# **Risk Management**

We undertake only appropriate and well-considered risks aligned with established Risk Appetite Statements. Key risk indicators supporting these statements are monitored to track performance and provide early warnings.

As a global asset manager and operator, we are committed to be a trusted partner to our stakeholders, delivering strong returns to our Limited Partners and value to our customers and shareholders. We seek to manage our financial and operational risks appropriately to ensure that the Company remains in a strong position to raise and deploy third-party capital efficiently and deliver the targeted returns to our Limited Partners.

Keppel adopts a balanced approach to risk management to optimise returns while considering their impact on corporate sustainability. Managing risks effectively is an integral part of the way in which we develop and execute our business strategies. It is grounded in our core values of Agile, Can Do and Trusted, and our belief that a balanced risk-reward methodology is the optimal approach for the achievement of Keppel's strategic goals and objectives. The framework takes reference from ISO 31000 Risk Management Guidelines.

The Board has overall responsibility for the governance of risk. Through the Board Risk Committee, the Board guides management in formulating and implementing the risk management framework, policies and guidelines.

The identification and day-to-day management of risks continues to rest with management who is responsible for the effective implementation of risk management strategies, policies and processes. The portfolio managers are responsible for maintaining levels of portfolio risk which are consistent with the representations made to the clients/investors and/or fund mandates particularly with regard to the risk tolerance and investment objectives.

In recognition of its adequate and effective risk management practices, Keppel received the silver award for Best Risk Management at the Singapore Corporate Awards 2024.



Keppel adopts a balanced approach to risk management to optimise returns while considering their impact on corporate sustainability.

# Strategic Goals and Objectives Financial Focus Areas Non-Financial Focus Areas Risk Appetite Statements for Key Financial Focus Areas Risk Appetite Statements for Key Non-Financial Focus Areas Key Non-Financial Focus Areas Key Risk Key Risk Indicator Key Risk Key Risk Indicator Key Risk Indicator Escalation and Reporting

### **ENTERPRISE RISK FRAMEWORK**

The Board has set out the following three risk tolerance guiding principles:

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

The Enterprise Risk Management (ERM) Framework is refreshed to align with Keppel's new business model and to be more flexible and dynamic to respond to ever-evolving economic environment, business demands, as well as to seize new opportunities as they arise.

The refreshed ERM Framework sets out the minimum governance requirements for the achievement

of our strategic goals and objectives through the management of key risks. The diagram above summarises the key elements of the refreshed ERM Framework.

Risk Appetite Statements are formulated across the key financial and non-financial focus areas, taking into consideration the Board's acceptable level of risk exposure as well as desired risk-reward trade-offs.

Key Risk Indicators are established to support the respective Risk Appetite Statements with defined thresholds/ tolerances to ensure that Keppel operates within the prescribed risk appetite. Key Risk Indicators are monitored to track risk performance and to provide early warning signals.

To identify macroeconomic risks that are both current and emerging, intelligence gathering through processes such as horizon scanning are performed. Deep-dive reviews of thematic risks are also performed together with the relevant risk owners. Where required, a further

scenario analysis or stress testing is performed, and risk-mitigating actions will be developed as necessary.

Each identified risk is assessed for impact and likelihood based on a set of defined impact and likelihood criteria. Impact criteria include, but are not limited to, financial and operational areas. The effectiveness of existing risk management measures is considered before arriving at the risk rating and risk prioritisation. The risk levels of all the key risk areas are detailed in the Company's risk register and risk matrix.

The annual Control Self-Assessment programme assesses the effectiveness of the controls for identified risks.

Exceptions i.e. risks that exceed the set thresholds/tolerances, or where any key risk is trending, are escalated and reported to the Board Risk Committee and where relevant, to the Board.

<sup>1</sup> The risk tolerance principles apply to all material risks identified, including strategic, financial, compliance, operational, and IT risks.

