



SEMBCORP MARINE  
**ENGINEERING  
GROWTH**  
IN UNPRECEDENTED TIMES



# CONTENTS

**1**

About the Report

**2**

Chairman's Foreword

**3**

Our Sustainability Performance at a Glance

**4**

Our Approach to Sustainability

**6**

Our Sustainability Vision 2025

**8**

Reshaping for Resilience in the New Normal

**12**

Proactive Supply Chain Management for Business Continuity

**14**

Enabling Sustainability Through Our Value Chain

**16**

Delivering Innovative & Sustainable Solutions

**24**

Fulfilling the Needs of Our Customers

**32**

Addressing Environmental Challenges

**40**

Nurturing Our Human Capital

**48**

Protecting Our People

**56**

Caring for Our Communities

**62**

Operating a Responsible Business

Sembcorp Marine's transformation drive inspired the front cover of our Sustainability Report. As the world pivots towards cleaner, greener and renewable energy, Sembcorp Marine is evolving into a provider of innovative and sustainable solutions for the offshore, marine and energy industries. We are engineering Sembcorp Marine's growth in strategic areas underpinned by our sustainability principles of business growth, environmental sustainability, social growth and corporate governance, which is presented as radiating blades of a propeller setting in motion our Group-wide sustainability drive.

**Cover images (clockwise from top):**

- Battery-powered, zero-emission Ropax (Roll-on/Roll-off Passenger) ferry designed by Sembcorp Marine;
- Sectoral company visit to Tuas Boulevard Yard by Mr Chan Chun Sing, Minister for Trade and Industry, and Mrs Josephine Teo, Minister for Manpower;
- Sembcorp Marine's cylindrical hull designs for offshore wind market; and
- In-house swab centre set up at Tuas Boulevard Yard



This second standalone sustainability report augments our first standalone publication. For a full appreciation of our sustainability programmes and progress, both reports should be read in conjunction.

# ABOUT THE REPORT

Sembcorp Marine's Sustainability Report 2020 is presented as a standalone publication for the second year running in line with our ongoing efforts to enhance our environmental, social and governance (ESG) disclosures.

This is the 10<sup>th</sup> sustainability report we have published since FY2011. Through this report, our sustainability progress and performance are shared in a concise, impactful and engaging manner.

This report is prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core Option, with the GRI Content Index separately published on our website at [www.sembmarine.com/sustainability/sustainability-report](http://www.sembmarine.com/sustainability/sustainability-report).

For FY2020, we have taken into account recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) to guide our sustainability reporting for the first time. Our Sustainability Report is also aligned

with the United Nations Sustainable Development Goals (UN SDGs) and the Oil and Gas Industry Guidance on Voluntary Sustainability Reporting issued by IPIECA, the American Petroleum Institute (API) and the International Association of Oil & Gas Producers (IOGP).

This report is accessible on our corporate website [www.sembmarine.com](http://www.sembmarine.com) and should be read in conjunction with our Annual Report 2020 and online sustainability disclosures.



## SCOPE OF THE REPORT

The scope of our Sustainability Report 2020 covers the yards under our operational control in Singapore, Indonesia and Brazil, unless otherwise stated. These three regions have the most significant sustainability impact on our organisation and our stakeholders. The data reported relates to the financial year ended 31 December 2020.

The terms "Sembcorp Marine", "Sembcorp Marine Ltd", "the Group" and "we" are used interchangeably within the Sustainability Report to reference operations and facilities in Singapore, Indonesia and Brazil, unless indicated otherwise.

The Group's entities included in the consolidated financial statements are detailed in the Notes to the Financial Statements in our Annual Report 2020 (pages 107 to 207), which is published separately at [www.sembmarine.com/investor-relations/annual-report](http://www.sembmarine.com/investor-relations/annual-report).



## ASSURANCE

We have engaged PricewaterhouseCoopers LLP for the fourth year to undertake an assurance of selected sustainability information in our report. The assurance engagement was performed in accordance with the Singapore Standard on Assurance Engagements (SSAE) 3000 – Assurance Engagements other than Audits or Reviews of Historical Financial Information. Details can be found in the Independent Limited Assurance Report on Sustainability Information at [www.sembmarine.com/sustainability/sustainability-report](http://www.sembmarine.com/sustainability/sustainability-report).



## SCAN FOR MORE INFORMATION



### Sustainability Report 2020

- SGX Sustainability Reporting Index
- GRI Standards: Core Option Content Index
- Independent Practitioner's Limited Assurance Report



### Annual Report 2020

Read additional information on our financials, operations, corporate governance and risk management framework



### Sustainability Report 2019



## FEEDBACK

To provide feedback on our sustainability reporting, please email [sustainability@sembmarine.com](mailto:sustainability@sembmarine.com).

# CHAIRMAN'S FOREWORD



“ We continue to drive sustainability in our business and community with a keen focus on four strategic areas, namely decarbonisation, ocean sustainability, digitalisation and social growth. These four pillars of our sustainability pursuit remain highly relevant in the face of today’s challenges. ”

**Tan Sri Mohd Hassan Marican**  
Chairman

The COVID-19 pandemic in 2020 certainly brought to the fore the importance of sustainability and even hastened the momentum of business and sustainability transformation of many organisations.

At Sembcorp Marine, we take a comprehensive approach to sustainability, anchored on our core values to achieve our stakeholders’ immediate and longer term objectives. Sustainability is integrated into the Group’s strategy and embedded into the fabric of how we operate and conduct our business.

Since 2015, the Group has strategically aligned our businesses towards a cleaner energy mix. Our foresight is now validated by the global pandemic and energy transition due to climate concerns.

We continue to drive sustainability in our business and community with a keen focus on four strategic areas, namely decarbonisation, ocean sustainability, digitalisation and social growth. These four pillars of our sustainability pursuit remain highly relevant in the face of today’s challenges.

As we look back at COVID-19 in 2020, our focus on safety and continuity in yard operations enabled us to act swiftly and decisively to protect our employees, customers, business partners and communities where we operate. We activated our Business Continuity Plan for Pandemics, ahead of the implementation of national

pandemic containment measures, and initiated work team segregation, which quickly evolved to standing down of operations and arrangements to work from home. We are thankful that our yard operations have resumed reasonably smoothly since July 2020.

We have clear ambitions with our Vision 2025 strategic roadmap for Sembcorp Marine’s sustainable growth. Among our goals for the next five years, we target to generate 30% of our revenue from sustainable products and solutions by 2025.

We know we have a responsibility and the opportunity to contribute to a more sustainable world. As we forge ahead in engineering our growth, we are resolved to continue to take a proactive stance in sustainability, to create real positive sustainable impact and achieve our stakeholders’ objectives.

A handwritten signature in black ink, appearing to be 'H.S.' followed by a stylized flourish.

**Tan Sri Mohd Hassan Marican**  
Chairman  
Sembcorp Marine Ltd

# OUR SUSTAINABILITY PERFORMANCE AT A GLANCE



**100%**

compliance with anti-competitive behaviour, anti-trust and monopoly policies



**26%**

of annual company turnover from sustainable products and solutions



**>2,190 tonnes**

of carbon emissions avoided by using clean energy generated by the solar panels at Sembcorp Marine Tuas Boulevard Yard, equivalent to taking 684 cars off the road for a year



**WINNER**

of the Sustainability Award at the Seatrade Maritime Awards Asia 2020



**\$1.70 million**

invested in community programmes



**16.06**

training hours per employee globally



**0.65 LTIR<sup>1</sup>**

per million man-hours worked

## Our Strategic Focus Areas:



**DECARBONISATION**



**OCEAN SUSTAINABILITY**



**DIGITALISATION**

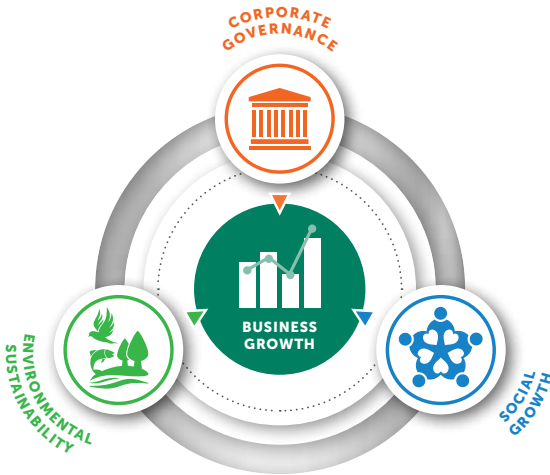


**SOCIAL GROWTH**

<sup>(1)</sup> LTIR refers to Lost Time Injury Rate. For more details, please refer to page 51.



# OUR APPROACH TO SUSTAINABILITY



Sembcorp Marine takes a long-term approach in creating value for our stakeholders. We are committed to minimising our negative environmental impact and supporting our communities, while achieving positive financial performance, business growth and high standards of governance.

Our commitment to sustainability is anchored in our Mission, Vision, and Core Values, which are the guiding principles for our business conduct.

Our sustainability strategy focuses on four key dimensions, namely: Business Growth, Environmental Sustainability, Social Growth and Corporate Governance.



### Business Growth

We actively address the values, needs and priorities of our stakeholders in managing our long-term growth and sustainability.



### Environmental Sustainability

We mitigate our environmental impact by improving resource and operational efficiency, reducing our carbon footprint, and developing sustainable products and solutions.



### Social Growth

We create positive impact on our communities and for our stakeholders through our business and corporate social responsibility activities.



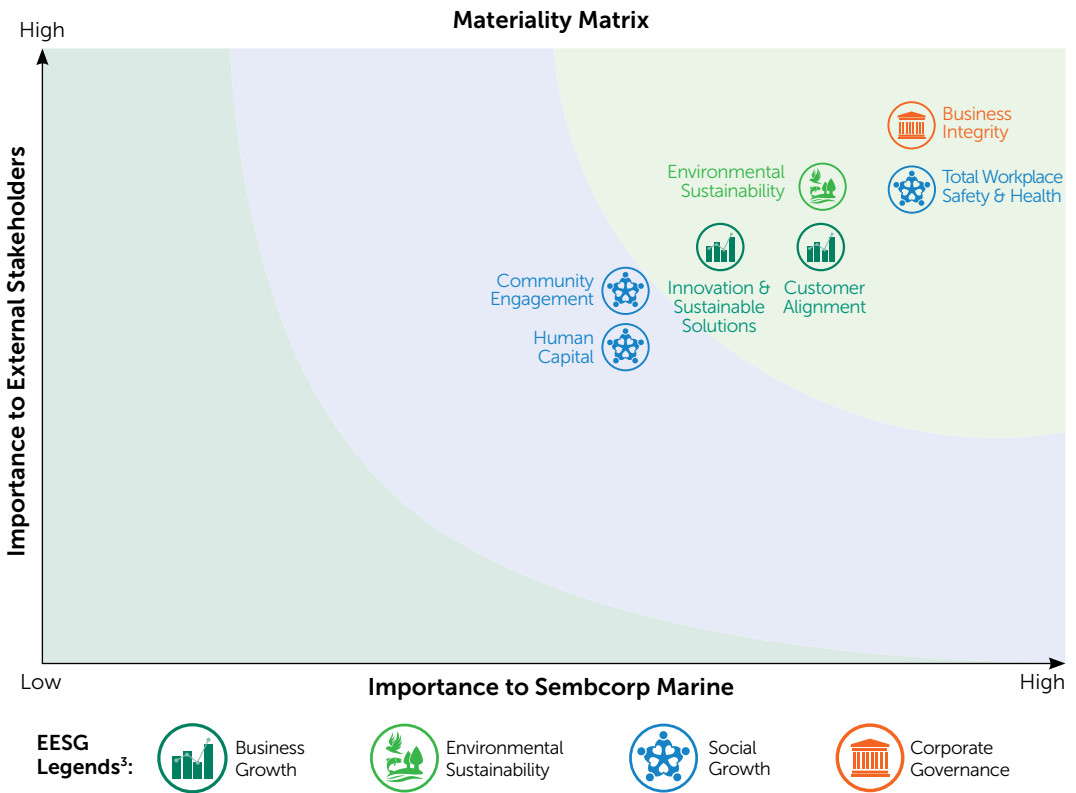
### Corporate Governance

We are committed to regulatory compliance, transparency, accountability and a proactive risk management culture with high ethical standards.

Sembcorp Marine aligns its programmes with 11 UN Sustainable Development Goals and other international frameworks relevant to the Group's business strategy. This is indicated in the subsequent sections on the seven material issues which we have identified.



In 2020, we conducted an internal materiality review<sup>2</sup> with our sustainability champions. The review confirmed that our current list of seven material topics remain relevant to Sembcorp Marine and our stakeholders. We used a materiality matrix to assess the relative importance and priority of our material topics. Based on inputs from both internal and external stakeholders, there is an increasing importance of Innovation & Sustainable Solutions and Environmental Sustainability while Business Integrity and Total Workplace Safety and Health remain the most important material topics for the Group.






(2) Aligns with Global Reporting Initiative (GRI) Standards 101 (clause 1.3), 102-44, 102-46 and 102-47 on defining content and boundaries.

(3) EESG refers to Economic, Environmental, Social and Governance.

