel Land, through a wholly-owned subsidiary of Keppel Land China for the development of Seasons City (Phase 1) in the Sino-Singapore Tianjin Eco-City, China; and an unsecured \$150 million green loan facility obtained by Keppel REIT.



Renewables and gas solutions made up more than 60% of Keppel O&M's new orders in 2019.

WE PROACTIVELY
MANAGE OUR
ENVIRONMENTAL
IMPACT TO IMPROVE
RESOURCE EFFICIENCY
AND SUPPORT THE
GLOBAL CLIMATE
CHANGE AGENDA.



#### **MANAGEMENT APPROACH**

GRI 103-1 | 103-2 | 103-3

The proactive management of our environmental impact enables us to improve resource efficiency, reduce costs and support the global climate change agenda.

The Group's risk-based strategies are used to assess, avoid, reduce and mitigate environmental risks and impacts. Our focus areas are enhancing energy efficiency, reducing waste generation and water consumption, reducing our carbon emissions and improving our environmental management systems.

The implementation of our Group-wide carbon management strategy is led by the energy efficiency committee. The committee sets targets, evaluates the effectiveness of our carbon management efforts, and monitors and reports on performance. The committee comprises representatives from business units, many of whom are certified energy managers.

All our key business units are certified to the ISO 14001 environmental management system, which guides how we identify, manage, monitor and control environmental issues. In addition, the rigs and ships we build comply with all six technical annexes¹ of the

international convention for the prevention of pollution from ships (MARPOL 73/78) which is the main international convention covering prevention of pollution of the marine environment by ships, while our data centres are certified under the SS 564 Singapore standard for green data centres and the ISO 50001 energy management system<sup>2</sup>.

Across our key businesses, we adopt a systems approach and apply the International Standards framework and plan-do-check-act model to achieve continual improvement in environmental management.

- The six technical annexes are: Annex I Regulations for the Prevention of Pollution by Oil; Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk; Annex III Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form; Annex IV Prevention of Pollution by Sewage from Ships; Annex V Prevention of Pollution by Garbage from Ships; and Annex VI Prevention of Air Pollution from Ships.
- Excluding Keppel DC Singapore 4.

#### **Energy Efficiency**

862,264 GJ

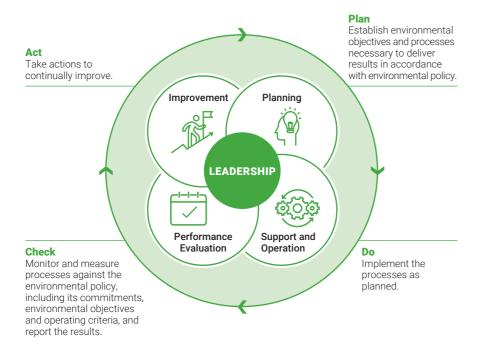
Of projected energy savings through energy efficiency initiatives implemented in 2019 and from Keppel Land's Green Mark-certified developments, translating to estimated cost savings of about \$60 million1

#### **Emissions Reduction**

30.1%

Average reduction in carbon emissions intensity from our 2010 baseline achieved by operations in Singapore and overseas.

#### INTERNATIONAL STANDARDS FRAMEWORK AND PLAN-DO-CHECK-ACT MODEL FOR ENVIRONMENTAL MANAGEMENT



#### **ENERGY**

GRI 302-1 | 302-4

The Group's energy demand comprises a mix of direct and indirect sources of energy. Direct energy refers to primary sources of energy consumed on site by our operations, whereas indirect energy is electricity purchased from external suppliers.

The Group's primary energy sources are diesel, naphtha, piped natural gas, petrol, furnace oil and liquefied petroleum gas.

In 2019, the Group consumed 291,539 gigajoules (GJ) of direct energy and 1,642,415 GJ of indirect energy or electricity, compared to 248,861 GJ of direct energy and 1,254,223 GJ of indirect energy in 2018.

Our Singapore operations consumed 184,513 GJ of direct energy and 1,215,727 GJ of indirect energy in 2019, compared to 141,282 GJ of direct energy and 949,404 GJ of indirect energy in 2018. The data includes direct energy used in activities carried out by both employees and contractors at our worksites.

#### **Improving Energy Efficiency**

The Group is estimated to have saved 862,264 GJ<sup>2</sup> of energy from its energy efficiency initiatives in 2019 and through green initiatives implemented at Keppel Land's Green Mark-certified developments. The total energy saving is equivalent to about 44% of the Group's total energy consumption in 2019, and translates to estimated cost savings of about \$60 million3 and an avoidance of approximately 100,000 tCO2e in emissions4.

These savings were achieved through the optimisation of operations and processes; technological improvements, including the adoption of more sustainable building designs and materials; and the use of energy-efficient equipment and devices. Examples of initiatives undertaken in 2019 include:

· Optimisation of chilled water pump pressure system and removal of strainer mesh to reduce system pressure head at Keppel DHCS' plants at Biopolis@ one-north, Changi Business Park and Woodlands Wafer Fab Park, which achieved energy savings of 813,500 kWh;

#### **ENVIRONMENTAL DATA**<sup>5</sup>

GRI 102-48 | 302-1 | 303-3 | 305-1 | 305-2 | 305-7 | 306-2

	2017	2018	2019
Global Operations			
Direct Energy Consumption (GJ)	247,871	248,861	291,539
Indirect Energy Consumption (GJ) - Non Renewable	1,239,692	1,254,223	1,642,415
Indirect Energy Consumption (GJ) - Renewable	NA	NA	24,349
Direct (Scope 1) Emissions (tCO <sub>2</sub> )	248,083	26,299	29,577
Indirect (Scope 2) Emissions (tCO <sub>2</sub> )	152,344	155,503	200,759
Other Indirect (Scope 3) Emissions (tCO <sub>2</sub> ) - From Investments	197,790	198,632	1,742,672
Other Indirect (Scope 3) Emissions (tCO <sub>2</sub> ) - From Business Travel	NA	NA	2,360
Potable Water Used (m³)	1,221,486	1,981,807	2,277,792
NEWater Used (m³)	1,616,945	1,568,159	2,151,839
Recycled Water Used (m³)	56	68	74
River Water Used (m³)	55,523	61,030	27,715
Seawater Used (m³)	NA	NA	14,012,189
Recycled Waste (t)	33,132	119,349	41,904
Incinerated Waste (t)	27,633	17,934	25,957
Landfilled Waste (t)	1,539	1,067	6,286
Singapore Operations			
Direct Energy Consumption (GJ)	116,901	141,282	184,513
Indirect Energy Consumption (GJ)	970,186	949,404	1,215,727
Direct (Scope 1) Emissions (tCO <sub>2</sub> )	32,954	14,490	18,774
Indirect (Scope 2) Emissions (tCO <sub>2</sub> )	114,374	111,924	141,430
Nitrogen Oxides Emissions (mg/Nm³)			
Keppel Merlimau Cogen Plant	24.87	28.44	28
Keppel Seghers Tuas WTE Plant	137.53	162.13	160
Sulphur Dioxide Emissions (mg/Nm³)			
Keppel Merlimau Cogen Plant	10.12	10.4	14
Keppel Seghers Tuas WTE Plant	31.26	67.47	65
Senoko WTE Plant	101.9	48.79	88
Average Particulate Matter Emissions (mg/Nm³)			
Keppel Seghers Tuas WTE Plant	8.55	7.88	5.93
Senoko WTE Plant	17.58	5.92	3.13
Potable Water Used (m³)	535,128	620,388	856,061
NEWater Used (m³)	1,616,945	1,568,159	2,151,835
Seawater Used (m³)	NA	NA	14,012,189
Recycled Water Used (m³)	0	0	0
Recycled Waste (t)	27,274	19,082	32,072
Incinerated Waste (t)	23,957	17,932	23,216

1 Cost savings from the reduced usage of fossil fuels, such as diesel, and a reduction in electricity consumed. The amount of savings in absolute terms is the difference in

The electricity conversion factor used is based on DEFRA 2015 Government GHG Conversion Factors for Company Reporting, whereby 1 kWh = 0.0036 GJ. Estimated monetary savings are calculated based on the average electricity tariff rates in 2019 as published by SP Group, whereby 1 kWh = \$0.2522.
 The electricity savings in carbon dioxide equivalent was estimated by multiplying the energy savings in kWh with the Electricity Grid Emission Factors for 2018 from

Singapore's Energy Market Authority (EMA), whereby 1 kWh = 0.4188 kg CO<sub>2</sub>

5 The environmental performance data for 2017 and 2018 have been restated to reflect the changes in our reporting boundaries and methodology. Emissions from our investments that were previously reported under Scopes 1 or 2, are now accounted for under Scope 3 using the equity share approach. Scope 3 emissions in 2017 and 2018 exclude data from Keppel Merlimau Cogen Plant's power generation operations, as this was not reported in previous years due to commercial sensitivity.

Sustainability Report 2019 Keppel Corporation Limited Keppel Corporation Limited Sustainability Report 2019

consumption before and after the implementation of an energy efficiency project.

The 862,264 GJ in savings comprise savings from the reduced usage of fossil fuels, such as diesel, and a reduction in electricity consumed. The amount of savings in absolute terms is the difference in consumption before and after the implementation of an energy efficiency project. The savings are converted to energy equivalent in GJ based on the corresponding energy conversion factors for fossil fuels and electricity published in the United Kingdom's Department for Environment, Food and Rural Affairs 2015 (DEFRA 2015) Government GHG Conversion Factors for Company Reporting, whereby 1 kWh = 0.0036 GJ and 1 tonne of diesel = 43.33 GJ. A significant proportion of the savings are achieved through green initiatives implemented at Keppel Land's Green Mark certified developments.

- Installing Variable Speed Drives (VSDs) in three ballast pumps at our shipyards. Regulating the speeds of the VSDs with actual demand has yielded annual savings of 518,400 kWh; and
- Upgrading to LED lightings and replacement of chilled water system with WDX systems at our data centres which produced total annual energy savings of 7.4 million kWh.

In 2018, Keppel Land was awarded a grant of about \$1.28 million by BCA to testbed new and emerging technologies which would reduce the building's energy consumption significantly and improve its energy efficiency by 20% compared to other Green Mark Platinum buildings by June 2020. Keppel is currently on track to meet its goal of reducing the annual energy consumption of Keppel Bay Tower to 115 kWh/m<sup>2</sup> per annum from its initial consumption of about 145 kWh/m<sup>2</sup> per annum by June 2020. Keppel Bay Tower is also working with tenants to adopt green leases and install energy-efficient LED lamps in their offices at no additional capital investments to the tenants, as well as helping them attain Green Mark certification. Moving ahead, Keppel Land is also actively seeking new solutions to further reduce the building's energy consumption to below 100 kWh/m<sup>2</sup> per annum, which would result in Keppel Bay Tower being 50% more energy efficient compared to typical office buildings in Singapore.

Incineration at WTE plants is an

ingapore, which also reduces

Incineration is also preferable to

the direct burial of waste which generates significant amounts

Energy efficiency initiatives

implemented by Keppel DHCS across its plants (pictured),

such as the optimisation of its

system, enabled energy savings

chilled water pump pressure

waste volume and removes harmful substances before landfill disposal.

efficient option for land-scarce

#### WATER

GRI 303-1 | 303-3

Water is a precious resource. The Group continues to strengthen its water conservation efforts through initiatives such as promoting water-saving practices, adopting water-efficient technologies and equipment as well as implementing process improvements.

The total water consumption of the Group consists of potable water (water from local catchment and imported water), NEWater (treated wastewater from sewage), recycled water and water drawn from rivers. The Group consumed 4,457,346 cubic metres (m<sup>3</sup>) of water in 2019, an increase of 23% compared to 3,610,996 m³ in 2018. The increase is mainly due to acquisitions by Keppel Land and increased water usage by Keppel FELS.

Our operations in Singapore consumed 3,007,895 m<sup>3</sup> of water compared to 2.188.902 m<sup>3</sup> in 2018.

Water consumption reduction efforts include the optimisation of cooling towers at Keppel DC Singapore 5, which results in water savings of 6,000 m<sup>3</sup> per annum. Rainwater harvesting for gas hose testing is also practised at Keppel FELS yards, which reduces water consumption by 35,000 m<sup>3</sup> per year.

In recognition of its efforts to reduce water consumption, two of Keppel Logistics' warehouses in Singapore received the PUB Water Efficient Building Certification in 2019. **WASTE** 

The Group strives to minimise waste generation, increase opportunities for reusing and recycling, as well as treat and dispose waste responsibly where other options are not practicable.

Waste is segregated at our offices, plants and yards to promote reuse and recycling. Used papers from our offices as well as scrap metals and damaged equipment recovered from our shipyards and waste-to-energy (WTE) plants are sent for recycling. Hazardous waste generated is handled, stored and disposed in a manner that adheres to best practices and meets local regulatory requirements<sup>1</sup>.

Waste recycled included ferrous scrap, grits, plastic stretch wrap, paper and other office consumables. In 2019, the Group recycled 41,904 tonnes (t) of refuse, which is a decrease from 119,349 t of waste in 2018. In 2018, a reorganisation and clean-up of the AmFELS yard contributed towards a significantly higher volume of recycled waste generated when compared to 2019. Our Singapore operations recycled 32,072 t of waste in 2019, an increase from 19,082 t recycled in Singapore the previous year.

As a Group, a total of 25,957 t of waste was sent for incineration in 2019, which is an approximately 45% increase compared to 17.934 t in 2018.





In land-scarce Singapore, refuse is incinerated at WTE plants to reduce the volume of waste and to remove harmful substances before disposal at the landfill. Heat from the incineration of waste is recovered to produce electricity. Incineration is also preferable to land filling in Singapore and many other countries, as the direct burial of waste produces significant amounts of methane, a GHG. A total 23,216 t of waste was sent for incineration in 2019, registering a 29% increase compared to 17.932 t in 2018. mainly due to an increase in business activity at the yards.

As incineration of refuse is prohibited or unavailable in some countries where we operate, a total of 6,286 t of municipal waste was disposed at landfill sites in 2019, an increase over 1,067 t in 2018. Incineration is banned in the Philippines, while waste disposal regulations in the state of Texas in the United States require plant waste to be landfilled.

#### **EMISSIONS & EFFLUENTS**

GRI 305-1 | 305-2 | 305-3 | 305-4 | 305-5 | 305-7

#### **Emissions Intensity Targets**

Keppel aims to achieve a 16% improvement in carbon emissions intensity from 2020 business-as-usual levels. This is based on

the national targets which the Singapore government had disclosed in 2009.

In support of the Paris Agreement, Singapore announced its intended nationally determined contribution of reducing GHG emissions intensity by 36% from 2005 levels by 2030. In line with the government's commitment, we have set a long-term target of a 28.8% reduction in carbon emissions intensity from 2010 levels by 2030 for our global operations<sup>2</sup> Our target was derived by adjusting the national target to a shorter timeframe, as data prior to 2010 is unavailable.

As at end-2019, our operations in Singapore and overseas have achieved a 30.1% average reduction in carbon emissions intensity from our 2010 baseline and we are on track to achieve the 2020 target of a 16% improvement in carbon emissions intensity. Given the progress achieved with our existing commitments, we will be reviewing our targets to see if we can do even more to reduce emissions.

The Singapore government implemented a carbon tax in 2019. The carbon tax is set at a rate of \$5 per tCO<sub>2</sub>e from 2019 to 2023. Singapore will review the carbon tax rate by 2023, with plans to increase it to between

\$10 and \$15 per  $tCO_2e$  by 2030. The tax is applied upstream, for example, on power stations and other large direct emitters. The carbon tax would have an impact on the business cost, which would in turn impact project economics. To mitigate the impact of the carbon tax, the Group has continued to improve our energy efficiency and reduce our carbon footprint, particularly for businesses that are energy intensive.

- 1 We are working to provide data on hazardous waste disposal.
- In calculating emissions intensity reductions, each business division first computes its base year (i.e. 2010) emissions intensity using a normalising factor relevant to its business activity. The total emissions intensity reduction is the difference in the Group's average emissions intensity betwee the base year and the current year in which the data is reported. The normalisation factors for our business divisions are based on their key activities and industry best practices. They are as follows: gross floor area in square metres for office and retail premises, million man-hours for Keppel O&M and Keppel Logistics, refrigeration tonnes hour for our district heating and cooling plants; kilowatt hour of IT power for data centres, number of base stations for our mobile networks and number of subscribers for our fibre networks. The baseline year used in the intensity calculations of newly acquired assets is as per the earliest year that such data is available

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The Ocean Financial Centre developed by Keppel Land is one of the greenest buildings in Singapore, and was awarded the title of having the world's largest vertical garden (pictured) in 2013.

#### Carbon Emissions<sup>1</sup>

In 2019, total direct (Scope 1) emissions from the use of fuels across the Group was 29,577 tCO $_2$ e, registering a 12% increase from 26,299 tCO $_2$ e in 2018, while indirect (Scope 2) emissions from electricity use was 200,759 tCO $_2$ , which is a 29% increase from 155,503 tCO $_2$  in 2018. Direct emissions for Singapore operations was 18,774 tCO $_2$ e, compared with 14,490 tCO $_2$ e in 2018. Indirect emissions from our Singapore operations was 141,430 tCO $_2$ , compared with 111,924 tCO $_2$  in 2018.

The Group's total other indirect (Scope 3) emissions is  $1,745,032 \text{ tCO}_2\text{e}$  in 2019, with  $1,742,672 \text{ tCO}_2\text{e}$  from investments and  $2,360 \text{ tCO}_2\text{e}$  from business travel.

#### **Other Emissions & Effluents**

Keppel Infrastructure continues to actively manage the emissions from its operations. Nitrogen oxides and sulphur dioxide emitted from Keppel Merlimau Cogen Plant, Keppel Seghers Tuas WTE Plant and Senoko WTE Plant operated and maintained by Keppel Infrastructure remain far below the emission standards of 700 milligrams per normal cubic metre (mg/Nm³) and 500 mg/Nm³ respectively, as stipulated by Singapore's National Environment Agency (NEA) Code of Practice on Pollution Control.

In 2019, dust or particulate matter emitted by Senoko WTE Plant and Keppel Seghers Tuas WTE Plant were 36 mg/Nm³ and 71.45 mg/Nm³ respectively, which were well below the NEA emission standard of 100 mg/Nm³. Variations in emissions are dependent on the type of municipal refuse incinerated by the plants.

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All trade effluent from our operations are treated and discharged to water courses or sewer systems in accordance with the environmental discharge limits and effluent standards in the countries of operation.

#### COMPLIANCE

GRI 306-3 | 307-1

There were no records of spillages, no sanctions pertaining to spillages, nor significant fines<sup>2</sup> and non-monetary sanctions for non-compliance with environmental laws and regulations that were administered by Singapore or overseas authorities on the Group in 2019.

- The GHG conversion factors for direct (Scope 1) emissions, as well as Global Warming Potential values used are based on DEFRA 2015 Government GHG Conversion Factors for Company Reporting. The GHG conversion factors for indirect (Scope 2) emissions are based on the Electricity Grid Emission Factors for 2018 from EMA. For other overseas regions, 2017 grid emission factors from the International Energy Agency were used. The GHG emission Scopes 1, 2 and 3 are as defined by the GHG Protocol, whereby Scope 1 refers to emissions from company owned and operated facilities, machines, vehicles, etc. The primary sources of energy consumed on site by our operations are diesel, liquefied petroleum gas, naphtha, piped natural gas, liquefied petroleum gas, compressed natural gas, acetylene, and refrigerants – R123, R134A, R22, R407C, R410A; Scope 2 refers to emissions from the generation of purchased electricity consumed by the company; Scope 3 emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company, including investments and business travel. Emissions from refrigerant leakage in the shipyards are excluded. We are working to track these emissions for 2020.
- Significant fines are defined as fines above a monetary value of \$50,000.

#### SPECIAL FOCUS

# SOLUTIONS FOR SUSTAINABLE URBANISATION

Keppel is committed to sustainability, both as a responsible corporate citizen and as a provider of solutions that help to build a more sustainable world. Across the Group, our businesses offer a suite of innovative solutions for sustainable urbanisation, to help meet the world's growing needs for energy, clean environments, urban developments, connectivity and more.

We are committed to minimising our environmental impact, focusing on enhancing energy efficiency, reducing carbon emissions in our operations, as well as reducing waste and water consumption intensity.

To support the climate change agenda, we have clearly defined the businesses that we will avoid, maintain and grow, considering their respective environmental impacts. We will include an internal carbon price in our evaluation of all major investment decisions. We also aim to increase the generation and usage of renewable energy in our operations.

In 2014, we set the goal of achieving a 16% improvement in carbon emissions intensity from 2020 business-as-usual levels, and are well on track towards achieving the target. We are also working towards a longer term target of a 28.8% reduction in carbon emissions intensity by 2030 from 2010 levels.

As countries focus increasingly on climate change, the demand for cleaner energy is growing too. Keppel's

businesses are also pivoting towards renewables and cleaner fossil fuels. At Keppel Offshore & Marine, for example, renewables and LNG-related solutions made up over 60% of new orders secured in 2019.

We also contribute to cleaner environments with waste and water treatment solutions, like waste-to-energy plants, which produce significantly less greenhouse gas emissions compared to traditional direct landfilling and reduce the volume of waste by up to 90%. Keppel is also developing the Keppel Marina East Desalination Plant, Singapore's first large-scale dual-mode desalination plant which is scheduled to commence operations in 2020.

Reflecting our commitment to green urban development, Keppel Land has garnered a total of 84 Building and Construction Authority of Singapore Green Mark Awards, of which 16 are Platinum. When all of Keppel Land's Green Mark-awarded projects are fully

completed, they will contribute to a reduction in carbon emissions of almost 95,000 tonnes annually.

In January 2020, Keppel Bay Tower became the first commercial development in Singapore to utilise renewable energy to power all its operations, including the offices of tenants in the building. The photovoltaic panel installation on the rooftop, together with the purchase of Renewable Energy Credits generated by PV panels at Keppel Offshore & Marine's yards in Singapore, will result in a reduction of over 2,400 tonnes of carbon emissions per annum - an amount which would otherwise require about 12,000 trees to absorb over about 50 years.

In terms of Keppel's connectivity business, our data centre facilities are certified with the Singapore Standard for Green Data Centres and utilise a host of energy-efficient solutions to improve power usage effectiveness. We are also pursuing innovative and greener solutions including high-rise green data centres and floating data centre parks.



In January 2020, Keppel Bay Tower became Singapore's first commercial development to be fully powered by renewable energy.

#### **ECONOMIC SUSTAINABILITY**

URBANISATION
TRENDS PRESENT
MANY EXCITING AND
INTERCONNECTED
OPPORTUNITIES FOR
KEPPEL, WHETHER
IT IS PROVIDING
SOLUTIONS IN
ENERGY, URBAN
DEVELOPMENT, CLEAN
ENVIRONMENTS OR
CONNECTIVITY.



#### **MAJOR DEVELOPMENTS IN 2019**

GRI 103-2 | 103-3

#### **OFFSHORE & MARINE**

Secured over \$2 billion worth of new contracts.

Delivered 13 newbuild and conversion projects.

Enlarged footprint in the offshore renewable energy industry with two contracts from TenneT Offshore and Ørsted.

Reached a settlement agreement with Sete Brasil, bringing closure to the outstanding contracts for the construction of six rigs.

Became one of the first companies in Singapore to achieve global certification for the ISO 37001 Anti-Bribery Management System.

#### **PROPERTY**

Sold about 5,150 homes in Asia, mainly in China and Vietnam.

Divested assets worth \$400 million in Singapore and Vietnam.

Completed acquisitions amounting to about \$500 million in China, Vietnam and India.

Replenished residential landbank with addition of about 2,500 units across China and Vietnam.

Increased commercial portfolio with addition of about 136,000 square metres in China.

#### **INFRASTRUCTURE**

Construction of Keppel Marina East Desalination Plant is on track for completion in 2020.

Expanded energy and environmental capabilities with investments in MET Holding and Zerowaste Asia.

Completed first LNG cargo import from North America.

Maintained Keppel Electric's position as one of the largest OEM retailers in Singapore.

Continued to grow the Group's data centre business, and injected Keppel DC Singapore 4 into Keppel DC REIT.

Grew logistics network and omnichannel solutions offerings to customers beyond Singapore.

#### **INVESTMENTS**

Completed the privatisation of M1, together with Singapore Press Holdings (SPH).

Keppel Capital expanded its alternative asset classes with a debt mezzanine platform.

Keppel's listed REITs and Trust continued to seize opportunities and create value for Unitholders through active investments and divestments across Singapore, South Korea, Germany and the United States.

Prime US REIT, of which Keppel Capital is a strategic partner, was successfully listed.

#### **OVERVIEW**

GRI 103-1

Today, more than half of the world's population live in urban areas. According to estimates by the United Nations, urban areas are projected to house 68% of people globally by 2050¹. Urbanisation trends and a growing middle class, especially in Asia, continue to drive demand and provide opportunities for companies able to supply solutions to meet their needs.