### **Risk Management**

### **RISK-CENTRIC CULTURE**

Having a risk-centric culture is key to effective risk management. The key elements of Keppel's risk-centric culture are:

### **Leadership & Governance**

Keppel's Board and management set the tone at the top and encourage prudent risk taking in decision making.

# Training, Competency & Communications

Risk management is regularly reinforced as a discipline and developed through training, awareness and practice.

### **Transparency**

We promote transparency in information-sharing and escalation of risk-related matters, incidents, near-misses or events of interest.

### Framework

We are guided by the ERM Framework to manage effectively the risks and opportunities arising from our businesses.

### Ownership & Accountability

Our risk processes provide clarity and accountability in executing our roles and responsibilities and emphasise on having clear owners for major risk areas.

### Process & Methods

A key part of the process is the identification and assessment of key risks, guided by our Risk Appetite Statements, and monitored through developed Key Risk Indicators.

### **Risk-Centric Culture**

The measures to mitigate key risks, both financial and non-financial, identified for FY 2024 are listed below.

### **FINANCIAL RISKS**

## Financial and Funding Risks



We aim to deliver strong and sustainable financial results to meet stakeholder expectations and enhance shareholder value.

We aim to maintain sufficient liquidity and funding capability at preferential interest margins.

### We manage this risk by:

- Reviewing the material variances on a continual basis, i.e., actual versus budget and actual versus prior year.
- Preparing the annual operating and capital budgets and having them approved by the appropriate
  approving authority prior to the commencement of each financial year. Each operating and capital
  expenditure is approved in accordance with the Financial Authorisation Limits.
- Conducting sensitivity analysis and stress tests to gauge Keppel's potential financial exposure to changing market situations.
- · Maintaining a mix of fixed and variable debt instruments with varying maturities.
- Actively managing the debt term-out profile, operating cash flows and availability of funding resources to ensure that all the financial obligations and funding needs are met.

More details can be found in the Financial Risk Management section from pages 201 to 213 of this report.

### **Fund Management and Investment Risk**



We aim to raise adequate capital for efficient deployment to ensure we preserve and enhance our funds' track records in delivering consistent performance.

### We manage this risk by:

- Building and maintaining strong relationships with current and potential investors through regular communication, transparency, and demonstrating past successes and future potential.
- Conducting in-depth research and analysis before making investment decisions to ensure capital is allocated to opportunities with attractive risk-adjusted returns.
- Continuously monitoring the performance of investments and comparing them against benchmarks and objectives, including implementation of hedging strategies where practical.
- Conducting scenario analysis and stress testing to understand the potential likelihood and magnitude of impact of adverse market conditions on the investment portfolio.
- Developing contingency plans, where possible, to address potential financial losses or lower-than-expected returns.

### **Business & Asset Operations**



We aim to ensure that there are minimal outages or disruptions which may adversely affect our operations in terms of financial performance, service level or customer satisfaction.

### We manage this risk by:

- Establishing the Keppel Business Continuity Management Steering Committee which provides sponsorship, direction and guidance to ensure a state of constant readiness to respond.
- Establishing Keppel's Incident Reporting and Crisis Management operating standard as well as the Cyber Incident Response plan which provides guidance for dealing with potential crisis events or major incidents that impact important business processes.
- Conducting Tech Disruption and Cyber Incident Tabletop Exercises as well as Business Continuity
  Exercises regularly to validate the effectiveness of the Business Continuity Plans (BCPs). Such BCPs
  enhance our operational readiness and resilience to potential business disruptions.
- Using a systematic risk assessment approach to identify, assess, manage and monitor project risks.
   Special attention is given to technical and high-value projects, including greenfield developments, the deployment of new technology and/or operations in new geographical locations.
- Monitoring the project execution status on a regular basis to proactively address any issues such as costs or schedule overruns.