# OUR SUSTAINABILITY VISION 2025





We established a set of quantitative and qualitative targets for our material sustainability topics in our Annual Report 2017. As we cross the first landmark in our target timeline in 2020, we took stock of our performance and refreshed our ambitions for the next five years.

	 <b>INNOVATION &amp; SUSTAINABLE SOLUTIONS</b>	 <b>CUSTOMER ALIGNMENT</b>	 <b>ENVIRONMENTAL SUSTAINABILITY</b>
<b>2020 PERFORMANCE</b>	<ul style="list-style-type: none"> <li>Achieved 26% of annual company turnover from sustainable products and solutions</li> <li>Continuing efforts to innovate strategically and proactively in new and disruptive technologies</li> <li>Inked a Master Research Collaboration Agreement with Singapore's Agency for Science, Technology and Research (A*STAR) to jointly pursue innovation in Digital Design and Advanced Manufacturing</li> <li>Completed the LNG collaboration with A*STAR Institute of High Performance Computing and American Bureau of Shipping</li> </ul>	<ul style="list-style-type: none"> <li>Actively tendering for more projects in the greener energy market segments, such as renewable energy and gas solutions, and a similar number for the process solutions segment</li> <li>Maintained 100% compliance with product safety and health</li> <li>Achieved 88% customer satisfaction for repair and upgrading projects</li> <li>Continued to protect customers' data</li> <li>Proactively explore joint development of green energy initiatives with customers</li> </ul>	<ul style="list-style-type: none"> <li>Avoided 2,190 tCO<sub>2</sub>e of carbon emissions through the solar panels at Tuas Boulevard Yard (TBY)</li> <li>No significant fines arising from non-compliance with environmental laws and regulations, and no significant oil spills</li> <li>100% contracted responsible procurement spend</li> <li>Established our Climate Protection Programme 2025</li> <li>Continuing efforts towards ISO 50001 Energy Management System certification</li> <li>Working towards integrating TCFD recommendations</li> </ul>
<b>2020 TARGETS</b>	<ul style="list-style-type: none"> <li>Continue to market gas value chain and floater solutions and secure new projects</li> <li>Continue to invest in research and development of safe and sustainable products and solutions and in Research and Development (R&amp;D) collaborations</li> </ul>	<ul style="list-style-type: none"> <li>Continue to grow client base and secure projects in new market segments</li> <li>Maintain 100% compliance with product safety and health</li> <li>Maintain above 90% customer satisfaction in all projects</li> <li>Maintain 100% quality, health, safety and environmental certifications</li> <li>Maintain high standards of customer security and data privacy protection</li> </ul>	<ul style="list-style-type: none"> <li>Continue to implement initiatives to reduce carbon footprint and mitigate climate change</li> <li>100% contracted responsible procurement spend and business practices in line with Sembcorp Marine's sustainable procurement policy</li> <li>Achieve Building Construction Authority (BCA) Green Mark Gold Plus status at TBY<sup>4</sup></li> <li>Achieve ISO 50001 Energy Management System Certification for TBY</li> </ul>
<b>2025 TARGETS</b>	<ul style="list-style-type: none"> <li>Achieve 30% of annual company turnover generated from sustainable product solutions</li> </ul>	<ul style="list-style-type: none"> <li>Achieve 100% compliance with product safety and health requirements</li> <li>Maintain above 95% customer satisfaction in all projects</li> </ul>	<ul style="list-style-type: none"> <li>Zero harm to environment</li> <li>100% contracted procurement spend in compliance with Sembcorp Marine's Code of Business Conduct and Supplier Code of Conduct</li> </ul>

(4) For more information, please refer to pages 30 and 31 of our Sustainability Report 2019.



Our strong sustainability performance has enabled us to secure our first green financing in March 2021. The \$500 million facility is believed to be the first sustainability-linked loan for the maritime industry which references the Singapore Overnight Rate Average (SORA). Through this green loan, the ongoing achievement of our sustainability targets will allow the Group to benefit from interest cost savings which will contribute to our sustainable growth.

 <p><b>HUMAN CAPITAL</b></p>	 <p><b>TOTAL WORKPLACE SAFETY &amp; HEALTH</b></p>	 <p><b>COMMUNITY ENGAGEMENT</b></p>	 <p><b>BUSINESS INTEGRITY</b></p>
<ul style="list-style-type: none"> <li>• Total investment in global employee training and development was \$2.60 million, equivalent to 0.73% of total payroll</li> <li>• Achieved 16.06 training hours per employee globally</li> </ul>	<ul style="list-style-type: none"> <li>• Accident Frequency Rate, Accident Severity Rate and Workplace Injury Rate at 0.64, 155.12 and 110.31 respectively<sup>5</sup></li> <li>• Achieved 100% participation rate for safety induction for all yard visitors</li> </ul>	<ul style="list-style-type: none"> <li>• Invested \$1.70 million in community programmes</li> <li>• Staff dedicated more than 7,200 hours to participate in community programmes</li> </ul>	<ul style="list-style-type: none"> <li>• Active engagement with governance bodies and sustainability agencies</li> <li>• Maintained 100% compliance with codes of conduct by employees and suppliers</li> <li>• No material incidents of non-compliance</li> <li>• 100% compliance with anti-competitive behaviour, anti-trust and monopoly policies</li> <li>• Successfully completed surveillance audit for ISO 37001 Anti-bribery Management System (ABMS) certification</li> </ul>
<ul style="list-style-type: none"> <li>• Invest 3% of total payroll in workforce competencies and talent development</li> <li>• Achieve 44 training hours or over five training days per employee yearly</li> </ul>	<ul style="list-style-type: none"> <li>• Vision Zero Incidence Goal</li> <li>• Accident Frequency Rate, Accident Severity Rate and Workplace Injury Rate below national benchmarks</li> <li>• 100% participation in safety induction for all yard visitors</li> </ul>	<ul style="list-style-type: none"> <li>• \$2 million annual community investment</li> <li>• Staff share 10,000 hours to participate in community activities</li> <li>• Assist more than 1,000 students through SchoolBAG programme</li> <li>• Attract more than 1,200 students from local and regional institutes to participate in Green Wave Environmental Care Competition</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous collaboration with Global Compact Network Singapore (GCNS) on national industry sustainability capability building</li> </ul>
<ul style="list-style-type: none"> <li>• 3% of total payroll as investment for workforce competencies and talent development</li> <li>• 40 training hours or five training days per employee per year</li> <li>• Build a diverse and inclusive workplace</li> </ul>	<ul style="list-style-type: none"> <li>• Vision Zero Incidence Goal</li> <li>• Workplace Injury Rate below national benchmarks</li> </ul>	<ul style="list-style-type: none"> <li>• \$2.50 million of annual investment for community engagement</li> <li>• 20,000 hours of participation in community projects and volunteering activities by employees</li> </ul>	<ul style="list-style-type: none"> <li>• Uphold the standard of corporate governance disclosures</li> <li>• Manage risks of the Group holistically and prudently within ambit of its risk appetite, safeguard assets and shareholders' interests, as well as comply with applicable laws</li> <li>• Uphold the Group's zero tolerance policy towards fraud, bribery and corruption</li> </ul>

(5) For more details, please refer to page 51.

# RESHAPING FOR RESILIENCE IN THE NEW NORMAL

## Ensuring Safety, Health & Well-being

Expanded capabilities to ensure pandemic readiness and enhance the well-being and welfare of all personnel at the workplace



To safeguard the safety and health of our employees, customers and stakeholders in our yards, we have implemented robust Safe Management Measures to mitigate the risk of COVID-19.



Regular in-house COVID-19 swab tests for personnel on-site

## OUR COVID-19 RESPONSE



## Transforming for Business Continuity

Proactive business continuity measures and digital transformation for operational resilience



We have transformed our work processes and taken measures to mitigate disruptions caused by COVID-19 for business continuity and resilience. The pandemic has accelerated our digital transformation and integration of new technologies in our work processes to rise above the challenges and constraints.



Smart mobile applications implemented for efficient temperature recording

## Engaging our Stakeholders

Stakeholder communications and partnerships to enhance sustainable and responsible practices for effective pandemic response



Scan for more information on our stakeholders and engagement platforms

The Group worked closely with our customers and partners to ensure safe business operations and timely progress of projects. We maintained close connection with stakeholders to ensure their well-being and leveraged digital platforms for timely communications and active engagements.



Distribution of care packs to workers residing in our dormitories

Sembcorp Marine's comprehensive Emergency Contingency Plan has been further augmented since successive flu epidemics of the past. With our robust emergency response framework, we were able to roll out our COVID-19 contingency plan decisively across the Group. Our pandemic-related surveillance, rapid response and strategies for infection control protected our employees, customers and all stakeholders.



*Wearing of face masks and safe distancing across our global yard operations*

- Safe entry controls (e.g. TraceTogether) for contact tracing
- Temperature screening at entrances
- Twice-daily temperature recording mobile application
- Wearing of face masks
- Safe distancing demarcation
- Stepped up disinfection and cleaning of facilities.
- Regular routine swab tests for personnel on-site
- Appointment of trained Safe Management Officers and Safe Distancing Officers



*Digital non-contact thermal scanners provide quick and accurate temperature screening*

- Developed mitigation plans and actions to address operational risks and disruptions to supply chain
- Implemented Safe Management Measures as well as staggered and remote work arrangements for business and operational continuity
- Leveraged digital platforms for interfacing with employees, business partners and suppliers
- Developed smart applications and enterprise IT solutions to enable flexible work arrangements for operational resilience and business continuity
- Harnessed technologies for remote work execution (e.g. remote vessel surveying)
- Application of digital platforms and IT security controls for key processes and controls
- Engaged internal and external stakeholders via virtual conferencing



*Working with customers for the safe and timely execution of projects*

- Proactive exchanges with stakeholders on business continuity plans, pandemic response best practices and risk mitigation measures
- Provide support to partners affected by the pandemic
- Ensure regular communications and active engagements to maintain strong links with stakeholders
- Extend care and support to stakeholders impacted by COVID-19

## RESHAPING FOR RESILIENCE IN THE NEW NORMAL

### STAKEHOLDERS ENGAGEMENT DURING COVID-19



#### Employees & Contractors

- Safeguard employees' and contractors' well-being through safe management measures
- Engagement on business continuity and digital transformation
- Virtual team meetings/work discussions



#### Customers

- Active engagement with customers to ensure business continuity, safe work resumption and timely completion of projects
- Resumed discussions on project tenders/bids
- Remote work execution/surveys and virtual meetings



#### Communities

- Organise virtual engagement activities for foreign workers in our community
- Contribute face masks, sanitisers and essentials to local communities in Singapore, Brazil and Indonesia



#### Government & Industry Partners

- Identification and management of sourcing restrictions by authorities
- Close engagement with government and industry partners
- Management participation in national and industry dialogues on COVID-19 mitigation and financial relief packages



#### Business Partners & Suppliers

- Close interface with partners and suppliers on business continuity plans and mitigation measures
- Assist suppliers and contractors affected by pandemic control measures
- Use digital platforms for managing suppliers, trade and business meetings



#### Investors, Finance Professionals & Media

- Engage investors, buy-side/sell-side finance professionals, media by virtual conferences, web meetings and teleconferences
- Held Annual General Meeting and Extraordinary General Meeting via electronic means

## SHARING INSIGHTS WITH THE PUBLIC SECTOR TO DRIVE INDUSTRY RECOVERY

Sembcorp Marine works in close partnership with public sector agencies to drive the recovery for the marine, offshore and energy industries. On 9 November 2020, we hosted a ministerial delegation comprising Mr Chan Chun Sing, Minister for Trade and Industry, and Mrs Josephine Teo, Minister for Manpower, to Tuas Boulevard Yard.

During the walkabout and dialogue session held as part of the visit, our Chairman Tan Sri Mohd Hassan Marican, President & CEO Mr Wong Weng Sun, and key management representatives shared insights into the Group's COVID-19 response and strategic initiatives for sustainable growth.

In his ministerial address, Minister Chan commended industry players such as Sembcorp Marine for their continuous investments to "build up capabilities for the long term" and "groom their engineering talent". This has enabled the Group to pivot into new areas such as Liquefied Natural Gas (LNG), offshore wind as well as smart and digital products, in line with the growing demand for cleaner, greener and renewable energy solutions.

"With this kind of challenges on the horizon, it is therefore very important for our industry to have the engineering capabilities to pivot to new areas .... Sembcorp Marine (has) continued to invest in and build up capabilities for the long term, and ... groom their engineering talent to make sure that they are ready for future projects."

*Mr Chan Chun Sing, Minister for Trade and Industry*

"(Firms) are also moving into new business areas and understand the importance of sustainability. The new 3Ds are decarbonisation, dealing with disruption and digitalisation."