We harness the strengths of the Group to meet the world's growing needs for sustainable urbanisation solutions. Our business model, underpinned by strong collaboration across verticals, provides a robust eco-system that allows us to create and capture value from all parts of the Group.

#### **REPORT BOUNDARY**

GRI 103-1

The reporting boundary for financial data in this section is the same as that of Keppel Corporation's Report to Shareholders 2019.

#### **MANAGEMENT APPROACH**

GRI 102-10 | 103-1 | 103-2 | 103-3

The last few years have been transformative for Keppel as we worked to build a more resilient and sustainable company, committed to delivering value and growth for the future. The Group's corporate structure has been simplified with the privatisation of our operating entities, starting with Keppel Land, followed by Keppel Telecommunications & Transportation (Keppel T&T) and M1, thus allowing more efficient capital allocation.

We have also consolidated our asset management businesses under Keppel Capital, which serves both as a platform for capital recycling and tapping third-party funds for growth. We have been deepening our presence in rapidly urbanising markets such as China and Vietnam, and expanding our products and offerings, with smart, urban projects, renewables, gas solutions, asset management and digital connectivity among our new growth engines.

We see sustainability as being core to our strategy, not just in terms of how we deal with environmental, social and governance (ESG) issues, but as a source of business opportunities, as we channel the Group's capabilities and resources to meet the needs of sustainable development and address the challenges posed by climate change.

We have defined the kinds of businesses that we will strictly avoid, the existing businesses that we will maintain, and those which we will grow and expand, considering their respective environmental impacts. In addition an internal carbon price will also be introduced in the evaluation of our major investment decisions.

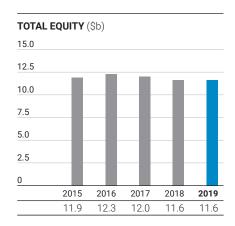
Revision of World Urbanisation Prospects (2018), Population Division of the UN Department of Economic and Social Affairs (UN DESA).

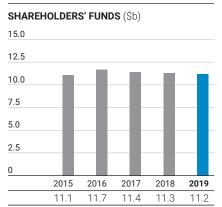
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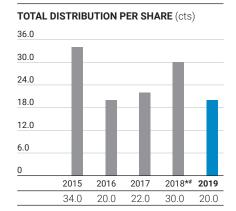
We have been deepening our presence in rapidly urbanising markets and expanding our offerings with smart, urban projects like the Saigon Sports City (pictured) in Ho Chi Minh City, Vietnam.



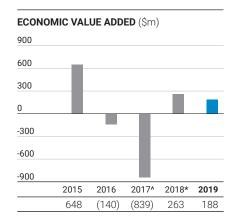
#### **ECONOMIC SUSTAINABILITY**













- \* 2018 financial figures have been restated due to an IFRIC agenda decision on SFRS(I) 1-23 Borrowing costs eligible for capitalisation.
- Includes the special dividend paid of 5.0 cents per share.
- Includes the one-off financial penalty and related costs of S\$619 million.

#### **FINANCIAL PERFORMANCE IN 2019**

GRI 201-1

Group net profit was \$707 million, with stronger contributions from Keppel Offshore & Marine, Keppel Infrastructure and Keppel Capital. This was 25% lower as compared to 2018, when the Group had benefited from \$584 million in gains through the en-bloc sales of development projects and property divestments. Group revenue grew 27% to \$7,580 million in 2019 with higher recognition of ongoing offshore & marine and infrastructure projects, improved sales in the power and gas segment, the consolidation of M1 and higher asset management revenue.

Total cash dividend for 2019 will be 20.0 cents per share. This comprises a proposed final cash dividend of 12.0 cents per share as well as an interim cash dividend of 8.0 cents per share paid in the third quarter of 2019.

# GOVERNMENT ASSISTANCE & TAXES PAID

GRI 201-4

In 2019, the Group received a total of \$8.6 million in financial assistance from governments. Approximately 47% of financial assistance received was from the government of China for business development incentives, land subsidies and green building grants. Close to 40% relates to the Singapore government's Research and Development grants, training grants as well as cash grants under its wage credit and employment credit schemes. The remaining 13% was from the governments of the United States and Belgium.

The Group has exposure to income taxes in many jurisdictions. Significant assumptions are required in determining the provision for income taxes. There are certain transactions and computations for which the ultimate tax determination is uncertain during the ordinary course of business. The Group recognises liabilities for expected tax issues based on estimates of whether additional taxes will be due.

Where the final tax outcome of these matters is different from the amounts that were initially recognised, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made. The carrying amounts of taxation and deferred taxation are disclosed in the balance sheet in Keppel Corporation's Report to Shareholders 2019.

The Group operates in more than 20 countries. In 2019, the Group contributed \$191 million in taxes to the various countries and tax jurisdictions in which it operates.

#### **EMPLOYEE COMPENSATION**

In 2019, staff costs amounted to \$1,163 million in the form of wages and salaries, employer's contribution to Singapore's Central Provident Fund, share options and share plans, as well as other staff benefits. The Group's average number of employees in 2019 was 18,2971.

#### **ECONOMIC VALUE DELIVERED TO SOCIETY**

GRI 201-1

Keppel's business operations generate employment, opportunities for suppliers and tax revenues for governments. We are committed to positively impact the communities in which we operate, and contribute to worthy social causes through donations and sponsorships.

In 2019, Keppel generated \$8,208 million of economic value for our stakeholders, which was distributed through our business operations to suppliers, contractors, subcontractors, employees, investors, governments and community organisations, among others. The majority of the economic value retained by Keppel after this distribution is invested in capital expenditure and acquisitions, as we seek to sharpen our competitive edge and stand ready to seize growth opportunities.

The figures in this section do not take into account the headcount and staff costs of associated companies, whereby an associated company is an entity, not being a subsidiary, over which the Keppel Group has significant influence, but not control.



Deputy Prime Minister Heng Swee Keat (centre, in white) with the ROBO KRAWLER, a robotic device developed by the Keppel-NUS Corporate Laboratory, which can weld and undertake inspections in confined spaces ROBO KRAWLER is part of Keppel O&M's Yard of the Future initiatives to improve productivity by using automation and robotic technologies

Economic Value Generated by Keppel

\$8,208m
This includes revenue,

interest and investment income, and disposal gains. **Economic Value Distributed to Others** 

**Operating Costs** 

\$5,379m

**Employee Wages & Benefits<sup>2</sup>** 

\$1,163m

Capital Providers

\$728m

Governments

\$191m

Communities

\$9.6m

This includes purchases from suppliers and contractor costs, and other operating expenses.

Employee costs include salaries

and benefits.

This includes dividends and interest paid.

This includes income taxes paid, net of refunds received.

This includes voluntary donations and sponsorships disbursed that are not business or marketing related.

<sup>2</sup> Excludes capitalised staff costs in stocks and work-in-progress and capital expenditure.

**Economic Value** Retained by Keppel

The majority of this is invested in capital expenditure and acquisitions.

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#### CORPORATE GOVERNANCE AND RISK MANAGEMENT

THE LONG-TERM SUSTAINABILITY OF THE GROUP'S BUSINESSES IS UNDERPINNED BY OUR CORE VALUES, AND DRIVEN AT THE HIGHEST LEVEL OF THE ORGANISATION THROUGH STRONG CORPORATE GOVERNANCE AND PROACTIVE ENGAGEMENT WITH STAKEHOLDERS.



#### **PERFORMANCE OVERVIEW**

GRI 103-2 | 103-3

#### **2019 TARGETS**

Continue to improve risk and compliance policies, processes and operating standards to strengthen the overall culture of risk and compliance and corporate governance in the Group.

Embed proactive risk management as part of the overall operating framework for risk management and governance.

Cascade compliance best practices through targeted training and workshops.

Extend the evaluation of controls and compliance culture as part of internal audits.

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#### **2019 PERFORMANCE**

Launched the Technology and Data Risk Management (TDRM) operating standards and programme to set baseline standards for cyber and data risks, and developed the Cyber Incident Response Plan.

Implemented the Crisis
Management and Incident
Reporting operating standard
covering crisis response,
incidents reporting and
business continuity planning.

Achieved ISO 37001 (Anti-Bribery Management Systems) certification by Keppel Offshore & Marine for its operations in Singapore, Brazil, China and USA.

Operationalised the Group Disciplinary Procedure Guide.

Enhanced the Group's Whistle-Blower Policy with centralised procedures and Whistleblower reporting channels, including an email hotline and local toll-free whistle-blower hotlines for the respective countries.

#### **2020 TARGETS**

Continue to harmonise and enhance risk and compliance policies and processes, and strengthen their integration into corporate governance and business processes to improve the Group's risk and compliance culture.

Cascade compliance best practices through targeted training, communications, and monitoring.

Strengthen feedback loop from business units and supporting departments in the practice of managing risks.

#### LONGER TERM TARGETS

Improve gender diversity over a 3-year period by ensuring that at least 20% of the Board will comprise female directors by end FY 2021.

#### **TOPICS**

Governance

Anti-corruption

Risk management

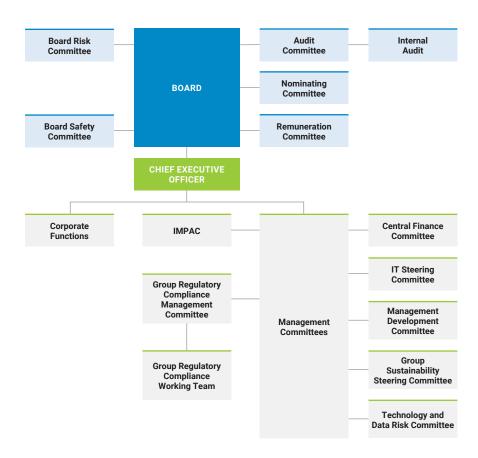
Regulatory compliance

#### SDGs





#### **GOVERNANCE FRAMEWORK 2019**



#### **OVERVIEW**

GRI 103-1

The Board and management of Keppel Corporation Limited ("KCL", "Keppel" or the "Company") firmly believe that a genuine commitment to good corporate governance is essential to the sustainability of the Company's businesses and performance, and are pleased to confirm that the Company has adhered to the principles of the Code of Corporate Governance 2018 ("2018 CG Code"), with references to the accompanying Practice Guidance.

#### **BOARD'S CONDUCT OF AFFAIRS**

GRI 102-18 | 102-22 | 102-23 | 102-26 | 102-33 | 103-1 | 103-2 | 103-3

#### **Governance Framework**

KCL's governance structure is as above.

Dr Lee Boon Yang is the non-executive and independent Chairman of the Company. Mr Loh Chin Hua is the Chief Executive Officer (CEO) of the Company.

The Chairman, with the assistance of the Company Secretaries, schedules meetings and prepares meeting agenda to enable the Board to perform its duties responsibly having regard to the flow of the Company's operations. He sets

guidelines on and monitors the flow of information from management to the Board to ensure that all material information is provided in a timely manner to the Board for the Board to make good decisions. He also encourages constructive relations between the Board and management, and between the executive and non-executive directors (NEDs). At board meetings, the Chairman encourages a full and frank exchange of views, drawing out contributions from all directors so that the debate benefits from the full diversity of views, in a robust yet collegiate setting. At annual general meetings and other shareholders' meetings, the Chairman ensures constructive dialogue between shareholders, the Board and management. The Chairman sets the right ethical and behavioural tone and takes a leading role in the Company's drive to achieve and maintain a high standard of corporate governance with the full support of the directors, Company Secretaries and management.

To assist the Board in the discharge of its oversight function, various board committees, namely the Audit, Board Risk, Nominating, Remuneration and Board Safety committees, have been constituted with clear written terms of reference. All the

#### **Compliance Training**

>16,000

Directors and employees received compliance e-training on key Group policies and requirements.

#### **Independence of Directors**

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Out of 11 directors are independent.

#### CORPORATE GOVERNANCE AND RISK MANAGEMENT

board committees are actively engaged and play an important role in ensuring good corporate governance in the Company and within the Group, and the Board is kept updated on discussions of the committees via circulation of minutes and regular updates by the respective chairmen of the committees at board meetings.

The CEO, assisted by the management team, makes strategic proposals to the Board and after robust and constructive board discussion, executes the agreed strategy, manages and develops the Group's businesses and implements the Board's decisions. He is supported by management committees that direct and guide management on operational policies and activities, which include:

- Investments & Major Projects Action Committee (IMPAC), which guides the Group to exercise the spirit of enterprise as well as prudence to earn optimal risk-adjusted returns on invested capital for its chosen lines of business, taking into consideration the relevant risks, in a controlled manner;
- 2. Management Development Committee (MDC), which nominates candidates as nominee directors to the boards of each unlisted company or entity that the Company is invested in ("Investee Company") so as to safeguard the Company's investment. In respect of Investee Companies that are (a) listed on a stock exchange, (b) managers or trustee-managers of any collective investment schemes, business trusts or any other trusts which are listed on a stock exchange, or (c) parent companies of the Company's core businesses, the Committee recommends the candidates for the approval of the Nominating Committee (NC). The MDC also provides inputs, guidance and direction on operational policies and human resources/organisational matters;
- Central Finance Committee, which reviews, guides and monitors financial policies and activities of Group companies;
- 4. Group Regulatory Compliance Management Committee (Group RCMC), which articulates the Group's commitment to regulatory compliance, directs and supports the development of over-arching compliance policies and guidelines, and facilitates the implementation and sharing of policies and procedures across the Group;

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- Group Regulatory Compliance Working Team (Group RCWT), which supports the Group RCMC and oversees the development and review of over-arching compliance policies and guidelines for the Group, as well as review training and communication programmes;
- Keppel IT Steering Committee, which provides strategic information technology (IT) leadership and ensures IT strategy alignment in achieving business strategies;
- Group Sustainability Steering Committee, which sets the sustainability strategy and leads performance in key focus areas; and
- 8. Technology and Data Risk Committee, which operationalises the Technology and Data Risk Management operating standards programme that enhances the Group's safeguards, resilience and responses to cyber threats.

#### **Board Strategic Review**

The Board periodically reviews and approves the Group's strategic plans. A two-day off-site board strategy meeting is organised annually for in-depth discussion on strategic issues and the direction of the Group, to give the non-executive directors a better understanding of the Group and its businesses, and to provide an opportunity for the non-executive directors to familiarise themselves with the management team so as to facilitate the Board's review of the Group's succession planning and leadership development programme. In FY 2019, the focus of the strategy meeting was to track the progress towards the Group's Vision 2020 targets and to discuss the strategic direction towards Vision 2030, with a view to grow Keppel as one integrated business providing solutions for sustainable urbanisation. To support the Board's oversight of the implementation of the strategic plans, one business unit is invited to each quarterly Board meeting to present its plans and current challenges, and provide the Board an opportunity to perform an in-depth review into each of the Group's core businesses.

#### **AN EFFECTIVE BOARD**

GRI 102-25 | 102-27 | 102-28

The Board and management fully appreciate that fundamental to good corporate governance is an effective and robust Board whose members engage in open and constructive debate and challenge management on its assumptions and proposals.

#### **Independence of Directors**

The NC determines on an annual basis whether or not a director is independent. In January 2020, the NC carried out reviews on the independence of each director based on the respective directors' self-declaration in the Directors' Independence Checklist and their actual performance on the Board and board committees, taking into account the listing rules on the circumstances in which a director will not be deemed independent and guidance in the 2018 CG Code as to the circumstances in which a director should not be deemed independent. The assessment of the independence the directors are set out on page 80 of our Report to Shareholders 2019. Except for the Board Safety Committee, all board committees comprise entirely independent directors.

#### **Independent Judgment**

All directors are expected to exercise independent judgment in the best interests of the Company. This is one of the performance criteria for the peer and self-assessment of the individual directors. Based on the results of the peer and self-assessment carried out by the directors for FY 2019, all directors have discharged this duty well. Mr Teo Siong Seng, Mr Tham Sai Choy and Mrs Penny Goh were not part of this assessment as they were only recently appointed.

#### **Conflicts of Interest**

Each director must promptly disclose conflicts of interest, whether direct or indirect, in relation to any transaction or proposed transaction. In this connection, the Company has in place a "Keppel Group - Directors' Conflict of Interest Policy" to quide directors in identifying, disclosing and managing situations of actual or potential conflicts, as well as situations which may be perceived to be conflicts of interest. Every director is required to promptly disclose any conflict of interest, whether direct or indirect, in relation to a transaction or proposed transaction with the Company as soon as is practicable after the relevant facts have come to his/her knowledge, and recuse himself/herself when the conflict-related matter is discussed unless the Board is of the opinion that his/her presence and participation is necessary to enhance the efficacy of such discussions, and abstain from voting in relation to conflict-related matters. On an annual basis. each director is also required to submit details of his/her associates for the purpose of monitoring interested persons transactions.

#### **Board Competency & Diversity**

The Company recognises that diversity in relation to composition of the Board provides a range of perspectives, insights and challenges needed to support good decision-making for the benefit of the Group, and is committed to ensuring that the Board comprises directors who, as a group, provide an appropriate balance and mix of skills, knowledge, experience and other aspects of diversity (such as gender and age) so as to promote the inclusion of different perspectives and ideas, mitigate against groupthink and ensure that the Company has the opportunity to benefit from all available talent. In identifying suitable candidates for new appointments to the Board, the NC would ensure that female candidates are included for consideration. The final decision on the appointment of directors would be based on and driven by merit against the objective criteria set by the Board from time to time on the recommendation of the NC, after having regards to the benefits of diversity and the needs of the Board.

The Company has in place a Board Diversity Policy that sets out the framework and approach for the Board to set its qualitative and measurable quantitative objectives for achieving diversity, and to annually assess the progress in achieving these objectives. The annual assessment is led by the NC as part of the process for appointment of new directors and Board succession planning. To help the NC identify gaps (if any) in skills, knowledge, experience and other aspects of diversity in the board composition in any given year of assessment, each member of the Board is required to complete a Board Diversity Matrix to indicate which of the list of skills, knowledge, experience and other aspects of diversity (identified by the NC, and set out in the Board Diversity Matrix, as being able to contribute to the Company's strategy and business) the board member possesses. The returns from the board members are then consolidated into a single Board Diversity Matrix to highlight the Board's current mix of skills, knowledge, experience and other aspects of diversity and gaps therein, if any.

The Board will, taking into consideration the recommendations of the NC, review and agree annually on the qualitative and measurable quantitative objectives for achieving diversity on the Board. The objectives identified in FY 2019, and the progress towards achieving such objectives, are set out below:

The NC conducted an assessment in January 2020 and is satisfied that the Board and the board committees comprise directors who as a group provide an appropriate balance and mix of skills, knowledge, experience, and other aspects of diversity. The NC is also satisfied that the directors, as a group, possess core competencies including accounting or finance, business or management experience, human resource, risk management, technology, mergers and acquisitions, legal, international perspective, industry knowledge, strategic planning experience and customer-based experience or knowledge, required for the Board and the board committees to be effective, taking into account the Company's strategy and business.

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#### **OBJECTIVES FOR FY 2019**

#### Objectives

Appoint at least two additional independent directors with some of the core competencies already present on the Board by end-FY 2020 for succession planning purposes.

#### Progress

Mr Tham Sai Choy was appointed as a non-executive and independent director with effect from 1 November 2019. Mr Tham was Managing Partner of KPMG Singapore and then Chairman of KPMG Asia Pacific before he retired in 2017. He was a member of KPMG's global board, and had served on its executive committee and risk committee, and chaired its compensation and nominations committee. As a member of the executive committee, Mr Tham was responsible for KPMG's global strategies and planning, including developing the firm's capabilities in cyber security, data analytics and digital transformation. Mr Tham also worked with many of Singapore's listed companies in their audits and other consultancy work over his 36 years of practice. He was appointed as a board member with a view of being the successor to Mr Danny Teoh in the roles of Audit Committee Chairman and Board Risk Committee member.

Mrs Penny Goh was appointed as a non-executive and independent director with effect from 2 January 2020. Mrs Goh was Co-Chairman and Senior Partner of Allen & Gledhill LLP, where she had, for many years, headed the firm's corporate real estate practice. She advises listed corporations, private equity property funds, sovereign wealth funds and real estate investment trusts, and has extensive experience in a broad range of corporate real estate transactions for commercial, industrial and logistics projects in Singapore and the Asia Pacific, involving investment, joint development and profit participation structures. Mrs Goh was appointed with a view to succeeding Mr Alvin Yeo as a board member with legal expertise and to enhance the gender diversity of the Board.

Broaden the skillset of directors on the Board by appointing at least one director with the relevant expertise and experience that would complement those already on the Board and which would help drive the Group's strategy. Mr Teo Siong Seng was appointed as a non-executive and independent director with effect from 1 November 2019. His strong background, knowledge and experience in the China market; experience in growing businesses in frontier countries such as East and West Africa, and his knowledge and experience from serving as Chairman of the Singapore Business Federation, Honorary President of the Singapore Chinese Chamber of Commerce & Industry and as director of Business China, would enhance the balance and breadth of skills of the Board, and help drive the Group's strategy.

Improve gender diversity over a three-year period by ensuring that at least 20% of the Board will comprise female directors by end-FY 2021. With the recent appointment of Mrs Penny Goh, together with Ms Veronica Eng, the female representation on the Board is currently 18%. This objective will be met with the appointment of an additional female director by end-FY 2021.

#### CORPORATE GOVERNANCE AND RISK MANAGEMENT

#### **Board Information**

To effectively engage the management, the Board must be kept well informed of the Company's businesses and affairs, and be knowledgeable about the industries in which the businesses operate. The Company has therefore adopted initiatives to put in place processes to ensure that the non-executive directors are well supported by accurate, complete and timely information, have unrestricted access to management, and have sufficient time and resources to discharge their oversight function effectively. Subject to the approval of the Chairman, the directors, whether as a group or individually, may seek and obtain independent professional advice to assist them in their duties, at the expense of the Company.

As a general rule, board papers are required to be distributed to the directors at least seven days before the board meeting so that the members may better understand the matters prior to the board meeting and discussions may be focused on questions that the directors may have. Directors are provided with tablet devices to facilitate their access to and review of board materials. However, sensitive matters may be tabled at the meeting itself and discussed. Managers who can provide additional insights into the matters at hand would be present at the relevant time during the board meeting. The directors are also provided with the names and contact details of the Company's senior management and the Company Secretaries to facilitate direct access to senior management and the Company Secretaries.

Regular informal meetings are conducted for management to brief the directors on prospective deals and potential developments at an early stage before formal board approval is sought, and relevant information on business initiatives, industry developments and analyst and press commentaries on matters in relation. to the Company or the industries in which it operates is circulated to the directors from time to time. Management is also expected to provide the Board with accurate information in a timely manner concerning the Company's progress or shortcomings in meeting its strategic business objectives or financial targets and other information relevant to the strategic issues facing the Company.

The Board also reviews the budget on an annual basis, and any material variance between the projections and actual results would be disclosed and explained. Management also provides the Board members with management accounts monthly and as the Board may require from time to time, to keep the Board informed, on a balanced and understandable basis, of the Group's performance, financial position and prospects.

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#### **Training**

Directors are provided with continuing education in areas such as directors' duties and responsibilities, corporate governance, changes in financial reporting standards, changes in the Companies Act, continuing listing obligations and industry-related matters, so as to update and refresh them on matters that may affect or enhance their performance as board or board committee members. A training programme is also in place for directors in areas such as accounting, finance, corporate social responsibility, risk governance and management, the roles and responsibilities of a director of a listed company and industry-specific matters. In FY 2019, some KCL directors attended talks on topics relating to the digital economy, cyber security governance and macroeconomic trends. E-training was also conducted on the Group's policies on anti-corruption, anti-money laundering, personal data protection, competition law, and cyber security. Site visits are also conducted periodically for directors to familiarise themselves with the operations of the various businesses so as to enhance their performance as board or board committee members. All induction, training and development costs are at the Company's expense.

#### **Board Evaluation**

The Board has implemented formal processes for assessing the effectiveness of the Board as a whole, each of its board committees, the contribution by the Chairman, as well as peer and self-assessment of the individual director to the effectiveness of the Board.

To ensure that assessments are done promptly and fairly, the Board has appointed an independent third party (the "Independent Co-ordinator") to assist in collating and analysing the returns of the board members. Mr Michael Lim, former Chairman of PricewaterhouseCoopers and Land Transport Authority, and currently Chairman of Nomura Singapore Limited, was appointed for this role. Mr Michael Lim does not have business relationships or any other connections with the Company or its directors which may affect his independent judgment.

## BOARD COMPOSITION & SUCCESSION PLANNING

GRI 102-24

The Board believes that orderly succession and renewal are achieved as a result of careful planning, where the appropriate composition of the Board is continually under review. In this regard, the Board has put in place a formal process for the renewal of the Board and the selection of new directors so that the experience of longer serving directors can be

drawn upon while tapping into the new external perspectives and insights which more recent appointees bring to the Board's deliberation.