### **NON-FINANCIAL RISKS**

### **Compliance & Controls**



Our policy is to comply with all applicable laws, regulations and fund mandates

We adopt a zero-tolerance policy towards fraud, bribery and corruption.

### We manage this risk by:

- Continuing to foster and enhance our compliance culture through comprehensive compliance programmes and conducting regular trainings to ensure that Keppel maintains a high level of compliance and ethical standards in the way we conduct business.
- Staying updated with regulatory changes in countries where Keppel operates/invest in or looking to expand, to effectively assess any exposures or risks to Keppel, and surfacing to management and the Board (where applicable). Key risk areas include situations where external agents are appointed for
- Regular monitoring of investment activities and strategies to ensure compliance with regulations and/ or investment parameters of fund/investment mandates, including any internal approvals by relevant investment committees/advisory board.
- Periodic reporting of portfolio performance and strategy updates (investor reporting) to further build investor confidence, fund manager accountability and market confidence.
- Conducting regular external and internal audits to provide assurance on the accuracy of the financial statements and adequacy of the internal control framework supporting the statements.
- Continuing to operate within Keppel's System of Management Controls, comprising the Three-Lines Model, to ensure the adequacy and effectiveness of our internal controls and risk management.

### Human Capital



We are committed to attract, We manage this risk by: develop and retain talents to ensure that we can achieve our growth and business plans.

- Leveraging internal and external training programmes to augment our employees' skillsets, which includes nurturing employees and maintaining good industrial relations.
- Enhancing succession planning strategies, building bench strength capabilities, as well as acquiring new organisational capabilities in line with our business objectives.
- Creating an environment that celebrates diversity and promotes inclusion, championing ourselves as an employer of choice.

### Climate Change



We will meet all applicable regulatory requirements and aim to be among the sustainability leaders in Singapore, while limiting Keppel's exposure to risks associated with climate change.

### We manage this risk by:

- Establishing the Board Sustainability and Safety Committee (BSSC) to review the processes for identifying, assessing, and managing climate-related risks and opportunities, and related reporting aligned with the recommendations of the Task Force on Climate-related Financial Disclosures1.
  - The BSSC also oversees the adoption of Keppel's sustainability goals and targets, as well as management's plans and progress towards achieving the goals and targets.
  - Conducting periodic scenario analyses of climate-related physical and transition risks on key assets to evaluate the potential likelihood and magnitude of the impact of these risks on Keppel<sup>2</sup>.
- A qualitative scenario analysis of climate-related transition risks and opportunities was conducted in 2023, followed by a quantitative analysis in 2024, focusing on the more quantifiable risks and opportunities, namely the impact of carbon taxes on power generation assets and other assets subject to carbon taxes, and the indirect impact of the rising price of electricity over time in key markets where Keppel operates3.
- Undertaking measures such as including climate-related considerations in investment decisions, improving the energy efficiency of Keppel's assets, considering the impact of rising carbon taxes and electricity prices in the relevant business contracts and seizing climate-related opportunities by providing solutions to help customers reduce or avoid carbon emissions.

More details will be provided in our Sustainability Report 2024.

Task Force on Climate-related Financial Disclosures (TCFD) has fulfilled its remit and disbanded in October 2023. Following the publication of the inaugural ISSB Standards – IFRS S1 and IFRS S2 – the Financial Stability Board has asked the IFRS Foundation to take over the monitoring of the progress on companies' climate-related disclosures from TCFD.

The analyses were conducted over the time periods of 2030, 2050 and 2070 on 19 key assets located in Singapore, China, Vietnam, Indonesia and India. The analysis was done across three climate scenarios of Shared Socioeconomic Pathway (SSP) 2, SSP3 and the International Energy Agency's Net Zero Emissions Scenario, and over two time periods of 2030 and 2050, to manage the impact of higher carbon prices and electricity costs.

### Risk Management

### **NON-FINANCIAL RISKS**

### Health, Safety & Environment (HSE)



We do not condone safety breaches or lapses in all sites where Keppel operates.