*Mrs Josephine Teo, Minister for Manpower*



*Briefing Mr Chan Chun Sing (third from left), Minister for Trade and Industry, and Mrs Josephine Teo, Minister for Manpower, on the Group's integrated solutions and capabilities*



*Exchanging insights during the dialogue session*

### Augmenting our Technology Bench Strength and Capabilities

Sembcorp Marine's strategic initiatives to expand its capabilities for sustainable growth include:

#### Gas Innovation and Solutions Centre

- Focusing on design and engineering capabilities for LNG-battery hybrid tugs, LNG bunkering vessels and Gravifloat-based LNG refuelling terminals

#### Post-graduate Programme

- Supporting employees' development in emerging areas such as hydrogen liquefaction process and transport, electrification and autonomous systems

#### Professional Conversion Programme

- Reskilling and upskilling employees with new expertise and know-how



# PROACTIVE SUPPLY CHAIN MANAGEMENT FOR BUSINESS CONTINUITY



The global disruptions caused by the COVID-19 pandemic in 2020 highlighted the importance of a sustainable and resilient supply chain that is enabled by robust digital procurement platforms and solutions.

Supply chain disruptions arising from pandemic control measures and restrictions by governments impacted business activities, receipt of goods and services, and global transportation routes. This had affected the ability of suppliers to manufacture, distribute and deliver materials, equipment packages, consumables and services from and to pandemic-affected areas. Limitations to manufacturing capabilities also caused uncertainties in production, price and market availability.

In this volatile supply chain environment, Sembcorp Marine responded proactively to address the impacts and implemented risk mitigations where needed.

Building on robust sustainability processes in our supply chain management framework, we implement strategies to mitigate disruptions, ensure business continuity and maintain competitiveness. Digital platforms and technologies are also deployed for procurement process continuity and interface with partners and stakeholders.

## SUPPLY CHAIN

### Safeguarding against supply chain disruption risks

We proactively monitor the supply and pricing of key materials, equipment and consumables as well as sourcing restrictions imposed by government authorities to identify potential risks in our supply chain.

As part of our strategy to buffer against supply chain disruptions, we deploy strategic frame agreements with key suppliers to secure essential supplies for our operations.

Our global supply network enables access to diversified procurement channels and sources in different geographies, enabling us to meet shipping and trade restrictions. We also partner local suppliers to leverage their local inventory and supply sources.

We work closely with authorities to ensure uninterrupted supply of essential services — such as waste treatment, freight forwarding, shipping-related logistics and maintenance services for our operations.



Enabling and deploying strategic sourcing arrangements with key suppliers from diverse sources to mitigate disruptions

### Upholding high levels of compliance standards

We continue our due diligence and actively monitor suppliers' financial health and their ability to deliver to specifications and comply with our sustainability requirements and codes of conduct. This is especially important when alternative suppliers or geographical sources are used.

Quality assurance on suppliers' production and factory acceptance tests (FAT) are conducted via remote video surveillance solutions to ensure continued compliance to technical requirements and industry standards.

These solutions enable us to uphold consistent standards of compliance and to meet emergent regulatory restrictions imposed by different countries' authorities in challenging operating conditions.



Supplier surveillance and audit via remote inspections arrangements



## MANAGEMENT FRAMEWORK

### Engaging and collaborating with stakeholders

Managing a sustainable and resilient supply chain requires close engagement and collaboration with our stakeholders, especially during periods of disruptions.

We engage our suppliers to closely monitor the availability of key materials, equipment and consumables to identify possible disruption points in the supply chain.

Recovery plans are developed to mitigate areas of supply and delivery disruptions to our project and production processes.

We also support our suppliers to help them address their operational challenges, share pandemic response best practices and manage sourcing restrictions in compliance with authorities.



*Vendors sharing new technologies and product innovations via virtual technical meetings*

### Integrating digital procurement processes

To ensure business continuity and operational resilience, we leverage digital procurement platforms for supplier interfacing, sourcing and management. These platforms allow for effective control as well as secure procurement processes and transactions to be carried out away from physical workspaces.

In line with COVID-19 safety measures, we utilise remote inspection solutions and video conferencing for supplier engagement, audits and business meetings. We also conduct supplier performance surveillance and monitoring through our digital platforms.



*Leveraging established procurement digital platforms for interfacing with supply chain partners*

### Ensuring optimal inventory levels

We closely track our inventory flows, delivery and deployment of materials, equipment and consumables for ongoing projects in our yards.

We actively monitor and replenish our inventory levels with adequate buffer as well as standby contingency supply sources to ensure continuity of our operations.

Optimisation of inventory is especially important to address evolving and dynamic project and production supply requirements. Where necessary, we establish advance delivery plans with strategic vendors to ensure timely and reliable supplies to meet critical project requirements.



*Monitoring of inventory flows for tight inventory supply and replenishment management*

# ENABLING SUSTAINABILITY THROUGH OUR VALUE CHAIN

## Developing Sustainable Designs & Solutions

- Development of sustainable and environmentally-friendly solutions that reduce carbon footprint and minimise impact on the marine environment and biodiversity
- Energy and resource-efficient designs and engineering solutions that minimise use of natural and hazardous materials
- Support customers in developing Inventory of Hazardous Materials documentation

## Ethical Sourcing & Responsible Procurement

- Sustainable and ethical sourcing in compliance with Sembcorp Marine codes of conduct and government regulations
- Procure and utilise materials that are environmentally friendly and from non-conflict sources
- Responsible service and manpower contracting

## Solutions for Asset Repurposing, Product Revitalisation, Life Extension & End-of-Life Treatment

- Maximise value and extend service life of customers' existing assets through repairs, upgrades and conversions
- Prepare customers' marine and offshore assets for safe end-of-life treatment and recycling



## Ensuring Sustainable Operations & Providing End-of-life Support

- Provide training and documentation for safe and sustainable product operation
- Provide after-sales support following delivery
- Offer technical support for end-of-life treatment and recycling

## Integrating Quality, Health, Safety & Environment (QHSE)

- Integrate quality, health, safety and environmental standards into our value chain processes
- Ensure solutions fulfill regulatory requirements and classification standards

## Operational Sustainability & Responsible Labour Practices

- Implement environmentally friendly operational processes that are enabled by Industry 4.0 technologies to enhance sustainability, reduce carbon footprint and minimise wastage
- Adopt fair and sustainable labour practices
- Create a diversified and inclusive work environment

## Reducing Carbon Footprint of Towing Operations

- Low-carbon towing operations for environmental sustainability

Scan for more information on our value chain management



At Sembcorp Marine, we carefully and proactively manage each stage of the life-cycle of our products and solutions — from design and engineering to production and delivery — to mitigate our environmental, social and governance impacts. We use resources more efficiently by transforming a traditionally linear business process into a circular value chain through continuous innovation.

Sustainable products and solutions are conceptualised at the innovation and solutions development phase of our value chain. We incorporate sustainability and material circularity objectives into our product designs by adopting more efficient solutions and proactively managing hazardous materials. Similarly, during procurement, our teams source for sustainable materials and socially responsible service providers and contractors.

After final production, construction and commissioning, we transport and deliver the completed products with our low-carbon fleet and provide training and documentation support for customers to operate their assets in a safer and more resource-efficient manner. Through repair, upgrade and conversion projects, we give our customers' existing assets a second lease of life, thus contributing to their sustainability objectives. We also help our customers prepare their end-of-life assets for safe and efficient recycling and scrapping.

At each stage of our value chain, we uphold high standards of quality, health, safety and environmental compliance in all aspects of our operations.

## **OUR PROVEN CIRCULAR VALUE CHAIN SOLUTIONS**

### **Repurposing Assets Through Conversion**

We enable the repurposing of our customers' assets to maximise their life-cycle value.



*Conversion of Floating Storage Regasification Units from LNG tankers*



*Conversion of Floating Storage Units from LNG carriers*



*Repair, life extension and conversion of Very Large Crude Carriers to Floating Production Storage and Offloading vessels*

### **Asset Revitalisation, Life Extension & End-of-Life Treatment**

We extend the life-cycle of a wide range of marine, offshore vessels and platforms. We also support our customers in their end-of-life asset management by preparing their marine and offshore assets for safer recycling and scrapping.



*Overhaul, revitalisation and renewal of cruise ships*



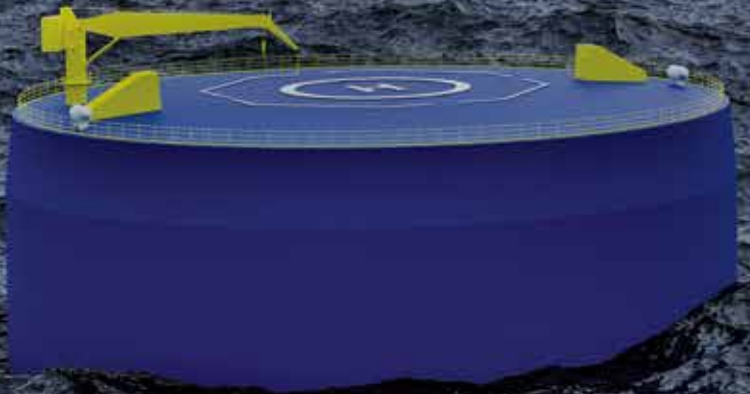
*Longevity works to extend the service life of LNG carriers*



*Demucking works to treat vessels for safe recycling and scrapping*

# DELIVERING INNOVATIVE & SUSTAINABLE SOLUTIONS

ADVANCING TECHNOLOGICAL RESPONSE  
AND THE CREATION OF INNOVATIVE  
SOLUTIONS, FROM CONCEPTUALISATION  
TO COMMERCIALISATION, TO SUPPORT  
GLOBAL DECARBONISATION GOALS







## **SOFIA OFFSHORE WIND FARM - ONE OF THE WORLD'S BIGGEST OFFSHORE WIND FARMS AT THE UK NORTH SEA**

In July 2020, Sembcorp Marine and GE's Grid Solutions were selected by German utilities company RWE Renewables as the preferred suppliers for the high voltage direct current (HVDC) electrical transmission system for the 1.4 gigawatt Sofia Offshore Wind Farm. This further strengthens our strategic diversification into greener solutions.

## DELIVERING INNOVATIVE & SUSTAINABLE SOLUTIONS

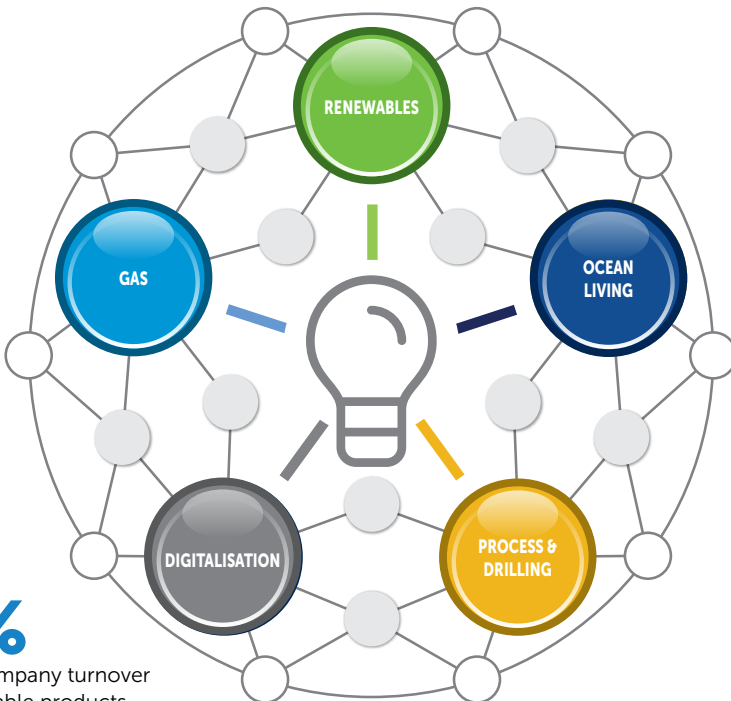
Our contribution towards decarbonisation is realised through our sustainable products and solutions aligned to our five areas of innovation focus. For each focus area, we actively manage the risks, explore opportunities and engage in research and development, with strategic collaborations, to deepen our core engineering capabilities. Our pipeline of sustainable products and solutions also comply with some of the world’s strictest safety, quality and engineering regulations. This ensures that our solutions achieve zero harm to people and the environment.



*“Decarbonisation is a multi-faceted issue requiring different perspectives and collaborations. Sembcorp Marine is proud to support Singapore’s push for decarbonisation and we look forward to contributing our experiences from developing low-carbon engineering products and solutions for the global markets, and from our ongoing efforts to tap solar power in our yard operations.”*

- Mr Wong Weng Sun, President & CEO of Sembcorp Marine

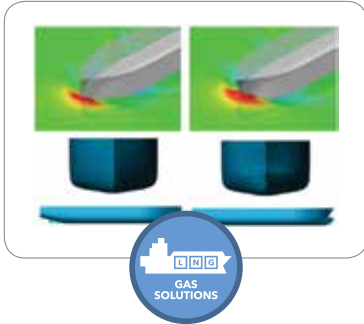
## OUR INNOVATION FOCUS



Achieved  
**26%**  
of annual company turnover  
from sustainable products  
and solutions in 2020



## OUR WORK IN 2020



### Largest membrane type LNG bunker vessel in Asia

The 12,000 cubic metre GTT Mark III Flex membrane tanks are the largest ever built in Singapore and the rest of Asia. This state-of-the-art design allows for safe transfer of LNG during bunkering operations as well as reducing loss of cryogenic LNG through evaporation. This vessel also boasts an optimised vessel hull form using computational fluid dynamics (CFD) as shown on the left, and energy-efficient designs that effectively reduce carbon emissions during operation.