The NC leads the process and makes recommendations to the Board as follows:

- a. NC reviews annually the balance and mix of skills, knowledge, experience and other aspects of diversity such as gender and age, and the size of the Board which would facilitate decision-making. In this review, the NC would also take into account the needs of the Group, the collective skills and competencies of the Board and service tenure spread of the directors.
- In the light of such reviews and in consultation with management, the NC assesses if there is any inadequate representation in respect of any of those attributes and if so, determines the role and the desirable competencies for a particular appointment.
- c. The NC will, in all cases, take into consideration the following objective criteria identified as necessary for the Board and board committees to be effective:
  - i. Integrity
  - ii. Independent mindedness
  - iii. Able to commit time and effort to carry out duties and responsibilities effectively
  - iv. Track record of making good decisions
  - v. Experience in high-performing companies
  - vi. Financial literacy
- d. External help (for example, Singapore Institute of Directors and search consultants) may be used to source for potential candidates if need be. Directors and management may also make recommendations.
- e. NC meets with the short-listed candidate(s) to assess suitability and to ensure that the candidate(s) is/are aware of the expectations and the level of commitment required.
- f. NC makes recommendations to the Board for approval.

#### **Re-nomination of Directors**

The NC is also charged with the responsibility of re-nomination having regard to the director's contribution and performance (such as attendance,

preparedness, participation and candour), with reference to the results of the assessment of the performance of the individual director by his/her peers.

The directors submit themselves for re-nomination and re-election at regular intervals of at least once every three years. Pursuant to the Company's constitution, one-third of the directors retire from office at the Company's annual general meeting, and a newly appointed director must submit him/herself for re-election at the annual general meeting immediately following his/her appointment.

#### REMUNERATION FRAMEWORK

GRI 102-35 | 102-36

The Remuneration Committee (RC) is responsible for ensuring a formal and transparent procedure for developing policy on executive remuneration and for determining the remuneration packages of individual directors and senior management. The RC assists the Board to ensure that remuneration policies and practices are sound in that they are able to attract, retain and motivate without being excessive, thereby maximising shareholder value. The remuneration framework is set out from pages 82 to 87 of our Report to Shareholders 2019.

The RC has access to expert advice from external remuneration consultants where required. In FY 2019, the RC sought views from external remuneration consultants, Aon Hewitt, on market practice and trends, and benchmarks against comparable organisations. The RC undertook a review of the independence and objectivity of the external remuneration consultants through discussions with the external remuneration consultants, and has confirmed that the external remuneration consultants had no relationships with the Company which would affect their independence and objectivity.

## RISK MANAGEMENT & INTERNAL CONTROLS

GRI 102-11 | 102-17 | 102-33 | 205-2

The Board, supported by the Audit Committee ("AC") and Board Risk Committee ("BRC"), oversees the Group's system of internal control and risk management.

The AC's primary role is to assist the Board with ensuring the integrity of financial reporting and the adequacy and effectiveness of the system of internal controls and risk management. The AC has explicit authority to investigate any matter within its responsibilities, full access to and co-operation by management and full discretion to invite any director or executive officer to attend its meetings, and reasonable resources (including access to external consultants) to enable

it to discharge its responsibilities properly. The BRC considers the nature and extent of the significant risks which the Company may take in achieving its strategic objectives and value creation; and reviews and guides management in the formulation of risk policies and processes to effectively identify, evaluate and manage significant risks to safeguard shareholders' interests and the Group's assets, and ensure corporate sustainability.

#### Keppel's System of Management Controls Framework

The Group also has in place Keppel's System of Management Controls Framework (the "Framework") outlining the Group's internal controls and risk management processes and procedures. The Framework comprises three Lines of Defence towards ensuring the adequacy and effectiveness of the Group's system of internal controls and risk management.

Under the first Line of Defence, management is required to ensure good corporate governance through the implementation and management of policies and procedures relevant to the Group's business scope and environment. Such policies and procedures govern financial, operational, IT and regulatory compliance matters and are reviewed and updated periodically. Compliance governance is governed by the respective regulatory compliance management committees and working teams. Employees are also guided by the Group's core values and expected to comply strictly with Keppel's Code of Conduct.

Under the second Line of Defence, significant business units are required to conduct a self-assessment exercise on an annual basis. This exercise requires such business units to assess the status of their respective internal controls and risk management processes via self-assessment. Where required, action plans are developed to remedy identified control gaps. As described under the Group's Enterprise Risk Management Framework, significant risk areas of the Group are also identified and assessed, with systems, policies and processes put in place to manage and mitigate the identified risks beyond internal thresholds of appetite. It includes the reporting and oversight structure involving both boards and management of the Group and business divisions and seeks to embed sound risk management practices in business decisions and operations across Group entities. Regulatory Compliance supports and works alongside management to ensure that relevant policies, processes and controls are effectively designed, managed and implemented.

Under the third Line of Defence, to assist the Group to ascertain the adequacy and effectiveness of the Group's internal controls, business units' CEOs and Chief Financial Officers (CFOs) are required to provide the Group with written assurances as to the adequacy and effectiveness of their system of internal controls and risk management. Such assurances are also sought from the Group's internal and external auditors based on their independent assessments.

### Enhancements to Compliance Programme in FY 2019

As our Code of Conduct states, "we care how results are achieved, not just that they are attained." Implementing that core value by enhancing our regulatory compliance process and reminding every Keppelite of that value is a focus of attention for us, our boards, officers and line managers globally. Read more about the Group's enhanced compliance programme on pages 90 to 91 of our Report to Shareholders 2019.

#### **Communication & Training**

The Group continuously ensures that its compliance policies and procedures are communicated effectively to all employees and directors. In 2019, an e-training and assessment exercise covering key policies, including Keppel's Enhanced Code of Conduct, Conflict of Interest, Whistle-Blowing, Gifts and Hospitality, Donation and Sponsorship and Solicitation and Extortion, was carried out. 16,544 directors and employees have completed the e-training and toolbox training. Targeted training focused on line managers' responsibilities and employees' obligations, under the re-branded K'ompass programme, was conducted in FY 2019. The K'ompass training aims to educate and entrench correct mindset, behaviours, and culture towards fostering risk awareness, ethical behaviour at work, importance of controls and focus on safety. Conflict of Interest trainings targeted at those with procurement, commercial, business development functions, were also conducted to heighten awareness of conflict situations and to train on declaration requirements.

#### Reporting & Investigation

Keppel Whistle-Blower Policy took effect on 1 September 2004 and was enhanced on 15 February 2017 to encourage reporting in good faith of suspected reportable conduct by establishing clearly defined and centralised processes through which such reports may be made with confidence that employees and other persons making such reports will be treated fairly and, to the extent possible, protected from reprisal. Read more about our Risk Management & Internal Controls framework on pages 106 to 112 of our Report to Shareholders 2019.

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#### CORPORATE GOVERNANCE AND RISK MANAGEMENT

#### **REGULATORY COMPLIANCE**

GRI 102-15

We are guided by our core values and code of conduct. We will do business the right way and comply with all applicable laws and regulations wherever we operate. We strive to deliver outstanding performance, whilst maintaining the highest ethical standards.

We are clear with our tone for regulatory compliance, which is consistently emphasised from the top and throughout all levels of the Group. We have zero tolerance for fraud, bribery, corruption and violation of laws and regulations.

#### **STRATEGIC OBJECTIVES**

We have made significant progress in embedding a robust compliance framework and processes throughout the Group. With Keppel Offshore & Marine having obtained ISO 37001 Anti-Bribery Management Systems certification for all units globally in 2019, we are progressively implementing the same standard throughout the Group. This will ensure consistency in application and operational effectiveness of the compliance programme.

We have a compliance framework that is commensurate with the size, role and activity of each business unit (BU), including appropriate compliance control systems, to be able to effectively detect and remedy gaps. We remain focused on rebuilding our credibility and reputation with our stakeholders and building a sustainable compliance framework that supports the Group's growth.

#### **GOVERNANCE STRUCTURE**

Our Regulatory Compliance Governance Structure is designed to strengthen our corporate governance. The Board Risk Committee (BRC) supports the Board in its oversight of regulatory compliance and is responsible for driving the Group's implementation of compliance and governance systems. Group Risk & Compliance serves as a secretariat to the BRC, assessing and reporting on compliance risks, controls and mitigations.

The Group Regulatory Compliance Management Committee (Group RCMC) is chaired by Keppel Corporation's Chief Executive Officer and its members include all BU heads. The role of the Group RCMC is to articulate the Group's commitment to regulatory compliance, direct and support the development of over-arching compliance policies and guidelines and facilitate the effective implementation of policies and procedures.

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The Group RCMC is supported by the Group Regulatory Compliance Working Team (Group RCWT), which is chaired by the Head of Group Risk & Compliance. The Group RCWT oversees the development and review of pertinent regulatory compliance matters, over-arching compliance policies and guidelines for the Group, as well as reviews training and communication programmes.

Each BU has a dedicated Compliance Lead. He/she is supported by the respective risk and compliance teams and is responsible for driving and administering the compliance function and agenda for the BU. This includes providing support to BU management with subject matter expertise, process excellence and regular reporting to ensure that compliance risks are effectively managed and mitigated. We continue to strengthen the Group's Compliance teams with additional professional and experienced officers.

Under the direction of Group RCMC and Group RCMT, BUs are responsible for implementing the Group's Code of Conduct and regulatory compliance policies and procedures. They are also responsible for ensuring that risk assessments of material regulatory compliance risks are conducted, and that control measures are adequate and effective.

## REGULATORY COMPLIANCE FRAMEWORK

Our regulatory compliance framework focuses on critical pillars covering the areas of culture; policies and procedures; training and communication; key compliance processes; compliance risk assessment, reviews and monitoring; and compliance resources.

A key aspect of the framework is the structure of the compliance organisation. The Head of Group Risk & Compliance reports directly to the Chairman of the BRC. Similarly, the Compliance Leads of the BUs have direct reporting lines to the respective BU Audit Committee or BRCs. Furthermore, BU Compliance Leads report directly to the Head of Group Risk & Compliance. This reporting structure reinforces independence of the function and enables senior management, including members of the Board, to provide continuous, clear and explicit support, and credence to the Group's compliance programme.

#### **CULTURE**

Culture and mindset are critical in ensuring effectiveness and durability of our compliance programme. Management has a key role in setting the right tone and walking the talk. This helps to embed a strong and robust regulatory compliance programme and culture that permeates all levels.

Posters on anti-bribery, anti-corruption and reporting mechanisms are exhibited in our offices globally and we issue Group-wide bulletins on relevant topical issues to apprise, inform and reinforce compliance principles and messages. Key messages are also delivered periodically by BU heads to employees. We continue to roll out initiatives to foster a positive compliance-centric culture.

#### **POLICIES & PROCEDURES**

GRI 102-16 | 102-17

#### **Employee Code of Conduct**

We have a strict Code of Conduct (Code) that applies to all employees, and who are required to acknowledge and comply with the Code. The Code sets out important principles to guide employees in carrying out their duties and responsibilities to the highest standards of business integrity. It covers areas from conduct in the workplace to business conduct, including clear provisions on prohibitions against bribery and corruption, and conflicts of interest amongst others.

We continue to review and enhance our Code to ensure that it stays updated and properly instructive. Appropriate disciplinary action, including suspension or termination of employment, is taken if an employee is found to have violated the Code.

We have procedures to ensure that disciplinary actions are carried out consistently and fairly across all levels of employees. All third parties who represent Keppel in business dealings, including joint venture partners, are also required to comply with and follow the requirements of the Code.

#### **Supplier Code of Conduct**

The acknowledgement to abide by our Supplier Code of Conduct is mandatory for all key suppliers across the Group. The areas covered within the Supplier Code of Conduct include proper business conduct, human rights, fair labour practices, stringent safety and health standards, and responsible environmental management.

#### **Whistle-Blower Policy**

Keppel's Whistle-Blower Policy encourages the reporting of suspected bribery, violations or misconduct through a clearly-defined process and reporting channel, by which reports can be made in confidence and without fear of reprisal. The whistle-blower reporting channels are widely communicated and made accessible to all.

#### **Personal Data Privacy Act**

Guidance is provided to employees on the Personal Data Protection Commission's advisory guidelines to ensure that the Group complies with the requirements of the Personal Data Privacy Act.

#### **Compliance Policies**

We maintain a comprehensive list of policies covering compliance-related matters including anti-bribery, gifts and hospitality, agent fees, donations and sponsorships, solicitation and extortion, conflict of interest and insider trading, amongst others. These policies are reviewed periodically to ensure that they are commensurate with the activities in the jurisdictions in which the Group operates. Group policies are applicable to all BUs and unless the jurisdictional regulatory requirements are more stringent, these policies represent the minimum standards for the Group. Concerted efforts were taken to ensure all compliance policies, including translated versions, are made available and accessible to employees.

#### **TRAINING & COMMUNICATION**

GRI 205-2

Training is an essential component of Keppel's regulatory compliance framework. Our programmes are tailored to specific audiences and we leverage Group-wide forums to reiterate key messages.

We have a comprehensive annual e-learning training programme which is mandatory for directors, officers and employees. The content of the training covers the Code and key principles underlying our compliance policies. Directors, officers and employees are required to complete assessments to successfully mark completion of the training. In addition, directors, officers and employees are also required to formally acknowledge their understanding of policies and declare any potential or actual conflicts of interest. Trainings on anti-bribery and the Code in multi-languages are also carried out for industrial/general workers.

We continue to refine our compliance training programmes and curriculum. We are also focused on developing and tailoring training content to varying target groups and training needs.

In addition to policy-related training programmes, we conduct trainings focused on the line manager's responsibilities in developing the desired culture and mindset regarding compliance. These responsibilities include the need to establish and maintain effective internal controls to ensure that processes are robust, and that potential gaps are identified and mitigated in a timely manner.

Our training aims to engender positive compliance mindsets and culture, and we see this guiding our employees in critical

facets of their work. Training focused on building risk and compliance competencies are also organised to ensure that we are apprised on changes in approaches, best practices and tools.

Group Risk & Compliance conducts periodic site visits, particularly to locations susceptible to higher corruption risks, to raise awareness of compliance risks. We also leverage opportunities at various management conferences and employee meetings to stress the importance of compliance.

#### **KEY PROCESSES**

#### **Due Diligence**

We continue to improve our risk-based due diligence process for all third-party associates who represent the Group in business dealings, including our joint venture partners, to assess the compliance risk of the business partner. In addition to background checks, the due diligence process incorporates requirements for third-party associates to acknowledge understanding and compliance with the Code.

#### **Other Processes**

As part of our ongoing review of policies and procedures, we ensure compliance oversight is embedded in key processes including areas such as gifts and hospitality, agent fees, donations and sponsorships, as well as conflicts of interest.

### RISK ASSESSMENT, REVIEW & MONITORING

GRI 102-30

We continue to develop our compliance resources and framework. This will enable the Compliance team to conduct independent risk assessments to identify and mitigate key compliance risks Regular discussions are held with all BUs, focusing on risk assessments including specific compliance risks identified for each BU. Separately, independent reviews of compliance risks are executed within the scope of internal audits including thematic reviews of the effectiveness of key aspects of our compliance programmes. These reviews provide valuable insights and opportunities for us to improve our processes and programmes.

#### **RESOURCES**

We recognise the need for an experienced compliance team to effectively support the business in compliance advisory, as well as to ensure that compliance programmes and controls are effectively implemented. Senior management and members of the Board are fully committed to ensuring that we sustain a strong compliance function.

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#### CORPORATE GOVERNANCE AND RISK MANAGEMENT

WE UNDERTAKE ONLY APPROPRIATE AND WELL-CONSIDERED RISKS, CONSIDERING THEIR IMPACT TO OUR BUSINESS, STAKEHOLDERS, AND LONG-TERM CORPORATE SUSTAINABILITY.

#### **RISK MANAGEMENT**

GRI 102-11 | 102-15 | 103-1 | 103-2 | 103-3

Keppel adopts a balanced approach to risk management, undertaking only appropriate and well-considered risks to optimise business returns while considering their holistic impact on corporate sustainability. This approach stems from the philosophy of seeking sustainable growth opportunities and creating economic value by ensuring only appropriate and well-considered risks are assumed.

Risk management is an integral part of the way in which we develop and execute our business strategies. It is grounded in our operating principles and belief that a balanced and holistic risk-reward approach is key to corporate sustainability, particularly our commitment to key material issues relating to environmental, social and governance, and to delivering long-term value for our stakeholders.

Our Risk-Centric Culture and Enterprise Risk Management (ERM) Framework enables the Group to continue to respond effectively to the dynamic business environment and shifting business demands to seize new value-added opportunities for stakeholders. As a Group, we prudently seek new opportunities, innovation and revenue streams to safeguard shareholders' interests and the Group's assets.

#### **RISK-CENTRIC CULTURE**

Mindsets and attitudes are key to effective risk management. The Group fosters a risk-centric culture through several aspects.

### ENTERPRISE RISK MANAGEMENT FRAMEWORK

GRI 102-15 | 102-29 | 102-30 |102-31 |102-32

Keppel's Board is responsible for risk governance and ensures that management maintains a sound system of risk management and internal controls.

Through the Board Risk Committee (BRC), the Board advises management in formulating and implementing the risk management framework, policies and guidelines. Significant risk issues are surfaced for discussion with the BRC and the Board to keep them apprised in a timely manner.

The terms of reference for the BRC are disclosed on pages 95 and 96 of this report. The Board has defined three risk tolerance guiding principles for the Group which determines the nature and extent of the significant risks which the Board is willing to take in achieving strategic objectives.

These principles are:

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- Risk taken should be carefully evaluated, and commensurate with rewards and in line with the Group's core strengths and strategic objectives;
- No risk arising from a single area of operation, investment or undertaking should be so huge as to endanger the entire Group; and
- 3. The Group does not condone safety breaches or lapses, non-compliance with laws and regulations, as well as acts such as fraud, bribery and corruption.

#### Ownership & Accountability

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We advocate ownership and accountability of risks across all employees via the performance evaluation process. Surveys are regularly conducted across the Group to assess staff ownership and accountability towards a strong risk, compliance and control culture. The survey results have been encouraging, indicating a strong risk and control culture across the Group

#### Leadership & Governance

Our management is fully committed to fostering a strong risk-centric culture and consistently supports the review and management of risks in all areas of business. Key messages encouraging prudent risk-taking in decision-making and business processes are interwoven into major meetings, speeches and publications.

#### Framework & Values

The Group's management and staff are guided by our ERM framework; our core values of accountability, people-focus and safety, as well as our mission and vision, in all daily activities.

#### **Risk-Centric Culture**

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#### **Transparency & Competency**

We promote transparency in information sharing and escalation of risk-related matters, incidents, near-misses or events of interest. Risk identification and assessment are embedded in key control processes. Group-wide surveys are conducted periodically to assess risk awareness amongst employees.

Training & Communications
Training and communications are conducted regularly to enhance competency through various forums, in-house publications and sharing of lessons learnt. Risk management is regularly reinforced as a discipline and developed through awareness and practice.

#### Process & Methods

Risk management methodologies are applied alongside requisite domain knowledge and capabilities. An integral aspect of strategic and operational decision-making includes considering and managing risks at all levels of business. One part of the process is the identification and assessment of risks deploying the five-step method: (1) identifying; (2) assessing; (3) mitigating; (4) communicating; and (5) monitoring risks. Underlying the five-step method is a detailed risk definition and reporting framework and for risk oversight at senior management and Board levels

Figure 1:

#### **ERM FRAMEWORK INCORPORATING SUSTAINABILITY RISKS**

#### Sustainability-Related Material Issues and Key Business Risks





**Strategic**External environment and execution of business strategy



Operational

People, processes, systems and Health, Safety and Environment (HSE)



Compliance

Compliance with laws and regulations; license to operate



Financial

Internal financial management and controls



**Emerging** 

Evolving or emerging threat(s) that affect business



Opportunities

Potential areas of competitive advantage arising from various risks

Sustainability-related risks (e.g. Climate change physical risks and transition risks)

Keppel's risk governance framework, set out on pages 88 to 92 of our Report to Shareholders 2019 under Principle 9 (Risk Management and Internal Controls), facilitates management and the BRC in determining the adequacy and effectiveness of the Group's risk management system.

As a Group, we are cognisant of the dynamic environment in which we operate. We constantly enhance the framework and systems where necessary, to ensure risk management remains an integral part of decision-making and operations.

Keppel's ERM framework, a component of Keppel's System of Management Controls, provides the Group with a systematic approach to identifying, measuring and monitoring risks. It outlines the requirement for each business unit (BU) to recognise key risk areas affecting their operations and to classify the impact and likelihood of these risks in a register for prioritisation and management by both BU and the Group. The ERM framework also provides the reporting structure, monitoring mechanisms, processes and tools used, as well as any policies, standards or limits to be applied in managing the Group's key risk areas.

Our ERM framework is constantly refined to ensure it remains relevant in our operating environment and where required, is tailored to the requirements of each BU. The framework takes reference from the Singapore Code of Corporate Governance, the COSO Enterprise Risk Management – Integrated Framework, ISO 22313, ISO 31000 and the Guidebook for Board Risk Committees.

Our Risk and Compliance Committee, comprising risk leads across BUs, drives and coordinates Group-wide activities and initiatives. The Committee's activities are facilitated by regular bilateral and BU-level meetings to ensure that pertinent risks are identified, assessed and mitigated in a timely manner.

We keep abreast of the latest developments and best practices through participation in industry seminars and interacting with peers and other subject-matter experts.

The table on pages 48 to 49 outlines what we have broadly identified as key risks for 2019. The period chosen follows our financial reporting year, and while we recognise that not all identified risks can be eliminated, we remain committed to addressing every risk as they arise

and undertake only appropriate and well-considered risks to optimise returns in a balanced and holistic manner to deliver long-term value for our stakeholders.

#### **Proactive Risk Management**

Effective risk management requires a dynamic approach. We recognise the need to continually evolve our framework and processes to ensure our risk identification, assessment, mitigation, communication and monitoring remains effective. However, much of these depend on our ability to remain vigilant against evolving or emerging threats that may affect our different businesses. Our BU risk teams identify, discuss and analyse emerging risks which may have an impact on the Group's activities in meetings throughout the year. Where applicable, these are escalated for discussion and consideration at the various governance committees for review.

Through close collaboration with stakeholders and constant vigilance, the Group continues to proactively assess our risks so as to respond effectively. We constantly review our systems and processes to ensure that our ability to manage and respond to threats remains adequate and effective.

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### **CORPORATE GOVERNANCE AND RISK MANAGEMENT**

Material Risks	Issues	Mitigating Actions
STRATEGIC RISKS	150de5	maganing rottons
Market & Competition	A large part of the Group's strategic risks includes market driven forces, evolving competitive landscapes, changing customer demands and disruptive innovation. The Group remains vulnerable to other external factors including volatility in the global economy, implications of geopolitical developments, intense competition in core markets and disruptive technology.	These risks receive constant high-level attention and strategy meetings are held across the Group to review business strategies, formulate responses and take pre-emptive action.  The BRC guides the Group in formulating and reviewing risk policies and principles. These policies and principles are subject to periodic reviews to ensure that they continue to support business objectives and are aligned to our risk tolerance levels, taking into consideration the prevailing business climate.
Sustainability and Climate Change	Sustainability covers a broad range of material issues, many of which have been identified and managed according to the Group's ERM framework. In addition, risks and opportunities relating to climate change have been recognised as fundamental to the Group. These relate to physical and transitional risks stemming from climate change and environmental management, which present both risks and opportunities for the Group.	We support the Taskforce on Climate-related Financial Disclosures, and are working towards incorporating its recommendations in our reporting framework.  A Sustainability Risk Framework (Figure 1), aligned to the ERM framework, guides the Group on the specific processes and methods applied in identifying, assessing and managing sustainability-related risks and opportunities. We are also committed to strengthening our organisational capabilities in responding to climate-related risks and opportunities.
Strategic Ventures, Investments & Divestments	We have an established process for evaluating investment and divestment decisions including strategic ventures. These activities are monitored to ensure that they are on track to meet the Group's strategic intent, investment objectives and returns, and where required, the need for timely recalibration of strategies in response to the changing business environment. These investment decisions are guided by Group-wide investment parameters.	Together with the Board, the Investment and Major Project Action Committee guides the Group in taking considered risks in a controlled manner, exercising the spirit of enterprise and prudence to earn the best risk-adjusted returns on invested capital across our businesses.  Investment risk assessment involves rigorous due diligence, feasibility studies and sensitivity analyses of key assumptions and variables. Some of the critical factors considered include alignment with Group strategy, financial viability, country-specific political and regulatory developments, contractual risk implications, as well as lessons learnt. We have defined the kinds of businesses that we will strictly avoid, those that we will maintain, and those which we will grow and expand, taking into account their respective environmental impacts. We will also be introducing an internal carbon price in the evaluation of all major investment decisions. The investment portfolio is constantly monitored to ensure that performance is on track to meet the Group's strategic intent and investment returns.
Customer & Stakeholder Experience	We recognise the increasing profile of consumer risks given the Group's expansion into telecommunications and growing portfolios in the retail electricity, e-commerce and gas businesses. The key issues of consideration include areas such as brand trust and reputation, product/service quality/reliability, after-sales service/support, customer data privacy, product safety and other related matters such as customer responsiveness and the channel management across various platforms.	We regularly seek customer feedback and suggestions and track them to help us better understand our customers' needs in order to improve the quality of our products and services. Where relevant we conduct regular staff training, conduct surveys or align with industry best practices to enhance customer experience.
Human Resources	We continue to maintain a strong emphasis on attracting and building a deep talent pool. This includes nurturing employees, maintaining good industrial relations and fostering a conducive work environment. We are focused on strengthening succession planning and bench strength, as well as building new organisational capabilities to drive business growth, whilst maintaining our status as an employer of choice.	In talent development programmes, we emphasise the importance of having a risk-centric mindset to inculcate the ability to identify and assess risks, develop and implement mitigating actions, and monitor residual risks. Keppel Leadership Institute helps to inculcate this mindset by embedding risk management in its key leadership courses.
OPERATIONAL RISI	(S	
Project Management	From project initiation through to completion, risk management processes are an integral part of project management activities to facilitate early risk detection and proactive management. The Group adopts a systematic assessment and monitoring process to help manage key risks in projects. Attention is given to technically challenging and high-value projects, including greenfield developments and the deployment of new technology and/or operations in new geographies. Safety is incorporated into the design stage of projects to enhance worker safety. Projects are managed in accordance with the respective country's environmental laws and labour practices.	During project execution, we conduct project reviews and quality and safety assurance programmes to address issues involving cost, schedule, quality and safety. Project Key Risk Indicators are used as early warning signals to determine if remedial actions are required. A Project Operational Set-up Guide detailing the key risk areas is also available for BUs. We also conduct knowledge-sharing workshops to share best practices and lessons learnt across the Group.  These processes help to ensure that projects are completed on time and within budget, without compromising on safety, quality and contract obligations.