### We manage this risk by:

- Establishing the BSSC which provides oversight on Keppel's HSE performance, including the safe condition and responsible operation of Keppel's assets and business, as well as employee health and well-being
- Establishing Keppel's Zero Fatality Strategy which aligns High Impact Risk Activities standards across our global operations.
- Maintaining our commitment on environmental management by closely monitoring Keppel sites
  globally for compliance with relevant local or global environmental standards, including protection of
  the environment and biodiversity.
- Entrenching a strong and proactive HSE culture through various initiatives, including regular safety training for employees, unannounced site visits, pre-festive safety stand-downs, three months look-ahead for high-risk activities, annual Global Safety Time-Out, Keppel Safety Convention, HSE CEO Roundtable and encouraging employees to actively participate in identifying and reporting any potential safety hazards.
- Using technology to enhance workplace safety and health through active identification, monitoring and coordination of work activities with the electronic Permit-to-Work system.
- In 2024, Keppel won four Workplace Safety and Health Awards for exemplary safety performance, implementation of robust HSE management systems, and efforts to innovate solutions that improve HSE.

### **Information Technology and Cyber Risks**



We aim to control information systems technology risks to ensure that incidents do not cause material harm, business disruption, financial loss or reputational damage.

We are committed to protect our data and systems by adopting best practices in cybersecurity.

### We manage this risk by:

- Establishing the Digital Transformation Steering Committee which provides strategic guidance and endorses Keppel-wide technology vision, initiatives and policies.
- Establishing the Keppel Cyber Security Steering Committee which defines strategy and provides oversight on cybersecurity risk and governance in Keppel.
- Periodically reviewing and updating Keppel-wide technology policies to ensure that the control requirements remain relevant in the current cyber and technology risk landscape.
- Establishing the Architecture Review Board to ensure alignment to business and design framework.
- Conducting security vulnerability assessments and penetration testing regularly to validate control
  effectiveness and provide external view of cyber risks to help strengthen Keppel's IT environment.
  Appropriate mitigations/remediations are carried out to reduce or remove associated risks, enabling
  Keppel to better protect its systems and data from malicious attacks and further build cyber resiliency.
- Continuing to enhance our ability to detect and respond to cyber threat actors while safeguarding
  assets from emerging threats through refinement of layered cybersecurity controls in the ever-evolving
  cyber threat landscape.
- Appointing Business Information Security Officer as the cybersecurity business partner for the respective platforms and divisions to work closely with their management to strengthen cyber risk management and build cyber resiliency.
- Conducting training and assessment exercises throughout the year to raise awareness on information security, inculcate a cyber safety culture, and heighten employees' overall awareness to effectively recognise and respond to cybersecurity risks.
- Performing independent external audits as well as internal audits regularly on Keppel's IT policies, IT infrastructure and information security management systems to ensure the adequacy and effectiveness of the controls.
- Conducting IT and cyber business continuity management workshop, disaster recovery and tabletop exercises annually to ensure timely recoverability of business-critical IT systems.

Keppel did not experience any breaches of information security during the year.

### **Proactive Management of Risks**

Effective risk management is dynamic and encompasses the evaluation of both risks and opportunities. Our ERM Framework enables us to respond to the ever-evolving economic environment, business demands and allows us to seize new opportunities as they arise. Our forward-looking risk-sensing approach as well as deep-dive reviews of thematic risks allow us to identify emerging risks and be able to put in place mitigating actions early. Emerging risks, where required, are escalated and reported to the Board Risk Committee and where relevant, to the Board.

The emerging risks identified are:

### **Global Geopolitical Risks**



Continued geopolitical tensions from the protracted Russian-Ukraine war, China's relations with the West, and the Middle East conflicts have and will continue to reshape the global economy.



Inauguration of the new US President in 2025 will likely increase tensions with China and drive significant shifts in trade policies.