### Floating offshore wind turbine solution for moderate to harsh environment based on the SWACH design

As the offshore wind market is moving into deeper and harsher environments with larger turbines, our subsidiary, Sevan SSP, developed a cost-efficient floating foundation for offshore wind turbines. Based on our proprietary Sevan SWACH (Small Waterplane Area Cylindrical Hull) design, the cylindrical floating foundation solution is scalable to house the largest wind turbines and offers excellent motion characteristics in harsh conditions.



### Work Boat World Best of 2020 Awards "Best Medium Ro-Pax" design – Hjeljestad

Hjeljestad, an aluminium hybrid plug-in double-ended ferry LMG-16-DEH, designed by our wholly-owned subsidiary, LMG Marin, won the Best Medium Ro-Pax Award at the Work Boat World awards. This ferry, which accommodates 16 cars and 80 passengers, is powered by a biodiesel and electrical propulsion system. The lithium-ion batteries onboard are charged by onshore hydroelectric power, reducing the emissions of vessel operation to zero.



### Strength through collaboration – Bringing ideas to life

In February 2020, Sembcorp Marine inked a Master Research Collaborative Agreement (MRCA) with Singapore's Agency of Science, Technology and Research (A\*STAR) to set up Joint Lab@TBY to pursue innovation in Digital Design and Advanced Manufacturing. This collaboration aims to pave the way for shorter time-to-market solutions by boosting our engineering capabilities, production capacity and efficiency. Joint Lab@TBY will capitalise on ongoing construction projects which will provide a real-world environment for research.

## DELIVERING INNOVATIVE & SUSTAINABLE SOLUTIONS

### Sembcorp Marine Offshore Wind Innovation & Solutions

Sembcorp Marine is committed to providing innovative and sustainable engineering solutions for the global offshore, marine and energy industries. In keeping with the global shift towards a cleaner and greener energy mix, we developed a suite of solutions across the entire offshore wind value chain.




**Sofia HVDC Substation**  
Offshore Fixed Platform




**PC1200 | 1600 | 2000 WTIV**  
Wind Turbine Installation Vessel




#### OUR OFFSHORE WIND VALUE CHAIN



**Marine & Geophysical Survey**  
Hydrographic Vessels, Offshore Survey Vessels



**Fixed & Floating Foundations**  
Jackets, Monopiles, Spars, TLPs, Semi-submersibles



**Substations & Platforms**  
Offshore Substations, Renewable Hub



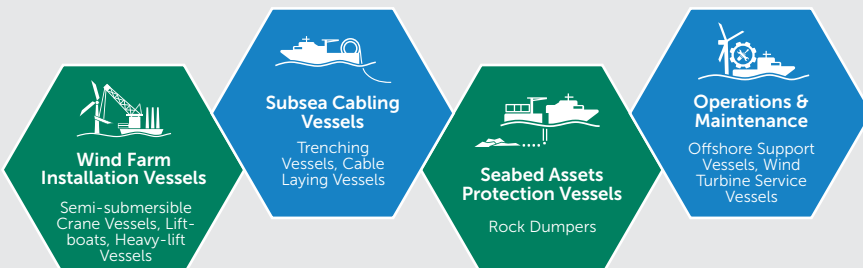
**ASEAN Explorer**  
Cable Laying Vessel



**FLINSTONE**  
Offshore Rock Placement Vessel



**LMG 400 Offshore Service Operation Vessel (SOV)**  
Support Vessels, Wind Turbine Service Vessels



## DELIVERING INNOVATIVE & SUSTAINABLE SOLUTIONS

### TOWARDS A LOW CARBON FUTURE THROUGH COLLABORATIONS

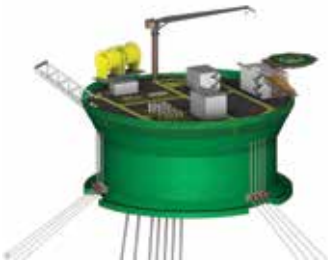


#### Gas Collaboration

Successfully completed Joint Development Projects (JDP) on LNG with American Bureau of Shipping (ABS) and A\*STAR's Institute of High Performance Computing (IHPC) comprising Risk Analysis for LNG Bunkering Leakage & Explosion and LNG Boil-off Rate Determination & Management. The image (left) is the result obtained from a CFD simulation showing a gas cloud (cyan color) resulting from an LNG leak during bunkering operation for two designs of bunkering station: with enclosure (first from left) and without (second from left).

#### Large Scale Maritime Fuel Cell Systems

A collaboration between Corvus, Toyota, Equinor, Norled, Wilhelmsen, LMG Marin, the NCE Maritime CleanTech cluster and University of South-Eastern Norway (USN) to develop and produce modularised and cost-effective Proton Exchange Membrane (PEM) fuel cell systems for the international marine market.



#### Carbon Capture Project - Stella Maris

A collaboration by Altera Infrastructure, TGE, Moss Maritime and Sevan SSP (a wholly-owned subsidiary of Sembcorp Marine) to explore and develop a commercially competitive solution for large scale maritime transport, offshore discharge, floating storage and injection of CO<sub>2</sub> for permanent storage in subsea reservoirs.

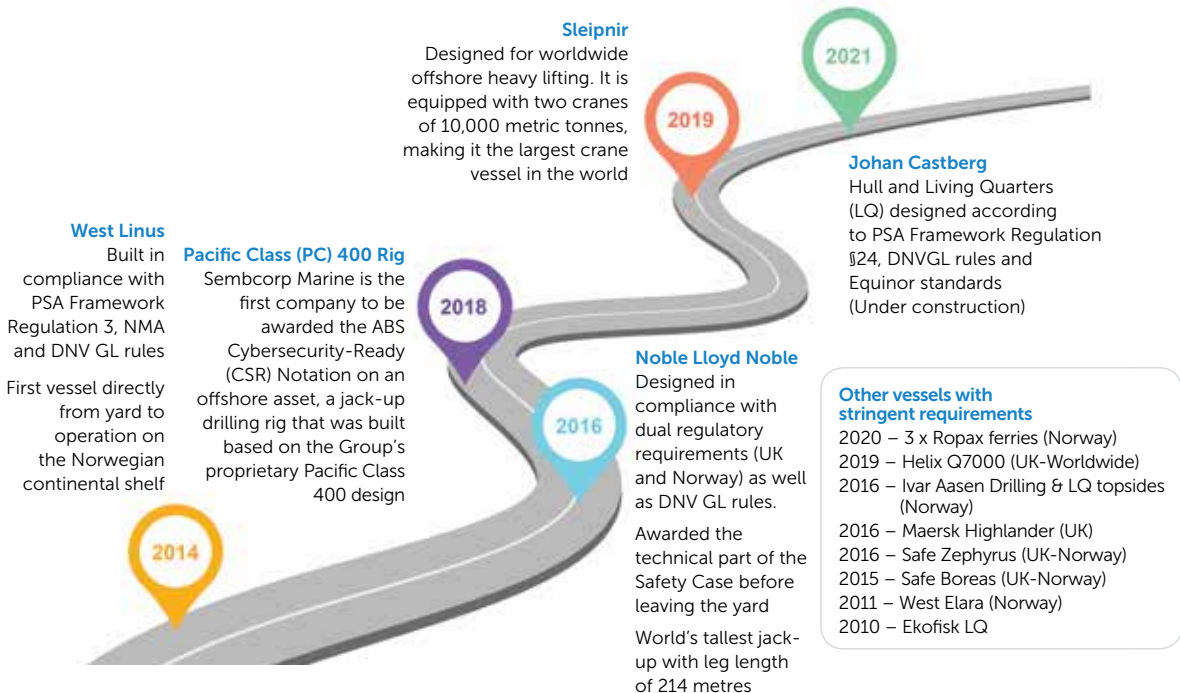
## ENSURING A SUSTAINABLE FUTURE THROUGH COMPLIANCE

Marine and offshore assets are capital intensive and often operate under harsh environment. To ensure the safety of the crew, the environment and the asset, we design, build and deliver our products and solutions according to stringent international standards. These regulatory and statutory requirements include among others Norwegian's NORSOK standard, UK HSE requirements, Norwegian Maritime Authority Regulations as well as the Code for Construction and Equipment of Mobile Offshore Drilling Units (MODU).

The responsibility to ensure these regulations are met lies with a dedicated team of regulatory compliance and technical safety engineers who are involved in every stage of the project. Using tools such as standard operating procedures, flowcharts, checklists and experience transfer from past projects, our engineers continuously innovate their work processes to execute projects seamlessly. As new regulations addressing different aspects of Health, Safety and Environment are introduced periodically, our team undergoes regular competency development courses to be kept up-to-date and relevant.

In addition to safety and environmental regulations, Sembcorp Marine is also cognisant of the need to secure solutions and protect assets from cyberspace threats. To this end, we have developed competencies in implementing cybersecurity requirements, including the Cyber Manage Prepared (CMP) notation from Bureau Veritas which we have done for a newbuild LNG carrier to meet the IMO's Resolution MSC (98).

## BUILT TO THE WORLD'S STRICTEST REQUIREMENTS







SWL

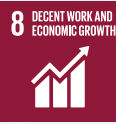
SWL 15000T



# FULFILLING THE NEEDS OF OUR CUSTOMERS

MEETING CUSTOMERS' BUSINESS  
OBJECTIVES OF SAFETY, QUALITY,  
TIME AND COST





## **SHELL VITO FLOATING PRODUCTION UNIT FOR A DEEP-WATER DEVELOPMENT IN THE U.S. GULF OF MEXICO**

With our state-of-the-art 30,000-tonne cranes at Tuas Boulevard Yard, the Vito FPSU topside will be assembled into a mega-block and combined with the hull efficiently in one single lift. Through the strategic strengthening of our yard's capabilities, we enhance our value proposition as a one-stop production centre capable of fabricating, assembling and installing larger and heavier integrated structures with greater cost-efficiency.

## FULFILLING THE NEEDS OF OUR CUSTOMERS

# We Are The Trusted Partner For Global Decarbonisation



### Renewables Solutions

#### Advancing a low carbon future

PC-series Offshore Wind Turbine Installation Vessels (WTIV), Offshore fixed and floating foundations, Offshore substations and platforms, Offshore support vessels, Wind turbine service vessels, Cable laying vessels



### Process Solutions

#### Providing trusted solutions to serve the offshore value chain

Floating Production, Storage and Offloading vessels (FPSO), Floating Storage and Offloading vessels (FSO), Floating Production Units (FPU)



### Gas Solutions

#### Supporting the global energy transition towards cleaner fuels

Gas exploration solutions, Floating Liquefied Natural Gas vessels (FLNG), Gas carriers, Liquefied Natural Gas (LNG) bunker vessels, LNG terminals (import/export, gas to power), Floating Storage Regasification Units (FSRU), LNG-fueled ships, LNG vessel repairs



Sembcorp Marine designed and is constructing three identical battery-powered Ropax ferries with zero-emission technology for Norled AS. While taking our utmost care to ensure the safety of our customers, vendors and our workforce amid the threat posed by COVID-19, we continue to make progress in the vessels' construction in collaboration with Norled AS



Sembcorp Marine strives to create value for customers and to accelerate sustainability within the offshore, marine and energy industries. We are committed to the timely delivery of innovative products and solutions that are aligned to our customers' needs and which meet high standards of quality, health, safety and environment. Through our greener energy and renewables solutions, we support the global transition towards cleaner fuels and a low carbon future. Our suite of green retrofit solutions and eco-friendly technologies also help mitigate our customers' impact on the climate and biodiversity.



### Ocean Living Solutions

#### Enabling sustainability in ocean living

Mid-sized cruise ships, Expedition ships suited for exploration of the Arctic and Antarctic regions, Mid-large-sized Ropax ferries addressing energy transition market, Deep-seagoing mega luxury yachts



### Advanced Drilling Rig Solutions

#### Delivering advanced solutions that fulfil high QHSE standards

Low carbon, energy-efficient drillships and rigs



### Digitalisation

#### Harnessing Industry 4.0 technologies for smarter and safer product solutions and operations

Autonomous and Remote-operated vessels, Digital Twin solutions

New generation, smart and sustainable yard operations augmented by highly automated steel structure fabrication workshop, automated pipe workshop, additive manufacturing, solar roof with digital management system and seamless secured connectivity



Fabrication of 15 wind turbine jacket foundations for the Formosa Phase 2 Offshore Wind Farm



## FULFILLING THE NEEDS OF OUR CUSTOMERS

### Our LNG Solutions : Supporting the Global Energy Transition

Supporting the adoption of cleaner energy across the shipping and global supply chain through LNG as a reliable, efficient and sustainable low-carbon fuel.



## WORLD'S Number 1

in the LNGC/FSRU/FSU sector with a total of  
**18** repair and conversion projects in 2020



Successful delivery of the conversion project of FSU CNTIC VPower Energy for VPower Group/Synergy Marine Group



Fabricating six wellhead risers platform topsides and four bridges at Sembcorp Marine Admiralty Yard for Total E&P Danmark A/S in the Tyra Redevelopment Project.