Material Risks	Issues	Mitigating Actions
OPERATIONAL RISK	s	
Health, Safety & Environment	Maintaining a high level of HSE standard is of paramount importance to the Group. We constantly strive to raise awareness and maintain vigilance to foster a strong HSE-centric culture across the Group, particularly at the ground level where the risks are greatest.	Key initiatives include a Zero Fatality Strategy with a roadmap focused on aligning Hazard Identification Risk Assessment standards across our global operations, enhancing competency of employees performing safety-critical tasks, strengthening operational controls, deploying Root Cause Analysis investigation standards across the Group, as well as developing more proactive and leading risk indicators/matrices to monitor HSE performance standards. The Group achieved zero fatalities across our global operations in 2019.
		Environmental management is a major area of focus and key operating sites are closely monitored for compliance to environmental standards. In 2019, the Group clinched 18 awards at the Workplace Safety and Health (WSH) Awards for exemplary safety performances, implementation of strong WSH management systems, as well as efforts to create solutions that improve workplace safety. The Group also leverages technology to improve HSE processes and systems.
Business & Operational Processes	We have established a common shared services platform which enables us to better manage costs while enhancing efficiency, productivity, compliance and controls.	Recognising the need to constantly harness technology, we have embarked on digitalisation initiatives and continue to take measured steps, applying a risk-based approach to optimise our processes.  We have adopted ISO standards and certifications in specific business
		areas to standardise our processes and keep up with best practices. In addition, procedures relating to defect management, operations, project control and supply chain management continue to be refined to improve quality of deliverables. We conduct regular reviews of policies and authority limits to ensure that they remain relevant in meeting business needs.
Business Continuity	We are committed to operational resilience with a robust Business Continuity Management (BCM) programme that seeks to equip us with the capability to respond effectively to business disruptions and to safeguard critical business functions from major risks. We are cognisant of the risks of natural disasters, pandemics, terrorism and cyber threats, as well as the failure of critical equipment/systems. We maintain a close watch and keep abreast of emerging threats.	The Group BCM Steering Committee provides sponsorship, direction and guidance to ensure that we maintain operational resilience and readiness against business disruptions to ensure that our business continuity plans remain current and relevant.
		For coordinated escalation and management of major incidents, the Group Incident Reporting and Crisis Management operating standard was rolled out in 2019 to guide BUs on how they should evaluate and escalate major incidents to the Group, and how the Group Crisis Management team can effectively render assistance to affected BUs or manage/respond to major incidents directly. The Group Cyber Incident Response plan is also part of our crisis management approach which details response protocols to cyber incidents/threats. We continually evaluate our plans to gauge the effectiveness and timeliness of response. In 2019, we engaged an independent party to conduct a table-top exercise to validate the response plan. The post-exercise report indicated no significant gaps in Keppel's incident responses and plan against industry practice.
		During the year, the Group has also formalised the Business Psychological Readiness Programme, an initiative led by Temasek Foundation Cares. The initiative focuses on psychological support in the event of traumatic/adverse workplace events.
		We continually extend and strengthen our capabilities in responding to major incidents/crises with the aim of safeguarding our people, assets and stakeholders' interests.
		The full impact of the COVID-19 outbreak is still unfolding. We have implemented business continuity plans to minimise disruptions to our operations and supply chain, especially in our key markets of China and Singapore. As we continue to assess and respond to the evolving situation, we are proactively implementing measures to mitigate the impact.
		As we deal with the economic impact of the COVID-19 outbreak, we are also focused on the well-being of our staff and stakeholders across our businesses. We have also taken a multi-pronged approach to assist those affected by COVID-19 in our communities.

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#### **CORPORATE GOVERNANCE AND RISK MANAGEMENT**

#### **Material Risks**

#### Issues

#### Mitigating Actions

#### **OPERATIONAL RISKS**

Cyber Security & Data Protection GRI 418-1

As Keppel moves into a more technology-focused and data-driven era, we recognise the integral importance and concerns of cyber threats globally. Technology and data security risks and the related processes/services in all forms are an integral part of the Group's business risks. We have established a technology governance structure and security risk framework to address both general technology and data security controls, covering key areas such as cyber security, business disruption, theft/loss of confidential data and data integrity.

In 2019, we formalised and implemented a Technology and Data Risk Management standard which identifies, assesses and manages critical technology and data assets according to leading industry guidelines such as those given by the Cyber Security Agency of Singapore and the National Institute of Standards and Technology. The programme not only seeks to improve technology and data security standards but also to inculcate a culture of cyber hygiene in employees across the Group. The Group has also embarked on various initiatives to continually strengthen our technology security, governance and controls through the refinement and alignment of our policies, processes and systems, as well as the consolidation of servers and storages. We work closely with industry professionals and consultants to enhance our policies and practices on end-user computing, safeguarding information, as well as security self-assessments to identify critical gaps.

In terms of innovations and emerging threats, our pool of dedicated Information Technology (IT) experts enable us to keep abreast of IT matters. They are assisted by Keppel Technology and Innovation which drives the adoption of new technology and innovation across the Group. Extensive training and assessment exercises have been conducted to heighten overall awareness of technology and data threats.

We have also taken steps to safeguard corporate data assets against the loss of availability of critical systems to ensure resilience against disruptions.

As a provider of mobile and fixed communications services, M1 is committed to protecting customers' data privacy and subscribes to the principles and requirements of the Personal Data Protection Act 2012. In August 2019, M1 became the first telecommunications provider in Singapore to receive the Data Protection Trustmark Certification, administered by Singapore's Infocomm Media Development Authority.

In 2019, M1 reported six incidents of data loss and three customer complaints from Singapore's Personal Data Protection Commission relating to the usage of personal data. The incidents were addressed promptly. There were no other cases of identified leaks, thefts, or losses of customer data during the year.

#### **COMPLIANCE RISKS**

Laws, Regulations & Compliance GRI 205-1

Given the geographical diversity of our businesses, we closely monitor developments in laws and regulations of countries where the Group operates, to ensure that our businesses and operations comply with all relevant laws and regulations. We regularly engage with local government authorities and agencies to keep updated on changes to laws and regulations, ensuring that we can assess our exposures and risks effectively. We recognise that non-compliance with laws and regulations not only have significant financial impact but have potentially detrimental reputational impact on Keppel.

Significant risks issues, such as risks relating to corruption in all areas of operations within the Keppel Group where we have operational control, are surfaced by management and assessed by the Board. With respect to corruption, significant risks include areas where external agents are used for business development.

In 2019, we continued to make improvements to our regulatory compliance programme, ensuring that compliance awareness and principles are further entrenched in all our activities. More details can be found on page 44 of this report.

#### FINANCIAL RISKS

Fraud, Misstatement of Financial Statements & Disclosures We maintain a strong emphasis on ensuring that financial statements are accurate and presented fairly in accordance with applicable financial reporting standards and frameworks.

Regular external and internal audits are conducted to provide assurance on the accuracy of financial statements and adequacy of the internal control framework supporting the statements. Where required, we leverage the expertise of engaged auditors in the interpretation of financial reporting standards and changes. We conduct regular training and education programmes to enhance competency of the Group's finance managers. Keppel's System of Management Controls framework outlines our internal control and risk management processes and procedures. For more details, please refer to page 43 of this report.

#### Financial Management

Financial risk management relates to our ability to meet financial obligations and mitigate credit, liquidity, currency and interest rate risks. Details can be found on pages 185 to 196 of our Report to Shareholders 2019. Policies and financial authority limits are reviewed regularly to incorporate changes in the operating and control environment.

We are focused on financial discipline and seek to deploy our capital to earn the most optimal risk-adjusted returns for shareholders, while maintaining a strong balance sheet to seize new opportunities. Our procedures include the evaluation of counterparties and other related risks against pre-established internal guidelines. We conduct impact assessments and stress tests to gauge the Group's potential financial exposure to changing market situations, to enable informed decision-making and the implementation of prompt mitigating actions. We also regularly monitor our asset concentration exposure in countries where we have a presence to ensure that our portfolio of assets, investments and businesses are diversified against the systemic risks of operating in a specific geography.

### **SUPPLY CHAIN AND RESPONSIBLE PROCUREMENT**

WE WORK CLOSELY WITH STAKEHOLDERS IN OUR SUPPLY CHAIN TO POSITIVELY INFLUENCE THEIR SUSTAINABILITY PERFORMANCE.



#### **PERFORMANCE OVERVIEW**

GRI 103-2 | 103-3

#### **2019 TARGETS**

Screen 100% of all new suppliers in accordance with environmental, social and governance (ESG) criteria.

To have 100% of all qualified suppliers endorse the Keppel supplier code of conduct.

Expand the assessments of supplier performance in relation to topics covered in the Keppel supplier code of conduct.

#### **2019 PERFORMANCE**

Screened 100% of all new qualified suppliers in accordance with ESG criteria.

Established an ESG scorecard and supplier audit framework to monitor and assess suppliers' sustainability performance.

99.97% of qualified suppliers endorsed the Keppel supplier code of conduct or have their own codes which met Keppel's requirements.

Organised safety training for subcontract workers and shared health, safety and environment (HSE) best practices at contractor and subcontractor forums.

#### **2020 TARGETS**

Screen 100% of all new suppliers in accordance with ESG criteria.

Refine the implementation of the ESG scorecard as part of the supplier screening process across the Group.

To have 100% of all qualified suppliers endorse the Keppel supplier code of conduct.

#### **TOPICS**

Screening suppliers

Supplier code of conduct

Due diligence

#### **SDGs**







#### SUPPLY CHAIN AND RESPONSIBLE PROCUREMENT

<b>OUR SUPPLY CHAIN</b> GRI 102-9   102-10	
Division	Description
Offshore & Marine	Subcontractors work closely with Keppel Offshore & Marine (Keppel O&M) to construct, convert and repair offshore and marine vessels in our yards.
	Equipment manufacturers supply us with large-scale equipment such as thrusters, engines, winches, switchgear and variable control systems for installation on offshore and marine vessels that we build for clients; as well as specialised purpose-specific equipment such as cryogenic systems and offshore drilling equipment. We also procure shipyard-specific equipment such as cranes, forklifts, transporters and panel line systems.
	Bulk material suppliers supply us with steel plates, steel profiles, cables, piping and paint; and consumables such as fuel, grits and gases.
Property	Consultants, contractors, and interior design firms provide architectural and engineering design, construction and interior design services for our real estate developments.
	As a manager of real estate properties, we also employ facility management companies to service our commercial buildings.
Infrastructure	Keppel Infrastructure engages consultants, system integrators, equipment manufacturers and suppliers, and subcontractors for the construction of plants and facilities and for the provision of environmental technology solutions. We also purchase raw materials, such as feedstock, to power the co-generation plant for our Energy Infrastructure business. In addition, we procure goods and services for the operations and maintenance of the plants and facilities.
	Keppel Data Centres engages external contractors for the construction of new data centre facilities, and employs facility technician companies for regular equipment maintenance.
	Keppel Logistics engages contractors for transportation services, warehouse operations and facility maintenance. UrbanFox, our e-commerce logistics arm, engages crowdsourced drivers for last-mile delivery services through its online platform.
Investments	Our managers engage subcontractors to ensure smooth operations and maintenance of our assets. The supply chain for this business also comprises mechanical and electrical equipment suppliers for some of our data centres, as well as property and facility management companies that provide building management, physical security, technical maintenance and routine cleaning services.
	M1 engages suppliers to support its supply of telecom equipment and services, terminals and devices, ICT solutions, software and computer hardware products, as well as cable installation. Over 90% of these suppliers are based in Singapore, in line with our primary market.

#### **OVERVIEW**

GRI 103-1

The Group contracts local and foreign suppliers for our different businesses. We recognise the importance of supply chain risk management and sustainable procurement in building operational resilience, and we work closely with our suppliers to make a positive impact on their sustainability performance.

#### **REPORT BOUNDARY**

GRI 103-1

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The data reported in this section covers global operations and all subsidiaries over which the Group has management control.

#### **MANAGEMENT APPROACH**

GRI 103-2 | 103-3 | 308-1 | 403-7 | 414-1

We adhere to local content requirements and are committed towards strengthening our base of local suppliers in countries where we operate. In doing so, we support domestic economic growth, generate employment opportunities and improve the capacities of the workforce in our host countries.

#### **Screening New Suppliers**

All suppliers are qualified in accordance with our requisition and purchasing policies, and screened based on ESG criteria. We review potential suppliers' industry reputation, track record, financial performance, security practices and certifications, with a preference for suppliers with certifications for ISO 9001 quality management system, ISO 14001 environmental management system, OHSAS 18001 occupational health and safety assessment series or the equivalent.

All new suppliers that provide Keppel with products and services valued at \$200,000 or more per contract or over cumulative purchase orders in the prior calendar year are expected to sign and abide by the Keppel supplier code of conduct, which covers areas pertaining to business conduct, labour practices, safety and health, and environmental management. All Group companies are required to include the acknowledgment and signing of the code, which is available in multiple languages, as part of their supplier selection procedure. The supplier code of conduct is available

on Keppel Corporation's website. In 2019, 99.97% of qualified suppliers endorsed the code or have their own codes which met Keppel's requirements. The remaining 0.03% comprised one supplier, who was assessed by the business unit's compliance team to be fit to be appointed, following further due diligence that was conducted.

Third-party associates of the Group that provide services on behalf of a Group company or engage in business activities on behalf of a Group company are required to abide by Keppel's rules of business conduct. The rules specify the Group's policy regarding ethical conduct and compliance with laws, anti-corruption, gifts and hospitality, and donations and contributions.

The Group made progress in enhancing its enterprise resource initiative in 2019. The enhanced system provides procurement managers across the Group with visibility on suppliers that have been qualified by other business units. Almost all overseas business units are on board, with the remaining ones scheduled to come on board in 2020.

In 2019, the Group established an ESG scorecard to consolidate key ESG data of our suppliers, which will allow us to assess and monitor their sustainability performance. Keppel O&M, including its overseas entities, has included the ESG scorecard as part of its supplier qualification process. We are working to progressively implement the ESG scorecard across the rest of our business units

#### **Due Diligence**

Keppel is committed to managing the inherent risks arising from our supply chains. The assessment of supplier risks and due diligence measures undertaken by the Group is an ongoing process which takes place throughout the lifecycle of a supplier relationship.

For example, Keppel O&M conducts regular audits of resident subcontractors to ensure their adherence to the International Labour Organisation's declaration on fundamental principles and rights at work and Singapore's Ministry of Manpower marine sponsorship scheme requirements for the employment of local and foreign employees.

The scope of these audits includes fair remuneration, living standards, workplace safety and abuse and harassment. Keppel O&M ensures that monthly interviews are done directly with subcontract workers on a rotational basis to determine their levels of satisfaction pertaining to the above topics. The respective management of the subcontractor companies are then required to address any areas of concern, under a structured mechanism of monitoring and close out. For 2019, focus was given

to about 10% of the total subcontractor companies registered with Keppel O&M.

Keppel Land has in place a five-step supply chain management process that covers the whole lifecycle of its project from its initiation and design development stages to subsequent construction and operation stages.

For all project sites covered under the scope of Keppel Land's environmental management system, contractors are required to conduct an impact assessment based on activities at the project site prior to construction. The assessment covers potential negative environmental impacts, including depletion of resources, biodiversity disturbance as well as air, water and noise pollution. Contractors are required to establish and implement appropriate measures to mitigate and/or prevent significant environmental impacts.

Keppel Land also conducts regular site visits and internal audits as part of its supplier due diligence process. When lapses are identified, the company's project team works closely with contractors to implement corrective action plans and preventive measures.

Identifying and auditing high ESG-risk critical suppliers enable us to allocate our resources to suppliers whom we can have the greatest impact on and support in improving their sustainability practices and performance.

In 2019, we developed an audit framework to manage sustainability risks among our critical suppliers. Critical suppliers are determined by the following factors: cumulative order value, single order value

and order volume, among other business criteria. ESG risks are assessed based on a country risk perspective in areas such as human rights, corruption, and the country's environmental regulatory framework. Sustainability audits will be conducted for high ESG risk critical suppliers, and corrective action plans will be implemented where necessary. The critical suppliers audit framework will be progressively rolled out across the Keppel Group.

#### **BUILDING CAPABILITIES**

GRI 403-7

We work closely with our suppliers and contractors to maintain high standards of conduct throughout our business engagements.

Forums and dialogue sessions with suppliers and contractors are held regularly to ensure alignment between Keppel's supplier code of conduct and the respective codes of conduct of our suppliers and contractors, share experiences, and communicate our expectations regarding performance. Our business units have incentive programmes that reward and recognise contractors with exemplary HSE performance.

Keppel O&M conducts outreach programmes and briefings to subcontractor workers to inform them of their employment rights, and the available channels to report any violation of their rights. The company also collaborates with Singapore's Ministry of Manpower to raise awareness among subcontractors on the common breaches in relation to the requirements under the Marine Sponsorship Scheme.

#### SUPPLIER SELECTION AND PERFORMANCE MANAGEMENT PROCESS



#### Qualification/ Re-Qualification

#### Stage 1

All suppliers are qualified in accordance with rigorous requisition and purchasing policies, and screened based on ESG criteria. We review potential suppliers' industry reputation, track record, financial performance, security practices and certifications.



#### Selection

#### Stage 2

As part of the supplier selection procedure, all new suppliers that provide Keppel with products and services valued at \$200,000 or more per contract or over cumulative purchase orders in the prior calendar year are expected to sign and abide by the Keppel supplier code of conduct.



#### **Performance Management**

#### Stage 3

We work closely with our suppliers and contractors to maintain high standards of conduct throughout our business engagements. In identifying and focusing on high ESG-risk critical suppliers, we are able to channel our resources to support and enhance the sustainability performance of these suppliers, and make a bigger impact.



#### **Evaluation**

#### Stage 4

We conduct regular reviews and assessments of supplier performance, with an emphasis on our contractors. This includes reviewing their performance in relation to topics covered in our supplier code of conduct. Our work teams provide feedback to our procurement teams to help determine whether suppliers will be retained in our list of approved suppliers.

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### **PRODUCT QUALITY AND SAFETY**

WE DRIVE
INNOVATION AND
EXERCISE DUE CARE
AND DILIGENCE
IN THE DESIGN,
CONSTRUCTION
AND OPERATION
OF OUR PRODUCTS
AND SERVICES.



#### **PERFORMANCE OVERVIEW**

GRI 103-2 | 103-3

#### **2019 TARGETS**

Invest at least 20% of R&D expenditure on sustainability-linked innovation.

Ensure customer satisfaction across our businesses.

Certify products and services to sustainability-related standards and protocols.

#### **2019 PERFORMANCE**

Invested over 30% of R&D expenditure on sustainability-linked innovation in 2019.

Continued to engage customers and review and document feedback for continuous service improvements.

The majority of our key business units are certified to meet the ISO 9001 quality management System.

#### **2020 TARGETS**

Invest at least 20% of R&D expenditure on sustainability-linked innovation.

Continue to drive innovation and seize new opportunities through synergistic partnerships.

Certify products and services to sustainability-related standards and protocols.

#### **TOPICS**

Innovation

Product quality

Product safety

Customer satisfaction

#### **SDGs**







#### **OVERVIEW**

GRI 103-1

As a provider of solutions for sustainable urbanisation, Keppel is committed to delivering the best value proposition to its customers through execution excellence and technology innovation, whilst prioritising customer safety.

We continue to drive innovation and tap on our businesses' knowledge and expertise in various fields such as engineering and technology development to seize new opportunities. These include meeting the growing demand for cleaner energy and renewables as the world transitions to a lower-carbon economy.

The health and safety of our customers in relation to the use of our products and services are of utmost importance to us. We exercise due care and diligence in the design, construction and operation of our products and services to ensure that they are safe for our customers.

#### **REPORT BOUNDARY**

GRI 103-1

The boundary for the material topic of product quality and safety includes the Group's major subsidiaries in Singapore and overseas operations in which the Group has management control.

#### **MANAGEMENT APPROACH**

GRI 103-2 | 103-3 | 416-1

#### **Product Quality**

The ISO 9001 management system is based on quality management principles including strong customer focus, a process approach and continuous improvement.

Exemplifying a commitment to execution excellence, close to 100% of Keppel Land's projects under development in Singapore, China and Vietnam and about 70% of Keppel Infrastructure's global operations have been certified to meet the ISO 9001 management system.

In addition to being certified to the ISO 9001 management system, Keppel Shipyard attained the Singapore Quality Class STAR with People, which recognises organisations for its excellent management practices, commitment towards continuous improvement and sustainable business performance.

Management systems are in place to improve the operational resilience of our assets in the Infrastructure division. Ongoing efforts such as regular reporting, annual capacity tests and audits help to further ensure the quality and reliability of the company's products and services.

Regular surveys and reviews are conducted to understand customers' needs and enhance products and services accordingly.

#### **Green Mark Awards**

84

Building & Construction Authority (BCA) Green Mark Awards achieved by Keppel Land to date.

#### **Sustainability Innovation**

>30%

Of R&D expenditure invested in sustainability-linked innovation.

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#### CUSTOMER FEEDBACK 2019 (NON-EXHAUSTIVE)

GRI 102-43

Division	Feedback Process	2019 Outcomes
Offshore & Marine	Keppel Shipyard conducted customer service satisfaction surveys for 291 completed projects in Singapore.	Achieved a customer satisfaction score of 5.7 out of 6.
	For Keppel FELS, face-to-face customer surveys were conducted once every four months to track customer satisfaction at each project phase.	Achieved an average score of 4.3 out of 6.
Property	Keppel Land conducted service quality surveys for 11 completed projects in Singapore, China and Indonesia.	95.3% of respondents indicated that they were satisfied with the services rendered in the management and operations of the developments.
Infrastructure	Keppel Logistics conducts regular customer meetings and annual customer surveys.	Maintained a customer engagement score of 100% in Singapore and 90% in China.
	Keppel Data Centres conducts an annual customer survey.	Scored 80% for customer satisfaction.
	Keppel DHCS conducts customer satisfaction surveys.	Scored 94.5% for customer satisfaction.
	Keppel Electric's residential customers are surveyed by the Energy Market Authority to understand customers' level of satisfaction towards their retailer.	Scored a rating of 3.5 out of 5 points for residential customers who switched between Nov 2018 and Feb 2019.
Investments	Keppel REIT conducted tenant satisfaction surveys for its properties in Singapore and Australia.	Survey results indicated high levels of tenant satisfaction.
	M1 consolidates customer feedback through its 24-hour hotlines, retail outlines, letters to media, mystery shopping surveys and from social media. In July 2019, M1 replaced its customer satisfaction survey with the Net Promoter Score (NPS) to measure customer experience.	Achieved an 89.5% customer satisfaction rating, exceeding its target of 85%.
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#### PRODUCT QUALITY AND SAFETY



Members of the Keppel Technology Advisory Panel provide Keppel with technology foresight and advice on strategic projects, and also broaden Keppel's networks.

#### **Customer Health & Safety**

Customer health and safety impacts are assessed for improvement in all our significant product and service categories, and throughout the products' life cycles.