Significant shift in China's monetary policy to address the economic headwinds.

### We manage this risk in the following ways:

- Actively monitor the geopolitical landscape to identify potential changes in trade, growth, and innovation in our key markets and formulate pre-emptive strategies accordingly.
- Establish good working relationships with local authorities to stay informed of potential regulatory and policy changes.
- Conduct scenario analysis and stress testing to understand the potential impact of adverse market conditions on the investment portfolio.

### Generative AI (GenAI)



Enables the advancement of Keppel's digitalisation journey to achieve our Vision 2030 goals.



GenAI has started to, and will continue to further boost productivity across Keppel.



Strategically, GenAI and broader AI solutions are expected to enhance Keppel's unique advantages in core business areas.



Potential associated risks from GenAl include reputational damage, loss of customer trust, financial losses, regulatory penalties, litigation, data security breaches, loss of intellectual property, loss of privacy and exposure of sensitive/confidential data.

### We manage this risk in the following ways:

- Keppel's internal AI forum oversees the strategic direction and coordinates the progress on the adoption of GenAI across Keppel.
- Implemented Keppel AI Policy which includes ensuring respect for data privacy, protecting the cybersecurity of systems, avoiding potential bias and allowing users to identify AI-generated content in the use/or development of AI.
- Across 2024, staff have been guided by a set of AI principles and AI Risk Management Guidelines, that were part of our mandatory annual declaration exercise.

Our AI principles guide staff on the dos and don'ts during their respective journeys to harness GenAI for work. These guidelines help them mitigate the risks associated with the use of AI. In addition, specific training modules have been created to educate staff on our AI principles, how to comply with them, as well as the fundamentals of AI and GenAI.

Our AI Risk Management Guidelines take reference from Singapore's Infocomm Media Development Authority (IMDA) Model AI Governance Framework, EU AI Act and includes internal governance, risk assessments, compliance with prevailing laws, the mitigation of bias, the promotion of transparency, and the principle of keeping the human in the loop.

In practice, for each AI tool that we seek to put into production, we put the tool through internal controls to identify potential vulnerabilities that could compromise data security and confidentiality as well as assessing the impact on business operations if AI systems do not perform as intended.

 An AI transformation roadmap was developed to ensure that we both keep pace with the AI technological landscape as well as ensure that we can scale up efficiently and remain governed uniformly in our use of AI.
 The other key component of the roadmap includes the development of a proprietary AI Platform that is fit for purpose for Keppel's unique capabilities and advantages, and that is also the enabling technology for our AI roadmap principles.

### **Nature & Biodiversity**



Growing recognition of the importance of understanding nature and biodiversity-related risks and their potential impacts on businesses and communities.



Nature-related disclosures may increasingly be included in regulatory requirements, while stakeholders may also pay growing attention to Keppel's disclosures.



Keppel operates mainly in urban areas and most of our activities and assets have limited direct impact on nature.

### We manage this risk in the following ways:

- The recommendations of the Task Force on Nature-related Financial Disclosures (TNFD) provide a framework to help companies identify, assess, manage, and where appropriate, disclose their nature-related risks and opportunities.
- Keppel's Environmental Sustainability Policy, available online, includes our commitment to practise good stewardship of the environment by protecting biodiversity and avoiding deforestation.
- We conduct Environmental Impact Assessments for major developments to determine and mitigate their potential impact on the environment.
- Keppel has also been monitoring and disclosing our carbon emissions, wastewater discharge, water withdrawal, and waste generation, which are among TNFD's core global metrics.
- In 2024, Keppel embarked on a further study of TNFD's recommendations, including assessing their
  applicability to Keppel's business and how they can be implemented, where appropriate. More details
  will be provided in our Sustainability Report 2024.

We will continue to monitor emerging regulatory requirements and international best practices regarding nature and biodiversity, and further refine Keppel's policies and disclosures accordingly.