Heavy lift of the 3,200-tonne mid-ship block of the dual-fuel 12,000cbm LNG bunker vessel at Sembcorp Marine Tuas Boulevard Yard. Designed by Sembcorp Marine, it is the largest LNG bunker vessel being built in Singapore.

Conversion and upgrading of FSRU Karmol LNGT Powership Africa and Karmol LNGT Powership Asia for Mitsui O.S.K. Lines, Japan and Karpowership, Turkey (under co-brand KARMOL)



FSRU conversion and upgrading of Torman II for Gasfin Development S.A./NYK



LNG vessel repairs and upgrades for GasLog LNG Services

FULFILLING THE NEEDS  
OF OUR CUSTOMERS

ACHIEVING KEY MILESTONES  
TOGETHER THROUGH SAFE AND SUSTAINABLE OPERATIONS



In August 2020, we delivered the offshore wind farm jacket foundations for the Hornsea 2 Offshore Wind Farm in the UK North Sea to Ørsted A/S.



In March 2020, we completed the major upgrade of Asuka II, Japan's largest cruise ship, for NYK Cruise. The upgrade involved extensive refurbishment and scrubber installation.



We successfully completed the conversion and upgrading of CNTIC VPower Energy FSU—amid global supply chain disruptions, travel restrictions and crew change challenges. The FSU was delivered in November 2020.

Completed repairs and upgrades on  
**26**  
cruise ships in 2020

Completed  
**34**  
Ballast Water Management System retrofit projects and  
**16**  
scrubber projects during the year



We successfully retrofitted scrubbers for Maran Tankers.



## CREATING EFFECTIVE AND SUSTAINABLE COLLABORATIVE PARTNERSHIPS



In 2020, Sembcorp Marine and our consortium partner GE's Grid Solutions were selected by RWE Renewables, owner of the 1.4 gigawatt Sofia Offshore Wind Farm, as the preferred supplier for the Wind Farm's High Voltage Direct Current (HVDC) electrical transmission system. Our scope of work includes the design, construction, installation and commissioning of the offshore converter platform for the project. We have started early design works and expect the Final Investment Decision (FID) to be made in the first quarter of 2021.

Located on the Dogger Bank, 195 km off the UK coast in the Central North Sea, Sofia spans an area of 593 km<sup>2</sup>. With a capacity of 1.4 gigawatt that will power nearly 1.2 million UK homes with clean and renewable energy, Sofia will be one of the largest wind farms in the world.



Sembcorp Marine is continuing with the pre-FID engineering work for Siccar Point Energy Cambo FPSO in anticipation of development sanction on the project in late 2021. We are very delighted to work with Siccar Point since 2019 in developing an innovative cylindrical FPSO for the Cambo field. This is another unique design-and-build project where the solution is based on our proprietary Sevan geostationary circular hull, a cost-effective alternative to traditional ship-shaped and turret-moored designs. The Sevan cylindrical hull eliminates the need for a costly turret while accommodating a larger number of risers and flexibility for future tie-ins.

In 2020, Sembcorp Marine is also pleased to have collaborated with the Defence Science and Technology Agency (DSTA), Singapore, on a concept based on an existing proven design by LMG Marin.

**SEMBCORP MARINE'S LNG-BATTERY  
HYBRID TUG – WORLD'S FIRST TO  
BE EQUIPPED WITH GAS ENGINES  
FROM ROLLS-ROYCE**

The new LNG-battery Hybrid Tug, which will be operational at Tuas Boulevard yard in 2021, is one of the 12 low carbon emission tugs commissioned to be built as part of our decarbonisation strategy.



# ADDRESSING ENVIRONMENTAL CHALLENGES

IMPROVING AND INNOVATING OUR OPERATIONS TO  
REDUCE OUR CARBON FOOTPRINT, CONSERVE NATURAL  
RESOURCES AND PROTECT THE ENVIRONMENT



7 AFFORDABLE AND CLEAN ENERGY

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

17 PARTNERSHIPS FOR THE GOALS

## ADDRESSING ENVIRONMENTAL CHALLENGES

Sembcorp Marine supports the goals of the Paris Agreement with a clear strategic direction. We have embarked on climate programmes to reduce the Greenhouse Gas (GHG) emissions in our operations and continue to design and deliver sustainable solutions for our customers.

This year, we have started to align our disclosures with those recommended by the Task Force on Climate-related Financial Disclosures (TCFD), specifically our approach to address the four core elements – governance, strategy, risk management and metrics and targets. We plan to provide further disclosures on this in the future. We are also enhancing our environmental policy to guide our management approach and strategy on issues such as climate change mitigation, adaptation and resilience, and ensure that it is implemented across our various operational sites.

In this report, we voluntarily publish our climate-related financial disclosures in the four key areas as recommended by the TFCFD.

### GOVERNANCE



Sembcorp Marine's Board of Directors and Senior Management Committee (SMC) have oversight of climate-related risks and opportunities through the Sustainability Council which oversees our corporate sustainability strategies, policies, performance and mitigation actions.

The Sustainability Secretariat reports to the Sustainability Council and coordinates with the Economic, Environmental, Social and Governance (EESG) working groups to implement strategies, identify emerging issues and engage our stakeholders on sustainability issues, including climate-related matters.

To guide the Group's strategic direction, the Board and SMC meet annually to review key business plans while taking into account climate-related risks and opportunities.

### STRATEGY



Climate-related risks and opportunities are integrated into Sembcorp Marine's business strategy through the annual strategic planning process and our environmental sustainability framework. We have identified policy and regulation changes, technological shifts, evolving stakeholder expectations, and growing threat of extreme weather events as key climate-related risks.

In keeping with the global and industry shift towards decarbonisation, we proactively leverage our engineering capabilities to diversify into gas value chain and renewables solutions, including offshore wind farms and zero-emission vessels. We also pursue opportunities in energy-efficient and low-emission engineering solutions to help ship owners comply with more stringent fuel and emission regulations through retrofits and upgrades.

Moving forward, we plan to conduct scenario analysis to evaluate the resilience of our business strategy against climate-related risks and opportunities for different time horizons.

Sembcorp Marine implemented five Environmental Management Programmes (part of our ISO 14001 Environmental Management System) to sustain an environmentally-friendly culture in our yards by promoting efficient use of material, energy and natural resources, while minimising waste and preventing adverse environmental impact, including mitigating climate change, during our operations.

**Natural Resources & Energy Management Programme**



**Air Quality Management Programme**



**Waste Management Programme**



**Water Quality Management Programme**



**Control of Chemical/Hazardous Substances Programme**



### RISK MANAGEMENT



Our Environmental Sustainability workgroup identifies, manages, monitors and controls environmental issues arising from our operations through risk assessment and environmental impact assessment as part of our ISO 14001 Environmental Management System.

The Group also actively pursues opportunities to leverage its capabilities to provide sustainable solutions as well as implement energy- and resource-efficient solutions in its operations to reduce climate-related risks and mitigate our environmental impact.

### METRICS & TARGETS



Sembcorp Marine uses a robust set of metrics and targets to manage and monitor our exposure to climate-related risks and opportunities.

To manage the risk of higher energy costs due to higher carbon taxes in the future, we measure and monitor the share of renewable energy in our energy mix and Scope 2 GHG emissions from our consumption of purchased energy.

We have also set up metrics and targets to monitor our progress in pursuing climate-related opportunities. We have been actively investing in R&D and pursuing business opportunities for our gas and renewable energy solutions and target to generate at least 30% of our total revenue from these by 2025.



ADDRESSING ENVIRONMENTAL CHALLENGES

Sembcorp Marine's Climate Programmes



As the world transits to a low-carbon economy to fight climate change, Sembcorp Marine is committed to using our resources optimally while delivering sustainable solutions and services to our

customers. Reducing our carbon footprint is our main priority and this will be achieved through our various smart and sustainable yard initiatives, including increasing the capacity of our solar panels.

STRIVING TO AVOID

**15,000 tCO<sub>2</sub>e**  
ANNUALLY BY 2025

The figures stated in this chart have been validated by Carbon Care Asia. Scan for more information



Expect to avoid **5,306 tCO<sub>2</sub>e** annually

Operational since 2019, our solar roof has a capacity of 4.5 MWp, and can generate 5,000 MWh of electricity. We intend to expand our solar capacity to 12 MWp by 2025, resulting in 12,000 MWh of electrical generation.

SOLAR ROOF



929 tCO<sub>2</sub>e avoided annually

Our production facilities and workshops are operational 24 hours a day. To reduce our energy usage intensity (EUI) in these facilities, we have made the switch to LED lightings progressively.

LED LIGHTINGS



**2,568 tCO<sub>2</sub>e avoided annually**

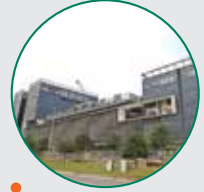
Consolidating our operational workforce into a central location within the yard reduces the time required for commuting as well as reduces our carbon emissions from transport vehicles. Our dormitories will be able to house 18,000 workers by 2030.

**IN-HOUSE DORMITORIES**



Our Corporate Office has achieved the Green Mark certification for its energy efficient equipment, green features and eco-friendly design. Find out more on pages 30-31 of our Sustainability Report 2019.

**CORPORATE OFFICE**



**Expect to avoid 2.46 tCO<sub>2</sub>e per 3-tonne forklift annually**

By 2025, every new forklift in our Tuas Boulevard Yard will be electrically-powered, transitioning our reliance from diesel to greener electrical energy.

**ELECTRIC FORKLIFT**



**Expect to avoid 251 tCO<sub>2</sub>e per LNG-battery Hybrid Tug annually**

Our continued investment and innovation in low carbon sustainable solutions enable GHG emissions to be avoided during their operation compared to conventional fuels.

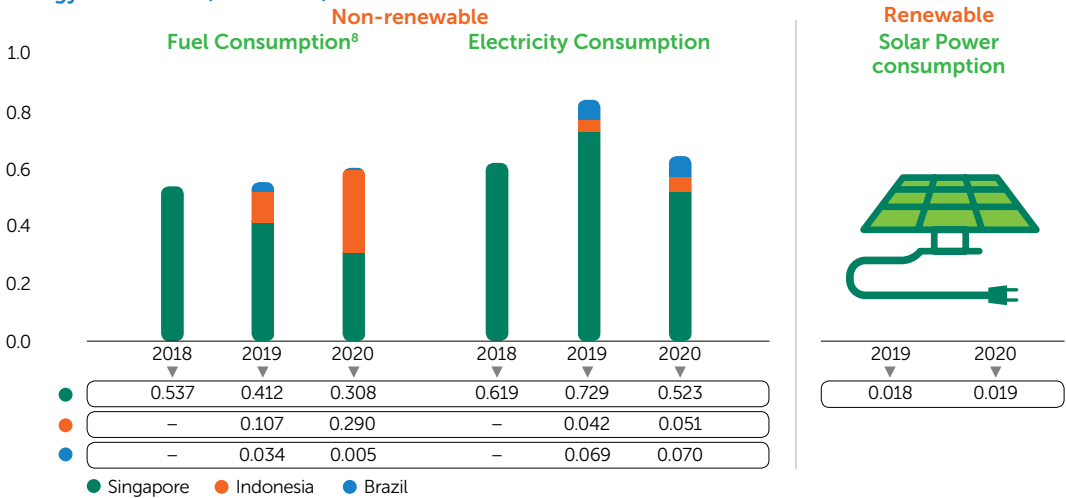
**LNG-BATTERY HYBRID TUG**



## ADDRESSING ENVIRONMENTAL CHALLENGES

Our total energy consumption in FY2020 amounted to 1.266 million GJ, a 10% reduction compared to our consumption in 2019. This is primarily attributed to the reduced operations in FY2020 across the yards. Our energy intensity for the same period was 0.021 GJ/man-hour<sup>6</sup>.

### Energy Consumed (million GJ)<sup>7</sup>



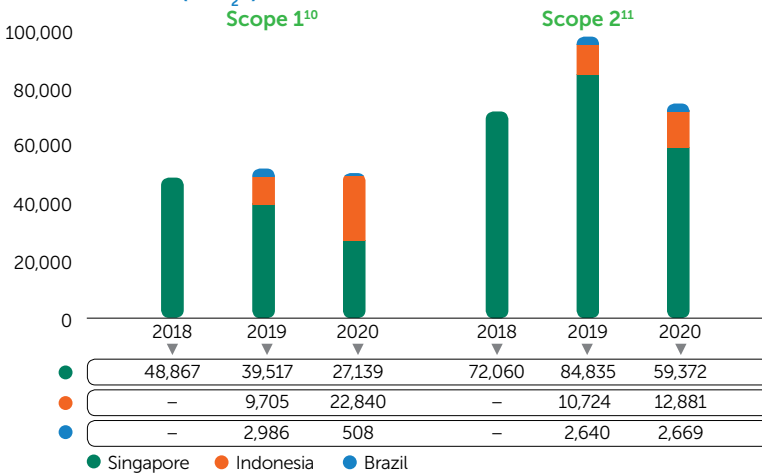
(6) Our restated energy intensity for FY2019 is 0.015 GJ/man-hour.