We consider proper design, handling, storage and disposal of materials as early as the planning stage. At the project execution stage, we carry out project reviews and quality assurance programmes. In terms of product safety, we adhere to design for safety regulations for our construction projects and comply with work environment requirements for the rigs and vessels that we build. Our hazard identification and risk assessment methodologies are reviewed regularly to ensure effectiveness and relevance.

In our business units, functional divisions, including health, safety & environment (HSE), commercial, engineering, and operations, as well as project and plant managers, are collectively responsible for the oversight of product and service safety.

All operational management and quality control systems at Keppel Offshore & Marine (Keppel O&M) are aligned based on the company's business excellence roadmap and framework. Clients are briefed on the management systems in place to address project-specific HSE risks. This includes the development of HSE and emergency plans which detail how risks will be managed at each phase of the project. Regular site audits are conducted by the client and our project teams to ensure compliance to the client's HSE standards.

Keppel Land has adopted the guidelines on design for safety in buildings and structure

for all its new projects in Singapore since 2008. The guidelines are in line with the Singapore Workplace Safety and Health Council's design for safety regulations, which have been implemented since 2016. The guidelines require safety and health risks to be incorporated into the early conceptual and planning phases of a project, enabling designers and consultants to reduce these risks through good design and effective project planning.

#### **Fostering Innovation**

The Keppel Technology Advisory Panel (KTAP) was established in 2004 as a key platform to advance the Group's technology leadership. Its members include eminent business leaders and industry experts from around the world.

KTAP members provide Keppel with technology foresight, advice on strategic projects, and broaden Keppel's networks. Collectively, members' expertise covers a wide range of topics pertaining to sustainable urbanisation, including floating platforms, urban design and liveability, alternative energy and efficiency, as well as communication networks and digitalisation. KTAP convenes once a year with key members of Keppel Corporation's board and senior management.

Keppel Technology and Innovation (KTI) is the Group's platform to co-create and incubate ideas, and serves to sharpen the Group's focus on innovation. Through KTI, we aim to transform how Keppel harnesses technology and innovation to create value for our stakeholders, including innovation in business models and the way we work, as well as how we collaborate with third parties to accelerate change.

One of KTI's key initiatives in 2019 was its collaboration with Keppel 0&M to drive the adoption of 3D printing. In partnership with Nanyang Technological University and the Singapore Institute of Manufacturing Technology, Keppel 0&M has been certified by Lloyd's Register for its production of offshore-grade steel using Laser Aided Additive Manufacturing (LAAM) technology. This certification will support Keppel 0&M's production of high-value components for offshore and marine structures.

KTI also kicked off Venture INC which provided a platform for the acceleration and incubation of ideas from participating employees with guidance from innovation experts. The ideas shortlisted for further incubation include solutions for waste in the marine environment, enhanced worker safety and smart homes.

In 2019, over 30% of the Group's R&D expenditure was invested in sustainability-linked innovation, such as in renewable energy and high-rise green data centres.

#### **COMPLIANCE**

GRI 416-2

Keppel subscribes to best practices and complies with all applicable legislations and requirements.

Keppel is not aware of any violation of laws, regulations and voluntary codes pertaining to the provision, use, health and safety of its products and services in 2019.

Keppel's business units abide by the Singapore Code of Advertising Practice by the Advertising Standards Authority of Singapore, as well as similar codes overseas.

#### **OCCUPATIONAL SAFETY AND HEALTH**

SAFETY IS OUR
CORE VALUE.
WE ARE COMMITTED
TO PROVIDING
SAFE AND HEALTHY
WORKPLACES
FOR ALL OUR
STAKEHOLDERS.



#### **PERFORMANCE OVERVIEW**

GRI 103-2 | 103-3

#### **2019 TARGETS**

Execute our Zero Fatality Strategy and reduce workplace fatalities to zero.

Conduct a compliance audit for selected business units in relation to the global High Impact Risk Activities (HIRA) standards.

Invest in technologies to drive improvements in safety performance.

#### **2019 PERFORMANCE**

Achieved zero workplace fatalities across our global operations, for the first time in more than 25 years.

Total Recordable Incident Rate was 2.491.

Conducted compliance audits for two sites in relation to the global HIRA standards.

Incorporated the use of virtual reality technologies in the Keppel Safety Training Centre and enhanced our electronic safety management system.

#### **2020 TARGETS**

Execute our Zero Fatality Strategy and achieve zero workplace fatalities across our global operations.

Strengthen efforts to promote occupational health and prevent workplace diseases.

To complete global HIRA standards compliance audits for at least one site at each of Keppel's business units.

Roll out electronic safety management system across business units in Singapore.

#### **LONGER TERM TARGETS**

Achieve zero workplace fatalities across our global operations.

#### **TOPICS**

Management systems

Hazard identification, risk assessment and incident investigation

Occupational health services

Worker participation, consultation and communication

Worker training

Promotion of worker health

#### \_



**SDGs** 



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<sup>&</sup>lt;sup>1</sup> Keppel introduced Total Recordable Incident Rate as a performance indicator in 2019.

#### OCCUPATIONAL SAFETY AND HEALTH

#### **OVERVIEW**

GRI 103-1

Safety is a core value at Keppel, an integral part of our business, and a key focus area for our board of directors and senior management. We are committed to provide safe and healthy workplaces for all our stakeholders.

Processes and systems are in place to identify, mitigate and report risks and communicate best practices across the Group, and we work with our contractors and subcontractors to ensure that they understand our requirements and expectations.

#### **REPORT BOUNDARY**

GRI 103-1 | 403-1

The boundary for the material topic of occupational safety and health includes the Group's major subsidiaries in Singapore and overseas operations in which the Group has management control.

#### **MANAGEMENT APPROACH**

GRI 102-13 | 103-2 | 103-3 | 403-1 | 403-2 | 403-3 | 403-4 | 403-5 | 403-6 | 403-7

We focus on strengthening our frameworks and management systems as well as promoting a culture of safety ownership across our operations.

#### **Board & Management Oversight**

Keppel Corporation was the first publicly listed company in Singapore to establish

a Board Safety Committee (BSC) in 2006. The BSC, Chaired by Mr Tan Ek Kia, a non-executive and independent director of Keppel Corporation, adopts a hands-on approach in setting the strategic direction and establishing a safety framework to ensure that consistently high safety standards are maintained across our business units. Major incidents are also shared and discussed at quarterly BSC meetings.

In 2019, we achieved zero workplace fatalities across our global operations, for the first time in more than 25 years.

The BSC leads efforts to implement initiatives and improve performance with the support of the Inter-Strategic Business Unit Safety Committee, which comprises representatives from all our business units.

Many of our key business units also establish their own BSC to oversee safety strategy and practices. The latest business unit to establish its BSC in 2019 was M1.

In 2019, Keppel Corporation's BSC and the BSCs of our business units conducted five safety visits covering eight worksites in Singapore and China to engage staff.

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#### Strategy, Policy & Management Systems

Our approach to safety management is guided by the Keppel Zero Fatality Strategy (ZFS). Introduced in 2016, the strategy outlines actionable items to reduce workplace fatalities to zero through five strategic thrusts.

Every year, we aim to implement several key initiatives to strengthen our safety culture across the Group. In 2019, we:

- Introduced the Keppel Road Safety Policy in April, where all business units that provide their own transport or engage a third party for employee commute to/ from work or for other business purposes must ensure that vehicles are roadworthy and fitted with seat belts for the driver and all passengers. Drivers are also prohibited from using mobile phones while on the road;
- Held more than 30 safety leadership coaching programmes to train and empower over 3,300 frontline managers and supervisors, including those from our contract workforce;
- Established a health, safety and environment (HSE) steering committee

- in China to strengthen the implementation of Group policies, strategies and standards across our business units in China;
- Completed global HIRA assessments at the Keppel Seghers Ulu Pandan NEWater Plant and Keppel Logistics sites in Singapore. There were no significant contraventions observed from these assessments;
- Incorporated the use of virtual reality technology at the Keppel Safety Training Centre and upgraded Keppel Telecommunications and Transportation's safety sharing mobile application;
- Conducted a survey among all Singapore yards on the company's safety culture. Four safety culture taskforces have been established to address the possible areas of improvement identified through the survey, namely front line engagement, care culture, technical competency, and stop work authority; and
- Carried out quarterly reviews of potential safety risks for projects.

The effectiveness of our management approach is reviewed regularly. During the annual HSE Roundtable, senior management from the Group's business units share insights and best practices, and exchange ideas to improve safety performance. The action plan generated during the session is incorporated into the Group's safety roadmap and strategies.

All employees and contractors at the worksites of the Group's companies where Keppel has operational control are covered by our HSE management systems. All employees and third-party suppliers and contractors are also expected to abide by the Keppel Corporation HSE Policy, which places the highest priority on the health and safety of people and the protection of assets and the environment.

Our safety management system is routinely audited by independent certification bodies/companies and internal audit teams. For example, Keppel Offshore & Marine's (Keppel O&M) cross-business unit audits and Keppel Infrastructure's inspection for Safety Compliance Assurance (iSCA) ensure that policies and management systems are adhered to and that safety standards across operations are aligned.

Our business units strive to achieve safety certifications in line with global best practices. Keppel O&M's yards in Singapore, Brazil, China, the Philippines and the United States, Keppel Infrastructure and its key subsidiaries, Keppel Land's Singapore, China, and Vietnam divisions, as well as Keppel Logistics are certified to meet the OHSAS 18001 management system.

In addition, Keppel Logistics is certified to meet the hazard analysis and critical control point management system. Our data centres Keppel DC Singapore 1 and 2 are also certified to meet the Singapore Standard for information and communications technology disaster recovery services.

As part of the Group's continuous improvement efforts, we are working to meet the requirements under the new ISO 45001 occupational health and safety management system, which provides a robust set of processes for improving safety in global supply chains. To date, Keppel Shipyard, Keppel Subic Shipyard, Keppel Nantong Shipyard, Keppel Housing, Keppel Infrastructure and its key subsidiaries, as well as Keppel Data Centres' five data centres in Singapore have been certified to the new standards.

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#### **KEPPEL ZERO FATALITY STRATEGY**



#### OCCUPATIONAL SAFETY AND HEALTH

#### **Hazard Identification & Risk Management**

Across the Group, we establish and implement procedures to identify, assess and mitigate safety and health hazards related to our operations.

As part of hazard identification and risk management, our operational and safety teams conduct periodic workplace inspections and internal audits. Training is conducted to equip HSE personnel with the skills to effectively manage safety risks. Union workers and subcontractor representatives are invited to participate in meetings where the identification of hazards, assessment of risks and the application of control measures are discussed1. For business units whose workers do not belong to unions, worker representatives are nominated by the various departments to participate in monthly safety committee meetings.

Keppel's operations are guided by five key safety principles, one of which is that everyone is empowered to stop any unsafe work. Workers are protected from reprisal when they report work-related hazards and hazardous situations.

Findings from our risk assessments are considered in the determination of facility requirements, training programmes and operational controls. For example, Keppel Infrastructure's process safety

management techniques incorporate the use of the bow-tie model and hazard and operability studies to identify and assess likely events that can result in critical failures.

We are also leveraging technology to drive improvements in our hazard and risk management, which is a key pillar of our ZFS. Group HSE is collaborating with Keppel Technology and Innovation to explore the use of various analytics and business intelligence tools to harness data from incidents, identify hazards, as well as conduct safety reporting, observations and inspections.

To protect workers from potential health hazards, hearing conservation and respiratory protection programmes are implemented at certain sites with higher risk levels. To protect against noise-induced hearing loss, employees with exposure to noise are required to wear hearing protection gear and are screened at annual audiometric tests conducted by a mobile medical unit.

During the daily Take 5 toolbox meeting, workers are briefed on work-specific hazards including proper ergonomic practices in material handling. For example, at Keppel Shipyard, fit tests are conducted to ensure that respirators used are in good condition and correctly fit each user before usage.



Representatives include members from the Keppel FELS Employees Union and the Subcontractors Executive Council at Keppel FELS; Keppel Employees Union and Subcontractor Watch Group at Keppel Shipyard; Keppel Subic Shipyard Workers Union and Supervisory Professional Technical Union at Keppel Subic Shipyard; Christian Labour Organisation and associated professional, supervisory, office and technical employees Union at Keppel Batangas Shipyard; metallurgic union of Angra dos Reis at Keppel FELS Brasil; Singapore Industrial and Services Employees' Union at Keppel Logistics and Keppel Infrastructure, and Landelijke Bediendencentrale - Nationaal Verbond voor Kaderpersoneelsit at Keppel Infrastructure.

Keppel Land's Safety Awareness Centres in various cities like Ho Chi Minh City (pictured) provide mandatory training for contractors' employees and foster a safety culture across the company's supply chain.



Group HSE conducted its inaugural Global Hazard Identification and Risk Assessment (HIRA) at the Keppel Seghers Ulu Pandan NEWater Plant and Keppel Logistics sites (pictured) in Singapore.



#### **Promotion of Worker Health**

It is mandatory for all workers, including contract workers, to be covered by work injury compensation insurance prior to working at our worksites. In-house medical centres are also located in all our shipyards. Across the Group, our contractors partner with clinics to provide contract workers with access to medical care.

Keppel also promotes the wellness of its workforce through programmes that address physical and mental health-related risks. Voluntary health promotion programmes and services across the Group include a smoking cessation hotline, healthy snacks in pantries and canteens, as well as fitness classes. Regular health talks on stress management and diabetes prevention, among others, are organised at various work sites. Workers' dormitories are also equipped with gyms to promote healthy lifestyles.

Keppel O&M conducts regular dormitory visits to engage workers on health and safety issues. Keppel Shipyard offers holistic health and medical services and is equipped with a pharmacy, counselling rooms and designated rest areas. To provide workers with a conducive environment to rest during

breaks, Keppel Shipyard built three 4-storey rest areas. Each rest area accommodates up to 2,000 workers.

The Keppel Wellness Gallery at Keppel Shipyard features interactive health exhibits to educate employees on the importance of having proper nutrition, active lifestyles and good mental health.

Keppel Shipyard and Keppel Housing were recognised for their outstanding workplace health promotion practices at the biennial Singapore HEALTH (Helping Employees Achieve Life-Time Health) Awards in 2019.

#### **Enhancing Skillsets**

We empower and train our stakeholders to ensure that all personnel are updated on safety measures and best practices. In 2019, we invested approximately \$21 million in enhancing safety-related infrastructure, upgrading systems and building knowledge and skillsets across the Group.

All personnel entering a Keppel-operated site must attend a site-specific safety induction to gain familiarity on the basic safety requirements and potentially hazardous on-site activities or situations. In addition, all workers must undergo

HIRA training which covers high-risk activities specific to each work site.

The Keppel Safety Training Centre at Keppel Shipyard in Singapore offers a complete range of training and certification courses in both trade-specific and broad-based skills for all levels of the workforce. The centre is equipped with classrooms, an e-learning zone, and a hall with multimedia and interactive training stations. It also features a life-size replica of the mid-section of a tanker with various technical training areas. The centre offers key training modules such as core competency and leadership development programmes, and workforce skills qualification courses certified by the Singapore Workforce Development Agency, conducted by qualified, full-time instructors. This model has been replicated at our yards in Brazil, China, the Philippines and the United States.

At Keppel Land, the Safety Awareness Centres (SAC) in Ho Chi Minh City, Vietnam; Johor Bahru, Malaysia; Jakarta, Indonesia and Tianjin, China, provide mandatory training for contractors' employees and foster a safety culture across Keppel Land's supply chain. Keppel Land's mobile SAC in Wuxi, China, is also deployed to Keppel's various offices and worksites in Wuxi to enhance safety awareness.

#### **OCCUPATIONAL SAFETY AND HEALTH**

#### **Engaging Stakeholders**

We work closely with all stakeholders, including our contractors, subcontractors, customers, suppliers, regulators and industry associations, to maintain high safety standards throughout our workforce. Our subcontract workers undergo the same training as direct employees.

To collectively raise industry standards and stay abreast of industry best practices, members of Keppel's management and safety representatives are members of various councils and committees of the Workplace Safety and Health (WSH) Council, such as the WSH (Marine Industries) committee, WSH (Construction and Landscape) committee, National Work at Height Taskforce, and related industrial associations such as the Association of Singapore Marine Industries and Real Estate Developers' Association of Singapore.

As a bizSAFE partner, Keppel O&M actively encourages contractors to progress through the levels of the bizSAFE programme. Since 2018, Keppel O&M has imposed a bizSAFE Level 4 (second-highest) certification requirement for resident contractors before they are able to undertake work at our yards.

In accordance with the company's HSE policy, business units are required to report and investigate all accidents, incidents and near misses, and ensure that lessons learnt are shared to prevent any recurrence. All Group companies where Keppel has operational control are required to report incidents, including those that involve third parties such as contractors, clients and visitors at our premises, as well as employees working at third-party sites or commuting for work-related purposes.

At worksites, stand-downs are conducted when incidents occur or when hazards are spotted. Reportable incidents and near misses are also promptly reported to senior management.

#### **Performance**

GRI 403-9 | 419-1

In 2019, the Group reported a total accident severity rate (ASR) of 12 man-days lost per million man-hours, an 81% decrease from 2018; and a total accident frequency rate (AFR) of 0.18 accidents per million man-hours in 2019, a 28% decrease from 2018<sup>1</sup>.

#### **Training**

3,300

Frontline managers and supervisors trained and empowered through safety leadership coaching programmes.

#### Investment

\$21m

Invested to enhance safety-related infrastructure, upgrade systems and build knowledge across the Group.

1 Accident Frequency Rate (AFR) = no. of workplace accidents reported no. of man-hours worked x 1,000,000

Accident Severity Rate (ASR) = no. of man-days lost to workplace accidents no. of man-hours worked x 1,000,000

#### PERFORMANCE

GRI 403-9

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GRI 403-9				
		Direct Workforce	Contract Workforce	Total
2019	AFR (reportable accidents per million man-hours)	0.17	0.18	0.18
	ASR (man-days lost per million man-hours)	11.46	12.13	12
	Occupational Disease Frequency Rate	0	0	0
	Total Recordable Incident Rate	3.59	1.97	2.49
	Lost Time Injury Frequency	0.40	0.89	0.73
	High-consequence incidents (excluding fatalities)	0	3	3
	Fatal Injury Rate (fatal injuries per 100,000 employed persons)	0	0	0
	Number of man-hours	34,820,644	70,547,675	105,368,319
2018	AFR (reportable accidents per million man-hours)	0.27	0.23	0.25
	ASR (man-days lost per million man-hours)	6	101	63
	Fatal Injury Rate (fatal injuries per 100,000 employed persons)	0	4.4	2.7
	Number of man-hours	40,708,241	65,307,115	106,015,356
2017	AFR (reportable accidents per million man-hours)	0.12	0.09	0.10
	ASR (man-days lost per million man-hours)	233	80	140
	Fatal Injury Rate (fatal injuries per 100,000 employed persons)	11.1	3.6	6.5
	Number of man-hours	51,968,923	79,087,378	131,056,301
2016	AFR (reportable accidents per million man-hours)	0	0.14	0.15
	ASR (man-days lost per million man-hours)	295	230	254
	Fatal Injury Rate (fatal injuries per 100,000 employed persons)	13.7	10.9	12
	Number of man-hours	62,851,897	105,712,508	168,564,405

The Group recorded no fatalities for its global operations in 2019, the first time the Group has achieved this target in over 25 years.

The Group reported a total of 17 safety incidents<sup>1</sup> in 2019, of which five incidents involved our direct workforce and 12 incidents our contractors. The reported incidents have been classified under the following types:

- · Caught in between;
- · Fall on same level;
- · Fall from height;
- Struck by; and
- · Sprain/strain.

Of the 17 reportable incidents, five were of high consequence<sup>2</sup> which led to insurance payouts under the Work Injury Compensation Scheme.

All work-related incidents are jointly investigated by the operational and safety teams. Where appropriate, an independent team is set up to investigate fatal and high potential incidents. All incident investigations include an account of the events leading up to the incident, how it occurred and post-incident actions, as well as a root cause analysis and corrective action plan to prevent recurrence.

All of the Group's operational entities monitor occurrences of occupational disease at their individual sites based on their region's regulatory requirements. No occurrences of occupational disease were reported in 2019.

During the year, the Group paid one significant<sup>3</sup> fine of \$200,000 relating to a fatal accident involving a contractor at one of Keppel O&M's shipyards in Singapore in October 2013. Immediate rectification actions were taken and mitigation measures to prevent recurrence have been put in place since 2013.

#### RECOGNITION

The Group was conferred 18 WSH Awards in 2019 by Singapore's Ministry of Manpower and the WSH Council. This is the highest number of awards won by a single organisation in the year.

Of the 18 awards, Keppel O&M received 12 awards under the Safety and Health Award Recognition for Projects (SHARP) category for exemplary project safety and health management systems. Keppel FELS, a subsidiary of Keppel O&M, also clinched the WSH Performance (Silver) Award for outstanding safety performance. In addition, Keppel FELS was conferred two WSH Innovation Awards, while Keppel Logistics and Keppel Merlimau Cogen each scored one award in this category. This award serves to recognise the development of solutions which improve safety and enhance operations at the workplace.

#### **ENHANCING COMMUNICATION**

Keppel's five key safety principles are widely publicised to ingrain safety consciousness among all stakeholders. The Group HSE Alerts system was established to better disseminate lessons learnt globally and ensure that preventive measures are taken promptly.

At the 13th Keppel Group Safety Convention on 5 November 2019, close to 400 Keppelites, contractors, subcontractors and business associates came together to reaffirm their commitment to safety. The convention saw the continuation of the annual Keppel Group Safety Awards and also recognised 28 safety innovation projects.

As a reminder of our common commitment to safety, the third annual Global Safety Time-out (GSTO) was held on 26 August 2019. During these timeouts, frontline managers reiterated safety messages and shared best practices with Keppelites.

- A workplace accident that results in the injury of an employee who is given more than three consecutive days of medical leave or hospitalised for at least 24 hours; or a workplace accident that results in the injury of a self-employed person or non-employee who receives treatment in hospital.
- A high-consequence incident is one from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within 6 months (e.g. amputation of limb, fracture with complications). This definition is adopted across Kennel's global operations.
- Keppel's global operations.

  A significant fine refers to a monetary sanction equal to or above \$50,000 that was paid during the financial year.

The annual Keppel Group Safety Convention is a valuable platform for all stakeholders to reaffirm their commitment to safety. The Chairman's Safety Trophy Challenge for 2019 was awarded to Keppel 0&M's Conversions and Repairs Division.



## LABOUR PRACTICES, TALENT MANAGEMENT AND HUMAN RIGHTS

WE ARE COMMITTED TO FAIR EMPLOYMENT PRACTICES, UPHOLDING HUMAN RIGHTS PRINCIPLES AND INVESTING IN PEOPLE DEVELOPMENT.



#### **PERFORMANCE OVERVIEW**

GRI 103-2 | 103-3

#### **2019 TARGETS**

Conduct the Keppel Global Employee Engagement Survey to track employee engagement levels.

Continue to promote diversity and equal opportunity in the workplace.

Continue to empower our workforce through techenabled and self-paced training programmes and achieve an average of over 20 hours of training per employee globally.

#### **2019 PERFORMANCE**

Achieved an overall engagement score of 86%, compared to 82% in 2017 and 80% in 2015. The score is significantly higher than the average of 76% among Singapore companies.

Formalised the Corporate Statement on Diversity and Inclusion. The statement is now publicly available on the Keppel Corporation corporate website.

Recorded an average of 27.6 hours of training per employee.

#### **2020 TARGETS**

Conduct engagement surveys to track and enhance employee engagement.

Continue to promote diversity and equal opportunity in the workplace.

Maintain an average of at least 20 hours of training per employee globally.

#### **TOPICS**

Fair employment

Diversity and equal opportunity

Non-discrimination

Talent management

Training and education

#### SDGs









#### **OVERVIEW**

GRI 103-1

People are our most valuable asset. We respect and uphold human rights principles, adhere to fair employment practices, and invest in developing and training our workforce. In doing so, we enhance our ability to attract and retain the best talent and grow the capabilities of our people.

#### **REPORT BOUNDARY**

GRI 102-8 | 103-1

The data reported in this section takes into account significant subsidiaries and associated companies in which the Group has a stake equivalent to 51% or more. Our total workforce across more than 20 countries was 21,049 as at end-2019. The figure comprises full and part-time permanent employees and excludes our contractor workforce.

#### **MANAGEMENT APPROACH**

GRI 102-41 | 103-2 | 103-3 | 401-2 | 404-3 | 406-1

#### **Fair Employment**

The ability to attract and retain talent is key to our business. We adopt fair employment practices and comply with local labour regulations across our global operations,

as well as minimum wage laws, where such laws exist. We endorse Singapore's Tripartite Guidelines on Fair Employment Practices and the Employers' Pledge of Fair Employment Practices. Keppel Corporation is also signatory of the Singapore Business Federation's Sustainable Employment Pledge.

Globally, 5,072 people were hired in 2019. Overall voluntary turnover rate was 10.9%, a decrease from 12.7% in 2018.