(7) Our energy sources include electricity, diesel, LPG, CNG, acetylene and solar energy.

(8) Net calorific values (NCV) were sourced from WRI/WBCSD Greenhouse Gas Protocol Emission Factors for Cross Sector Tools (March 2017). NCV for acetylene was referenced from S. McAllister et al., Fundamentals of Combustion Processes (2011).

\* - Figures for Indonesia and Brazil were not available for 2018.

### GHG Emissions<sup>9</sup> (tCO<sub>2</sub>e)



(9) Operational control approach is used to identify the GHG emissions. The boundaries of our reported emissions currently comprise our shipyards operating in Brazil, Indonesia and Singapore, excluding joint ventures.

(10) Emission factors (EF) were sourced from WRI/WBCSD Greenhouse Gas Protocol Emission Factors for Cross Sector Tools (March 2017). The scope 1 calculations for 2018 have been restated due to revised emission factors used for the fuels. Only CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O emissions are included in the calculation of direct GHG emissions. Global Warming Potential (GWP) factors used are from the 2014 IPCC Fifth Assessment Report. Emission data is derived from combustion of non-renewable fuels consumed in our yards and follows the requirement of GHG Protocol.

(11) Grid EF for Singapore was obtained from Energy Market Authority (EMA), grid EF for Brazil and Indonesia were obtained from Institute for Global Environmental Strategies (2019) – List of Grid Emission Factors version 10.6. Scope 2 emissions for Singapore for 2018 and 2019 have been restated based on latest Grid EF obtained from Energy Market Authority (EMA). Only CO<sub>2</sub> emissions are included in the calculation of indirect GHG emissions. Emissions data is derived from purchased electricity consumed in our yards and follows the requirement of GHG Protocol.

\* - Figures for Indonesia and Brazil were not available for 2018.

Solar panels installed at Tuas Boulevard Yard generated 5,364 MWh of electricity, equivalent to:

Avoiding emissions of approximately

# >2,190 tCO<sub>2</sub>e



Our solutions operate globally in all kinds of water conditions, including the fragile Arctic Ocean. Starting from 31 December 2020, the EU Ship Recycling Regulation (EU SRR) came into force and required vessels of 500 GT and above flying the flag of an European Union/European Economic Area (EU/EEA) member state, or third-party-flagged vessels calling at European ports to have a valid Inventory of Hazardous Material (IHM) certificate. To assist ship owners and managers, we minimise the use of hazardous materials during the design and engineering phase and support our customers in developing the IHM documentation.

In 2020, the United Nations Global Compact (UNGC) developed practical

guidance for shipyards to align their operations to deliver on the nine sustainable ocean principles. The ocean principles cover three broad areas: i) Ocean Health and Productivity, ii) Governance and Engagement, iii) Data and Transparency. Sembcorp Marine, recognised as a key stakeholder, was invited to join the taskforce to contribute good practices and standards that we have institutionalised in our yards globally.

As a responsible ocean citizen, we ensure that all our yards comply with the discharge requirements. In FY2020, we have not incurred any significant fines from non-compliance with environmental laws and regulations, nor caused any significant spills.

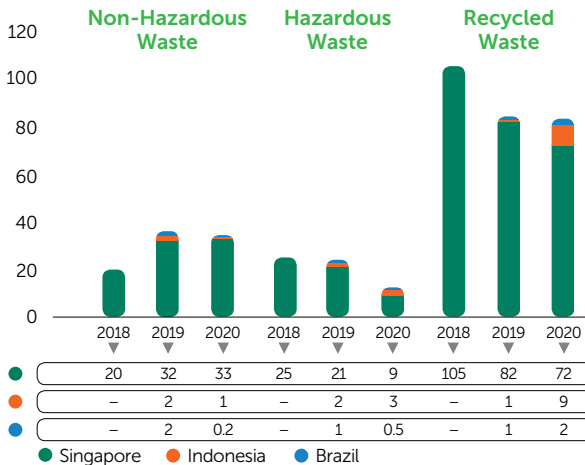


Steel, copper, welding materials and paint products are key raw materials used during our operations. We adopt sustainable practices and processes during the life-cycle stages of every project to optimise the use of resources. We have expanded the scope of reporting this year for material consumption to also include welding consumables, paint and thinner used by the Group. In FY2020, the total amount of steel, copper grits, steel grits, steel shots and welding consumables used by the Group amounted to 229,110 metric tonnes and the total amount of paint and thinner used is 938,905 litres.

All our yards have implemented strict policies on waste management to ensure environmentally responsible waste disposal processes in compliance with the local regulations. These processes include the use of licensed waste management vendors and proper waste segregation.

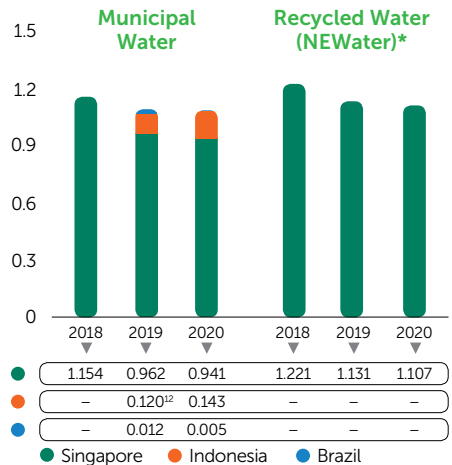
Municipal water and recycled water (NEWater – used in Singapore yards) are the two main sources of water used in our business operations. Besides conducting regular monitoring and leak checks in our yards' water pipe network, we create awareness on water conservation and advocate responsible consumption of this precious resource. In FY2020, we used 2.196 million m<sup>3</sup> of water.

Waste by type ('000 tonnes)



\* - \* Figures for Indonesia and Brazil were not available for 2018.

Water withdrawal by source (mil m<sup>3</sup>)



(12) This figure has been restated due to recalculation of raw data for one of the yards.

\*Recycled water (NEWater) is used only in Singapore.



# NURTURING OUR HUMAN CAPITAL

EMPOWERING AND RETAINING OUR PEOPLE  
FOR A FUTURE-READY WORKFORCE THAT  
ENGINEERS OUR GROWTH





## ZERO-EMISSION FERRIES – SOLUTIONS FOR SUSTAINABLE LIVING AND OPERATION IN THE OCEAN

As part of Sembcorp Marine's transformation strategy, we have been investing in our human capital. Since 2013, we have supported nine employees in the Post-graduate Programme to develop R&D skill-sets on emerging energy focus and technologies. Four of our employees (below) are currently pursuing the programme related to Gas solutions.



## NURTURING OUR HUMAN CAPITAL

People are at the heart of our business. We embrace the diversity and expertise that our employees bring to the Group and are committed to their growth, well-being and safety. We also respect human rights across our operations and value chain, aligning our human rights practices to various national and international frameworks. Sembcorp Marine's philosophy of providing a conducive work environment is in line with the United Nations Sustainable Development Goals.

### OUR WORK IN 2020



#### Fair Employment & Equal Opportunities

- Reviewed and updated our fair employment & equal opportunities policies



#### Talent Planning & Leadership Development

- Conducted a review of the SCM-SMU (Sembcorp Marine-Singapore Management University) Executive Leadership Development programme



#### Workforce Capability & Competency Development

- Attained 16.06 training hours per employee globally with a total of \$2.60 million training investment made
- Continued with the enrolment of staff in the EDB-IPP (Economic Development Board - Industrial Post-graduate Programme) in Singapore
- Arranged and organised various renewables- and gas-related training programmes, including Business Opportunities in Growing Offshore Wind Market, Business Opportunities in Low Carbon Shipping, Workshop on LNG Cargo System and Operations of LNG Bunkering Vessel
- Implemented new training programme in our Singapore yards with aims to develop a digital-ready workforce
- Successfully rolled out training programmes in our Singapore yards which align staff competencies with our sustainability goals
- Established a new improved Competence Matrix for our staff in Norway to allow analysis of training needs to be more precise



#### Employee Engagement & Well-being

- Set up in-house swab facilities at two of our Singapore yards
- Refined our Flexible Benefits System implemented for our Singapore yards
- Our Singapore yards organised first series of webinar on *Retirement Talks: Assessing Your Retirement Income Needs* on 18 December 2020
- Our Aracruz yard in Brazil organised employee engagement programmes such as Safe Carnival Campaign, Recognition of International Women's Day, and Campaign against COVID-19 Pandemic



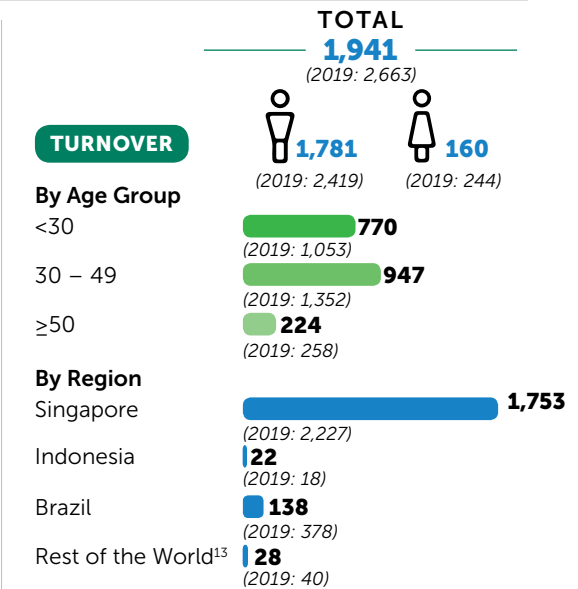
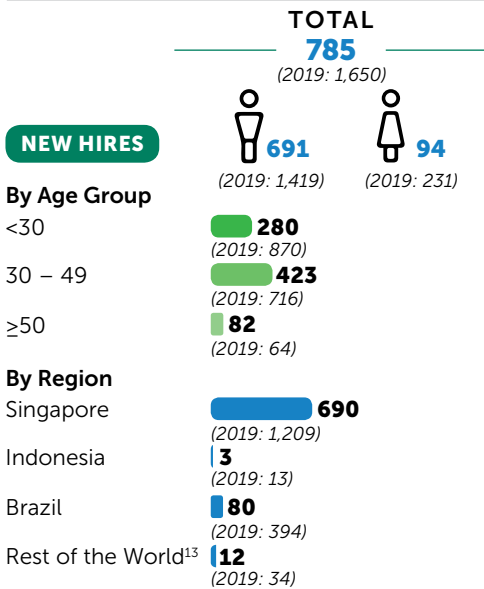
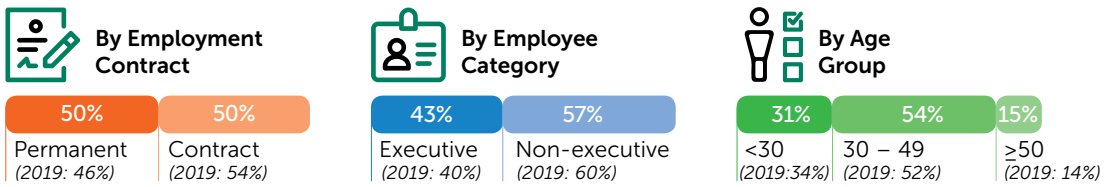
#### Human Rights Principles & Practices

- Updated our human rights policies to incorporate SA8000 standards
- Our Singapore yards implemented Employer Pays Principle (EPP) for hiring of migrant workers
- Our Aracruz yard formulated and introduced Anti-bribery and Code of Business Conduct policies

**FAIR EMPLOYMENT & EQUAL OPPORTUNITIES**

Sembcorp Marine enhances its commitment to long-term sustainable employment practices by fostering a “walk the talk” methodology. We promote a fair playing field in our recruiting activities and respect human rights. During the pandemic-led slowdown in 2020, we continued investing in our workforce to preserve our existing capabilities and empower them with future-ready competencies in anticipation of the global economic recovery.

**HIGHLIGHTS OF OUR WORKFORCE IN 2020**



(13) Rest of the world includes Norway, USA, Malaysia, Poland, France and United Kingdom.

NURTURING OUR HUMAN CAPITAL

291

contracts were offered in 2020 to people past the statutory retirement age in Singapore

Operating in a traditionally male-dominated industry, we aim to close the gender gap with an increased representation of women in senior leadership roles.

14% of our Singapore executive workforce in Operations roles are female

40% of our Singapore executive workforce in Commercial and Corporate Services roles are female

TALENT PLANNING & LEADERSHIP DEVELOPMENT

To retain our competitive edge and stay relevant, Sembcorp Marine develops our employees into leaders and agents of positive change. We nurture a diverse leadership team that not only creates value for our stakeholders, but also inspires and propels others to greater heights.



DEVELOP

Training and development constitute an important part of Sembcorp Marine's efforts to build a competent and resilient workforce.



49 employees were seconded to our overseas subsidiaries



8,485 of our workforce received performance appraisals and career development reviews



We conducted a review of our SCM-SMU Executive Leadership Development programme in 2020.