We believe that hiring from local communities enhances our ability to understand local needs, and strengthens our capabilities on the ground. We also develop talents locally to assume management positions. Across our business units, 69.8% of senior management<sup>1</sup> and 67.8% of our employees are citizens or permanent residents of the countries in which they work.

The definition of senior management across our business units varies according to the nature of the businesses. Business units that are smaller in scale define senior management to be the top three individuals with the highest level of executive management, while larger business units define senior management to be individuals holding positions that are above a specified job grade.

53.6

29.9 14.1

1.6

0.8

100.0

11,283

6,293

2,967

338

168

21,049

#### **Training & Development**

>580,000hrs

Invested in learning and development programmes for our employees.

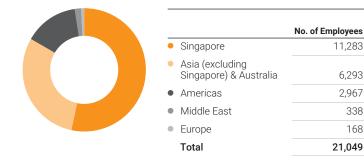
#### **Employee Engagement Score**

Achieved in 2019, significantly higher than the average of 76% among Singapore companies.

#### **OUR GLOBAL WORKFORCE**

GRI 102-8 I 202-2

#### DISTRIBUTION BY REGION



	Employees (%)		Senior Mana	gement1 (%)
	Local Hires <sup>2</sup>	Foreigners	Local Hires <sup>2</sup>	Foreigners
_	47.2	52.8	90.9	9.1
	99.0	1.0	55.5	44.5
	89.5	10.5	41.7	58.3
	1.8	98.2	14.3	85.7
	95.2	4.8	53.8	46.2
	67.8	32.2	69.8	30.2

Contract 8.8 22.8 13.5 37.8 87.3 27.7

#### **DISTRIBUTION BY SEGMENT**



			Employmen	t Type (%)
	No. of Employees	%	Permanent	Contrac
Corporate Office	580	2.8	91.2	8.8
<ul><li>Offshore &amp; Marine</li></ul>	13,839³	65.7	77.2	22.8
<ul><li>Property</li></ul>	3,010	14.3	86.5	13.5
<ul><li>Infrastructure</li></ul>	1,906	9.1	62.2	37.8
<ul><li>Investments</li></ul>	1,714	8.1	12.7	87.3
Total	21,049	100.0	72.3	27.7

Locals are defined as citizens or permanent residents of the country in which they work.

The headcount figure of 13,839 consists of 13,474 employees from Keppel Offshore & Marine and 365 employees from Keppel Prince Engineering.

## LABOUR PRACTICES, TALENT MANAGEMENT AND HUMAN RIGHTS

#### **NEW HIRES**

GRI 401-1

	No. of Employees	%
Total	5,072	100.0
Singapore	1,883	37.1
Asia (excluding Singapore) & Australia	1,451	28.6
Americas	1,668	32.9
Middle East	42	0.8
Europe	28	0.6

	Gender (%)			Age Group (%)		
	Male	Female	<30 years old	30 to 39 years old	40 to 49 years old	50 years old & above
Overall	79.4	20.6	22.5	39.2	24.6	13.7
Corporate Office	44.1	55.9	14.6	34.2	33.8	17.5
Offshore & Marine	90.7	9.3	23.3	39.4	23.0	14.2
Property	52.9	47.1	23.0	40.7	26.0	10.3
Infrastructure	77.0	23.0	23.7	38.7	23.3	14.3
Investments	51.9	48.1	15.6	37.3	33.7	13.3

#### TURNOVER1

GRI 401-1

	2019	2018	2017
No. of Employees	2,300	2,381	2,872
Turnover Rate <sup>2</sup> (%)	10.9	12.7	13.4

	No. of Employees	Turnover Rate <sup>2</sup>
By Region		
Total	2,298	10.9
Singapore	1,139	10.1
Asia (excluding Singapore) & Australia	814	12.9
Americas	295	9.9
Middle East	35	10.4
Europe	15	8.9

	No. of Employees	% of Total Turnover
By Gender		
Male	674	67.5
Female	324	32.5
By Age Group		
<30 years old	214	21.4
30 to 39 years old	470	47.1
40 to 49 years old	238	23.9
50 years old & above	76	7.6

Turnover is defined as the total number of employees who leave the organisation voluntarily. It does not take into account employees who leave due to completion of contracts, dismissal, retirement or death in service.
 The turnover rate is defined as the percentage of employees who leave the organisation voluntarily. It does not

Keppel supports re-employability beyond the statutory retirement age. Eligible employees are offered post-retirement employment opportunities in Keppel, in line with the Singapore Tripartite Guidelines on the Re-employment of Older Employees. As at 31 December 2019, there were 241 re-employed staff in the Group, of whom 67 were re-employed in 2019.

#### **Compensation & Benefits**

Keppel subscribes to a pay-for-performance philosophy.

Opportunities for advancement, promotion, recognition, compensation, training and other conditions of employment are provided based on merit. Performance reviews are conducted for permanent employees. The process, undertaken jointly by the employee and supervisor, entails target setting and review on an annual basis.

Our employees in Singapore and overseas are provided with a comprehensive range of benefits that may include paid vacation leave, medical benefits and group insurance plans. In Singapore, part-time employees are entitled to similar benefits on a pro-rata basis.

Foreign workers are an important part of our workforce in Singapore, especially in Keppel Offshore & Marine. Many of these workers have been with the company for many years and have risen to supervisory positions. Besides competitive wages and bonuses for eligible employees, foreign workers under direct employment in Singapore also enjoy other benefits such as subsidised housing.

Eligible female employees in Singapore are entitled to a maximum of 16 weeks of paid maternity leave, while eligible male employees in Singapore are entitled to a maximum of two weeks of paid paternity leave, in accordance with the Singapore Ministry of Manpower's legislation. In Singapore, we had a 90.2% return to work rate for the 83 female employees who went on maternity leave.

The Keppel Group adheres to the respective social security contribution or pension plan obligations of the countries in which we operate. In Singapore, the Central Provident Fund (CPF) is a comprehensive social security savings plan that enables salaried Singapore citizens and permanent residents to set aside funds to work towards a secure retirement. Under the CPF scheme, Keppel and its employees make monthly contributions to the employees' CPF accounts in accordance with the prevailing regulations.

The turnover rate is defined as the percentage of employees who leave the organisation voluntarily. It does not take into account turnover due to completion of contracts, dismissal, retirement or death in service.

Keppel's hiring policies ensure equal employment opportunities for all, and our corporate statement on diversity and inclusion was formalised in early 2019.



#### **Human Rights**

We uphold and respect the fundamental principles set out in the United Nations (UN) Universal Declaration of Human Rights and the International Labour Organisation's declaration on fundamental principles and rights at work. Our approach to human rights is informed and guided by general concepts from the UN Guiding Principles on Business and Human Rights.

Keppel Corporation is a signatory of the UN Global Compact and is committed to the Compact's 10 universal principles, which include principles on human rights and labour practices.

We have zero tolerance for unethical labour practices such as child labour, forced labour, slavery and human trafficking in all of our operations. Our suppliers are expected to abide by the Keppel supplier code of conduct, which holds them accountable for responsible labour practices in their operations.

Our commitment to human rights is supported by our Employee Code of Conduct, which sets the tone in relation to the Group's stance against discrimination on any basis. Our stance on human rights is articulated in our corporate statement on human rights which is publicly available online.

#### **Collective Bargaining**

Unions are our partners and we place great emphasis on maintaining a harmonious and collaborative relationship with them. Approximately 19.3% of our global workforce are bargainable employees covered by collective agreements.

Guidelines are in place for the appropriate management of grievance cases. For unionised companies, employee grievances are resolved according to the grievance handling protocol spelt out in the respective agreements.

All registered grievances are investigated and tracked through to final closure. In the case of a grievance, our management and the union will undertake every reasonable effort to resolve the grievance promptly.

Across our businesses worldwide, there were 26 grievance cases<sup>1</sup> reported in 2019, all of which have been resolved.

#### **Diversity & Inclusion**

We value and respect all employees regardless of ethnicity, gender, religious beliefs, nationality, age or any physical disability. Our stance on diversity and inclusion is articulated in our corporate statement on diversity and inclusion, which was formalised in early 2019, and is publicly available online.

Our hiring policies ensure equal employment opportunities for all. Our employment statistics, reviewed regularly, illustrate the diversity of our workforce. As at 31 December 2019, 20.3% of our employees are female, compared to 19.4% in 2018. We recognise that there are certain segments in our businesses, such as offshore and marine, which tend to attract larger proportions of male employees due to the nature of the jobs. At our corporate office and in certain parts of our businesses, such as Keppel Capital, more than half of our employees are female. 55.9% of the staff in Keppel Corporation's Corporate Office and 42% of the Heads of Departments are females as of end-2019.

There were no reported incidences of discrimination raised by our employees in 2019.

In Singapore, a "workplace grievance" is as defined by the Ministry of Manpower, i.e. "discontent or the feeling of being victimised at work". Our overseas business units reference the following in defining a workplace grievance - the Keppel Group code of conduct, the employment laws and regulations of the country of operation, and the collective agreement between the company and the employee union, where applicable.

## LABOUR PRACTICES, TALENT MANAGEMENT AND HUMAN RIGHTS

#### **EMPLOYEE DEMOGRAPHICS**

GRI 102-8

#### **DISTRIBUTION BY GENDER (%)**

	Male	Female
Overall	79.7	20.3
By Region		
Singapore	81.1	18.9
Asia (excluding Singapore) & Australia	71.2	28.8
Americas	91.5	8.5
Middle East	92.6	7.4
Europe	66.7	33.3
By Segment		
Corporate Office	44.1	55.9
Offshore & Marine	90.8	9.2
Property	52.9	47.1
Infrastructure	66.7	33.3
Investments	41.4	58.6
By Employment Type		
Permanent	81.5	18.5
Contract	73.2	26.8

#### **DISTRIBUTION BY AGE GROUP (%)**

	<30 years old	30 to 39 years old	40 to 49 years old	50 years old & above
Overall	22.5	39.4	23.0	15.1
By Segment				
Corporate Office	15.4	32.9	32.3	19.4
Offshore & Marine	22.7	39.2	22.9	15.2
Property	23.0	40.7	26.0	10.3
Infrastructure	22.4	40.4	15.3	21.9
Investments	8.8	44.1	26.5	20.6

#### DISTRIBUTION BY EDUCATIONAL QUALIFICATION (%)

	Post- graduate	Bachelor's Degree	Post Secondary/ Pre-U/ Vocational	Secondary
Overall	4.8	25.9	29.6	31.8
By Segment				
Corporate Office	12.1	47.4	31.1	1.3
Offshore & Marine	3.7	18.4	29.3	37.9
Property	6.5	44.2	29.9	18.4
Infrastructure	5.3	31.7	31.3	27.7
Investments	18.9	67.3	12.9	0

#### **TRAINING & TALENT DEVELOPMENT**

GRI 404-1 | 404-2

We empower employees through learning and development programmes and encourage them to reach their full potential. In 2019, employees at our key operations in Singapore received approximately 34.8 hours of training on average. Globally, the overall average number of training hours per employee was approximately 27.6 hours, with an average of 24.7 hours for females and 28.4 hours for males<sup>1</sup>.

Keppel Corporation's Group Human Resources drives and coordinates efforts across the business units to ensure consistency in processes such as performance management and talent management.

#### **Leadership Programmes**

Keppel Leadership Institute, headquartered in Singapore, offers a diverse range of leadership and development programmes, delivered in modular and blended approaches. These programmes are designed in consultation with senior management and are regularly refreshed to suit the Group's evolving needs. Over 200 employees have participated in the institute's leadership programmes since 2015.

About 200 employees are part of the Keppel Young Leaders programme, which is the Group's platform to nurture young talents. Members of the programme are given opportunities to lead high-impact projects with guidance from senior management across the Group. Activities undertaken by Keppel Young Leaders in 2019 include the Keppel Young Leaders Symposium, which centred on uncovering potential business opportunities brought about by a circular economy, a capacity building partnership with SPD to empower persons with disabilities (see page 80), as well as dialogue sessions with eminent external speakers.

Separately, the Keppel Associate Programme offers young talents opportunities for leadership development through a series of job rotations and structured learning.

#### **Industry Programmes**

The Group makes significant investments to equip employees with up-to-date operational skills and certifications. We support employees at all levels of the company in furthering their education. In 2019, the Group sponsored 169 employees in pursuing further studies.

Training hours reported in this section excludes on-the-job training.

In 2018, Keppel Offshore & Marine (Keppel O&M) signed a memorandum of understanding (MOU) with the National University of Singapore (NUS) to offer employees training places in an extensive range of academic modules and curated executive programmes. The MOU, which is part of the NUS 'All-You-Can-Learn' initiative, enables Keppel O&M employees to sign up for various NUS modules and executive programmes on topics such as data analytics, robotics and engineering, as well as finance and business. In 2019, Keppel O&M utilised over 1,000 training places under this initiative.

Keppel 0&M's technical associate and assistant technical associate schemes are offered in collaboration with the Institute of Technical Education. The two-year work-and-study programme includes classroom learning, practical skills training, on-the-job training and soft skills training. In 2019, five students participated in the programme.

In partnership with the Singapore government, the Group supports the Singapore-industry scholarship which sponsors Singapore citizens pursuing their undergraduate studies in areas related to Singapore's strategic sectors. In 2019, the Group supported one student in the programme.

In 2019, Keppel Shipyard signed an MOU with Keppel Employees Union, Shipbuilding Marine Engineering Employees' Union and the National Trades Union Congress's e2i (Employment and Employability Institute) to underscore the company's commitment to implement Company Training Committees (CTCs). The CTCs will play a crucial role in driving worker-centric industry transformation – assessing skills development gaps, developing training roadmaps, and rolling out robust digital and the technological skills training to develop a skilled workforce that is ready to take on Industry 4.0.

In China, Keppel O&M launched a collaboration between Keppel Nantong Shipyard and Nantong Shipping College for the Overseas Training and Attachment programme in 2019. The two-month programme will develop employees' skills in mechanical and electrical engineering, dimension control and piping. In 2019, eight employees from Keppel O&M's Singapore business units participated in this programme, while another eight employees from Keppel Nantong Shipyard attended training courses at Nantong Shipping College.

#### **TRAINING & TALENT DEVELOPMENT**

GRI 404-1 | 404-2

TRAINING HOURS PER EMPLOYEE (hrs)			
	2019	2018	2017
Global	27.6	27.1	22.6
Singapore	34.8	29.4	22.9

AVERAGE TRAINING HOURS BY EMPLOYEE CATEGORY (hrs)		
Senior Management	34.8	
Managerial	28.8	
Executive	31.9	
Non-Executive	21	
Industrial/General	27.5	



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At the Global Keppelites Forum 2019, Mr Loh Chin Hua, CEO of Keppel Corporation, spoke about the Group's strategy and rallied Keppelites to continue to collaborate and harness synergies to create value and drive growth for the Group.

## LABOUR PRACTICES, TALENT MANAGEMENT AND HUMAN RIGHTS



Management from Keppel interacted with children of Keppelites at the Company's Kids@Work event on 21 June 2019. The full day programme aimed to provide children with a better understanding of what their parents do at work.

#### **EMPLOYEE ENGAGEMENT**

#### **Employee Engagement Survey**

We conducted the Keppel Global Employee Engagement Survey in 2019, which has been conducted at Group-level since 2009. The survey achieved a strong response rate of 98% from a sample size of over 5,000 employees. The Group achieved a high Employee Engagement Score of 86% in 2019, an improvement over our score of 82% in 2017 and 80% in 2015, and significantly higher than the average of 76% among Singapore companies. In addition, 88% of employees surveyed indicated that they would "go beyond the norm" to contribute to Keppel's success.

#### **Enhancing Communication**

70

Various staff engagement initiatives are organised throughout the year to enhance communication between management and staff. The sixth edition of the Global Keppelites Forum, a group-wide town hall meeting, was held in January 2019. The event, which was also broadcast online, reached out to over 2,700 employees across 72 locations globally.

During the session, Mr Loh Chin Hua, Chief Executive Officer of Keppel Corporation, shared how the Group has been reinventing and repositioning itself for long-term growth, including exploring new businesses and future growth engines such as senior living

and renewables, and growing our presence in the business-to-consumer space. Employees also took the opportunity to pose questions to a panel comprising senior management from across the Keppel Group.

Employees are updated on company developments at regular staff dialogue sessions and through digital communication platforms.

#### **Building Strong Teams**

We believe that cohesive teams are integral to a productive workforce. We continue to build camaraderie among employees through various platforms, such as Keppel Games, a series of sports competitions initiated by Keppelite Recreation Club, as well as volunteer activities organised by Keppel Volunteers.

#### **SUPPORTING NATIONAL DEFENCE**

As a company headquartered in Singapore, we believe in contributing towards Singapore's national security. National Service (NS) is a vital component of national defence and we support our employees' NS commitments. Keppel Corporation was awarded the NS Advocate Award for Large Companies at the Total Defence Awards organised by Singapore's Ministry of Defence in 2018. The Award, conferred for a period of three years, is the highest accolade acknowledging businesses for

their exemplary support towards Total Defence and in particular, NS.

#### **WORKFORCE WELLNESS**

We are committed to the well-being of our entire workforce. This includes foreign workers who live and work away from their families. Keppel O&M provides high-quality dormitories for foreign workers under its direct employment in Singapore.

The dormitories are managed by Keppel Housing, a subsidiary of Keppel O&M, to ensure that our foreign workers are able to enjoy good living conditions. These dormitories offer a range of amenities and recreational facilities, including a minimart, free laundry services and sports facilities. Activities such as talent search contests and sports events are organised to promote harmonious living and bonding. Keppel Housing also provides counselling services, including a 24-hour emergency helpline, to look after our workers' mental and emotional well-being. In 2019, there were no fines or non-monetary sanctions for non-compliance with laws and/or regulations imposed on Keppel Housing.

Other welfare initiatives organised by our business units include lunchtime talks, health screening exercises, fitness classes as well as emotional and mental well-being programmes.

#### **COMMUNITY DEVELOPMENT**

WE UPLIFT
COMMUNITIES
THROUGH
PROGRAMMES
THAT DELIVER
ENDURING SOCIAL,
ECONOMIC OR
ENVIRONMENTAL
BENEFITS.



#### **PERFORMANCE OVERVIEW**

GRI 103-2 | 103-3

#### **2019 TARGETS**

Achieve over 10,000 hours of staff volunteerism worldwide.

Support programmes aligned with care for the underprivileged, education and environmental protection.

Drive collaboration with organisations that share our commitment to make a positive impact on our communities.

Keppel Corporation Limited

#### **2019 PERFORMANCE**

Sponsored and participated in a wide range of community initiatives, investing \$9.6 million in social and environmental causes.

Achieved over 18,000 hours of community service, an increase of about 4,000 hours compared to 2018.

Committed \$500,000 to the "SPD Sheltered Workshop supported by Keppel" to empower persons with disabilities.

#### **2020 TARGETS**

Achieve over 10,000 hours of staff volunteerism worldwide.

Support programmes aligned with care for the underprivileged, education and environmental protection.

Drive collaboration with organisations that share our commitment to have a positive impact on our communities.

#### **LONGER TERM TARGETS**

Support Singapore's One Million Trees movement with the planting of 10,000 trees over the next five years.

#### TOPICS

Social investment

Volunteerism

Impact measurement

#### **SDGs**





Sustainability Report 2019



#### COMMUNITY DEVELOPMENT

#### **OVERVIEW**

GRI 103-1

Keppel aims to deliver lasting social, economic and environmental benefits to the communities where we operate. In engaging and nurturing communities, we contribute to building a sustainable future together.

We invest in worthy causes that resonate with the company's values. These include caring for the underprivileged, empowering lives through education, protecting the environment, and nurturing creativity and an appreciation for the arts among children and youths.

As leaders in our businesses, we also support industry efforts that foster collaboration to promote sustainable development.

#### **REPORT BOUNDARY**

GRI 103-1

The boundary for the material topic of community development includes the Group's major subsidiaries in Singapore, and overseas operations in which the Group has management control.

#### **MANAGEMENT APPROACH**

GRI 103-2 | 103-3 | 203-2 | 415-1

We commit up to 1% of the Group's net profit to worthy causes. These contributions are coordinated and disbursed by Keppel Care Foundation, the Group's philanthropic arm in Singapore, which is governed by its own Board of Directors. The Foundation has disbursed over \$44 million to worthy causes to date, since its launch in 2012. In 2019, the Group spent \$9.6 million on social investments.

Beyond philanthropic giving, Keppel encourages employees to be responsible citizens. Keppel Volunteers, the company's volunteer movement, works closely with the foundation to drive volunteerism. To encourage volunteerism, Keppel grants employees two days of volunteer leave annually. In 2019, Keppel Volunteers around the world achieved over 18,000 hours of community service, an increase of 4,000 hours over the 14,000 hours in 2018.

Keppel Volunteers organise roadshows and talks for employees across the group to recruit volunteers and raise awareness on volunteering opportunities. The company has also designated August as its Community Month to further promote and drive volunteerism. Volunteers who participate actively are recognised for their contributions at an annual appreciation day held in conjunction with International Volunteer Day.

In 2019, Keppel conducted a survey to better understand the causes which its employees most identify with. The survey results validated that our focus areas of care for the underprivileged, education and environmental protection are closely aligned with employees' aspirations.

We maximise our corporate giving outcomes by partnering businesses and the community. For example, charity sales, donation drives and environmental campaigns are held at the lobbies of our commercial buildings to engage tenants, employees and members of the public. Keppel Care Foundation also supports the dollar-for-dollar matching of employee donations at the company's fund-raising events.

### SOCIAL INVESTMENT SPENDING BY PROJECT TYPE IN 20191 (%)



	Total	\$9.6 million	100.0
•	Environment		1.9
•	Industry Advancement <sup>3</sup>		4.3
•	Arts/Sports/Community Development Projects		13.0
•	Care for the Underprivileged/ Healthcare		16.8
•	Education <sup>2</sup>		64.0

- We expanded the scope of our reporting in 2019 to include contributions by M1, following the acquisition of M1 in 1H 2019.
- Includes a \$5 million donation (second payment tranche) to the ITE Education Fund. Keppel had committed a \$10 million donation to the Fund to promote education for financially-disadvantaged students from ITE in 2018.
- The category of industry advancement includes events and thought leadership platforms that promote learning and the exchange of ideas, with the aim of raising industry standards. Keppel supports such platforms that align with our mission to provide solutions for sustainable urbanisation. In 2019, such platforms include the Singapore Perspectives Conference by the Institute of Policy Studies, the Global Compact Network Summit, the Singapore Institute of Directors Conference and the Responsible Business Forum.

In November 2019, 150 volunteers from across the Group planted 150 coastal forest trees at Labrador Nature Reserve, which are expected to sequester 21.3 tonnes of carbon dioxide over 10 years.



"I feel very honoured to be awarded this scholarship. It is a recognition of my hard work. Coming from a humble family background, the scholarship will also enable me to have bigger dreams, and encourages me to strive to continue to do well."

TOH YI JING, Keppel Care Foundation scholarship recipient pursuing Higher Nitec in Cyber & Network Security at ITE In Singapore, our business units have been strong partners of Community Chest's SHARE, a voluntary employee payroll donation programme. Employees of the Keppel Group have contributed over \$3.0 million through SHARE since 1988.

Under the Keppel Group Donations & Sponsorships Policy, no donations or sponsorships may be made to any political party or politicians for any campaign and/or related purposes.

Keppel follows the LBG (formerly London Benchmarking Group) framework, the global standard for measuring and reporting on corporate community investment. As managers of LBG, Corporate Citizenship has assured the data in this section. Our LBG Assurance Statement for 2019 can be found on page 91.

#### PROMOTING EDUCATION

Inclusive, quality education can lift communities out of poverty by enabling children and youth to create brighter futures for themselves and their families. Since its inception in 2012, Keppel Care Foundation has disbursed over \$21 million to educational causes, which include scholarships and bursaries for students of local universities and institutes of higher learning.

In 2018, we made a \$10 million commitment to the ITE Education Fund to promote education for financially disadvantaged students from ITE. In 2019, the inaugural Keppel Care Foundation Scholarships were presented to three deserving ITE students, while academic awards and bursaries were disbursed to 79 students.

"With my family facing financial challenges, this scholarship allows me to focus on my studies without the need to worry about my education and living expenses. I am grateful for the support Keppel has given me, and I look forward to contributing back to society upon my graduation."

HO BING XUAN, Keppel Care Foundation-SUTD scholarship recipient pursuing Information Systems Technology and Design at SUTD

## \$21m

Including disbursements to fund bond-free scholarships, academic awards, bursaries and study grants for deserving students from low-income families.

#### KEY PARTNERS



National University of Singapore



Singapore University of Technology and Design



Singapore Institute of Technology



Institute of Technical Education

Institute of Technical Education

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Inputs



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Bond-free scholarships, bursaries, study grants and academic awards.

mpact

Our bursaries provide students from disadvantaged backgrounds with access to quality education. Recipients have reported that the bursaries help to ease the financial burden on their families, with some reporting that they no longer need to take on part-time jobs to cover their school fees and daily expenses. With this financial assistance, they are able to focus on their studies and benefit from a more holistic educational journey.