2,988 of our employees have undergone the leadership programme



OUTREACH

To attract talent with specialised knowledge and capabilities catering to our business segments and geographical markets, we reach out to a wide talent pool through career talks, job fairs and outreach activities in schools, tertiary institutions and our communities.



Participated in 6 job fairs



90 interns attached to our yards in Singapore



37 scholarships offered to students from various institutes



**WORKFORCE CAPABILITY & COMPETENCY DEVELOPMENT**

With the reduction in our local manpower pool and constraints on foreign manpower due to COVID-19, Sembcorp Marine continues to invest in the development of our human capital to equip them with the required competencies and to nurture them to their fullest potential.

Sembcorp Marine will continue to invest in productivity initiatives that leverage on good upfront designs, additive manufacturing processes, robotics and automation.

To develop and enhance our R&D capabilities, we sponsored selected employees to undergo post-graduate programme training to acquire expertise in emerging areas that are aligned to our company’s business and technology needs.

*“I believe that the future of energy consumption is in clean energy and LNG is one such energy source. I was given the opportunity to further my interest with the EDB-IPP and enrolled in the engineering doctoral programme, focusing on LNG industrial safety. I would like to thank Sembcorp Marine for their support and sponsorship.”*

– Mr Lim Boon How



Mr Lim Boon How, a Senior Compliance Engineer in our Engineering Department, commenced his IPP at Nanyang Technological University in August 2018, focusing on LNG industrial safety.

**RESKILLING & UPSKILLING OUR WORKFORCE FOR THE FUTURE**



**\$2.60 MILLION**

invested in our global workforce training and development



**233,476**

employee-training hours globally



**Average training hours by employee category**



**Average training hours by gender**





## NURTURING OUR HUMAN CAPITAL

### EMPLOYEE ENGAGEMENT AND WELL-BEING

The COVID-19 pandemic has affected the global economy as well as businesses worldwide. We have put in place various measures to continuously engage our employees and ensure their well-being during this period and in the new normal.

To support the nation's efforts in COVID-19 testing, we have set up in-house swab centres at two of our Singapore yards in 2020 that serve close to 35,000 employees. During the same period, we refined our Flexible Benefits System to ensure that our employees are sufficiently protected with core health and life insurance.

As part of our foreign workers' welfare and inclusion programme, we organised various initiatives to support the health and well-being of our employees who stay in the dormitories during the circuit-breaker period. These include:

Appointing dormitory room leaders to support the early detection of residents in distress and ensure adherence to safe-distancing measures.

Initiating a mobile clinic for the welfare of our workers residing in our in-house dormitories.

Participating in a green project involving the study of the effects of installing UV-C lights and ioniser plants at common toilets to reduce pollutants and airborne virus transmission.

Distributing of care packs filled with essential items like hand sanitisers, masks, gloves, dry food and Vitamin C.

Organising virtual engagement activities such as drawing competitions, art & craft sessions and photo competitions.

Providing support to employees for their medical and personal needs, including access to remittance services.



Promoting awareness of COVID-19 prevention among dormitory residents through drawing competitions



Maintaining communication and engagement with employees during COVID-19

**UPHOLDING HUMAN RIGHTS**

At Sembcorp Marine, we constantly demonstrate our strong belief in upholding our pledge to human rights through our policies and practices.

In 2020, we reviewed and updated our human rights policies to incorporate SA8000 standards. We have also signed agreements with nine of our designated manpower supply agencies to implement and comply with the "Employer Pays Principle" (EPP). Our Aracruz yard in Brazil formulated and introduced Anti-bribery and Code of Business Conduct policies.



**OUR HUMAN RIGHTS PRINCIPLES & PRACTICES<sup>14</sup>**

**INTERNATIONAL STANDARDS & PRINCIPLES**

**SEBNCORP MARINE'S POLICIES**

- |                        |                          |                          |                                  |
|------------------------|--------------------------|--------------------------|----------------------------------|
| Human Resources Policy | Code of Business Conduct | Supplier Code of Conduct | Collective Bargaining Agreements |
|------------------------|--------------------------|--------------------------|----------------------------------|

**SEBNCORP MARINE'S COMMITMENT & FOCUS**

- |               |                 |
|---------------|-----------------|
| Labour Rights | Employee Rights |
|---------------|-----------------|



(14) For more details, please refer to page 43 of our Sustainability Report 2019.

# PROTECTING OUR PEOPLE

A STRUCTURED AND ROBUST APPROACH TO ENSURE A SAFE AND HEALTHY WORK ENVIRONMENT AT ALL TIMES AND STRIVE TOWARDS ZERO INCIDENCE GOAL







## **ENERGEAN POWER FPSO FOR LANDMARK KARISH DEVELOPMENT IN ISRAEL**

Sembcorp Marine clinched 18 awards at Singapore's Workplace Safety and Health (WSH) Awards 2020. The Energean Power FPSO is one of the 13 projects to receive a Safety and Health Award Recognition for Projects (SHARP) for Safety Excellence.





## PROTECTING OUR PEOPLE

Work accidents and occupational diseases are avoidable. With a strong prevention culture, we strive to eliminate the hazards and risks that can cause work-related accidents and occupational diseases. Sembcorp Marine’s Workplace Safety and Health (WSH) 2028 Vision Zero incidence goal is an important foundation of the Group’s work ethos. Executed via a robust Health, Safety and Environment (HSE) integrated management system, we aim to eliminate harm to people, property and the environment through three key strategic thrusts (as shown on the right).

### SEMBCORP MARINE HSE STRATEGIC THRUSTS<sup>15</sup>



### PRINCIPLES OF OUR VISION ZERO COMMITMENT<sup>15</sup>



- Reduce risks at source;
- Place WSH duty on all stakeholders in their respective functional areas; and
- Prevent accidents through higher penalties.

## OUR WORK IN 2020



- Continued to promote Vision Zero as the Group’s HSE target
- Implemented and trained 100% of personnel entering the yard on the Safe Management Measures to ensure employees and visitors are protected from COVID-19 as operations gradually resumed
- Received 18 WSH Awards
- Encouraged all personnel to report unsafe and near-miss incidents, with 48 cases reported
- Held Virtual HSE Carnival for employees and resident contractors
- Organised Contractor Townhall Webinar to maintain regular communication on latest WSH initiatives
- Participated in a WSH awareness event jointly organised by Association of Singapore Marine Industries (ASMI) and Workplace Safety and Health Council (WSHC)



- Developed Pandemic Prevention Policy and Safe Management Measures
- Conducted virtual health and wellness activities, including Health Talk on Mental Wellness, the “Mr. Fittest at Alaunia” Challenge Competition at our Admiralty Yard Dormitory and Zumba workout
- Regular monitoring of temperature and COVID-19 symptoms
- Increased frequency of sanitising workplaces, common touch points and tools
- Constant monitoring of noise levels and air quality to ensure compliance

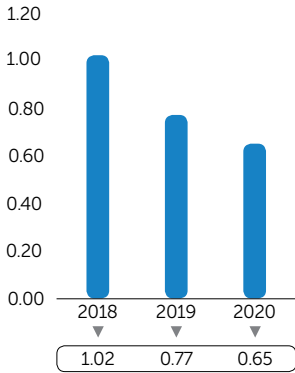


- Reduced the need for personnel to work at height while carrying out activities such as inspection, surveying and grinding
- Reporting of hazards electronically for HSE analysis

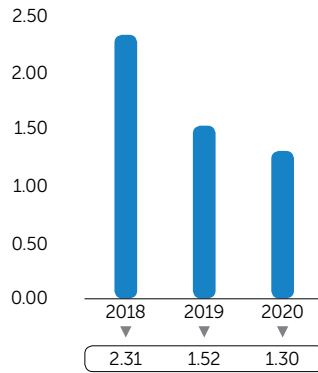
(15) For more details, please refer to page 46 of our Sustainability Report 2019.

**SINGAPORE AND OVERSEAS<sup>16</sup>**

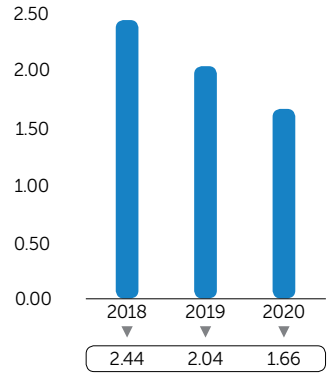
**Lost Time Injury Rate per million man-hours worked<sup>17</sup> (LTIR)**



**Total Recordable Incident Rate per million man-hours worked<sup>17</sup> (TRIR)**

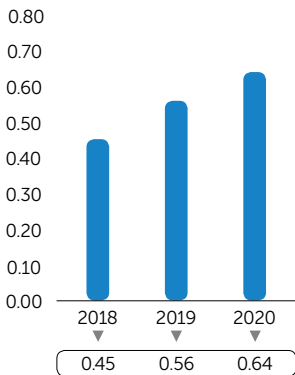


**Fatal Accident Rate per 100 million man-hours worked<sup>17</sup> (FAR)**

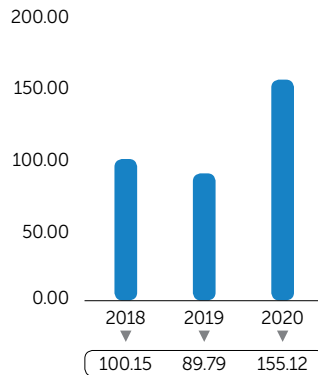


**SINGAPORE**

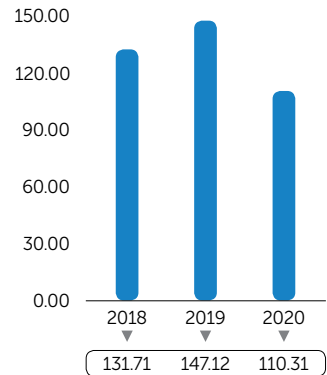
**Accident Frequency Rate per million man-hours worked (AFR)**



**Accident Severity Rate per million man-hours worked (ASR)**



**Workplace Injury Rate per 100,000 employed persons (WIR)**



During the year, the Group recorded a lost time injury rate of 0.65 and total recordable injury rate of 1.30. Despite the precautions we have put in place and the constant emphasis on safe work procedures, we regrettably had one workplace fatality in our yard, of which the cause is still under investigation.

(16) Health and safety statistics from overseas operations include yards located in Brazil (2018-2020), Indonesia (2018-2020) and UK (2018-2019).

(17) Aligned with International Association of Oil & Gas Producers (IOGP) Standards.

## PROTECTING OUR PEOPLE

### DEEPEN WSH OWNERSHIP

Good WSH performance requires strong ownership from all stakeholders, a holistic system with clear policies and procedures for implementing and building safety competencies; and a culture of prevention, trust and care.

#### WSH Ownership and Accountability

Sembcorp Marine’s WSH framework is championed by the Sembcorp Marine Board and Management, employees, contractors and other stakeholders. While the Board Risk and Enterprise Risk Committees steer the HSE policies, framework, procedures and control processes, the Group HSE Committee, together with various sub-committees at the yards, is responsible for developing and deploying the strategies and work plans.

In 2020, yard-level HSE committees comprised over 600 management and worker representatives. They collectively represent more than 33,000 Sembcorp Marine employees and contractors. These committees are responsible for engaging the workforce in HSE programmes.

Our clearly communicated safety policy, safety leadership capabilities, and robust safety management system, allow us to engage our workforce and provide them with knowledge on the hazards of their jobs and how to perform

their work safely. Our communication channels include daily toolbox meetings, Vessel Safety Coordination Committee meetings, monthly WSH Committee meetings and monthly WSH Sub-committee meetings held both physically and virtually.

#### Cultivate Positive WSH Culture

Our HSE Life Saving Rules is an important WSH culture-building programme that helps prevent injuries from high-risk activities at the workplace. In 2020, we continued to implement our HSE Life Saving Rules, ensuring that all direct employees, contractors, visitors and client representatives identify critical controls that must be in place.

At our Aracruz yard in Brazil, a campaign “Rules that Save Lives” was launched, with the main objective of preventing fatalities and serious accidents through implementation of the seven rules of the CARE programme. Each employee was presented with a badge that reaffirms their right to refuse to work if the conditions are unsafe.

Weekly management inspections are also conducted with our client and managers to identify and monitor the safety condition of the workplaces. This collaborative approach drives a positive safety culture among all our stakeholders that each play an important role in achieving a safety-conscious environment.



Representatives of Sembcorp Marine participated in a WSH awareness event, jointly organised by ASMI and WSHC, to share our Total Workplace Safety & Health (Total WSH) approach with participants from various companies and industries.

### Continuous Enhancement in HSE Competencies and Capabilities

Our yard in Brazil attained the ISO 45001 certification in 2020. With all our yards in Singapore, Indonesia, and Brazil certified to ISO 45001, the implementation of our occupational health and safety management systems and the monitoring of our safety performance can be done more effectively and efficiently.

We also conducted Customer Leadership Training to highlight the importance of leadership in influencing safety behaviour within the organisation, and how human and organisational factors affect safety norms and values. In 2020, we invested 39.9% of total training hours on HSE.