Recipients of our scholarships and academic awards have also reported that the recognition has inspired them to continue to work hard and contribute to society.

Keppel Corporation Limited

Sustainability Report 2019

#### **COMMUNITY DEVELOPMENT**

#### **IMPACT AT A GLANCE**

KEPPEL INVESTS IN WORTHY CAUSES THAT RESONATE WITH THE COMPANY'S VALUES. IN ENGAGING AND NURTURING COMMUNITIES, WE CONTRIBUTE TO BUILDING A SUSTAINABLE FUTURE TOGETHER.

>\$44.4m

Disbursed by Keppel Care Foundation since 2012.

\$9.6m

Invested in social causes in 2019.

**79** 

Scholarships, bursaries, study grants and academic awards awarded in 2019.



## >1.8m

Visitors to the Keppel Centre for Art Education since its launch in 2015.

>28,000

Students benefited from the Keppel Nights programme with Esplanade – Theatres on the Bay since its relaunch in 2013.



## >18,000hrs

Of community work achieved by Keppel Volunteers in 2019, an increase of over 4,000 hours compared to 2018.

## >3,500 lives

Touched through our volunteerism efforts in 2019.

94%

Of employees affirmed that Keppel is committed to corporate social responsibility.

# KEPPEL IS COMMITTED TO BEING A GOOD CORPORATE CITIZEN, AND SUPPORTS MEANINGFUL INITIATIVES THAT UPLIFT COMMUNITIES IN COUNTRIES WHERE WE HAVE A PRESENCE.



#### **SINGAPORE**

Keppel has pledged \$500,000 over the next three years to support the sheltered workshop programme run by SPD, a local charity supporting persons with disabilities. The "SPD sheltered workshop supported by Keppel" aims to help persons with disabilities improve their job prospects through providing vocational training, therapy and employment support services. Beyond financial support, Keppel will bring the Group's capabilities in areas such as engineering, workplace safety, business development and marketing to help enhance the sheltered workshop programme through skills-based volunteerism. Keppel Volunteers will also organise activities to engage SPD's clients (see Special Focus).

During the year, over 100 Keppel Volunteers packed and distributed 900 goodie bags, comprising food and household items sponsored by Keppel, to low-income households.

Keppel Volunteers across the Group continued to organise and participate in activities for its adopted charities, including Thye Hua Kwan, Montfort Care, NKF and Muscular Dystrophy Association Singapore.



#### **BRAZIL**

Volunteers organised community events, such as a health education talk on malaria and dengue prevention at a school, and rallied staff to donate non-perishable food items and pre-loved winter clothing to support the underprivileged in the community.



#### VIETNAM

Keppel Land is a sponsor of the Words on Wheels (WOW) mobile library programme, which is organised by the Singapore International Foundation. The initiative promotes reading and learning by providing students with better access to educational materials including books, the internet and multimedia facilities via a mobile library which visits participating schools on a rotational basis.

Since the launch of Phase Two of WOW Ho Chi Minh City in March 2018, nine volunteer trips involving over 90 employees across the Keppel Group have been held to date. About 7,000 students from seven primary and secondary schools have benefited from the programme. In addition, the programme also saw the refurbishment of libraries in three schools in Ho Chi Minh City.

Separately, to encourage the public to reduce consumption of single-use plastics, Keppel Land collaborated with partners in March 2019 to showcase a plastic straw art installation, 'The Parting of the Plastic Sea', at the Estella Place retail mall in Ho Chi Minh City. Singapore's then-Deputy Prime Minister Teo Chee Hean viewed the exhibit during his visit to Estella Place.



#### **CHINA**

In 2018, Keppel committed RMB 5 million to the China Foundation for Poverty Alleviation. The collaboration began with a three-year programme focused on needy students from 10 schools in Mabian County, Sichuan Province.

In conceiving its community outreach programme in Mabian, Keppel had consulted the local education bureau to ensure that the aid provided would be suitable and impactful.

Through Keppel's contribution, close to 2,000 needy students are provided with milk every school day. Over 1,300 students have also benefited from Kindles sponsored by Keppel, which are made available at school libraries, as well as the upgrade of school kitchens. During the year, Keppel Volunteers in China engaged 600 students from four schools through interactive story-telling sessions and educational games.



#### THE PHILIPPINES

In 2019, we awarded four out-of-school youths with full scholarships in technical trades such as flux-cored arc welding, shielded metal arc welding and structural fitting. Keppel Batangas Shipyard also conducted two training sessions for 20 out-of-school youths, and eventually employed 16 of the trainees.

Over 100 volunteers participated in National Schools Maintenance Week and helped with maintenance work, the clean-up of public schools as well as the refurbishment of classrooms. A book reading session was also held at the SIBOL Learning Centre at the Keppel-GK Eco Village, with the aim of inculcating reading habits in young children.

#### **COMMUNITY DEVELOPMENT**

#### **ENVIRONMENTAL PROTECTION**

We work closely with partners to lead initiatives that conserve biodiversity and promote climate action.

#### **KEPPEL DISCOVERY WETLANDS**



#### Inputs

Established with a \$2.08 million contribution from Keppel, the Keppel Discovery Wetlands at the Singapore Botanic Gardens includes a plant collection of over 200 species, allowing visitors to enjoy a restored freshwater forest wetland in the heart of the city.

#### Outputs

About 1.1 million people have visited the Learning Forest, which the Keppel Discovery Wetlands is a part of, since its launch in March 2017. Keppel's Green Ambassadors continued to promote conservation by leading bi-weekly public tours at the Learning Forest. Our volunteers also facilitate craft workshops for children on wetland habitats.

#### Impact

Plants of conservation importance, such as Alstonia spatulata and the critically endangered Radermachera quadripinnata have been successfully conserved and propagated around the Keppel Discovery Wetlands. In addition, biodiversity surveys at the Learning Forest have recorded over 60 species of birds and 10 species of frogs. Employees who participated in the training reported improved presentation skills and knowledge on flora and fauna in the wetlands.

Other Environmental Initiatives	Outputs & Impacts
Tree planting, coastal clean-ups and other activities	In November 2019, 150 volunteers from across the Group planted 150 coastal forest trees at Labrador Nature Reserve, which are expected to sequester 21.3 tonnes of carbon dioxide over 10 years. This initiative by Keppel supports NParks' Forest Restoration Action Plan, which seeks to strengthen the resilience of Singapore's forests to climate change and enhance biodiversity through the sustained planting of native forest species.
	Keppel Volunteers cleared over 1,600 kilogrammes of marine trash in Singapore and the Philippines.
	In Ireland, Keppel Data Centres participated in the 'DC's for Bees' initiative, which aims to reverse the rapid decline of the bee population in Ireland through the creation of safe habitats for bees. About 2,000 saplings were planted by volunteers from Keppel Data Centres, together with participants from 19 other companies in the data centre industry.
Raising environmental awareness	In support of Earth Day 2019, Keppel organised a public screening of the world's first feature-length documentary on the circular economy, 'Closing the Loop', to an audience of close to 1,000 people at the Singapore Botanic Gardens. The documentary showcases examples from around the world on innovative applications of technology, process improvements and labour solutions to reduce waste and pollution.
	Keppel Land and Keppel REIT collaborated with PUB to organise eco-roadshows at Keppel's commercial buildings, namely, Keppel Towers & Keppel Towers 2, Keppel Bay Tower, Ocean Financial Centre and Bugis Junction Towers. Keppel staff and building tenants were provided useful water-saving tips during the roadshows.
	To raise awareness on plastic pollution, Keppel Land and Keppel REIT Management jointly organised the display of an interactive microplastics artwork made from Singapore's shore debris. Keppel Land's community mall in Ho Chi Minh City, Vietnam, Estella Place also featured 'The Parting of the Plastic Sea' straw sculpture to raise awareness of the environmental damage caused by single-use plastics.
Earth Hour	Keppel demonstrated its support for climate action by participating in Earth Hour 2019. Non-essential lights at 29 of Keppel's commercial, residential and hospitality developments in Singapore and overseas were turned off for an hour.

#### ADVANCING CORPORATE SUSTAINABILITY

We collaborate with governments and industry partners to support knowledge-sharing platforms that promote responsible business practices and sustainable urbanisation.

Key Initiatives	Outputs & Impacts
Global Compact Network Singapore Summit	Keppel supported the Global Compact Network Singapore Summit 2019 as a Gold Partner. Themed 'Reimagining Businesses for Resilience', conversations at the Summit centred around decarbonisation, inclusive workforce policies and partnerships to achieve the Sustainable Development Goals (SDGs).
SID Directors Conference	Keppel was a gold sponsor of the Directors Conference by the Singapore Institute of Directors (SID) to promote the professional development of directors and corporate leaders and support thought leadership and benchmarking on corporate governance and directorship.
Responsible Business Forum	Keppel was the supporting partner of the Responsible Business Forum 2019, themed 'Circularity 2030'. The forum explored solutions to scaling the start-ups, innovations and technologies that will drive the achievement of the SDGs related to the circular economy.

#### **FOSTERING CREATIVITY & APPRECIATION OF THE ARTS**

We believe that the arts inspire, contribute towards civic engagement and social cohesion, and build bridges between cultures. Through supporting the arts, we aim to stimulate the cross-fertilisation of ideas, and foster creativity and expression. This will in turn contribute to the vibrancy of our communities.

#### **KEPPEL CENTRE FOR ART EDUCATION**



#### Inputs

Established with a \$12 million commitment from Keppel, the Keppel Centre for Art Education at National Gallery Singapore is the first art education facility of its kind in the region. The Centre has hosted over 1.8 million visitors since its launch in 2015.

Keppel Volunteers also serve as Art Ambassadors and participate regularly in the Centre's 'Book in a Nook' reading programme and guided school tours.

#### Outputs

As part of the Singapore Ministry of Education's museum-based learning programme, 78% of the country's Primary 4 pupils visited National Gallery Singapore in 2019. The majority of students participating in the programme visited the Keppel Centre for Art Education.

Over 79,800 families participated in the Centre's programmes such as 'Book in the Nook' and 'Stories in Art' in 2019. Alongside serving the local community and encouraging the young to embrace art from a young age, the Keppel Centre for Art Education was also recognised on the global stage, having won the prestigious Children in Museums Award in 2018.

#### Impact

Educators have shared that the immersive spaces at the Centre encourage creativity and self-led exploration in children, and help to improve students' visual inquiry skills. The programmes offered at the Centre also promote familial bonding.

#### **KEPPEL NIGHTS**



#### Inputs

Keppel Corporation committed \$500,000, from 2018 to 2020, to Keppel Nights, a partnership with Esplanade – Theatres on the Bay to nurture a deeper appreciation of the arts among students in Singapore.

#### Output

In 2019, 4,868 students attended shows at the Esplanade. Since 2013, the partnership has provided about 28,000 students from more than 75 schools in the heartlands with access to arts and cultural shows presented by the Esplanade. Keppel Nights also includes an element of experiential learning, with dance and music activities that give students the chance to try out various art and cultural forms and the opportunity to enjoy a professionally-staged live performance.

#### Impact

Students have reported an increased interest in the arts and improved confidence and self-esteem after participating in Keppel Nights programmes. The sensory-friendly performances also make arts and cultural shows accessible to students with special needs.

## SPECIAL FOCUS

# EMPOWERING PERSONS WITH DISABILITIES

Keppel Corporation has, through its philanthropic arm, Keppel Care Foundation, pledged \$500,000 over the next three years to support the sheltered workshop programme run by SPD, a local charity supporting persons with disabilities, helping it to stay relevant, current and economically viable in the longer term.

The partnership was launched on 3 December 2019 by Guest-of-Honour President Halimah Yacob, together with Ms Chia Yong Yong, President of SPD, Dr Lee Boon Yang, Chairman of Keppel Corporation, and Mr Loh Chin Hua, CEO of Keppel Corporation, on the occasion of the annual United Nations International Day of Persons with Disabilities.

The SPD Sheltered Workshop supported by Keppel aims to help persons with disabilities improve their job prospects through providing vocational training, therapy and employment support services. Beyond financial support, Keppel will further contribute to enhancing the sheltered

workshop programme through skills-based volunteerism by Keppel Young Leaders, who will bring their capabilities in engineering, workplace safety, business development and marketing to improve the efficiency and financial viability of the Sheltered Workshop.

Enhancements to the Sheltered Workshop will include improvements to its process efficiency and safety measures, developing an apprenticeship programme for trainees with higher work support needs, and a new product line to refresh the workshop's offerings of gift products.

Trainees like 27-year-old Mr Alvin Tey will get a better chance at achieving more through the new apprenticeship programme. Alvin was diagnosed with Dandy Walker Syndrome, a congenital brain malformation, low vision and speech limitations. These conditions limit the speed and quality of his work at the workshop's assembly lines.

Under the apprenticeship programme, Alvin and a few other trainees are picking up skills

like leather stitching that would allow them to be better engaged, while producing commercially-viable leather products for sale. "Learning sewing is not easy, but I enjoy learning new skills and making new things," said Alvin.

"Keppel Young Leaders will continue to refine the apprenticeship programme with a view to scale up production over the next two years. We will also work with SPD on marketing and branding, process optimisation and distribution," said Mr Ivan Lim, President of Keppel Young Leaders and General Manager of Specialised Vessels at Keppel Offshore & Marine.

Keppel's support also includes funding kerb-to-kerb transport for trainees who have difficulty commuting between the workshop and their homes due to the severity of their conditions. Such specialised transport service will make it possible for the trainees to get out of their homes and participate in the workshop's programmes.



## STRONGER TOGETHER





The partnership for the SPD Sheltered Workshop supported by Keppel was launched by President Halimah Yacob (seventh from right), together with Dr Lee Boon Yang (sixth from right), Chairman of Keppel Corporation, Ms Chia Yong Yong (front row, second from left), President of SPD, and Mr Loh Chin Hua (fifth from right), CEO of Keppel Corporation. They were joined by management from Keppel and SPD as well as Keppel Young Leaders and SPD trainees, including Alvin Tey (fourth from right).



Keppel Volunteers, together with KidSTART officers from Early Childhood Development Agency, delivered care packs to families living in rental flats, and shared with them proper hand washing techniques.

As the world continues to fight the COVID-19 pandemic, Keppel is committed to supporting its stakeholders and the wider community in this challenging time, and has committed over \$5 million to provide support to communities affected by the pandemic in Singapore and China.

In March 2020, Keppel Corporation announced a comprehensive package worth more than \$4.2 million to help the Singapore community weather COVID-19, funded by voluntary contributions from the Group's directors, senior management and staff, with dollar-for-dollar matching contributions from Keppel Corporation.

Dr Lee Boon Yang, Chairman of Keppel Corporation, said, "As one of the largest homegrown companies in Singapore, Keppel will do what we can to strengthen national resilience in the fight against COVID-19. Through this package, we will provide support to the communities most affected by the pandemic, including healthcare workers and patients, lower income families, as well as Small and Medium-Sized Enterprises (SMEs)."

"Keppel has stood together with the community to overcome many challenges over the past five decades. I am confident that with unity and determination, we can

effectively weather this difficult environment, and emerge stronger together."

The CEO and CFO of Keppel Corporation, as well as CEOs of key Keppel business units, volunteered to give up one month of their salaries in April 2020 to support this effort, while Directors of Keppel business units would also contribute an equivalent amount of their annual fees. Other members of the Group's senior management gave up half a month of their salaries, while other Keppel employees in Singapore were free to contribute any amount of their choice.

About \$3.5 million will go towards supporting lower income households in Singapore, through rebates given by Keppel Electric, M1 and City Gas to residents living in 1 and 2-room HDB flats. The rebates are expected to benefit more than 40,000 households. In addition, \$300,000 has also been donated to The Courage Fund to fund relief schemes for communities in Singapore affected by COVID-19. Up to \$400,000 will be set aside to support Keppel's frontline staff, such as cleaners and security personnel, in appreciation for their contributions and hard work during this difficult period, and also to provide personal protective equipment, hygiene items and other essentials to vulnerable communities in Singapore.

In addition, Keppel Care Foundation had earlier made a \$300,000 donation to The Courage Fund, while the Keppel Group, through Keppel Land China, had also made a RMB3 million donation to the Shanghai Charity Foundation, one of the largest charity foundations in China, to support the deployment of medical teams from Shanghai and the provision of medical and other supplies to Hubei Province and other affected regions in China.

In March and April 2020, Keppel Volunteers also stepped up to serve the community before the start of the Circuit Breaker period in Singapore. They partnered KidSTART officers from the Early Childhood Development Agency to pack and deliver "care packs" containing hygiene items such as hand sanitisers, and wet wipes to low-income families with young children living in rental blocks in Boon Lay and Taman Jurong, and engaged the children by teaching them proper hand washing techniques and how to effectively apply hand sanitiser.

To help the community stay safe and healthy, Keppel Volunteers also participated in the #BYOBclean event, as part of Temasek Foundation's Stay Prepared initiative that provided half a litre of free zero-alcohol hand sanitiser to all Singaporean households, dispensing over 3,000 bottles over one week.

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Keppel Corporation Limited Sustainability Report 2019

## **ABOUT THIS REPORT**

This report focuses on the sustainability strategy and practices of Keppel Corporation and its subsidiaries, namely the material environmental, social and governance (ESG) aspects of our business operations.

This report provides an overview of our management approach, priorities, targets and performance reviews in key areas.

The content was defined by identifying and prioritising the Company's material ESG factors through a comprehensive materiality review completed in 2019 (see pages 12 and 13). We printed limited copies of this report to minimise environmental impact. A PDF version is available at www.kepcorp.com.

Our stakeholders are advised to read Keppel Corporation's Report to Shareholders 2019, available at www.kepcorp.com/annualreport2019, for more information on the Group's businesses, strategy, performance and prospects.

## **REPORTING PERIOD & STANDARDS**

GRI 102-50 | 102-51 | 102-52 | 102-54

This report is published annually and covers the same period as the financial year of the Company (January to December 2019), unless otherwise stated. Our last sustainability report was published in May 2019. Where possible, we shared three-year historical information to provide a meaningful basis for comparison.

This report has been prepared in accordance with the GRI Standards: Core Option and Singapore Exchange-ST Listing Rules Practice Note 7.6 Sustainability Reporting Guide. We support the Taskforce on Climate-related Financial Disclosures (TCFD), and are working towards incorporating its recommendations in our reporting framework.

We are a signatory to the United Nations (UN) Global Compact and are committed to the 10 Principles. This report serves as our Communication on Progress.

The report was submitted for the GRI Materiality Disclosures Service, and GRI confirmed the correctness of the locations of the materiality disclosures (GRI 102-40 to 102-49). The GRI Materiality Disclosures Service organisational mark is located on page 83.

We used standard units of measurement. Conversion factors may be found in the relevant sections. All dollar values expressed are Singapore dollars.

## **REPORT BOUNDARY**

GRI 102-46 | 102-48 | 102-49

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As a guide, this report covers global operations and all subsidiaries for which the Group has management control, unless otherwise

indicated. The Group structure is provided on page 10. Significant subsidiaries include Keppel Offshore & Marine, Keppel Land, Keppel Infrastructure, Keppel Telecommunications & Transportation and Keppel Capital. We expanded the scope of our reporting in 2019 to include contributions by M1, following the acquisition of M1 in 1H 2019. The reporting boundary for financial data is the same as that of Keppel Corporation's Report to Shareholders 2019. The reporting boundaries for our material topics may vary, due to differences in where the impacts occur most for each topic. The boundaries are specified in the respective sections on our material issues.

To improve the monitoring and reporting of our Greenhouse Gas (GHG) emissions, in 2019, we reviewed our approach, reporting boundaries and calculation methodology for closer alignment with the GHG Protocol, based on an operational control approach. Our three-year environmental performance data on page 29 has been restated to reflect the changes in our reporting boundaries and methodology.

## **INDEPENDENT ASSURANCE**

GRI 102-56

Keppel Corporation appointed an independent third party, DNV GL, to provide assurance on this report. The content was reviewed and the accuracy and reliability of the statements were validated in accordance with the International Standard on Assurance Engagements 3000 by the International Federation of Accountants and DNV GL Verification Protocol for Sustainability Reporting, VeriSustain<sup>TM</sup>. The Assurance Statement is published on pages 87 and 88.

## **FEEDBACK**

GRI 102-53

This report demonstrates our commitment to keep our stakeholders abreast of Keppel's sustainability performance. We welcome feedback.

## Phone/Email:

## Sustainability Reporting

+65 6413 6297 sustainability@kepcorp.com

## **Media Relations**

+65 6413 6425 keppelgroup@kepcorp.com

## **Investor Relations**

+65 6413 6436 investor.relations@kepcorp.com

## **GRI CONTENT INDEX**

GRI 102-55



## THIS REPORT HAS BEEN PREPARED IN ACCORDANCE WITH THE GRI STANDARDS: CORE OPTION

GRI 102-54

GRI Standard	Disclosure Number	Disclosure Title	Page Reference and Remarks*	Connections to UN initiatives
General Disclo	osures			
GRI 101: Four	ndation 2016			
		Organisational Profile		
GRI 102:	102-1	Name of the organisation	Cover	UNGC Principles
General	102-2	Activities, brands, products, and services	6-7, AR 2019 (24-25)	1-10; SDG 3, 6, 7, 8
Disclosures 2016	102-3	Location of headquarters	Back Cover	9, 11, 12, 13, 16, 1
	102-4	Location of operations	8-9	
	102-5	Ownership and legal form	10, AR 2019 (201-210, 228)	
	102-6	Markets served	8-9	
	102-7	Scale of the organisation	8-10, 34-37	
	102-8	Information on employees and other workers	65	
	102-9	Supply chain	52	
	102-10	Significant changes to the organisation and its supply chain	35, 52	
	102-11	Precautionary Principle or approach	43, 46, AR 2019 (88-92, 106-112)	
	102-12	External initiatives	15, 18-21, 24	
	102-13	Membership of associations	15, 62	
	102.10	Strategy	10,02	
	102-14	Statement from senior decision-maker	2-4	
	102-15	Key impacts, risks, and opportunities	24, 44, 46-47,	
	102 10	ricy impuets, risks, and opportunities	AR 2019 (16-21)	
		Ethics & Integrity		
	102-16	Values, principles, standards, and norms of behaviour	Inside Front Cover, 15, 45	UNGC Principles
	102-17	Mechanisms for advice and concerns about ethics	43, 45, AR 2019 (99)	1-10; SDG 16
		Governance		
	102-18	Governance structure	14-15, 39-40	UNGC Principle 10
	102-19	Delegating authority	14-15	SDG 16
	102-20	Executive-level responsibility for economic, environmental, and social topics	14-15	
	102-21	Consulting stakeholders on economic, environmental, and social topics	12-13, 15-16	
	102-22	Composition of the highest governance body and its committees	15, 39-40	
	102-23	Chair of the highest governance body	39-40	
	102-24	Nominating and selecting the highest governance body	42-43, AR 2019 (77-81)	
	102-25	Conflicts of interest	40	
	102-26	Role of highest governance body in setting purpose, values, and strategy	14-15, 39-40	
	102-27	Collective knowledge of highest governance body	40-42, AR 2019 (96)	
	102-28	Evaluating the highest governance body's performance	40-42, AR 2019 (98-99)	
	102-29	Identifying and managing economic, environmental and social impacts	14-15, 46-47	
	102-30	Effectiveness of risk management processes	15, 45-47, AR 2019 (89)	
	102-31	Review of economic, environmental, and social topics	14-15, 46-47, AR 2019 (76)	
	102-32	Highest governance body's role in sustainability reporting	14-15, 46-47	
	102-33	Communicating critical concerns	39-40, 43, AR 2019 (99)	
	102-35	Remuneration policies	43, AR 2019 (82-87)	
	102-36	Process for determining remuneration	43, AR 2019 (82-87)	

<sup>\*</sup> References to Keppel Corporation's Report to Shareholders 2019 are expressed as 'AR 2019 (page number)'. Keppel Corporation's Report to Shareholders 2019 is available at www.kepcorp.com/annualreport2019.

For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report.

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## **GRI CONTENT INDEX**

GRI Standard	Disclosure Number	Disclosure Title	Page Reference and Remarks*	Connections to UN initiatives
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General Disclosures 2016	102-41	Collective bargaining agreements	65	SDG 8, 17
	102-42	Identifying and selecting stakeholders	15-16	
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	102-54	Claims of reporting in accordance with the GRI Standards	83	
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	102-56	External assurance	87-91	
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		Environmental Management		
GRI 103: Management Approach 2016	103-1/ 103-2/ 103-3	Management Approach	22-23, 27-28	UNGC Principles 7-9; SDG 6, 7, 11, 12, 13
GRI 302:	302-1	Energy consumption within the organisation	28-29	
Energy 2016	302-4	Reduction of energy consumption	28-29	
GRI 303:	303-1	Water withdrawal by source	30	
Water 2016	303-3	Water recycled and reused	29-30	
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Emissions	305-2	Energy indirect (Scope 2) GHG emissions	23, 29, 31-32	
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Effluents & Waste 2016	306-3	Significant spills	32	
GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	32	_

<sup>\*</sup> References to Keppel Corporation's Report to Shareholders 2019 are expressed as 'AR 2019 (page number)'. Keppel Corporation's Report to Shareholders 2019 is available at www.kepcorp.com/annualreport2019.

GRI Standard	Disclosure Number	Disclosure Title	Page Reference and Remarks*	Connections to UN initiatives
Topic-Specific D	isclosures			
		Economic Sustainability		
GRI 103: Management Approach 2016	103-1/ 103-2/ 103-3	Management Approach	34-35, AR 2019 (10-21)	SDG 8, 9, 11, 17
GRI 201:	201-1	Direct economic value generated and distributed	36-37	
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<sup>\*</sup> References to Keppel Corporation's Report to Shareholders 2019 are expressed as 'AR 2019 (page number)'. Keppel Corporation's Report to Shareholders 2019 is available at www.kepcorp.com/annualreport2019.

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## **GRI CONTENT INDEX**

GRI Standard	Disclosure Number	Disclosure Title	Page Reference and Remarks*	Connections to UN initiatives
Topic-Specific D	isclosures			
		Occupational Safety and Health		
GRI 103: Management Approach 2016	103-1/ 103-2/ 103-3	Management Approach	57-59	UNGC Principles 1-2, SDG 3, 8, 17
GRI 403:	403-1	Occupational health and safety management system	58-59	
Occupational Health	403-2	Hazard identification, risk assessment, and incident investigation	60	
and Safety	403-3	Occupational health services	61	
2018	403-4	Worker participation, consultation, and communication on occupational health and safety	62-63	
	403-5	Worker training on occupational health and safety	61	
	403-6	Promotion of worker health	61	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	52-53, 62	
	403-9	Work-related injuries	62-63	
		Labour Practices, Talent Management and Human Rights		
GRI 103: Management Approach 2016	103-1/ 103-2/ 103-3	Management Approach	64-67	UNGC Principles 1-6; SDG 3, 4, 8, 17
GRI 202: Market Presence 2016	202-2	Proportion of senior management hired from the local community	65	
GRI 401: Employment	401-1	New employee hires and employee turnover	66	
2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	66	
GRI 404: Training &	404-1	Average hours of training per year per employee	68-69	
Education 2016	404-2	Programmes for upgrading employee skills and transition assistance programmes	68-69	
	404-3	Percentage of employees receiving regular performance and career development reviews	66	
GRI 406: Non- Discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	67	
		Community Development		
GRI 103: Management Approach 2016	103-1/ 103-2/ 103-3	Management Approach	71-73	SDG 3, 4, 15, 17
GRI 203: Indirect Economic Impacts 2016	203-2	Significant indirect economic impacts	73-81	
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programmes	73-81	
GRI 415: Public Policy 2016	415-1	Political contributions	73	

<sup>\*</sup> References to Keppel Corporation's Report to Shareholders 2019 are expressed as 'AR 2019 (page number)'. Keppel Corporation's Report to Shareholders 2019 is available at www.kepcorp.com/annualreport2019.

## INDEPENDENT ASSURANCE STATEMENT

GRI 102-56

#### DNVGI

#### INTRODUCTION

DNV GL Business Assurance Singapore Pte. Ltd. has been commissioned by the management of Keppel Corporation Ltd. ("Keppel", Company Registration Number: 196800351N) to carry out an independent assurance engagement for the qualitative and quantitative information ("sustainability performance") reported in the Keppel Corporation Sustainability Report 2019 (the Report), which is available on Keppel's website¹ and in print, for the financial year ending 31 December 2019.

The assurance is in accordance with the International Standard on Assurance Engagements ISAE 3000 Assurance Engagements Revised<sup>2</sup> and Reporting Principles from the GRI Standards on Defining Report Content and Quality, and was performed using DNV GL's assurance methodology VeriSustain<sup>TM3</sup> (Version 5.0).

## **SCOPE OF ASSURANCE**

The scope of assurance included a review of sustainability disclosures and performance data from Keppel and its subsidiaries over which Keppel has operational control in and outside of Singapore. The boundary of the Report for identified material topics and topic-specific disclosures is defined within the Report and unless otherwise stated, includes those subsidiaries over which Keppel has management control.

We evaluated the Report for adherence to the reporting principles for defining the sustainability report content as set forth in the GRI Standards. We understand that the reported financial data and information are based on Keppel's and respective subsidiaries' financial statements, which are subject to a separate independent audit process. The review of financial data taken from these financial statements was not within the scope of our work.

# RESPONSIBILITIES OF THE MANAGEMENT OF KEPPEL AND OF THE ASSURANCE PROVIDER

Keppel has sole responsibility for the integrity of the Report and the responsibility includes designing, implementing and maintaining internal controls over collection, analysis, aggregation, preparation and fair presentation of the disclosures within the Report, ensuring that the reported data is free from material misstatement, and maintaining integrity of the information on its website. In performing our assurance work, our responsibility is solely towards the management of Keppel in accordance with the terms of reference

agreed on with Keppel. However, our statement represents our independent opinion and is intended to inform the independent conclusion of our verification to Keppel's stakeholders. DNV GL is responsible for planning and performing the engagement to obtain a limited level of assurance based on ISAE 3000 and VeriSustain, i.e. whether the reported disclosures are free from material misstatement and meets disclosure requirements of the GRI Standards (2016) and selected GRI Standards (2018) for identified material topics, in accordance with the Core option of reporting.

## **BASIS OF OUR OPINION**

Our assurance opinion is based on a limited level of assurance engagement undertaken for the disclosures in this Report. A multi-disciplinary team of sustainability and assurance specialists performed the work at Keppel's corporate headquarters and its subsidiaries in Singapore – Keppel Offshore & Marine and Keppel Infrastructure, during March and April 2020 to verify the qualitative and quantitative disclosures such as the related management approach for identified material topics, and test the reliability of data and the robustness of the data aggregation processes.

As part of the verification, we planned and performed our work based on DNV GL's risk-based approach to obtain the evidence that we considered necessary to provide a basis for our assurance opinion. Within the framework of our verification, we performed the following procedures and other activities:

- Conducted interviews with key data owners from Keppel Corporation and its subsidiaries including Keppel Offshore & Marine and Keppel Infrastructure, to understand the key processes and controls for reporting subsidiary performance data;
- Assessed the robustness of the underlying data and information flow and controls;
- Performed sample data analysis using a risk-based approach and materiality;
- Challenged the sustainability-related disclosures, statements and claims; and
- Performed limited testing on a sampling basis of the selected information at Keppel's corporate headquarters and subsidiaries' headquarters to check that the selected environmental and social data had been properly measured, gathered, recorded, collated and reported.

We also performed the following activities to assess the adherence to reporting principles:

- Interviewed selected senior managers and representatives responsible for sustainability management and made enquiries to determine their understanding of stakeholder engagement and materiality;
- Reviewed the current sustainability issues that could affect Keppel and could be of interest to stakeholders.

#### CONCLUSION

We provided a limited level of assurance over non-financial disclosure presented in Keppel's Report. Based on the work undertaken, nothing has come to our attention to suggest that the Report is not a fair representation of Keppel's sustainability performance for the identified scope and boundary of reporting. Without affecting our assurance opinion, we also provide the following observations regarding the adherence to the Principles for Defining Report Content and Report Quality as defined in the GRI Standards:

## STAKEHOLDER INCLUSIVENESS

The Report brings out the outcomes of a stakeholder consultation exercise conducted by Keppel from December 2018 to April 2019, covering various stakeholder groups i.e. six internal and external stakeholder groups such as customers, employees, governments, shareholders, local communities and suppliers. Further, the Report articulates Keppel's stakeholder engagement activities occurred at the Group and business unit levels through various platforms. Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Stakeholder Inclusiveness.

## **MATERIALITY**

The Report brings out the materiality determination process adopted by Keppel and its outcomes based on the exercise of revisiting Keppel's material topics through the materiality review exercise conducted by Keppel during December 2018 and April 2019, covering both internal and external stakeholder groups. Further, the process included an assessment of long-term global trends and an internal review of the Group's businesses. The review resulted in a matrix categorising and prioritising material topics based on their importance to internal and external stakeholders. The material topics identified

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- https://www.kepcorp.com/
- Assurance Engagements other than Audits or Reviews of Historical Financial Information.
- The VeriSustain protocol is available on request from the DNV GL website (www.dnvgl.com).

Keppel Corporation Limited Sustainability Report 2019

## INDEPENDENT ASSURANCE STATEMENT

DNV-GL

were approved by Keppel Corporation's Board of Directors. Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Materiality.

## **RESPONSIVENESS**

The Report provides an overview of the Keppel Group's sustainability performance and the processes adopted to communicate with stakeholders on the corporate strategy, management approach, and achievements and performance in relation to identified material issues, considering the overall sustainability context and external environment of its business within the identified reporting boundary. In our opinion, the Report could further bring out the long and medium-term targets related to the identified material topics.

## **ACCURACY AND RELIABILITY**

The Report brings out the systems that Keppel has implemented to compile and report information in a relatively consistent manner as per the GRI Standards applied for reporting the performance related to identified material topics. Any errors or misstatements identified during the assurance engagement were communicated for correction prior to the Report being published, and were corrected by Keppel. In our opinion, the level at which the Report adheres to the principle of accuracy and the reliability of the information on sustainability performance can be enhanced by implementing internal verification checks to improve consistency in data collection processes.

## **COMPLETENESS**

The Report has covered the sustainability strategy, management approach and sustainability performances against the material topics identified based on GRI Standards. The boundary of the Report has been explained across sections in the Report and includes the sustainability performance from the global operations, subsidiaries and associated companies over which the Keppel Group has management control for the reporting period.

## **BALANCE AND NEUTRALITY**

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The Report and related linkages in Keppel's corporate website brings out both the positive and the negative trends of Keppel's sustainability performance in 2019, presenting a balanced account of the activities and results relevant

to the reporting year. Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principles of Balance and Neutrality.

#### **LIMITATION**

Our assurance relies on the premise that the data and information provided by Keppel to us as part of our review procedures have been provided in good faith and free from misstatements. Because of the selected nature (sampling) and other inherent limitation of both procedures and systems of internal control, there remains the unavoidable risk that errors or irregularities, possibly significant, may not have been detected. The engagement excludes the sustainability management, performance and reporting practices of Keppel's associated companies, suppliers, contractors and any third parties mentioned in the Report. The position statements, the statements for the management approach, case studies and examples are excluded from the scope of our work. We did not interview external stakeholders as part of this assurance engagement.

The reported disclosures related to economic performance are based on the financial disclosures and data, which were cross-checked with internal documents and the audited consolidated financial statements for transcription and aggregation errors. Limited depth of evidence gathering, including inquiry and analytical procedures and limited sampling at lower levels in Keppel were applied as per the agreed scope of engagement. The data for environmental and social performance is verified with random samples of data, and the aggregated data at the corporate level is used for the verification. The procedures performed in a limited level of assurance engagement vary in nature and timing and are less in extent than for a reasonable/high level of assurance engagement. We expressly disclaim any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

## STATEMENT OF COMPETENCE AND INDEPENDENCE

DNV GL applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2015 - Conformity Assessment Requirements for bodies

<sup>4</sup> The DNV GL Code of Conduct is available from the DNV GL website (www.dnvgl.com).

providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We have complied with the DNV GL Code of Conduct<sup>4</sup> during the assurance engagement and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV GL maintains complete impartiality towards stakeholders interviewed during the assurance process. DNV GL did not provide any services to Keppel during 2019 that could compromise the independence or impartiality of our work.

For DNV GL Business Assurance Singapore Pte. Ltd.

**SOH MUI YAN** 

Lead Assessor,

DNV GL Business Assurance Singapore Pte. Ltd.

Nobbleng Chwin

**MAK HENG CHWIN** 

Operations Manager – South East Asia

DNV GL Business Assurance Singapore Pte. Ltd.

**VADAKEPATTH NANDKUMAR** 

Assurance Reviewer,

Head – Regional Sustainability Operations - IME,

DNV GL Business Assurance India Private Limited, India

30 April 2020, Singapore

## INDEPENDENT VERIFICATION STATEMENT

#### INTRODUCTION

DNV GL Business Assurance Singapore Pte. Ltd. ('DNV GL') has been commissioned by the management of Keppel Corporation Ltd. ("Keppel", Company Registration Number: 196800351N) Singapore to carry out verification of Greenhouse Gases ("GHGs") emissions assertions as part of its sustainability reporting and as part of the Company's Carbon Disclosure Project ("CDP") response. The verification exercise was carried out for the Company's GHG assertions for the period from 1st January 2019 to 31st December 2019. This verification provides a moderate level of assurance as per DNV GL VeriSustain<sup>TM1</sup> and applies a ±5% uncertainty threshold towards errors and omissions.

Keppel is responsible for the collection, analysis, aggregation and presentation of data and information based on an operational control approach under the GHG Protocol. The GHG conversion factors for direct (Scope 1) emissions, as well as Global Warming Potential values used are based on the United Kingdom's DEFRA 2015 Government GHG Conversion Factors for Company Reporting (Scope 1). The GHG conversion factors for indirect (Scope 2) emissions are based on the Electricity Grid Emission Factor for 2018 from Singapore's Energy Market Authority and Grid Emission Factor for International Energy Agency 2017. Carbon emissions from the incineration of waste (Scope 3) are based on the 2006 IPCC Guidelines for National GHG Inventories (Volume 5 - Waste) and emissions from business travel are calculated based on the International Civil Aviation Organisation (ICAO)'s online Carbon Emissions Calculator.

Our responsibility of performing this work is to the management of Keppel only and in accordance with terms of reference agreed with the Company. The verification engagement is based on the assumption that the data and information provided to us is complete, sufficiently true and free from misstatements. DNV GL disclaims any liability or co-responsibility for any decision a person or entity would make based on this verification statement. The verification was carried out during March to April 2020 as part of verification of sustainability report disclosures.

## **SCOPE, BOUNDARY AND LIMITATIONS OF VERIFICATION**

The scope of work agreed upon with Keppel includes the following:

- Verification of the GHG emissions (Scope 1, Scope 2 and Scope 3) in accordance with the requirements
  - The Scope 1 emissions arising from: a) diesel consumption in the diesel generating (DG) sets owned or operated by Keppel;
    - b) diesel fuel consumption in owned and leased vehicles of Keppel;
    - c) liquefied petroleum gas consumption;
    - d) naphtha consumption;
    - e) piped natural gas consumption;
  - f) compressed natural gas consumption;
  - g) acetylene consumption; and
  - h) refrigerant consumption -R123, R134A, R22, R407C, R410A.
  - The Scope 2 emissions arising from use of purchased electricity;
- The Scope 3 emissions arising from a consequence of the activities of the Company but occurring from sources not owned or controlled by the Company, such as business travel<sup>2</sup> and equity investment companies3. For carbon emissions calculation under Scope 3 emissions, Keppel Corporation accounts for the proportional emissions of Scope 1 and 2 emissions of its investments as its Scope 3 emissions.
- · Site visits to the sampled Keppel facilities in Singapore; and
- Verification of the Company's protocols, processes, management approach and controls related to the collection and collation of the GHG emission data.

The organisational boundary as set out by Keppel covers facilities in Singapore, Australia, Brazil, Germany, Hong Kong, United States and the Asia-Pacific region, where Keppel has operational control. During the process of verification, we did not come across any limitations to the agreed scope of work.

#### **VERIFICATION METHODOLOGY**

The verification was conducted by DNV GL in accordance with the requirements set out in DNV GL VeriSustain, for a moderate level of verification. As part of the verification process, we obtained an understanding of the systems used to generate, aggregate and report GHG emission data, and the GHG data management system of Keppel. We also tested the Completeness, Accuracy and Reliability of the data.

During the verification engagement, we have taken a risk-based approach, and we have verified the GHG assertion made in the Report and assessed the robustness of the underlying data management system, information flow and controls.

We carried out the following activities:

- · Desk review of Keppel's reported emissions provided to us in spreadsheets to select sample sites for onsite and offsite verification;
- · Management interaction to review data management systems of Keppel including review of data completeness, emission factors used and assumptions applied (data related to electricity from grid, DG), diesel consumption in DG sets owned or operated by Keppel and, diesel consumption in owned/leased vehicles, consumption of liquefied petroleum gas, naphtha, piped natural gas, compressed natural gas and acetylene and refrigerant usage (R123, R134A, R22, R407C, R410A) for its operations, and business travel:
- Onsite verification of data aggregation systems and related evidences related to Scope 1 emissions, Scope 2 emissions reported for sample locations at Keppel Offshore & Marine (Keppel FELS Limited); Scope 3 emissions reported for sample location at Keppel Infrastructure (Senoko Waste-to-Energy Plant);
- Desk review verification of emissions data for sample sites located at Keppel Telecommunications & Transportation and Keppel Land; and
- Review of feedback from Keppel on reported observations arising from onsite and offsite verification.

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- The VeriSustain protocol is available on www.dnvgl.com
- Emissions from business travel excludes data from entities defined as investments Keppel Infrastructure Trust, Keppel REIT, Keppel DC REIT. Equity investment companies include Keppel Infrastructure Trust (Australia-Basslink, Australia-IXOM, City Gas, SingSpring, Keppel Merlimau Cogen Plant, Senoko WTE Plant, Keppel Seghers Tuas WTE Plant, Keppel Seghers Ulu Pandan NEWater Plant), Keppel REIT, Keppel DC REIT

## INDEPENDENT VERIFICATION STATEMENT

es of CO <sub>2</sub> e I (tCO <sub>2</sub> e) fo ngapore Op	r 2019 –	
	18,774	

Scope	Source	Tonnes of CO₂e Emission (tCO₂e) for 2019 – Global Operations⁴	Tonnes of CO <sub>2</sub> e Emission (tCO <sub>2</sub> e) for 2019 – Singapore Operations <sup>4</sup>
Scope 1	<ul> <li>a) Diesel consumption in the generating sets owned or operated by Keppel;</li> <li>b) Fuel (diesel) consumption in owned and leased vehicles of Keppel;</li> <li>c) Liquefied petroleum gas;</li> <li>d) Naphtha;</li> <li>e) Piped natural gas;</li> <li>f) Compressed natural gas;</li> <li>g) Acetylene; and</li> <li>h) Refrigerant usage - R123, R134A, R22, R407C, R410A.</li> </ul>	29,577	18,774
Scope 2	Purchased electricity	200,759	141,430
Scope 3 <sup>5</sup>	Business travel, emissions from equity investment companies.	1,745,032	_
	Total (Scope 1, Scope 2 and Scope 3 emissions)	1,975,368	160,204

## CONCLUSION

On the basis of our verification methodology, nothing has come to our attention that would cause us not to believe that the GHG assertions below are not a fair representation of Keppel's GHG Scope 1, Scope 2 and Scope 3 emission assertions. Some data inaccuracies identified for the sampled sites during the verification process were found to be attributable to transcription, interpretation and aggregation errors, and the errors have been communicated for correction and were corrected by Keppel.

## STATEMENT OF COMPETENCE AND INDEPENDENCE

DNV GL applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2015 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We have complied with the DNV GL Code of Conduct<sup>6</sup> during the assurance engagement and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV GL maintains complete impartiality toward stakeholders interviewed during the assurance process. DNV GL did not provide any services to Keppel during 2019 that could compromise the independence or impartiality of our work.

For DNV GL,

**SOH MUI YAN** 

Lead Verifier

DNV GL Business Assurance Singapore Pte. Ltd.

Moutlengchwin

**MAK HENG CHWIN** 

**Operations Manager** 

DNV GL Business Assurance Singapore Pte. Ltd.

**VADAKEPATTH NANDKUMAR** 

Assurance Reviewer

DNV GL Business Assurance India Private Limited, India

17 April 2020, Singapore

DNV GL Business Assurance Singapore Pte. Ltd. is part of DNV GL - Business Assurance, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. www.dnvgl.com

For details please refer to Keppel Corporation's Sustainability Report, page 29. The data was verified from the CR360 software used by Keppel Corporation.

 $Keppel\ has\ considered\ carbon\ emission\ factors\ to\ be: one\ tonne\ of\ waste\ incinerated\ =0.3139\ tCO_2\ for\ Keppel\ Seghers\ Tuas\ WTE\ Plant,\ and\ =0.4283\ tCO_2\ for\ Senoko\ WTE\ Plant.$ ICAO Carbon Emissions Calculator or Carbon footprint carbon calculator used for business travel (Scope 3 emissions).

The DNV GL Code of Conduct is available from DNV GL website (www.dnvgl.com)

Scope 3 emissions for equity investment companies which generate incineration waste, estimated based on the fossil carbon arising from the incineration of non-organic waste content in the incineration plant which is dry plastics in Singapore's context.

## **LBG ASSURANCE STATEMENT 2019**

GRI 102-56



Corporate Citizenship is a global consulting firm which specialises in responsible and sustainable business and manages the LBG Framework. Corporate Citizenship has been commissioned by Keppel Corporation to perform independent external assurance on the company's use of the LBG Framework to measure and report on its corporate community investment (CCI) activities, occurring between January 2019 and December 2019.

The LBG Framework helps businesses measure, manage and report their CCI activities. It moves beyond charitable donations to include the full range of contributions, or inputs, made to community causes (including time, in-kind and management costs, and cash donations). It also assesses the actual results for the community and for the business, also known as outputs and impacts. (See www.lbg-online.net for more information).

The purpose of our assurance engagement has been to assess whether or not the LBG Framework, and its principles, are correctly and consistently applied by Keppel Corporation in its reporting.

The scope of the LBG assurance covers the information presented in the Communities section of Keppel Corporation's Sustainability Report for 2019, on pages 71 to 81. The scope of the assurance included the following data and KPIs:

- Inputs: e.g. Volunteer hours, number of volunteers, donations/sponsorships; and
- · Outputs: e.g. Number of beneficiaries served.

The assurance engagement was undertaken at a limited level and involved the following activities:

- Management interviews with key persons responsible for community investment activities to understand the process for collecting, validating and consolidating the data;
- A site visit to verify the internal systems and procedures for collecting, validating and consolidating the data; and
- Checks on the accuracy and consistency of the data presented in this report on pages 71-81.

As a result of our work, we are satisfied, based on the limited scope described above, that Keppel Corporation has sufficiently applied the LBG Framework in its reporting. Our work has not extended to an independent audit of the data presented in this report.

## Corporate Citizenship

Singapore 14 April 2020

Keppel Corporation Limited Sustainability Report 2019

## **KEY PERSONNEL**

# GROUP SUSTAINABILITY STEERING COMMITTEE

#### Loh Chin Hua

Chairperson

Chief Executive Officer, Keppel Corporation

#### Chan Hon Chew

Chief Financial Officer, Keppel Corporation

## **Ong Tiong Guan**

Chief Executive Officer, Keppel Infrastructure

## Christina Tan

Chief Executive Officer, Keppel Capital

## Chris Ong

Chief Executive Officer, Keppel Offshore & Marine

## Tan Swee Yiow

Chief Executive Officer, Keppel Land

## **Thomas Pang**

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Chief Executive Officer, Keppel Telecommunications & Transportation

## Manjot Singh Mann

Chief Executive Officer,

# GROUP SUSTAINABILITY WORKING COMMITTEE

#### Sebastien Lamy

Co-Chairperson

Director,

Group Strategy & Development, Keppel Corporation and Managing Director, Keppel Technology & Innovation

## Ho Tong Yen

Co-Chairperson

Director,

Group Corporate Communications,

Keppel Corporation

## Cindy Lim

Director, Group Corporate Development, Keppel Corporation and Managing Director, Keppel Urban Solutions

## Yeo Meng Hin

Director, Group Human Resources, Keppel Corporation

## Caroline Chang

General Manager, Group Legal, Keppel Corporation

## Tok Soo Hwa

General Manager, Group Control & Accounts, Keppel Corporation

## Sepalika Kulasekera

General Manager, Group Internal Audit, Keppel Corporation

## Kenny Mok

General Manager, Group Risk & Compliance, Keppel Corporation

## R K Jaggi

General Manager, Group Health, Safety & Environment, Keppel Corporation

## Jay Singham

Executive Director, Commercial, Keppel FELS

## Serena Toh

General Manager, Group Sustainability Strategy, Keppel Corporation

# GROUP SUSTAINABILITY SECRETARIAT

#### Sue-Ann Huang

Senior Manager, Group Corporate Communications, Keppel Corporation

## Ariel Tee

Senior Executive, Group Corporate Communications, Keppel Corporation

**Keppel Corporation Limited**(Incorporated in the Republic of Singapore)
1 HarbourFront Avenue
#18-01 Keppel Bay Tower
Singapore 098632

Tel: (65) 6270 6666 Fax: (65) 6413 6391 Email: keppelgroup@kepcorp.com www.kepcorp.com

Co Reg No: 196800351N