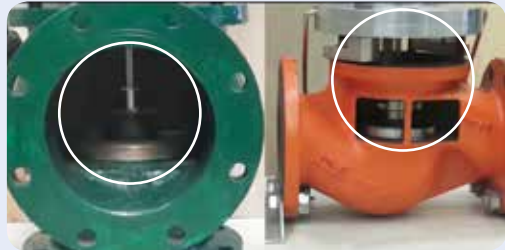
#### Strong Performance at WSH Awards 2020

Sembcorp Marine clinched 18 awards at the national WSH Awards 2020. Organised by Singapore's WSHC and Ministry of Manpower (MOM), the Awards recognise the safety achievements of organisations.

Of the 18 awards, we received two Workplace Safety and Health Performance (Silver) Awards (for our Admiralty Yard and Pandan Yard) and 13 Safety and Health Award Recognition for Projects awards for our exemplary safety and health standards, and systems.

Our Tuas Boulevard Yard and Admiralty Yard bagged the WSH Innovation Award for the EZI-LAP and Conta-Lifter respectively.

EZI-LAP (right), with an automatic feature that allows workers to carry out lapping of several valves simultaneously, eliminates the hazards (hand, finger and musculoskeletal injuries) associated with manual lapping.



Conta-Lifter (left) is a device designed for lifting containers in a safe manner, eliminating the need to climb on top of the containers at a height of 2.4 metres during shackling.



Mr Dharmalinga Raja Ramasubramaniyan (right), Technical Engineer in Machinery Department, clinched the WSH Award for Supervisors for caring for the safety of the workers under his charge.



## PROTECTING OUR PEOPLE

### FOCUS ON WORKPLACE HEALTH

We work to prevent occupational diseases and advocate the importance of good industrial hygiene practices at the workplace to reduce the incidence of ill health.

In response to the COVID-19 pandemic outbreak in 2020, we swiftly implemented procedures and programmes to ensure safe resumption of work activities while taking care of the health and wellness of all our stakeholders at the same time.

#### Emergency Contingency Plan

We have a comprehensive set of procedures that enable business continuity and effective response to emergencies and potential threats.

We developed our Pandemic Prevention Policy and implemented Safe Management Measures with a strong emphasis on personal and workplace hygiene. In 2020, we also conducted 98 emergency response drills and exercises together with local government agencies.



### Our Workplace Health Focus Areas<sup>18</sup>

#### Occupational Health Risk Mitigation



Proactive Incident Prevention



Create Safe & Supportive Environment



Emergency Contingency Plan

#### Employee Health and Wellness Programme



Workplace Health & Wellness Programme



First Aid Training



Health Management Centre

#### Workplace Health & Wellness Programme

To support the health and wellness of our employees and workers, we implemented a series of virtual activities last year.

We organised the “Mr. Fittest at Alaunia” Challenge (Admiralty Yard Dormitory) Competition which took place for three weeks in May 2020 to encourage our dormitory residents to remain motivated and fit during the circuit-breaker period, as well as to enliven their spirits during such difficult times.

In 2020, our annual HSE carnival was moved online to comply with COVID-19 safety measures. Various activities including health talks and wellness programmes were conducted during the two-day event. The health talk on mental wellness was organised to provide employees with tips on how to cope with stress and to develop mental resilience.

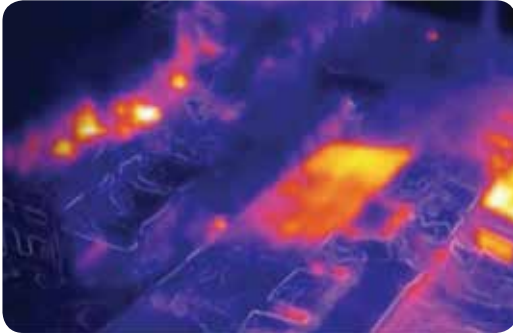
**45** workers took part in the “Mr. Fittest at Alaunia” Challenge Competition

**24** employees took part in the Mental Wellness talk conducted during our HSE Carnival in December 2020

(18) For more details of our framework, please refer to page 50 of our Sustainability Report 2019.

## WSH ADVANCEMENT WITH TECHNOLOGY

In 2020, we continued to innovate, embrace and adopt technology in our operations to provide a safer working environment for our employees and contractors.



### Enhanced Inspection Capability

We deployed drones with thermal imagery camera during inspections to increase safety and operational efficiency. These drones allow our certified in-house drone pilots to conduct inspections in low light or dark conditions and identify hot spots (as shown above) in various locations from a safe distance and height in order to deploy our resources effectively and provide a faster response.



### Enabling Remote Surveys

We have successfully trialed remote surveys for inspection of vessels under construction. Using Nokia's cloud-based collaboration platform and FastMile 4G Customer Premises Equipment (CPE), this technology increased operational efficiencies by providing connectivity between all stakeholders involved, while minimising inspectors' and workers' exposure to on-site safety risks, especially during the COVID-19 pandemic.



### Auto Edge Grinding Machine

There is normally extensive grinding of steel edges performed after completion of block assembly, and scaffolds are typically used as access to work at height. The Edge Preparation System (EPS) combines Computer Numerical Control (CNC) technology with a force-controlled milling system which allows such grinding to be done safely and accurately at the earliest stage possible, after plate cutting but before fitting work commences. This machine eliminates the need for deployment of personnel to perform grinding activities while working at height.



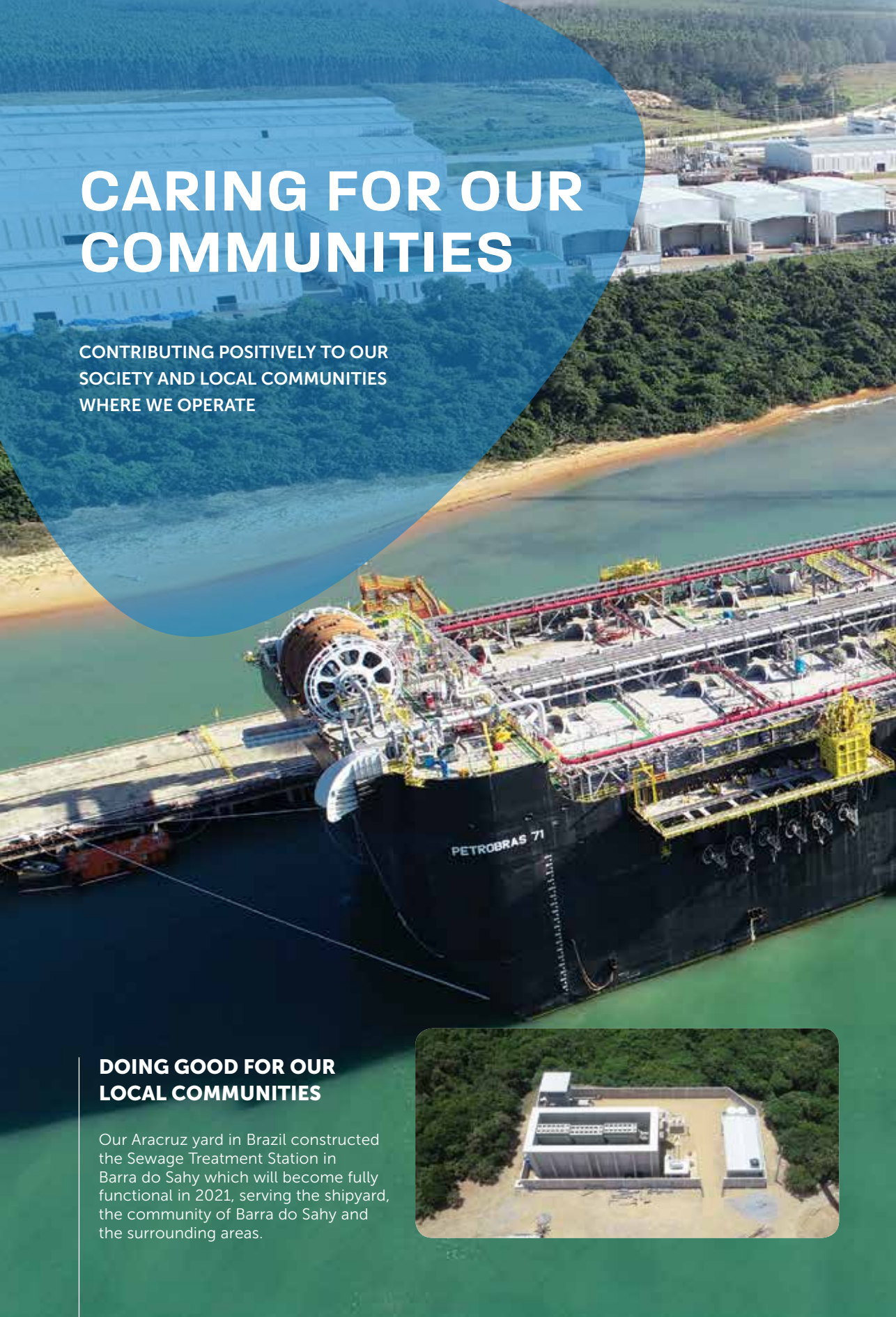
### Bluepass Token

We participated in the issuance of Bluepass tokens to our workforce in mid-2020. The token, a small and battery-powered wearable device, assists in contact-tracing by serving as a substitute for the TraceTogether app at operational areas where the usage of smartphones are restricted.



# CARING FOR OUR COMMUNITIES

CONTRIBUTING POSITIVELY TO OUR SOCIETY AND LOCAL COMMUNITIES WHERE WE OPERATE



## DOING GOOD FOR OUR LOCAL COMMUNITIES

Our Aracruz yard in Brazil constructed the Sewage Treatment Station in Barra do Sahy which will become fully functional in 2021, serving the shipyard, the community of Barra do Sahy and the surrounding areas.







**3** GOOD HEALTH AND WELL-BEING

**4** QUALITY EDUCATION

**13** CLIMATE ACTION

**14** LIFE BELOW WATER

**15** LIFE ON LAND

**17** PARTNERSHIPS FOR THE GOALS



## CARING FOR OUR COMMUNITIES

At Sembcorp Marine, we advance social growth, care for our communities, and forge partnerships that create long-term sustainable value. We do this through our community engagement strategy, which aligns with the United Nations Sustainable Development Goals and ISO 26000 Guidance on Social Responsibility.

Our community engagement strategy encompasses five focus areas: Youth and Education; Environmental Care; Community Care; Active Lifestyle; and Industry Outreach. In FY2020, the Group engaged and invested in local communities through various initiatives such as educational programmes, sponsorships, donations, staff contributions, and industry programmes.

### OUR WORK IN 2020

**\$1.70M**

invested in community programmes worldwide<sup>19</sup>.

More than

**7,200**

hours contributed by employees in FY2020 through community programmes and volunteer initiatives.

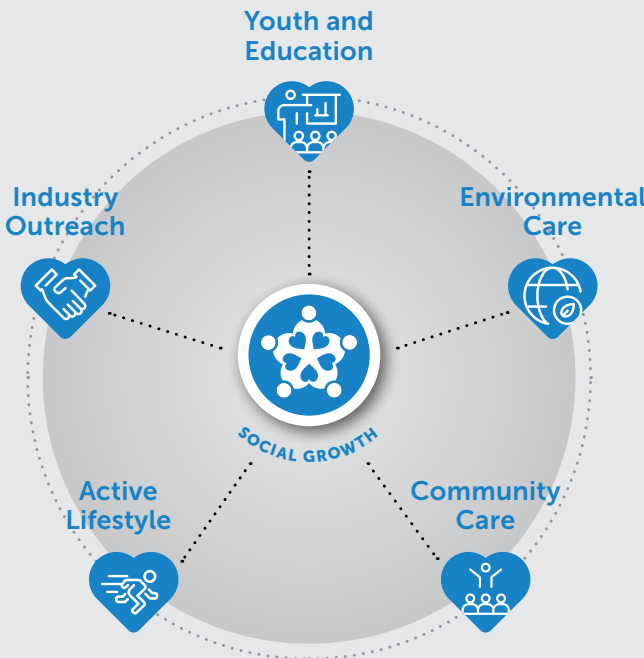
**950**

youths and students benefited from our support for educational programmes.

Over

**100,000**

face masks distributed to communities in Indonesia and Brazil.



(19) Sembcorp Marine committed an upfront sum of \$2,892,694 in Sewage Treatment System Programme and will annually disclose the community investment pertaining to this programme over 10 years as  $\$2,892,694 \div 10$  years.



## Youth and Education

Support strategies and efforts to provide equal access to education and learning opportunities for youths and adults.

1

### SCHOOLBAG PROGRAMME

For 20 years, we have been helping students from financially disadvantaged families through our School Book Assistance Grant (SchoolBAG) programme. In 2020, we gave out **\$179,900** to **858** student beneficiaries in Singapore.



2

### ITE FINANCIAL ASSISTANCE GRANT PROGRAMME

Launched in 2018, the ITE Financial Assistance Grant Programme was a strategic community programme developed in partnership with ITE to provide technical skills development and a career pathway for students with a strong interest in engineering.

In FY2020, we committed **\$284,400** to **40** students in Singapore under the ITE Financial Assistance Grant Programme. The grant paved the way for the students to successfully continue their education, as well as prepare them for higher education or improved employability. Since its introduction, the grant has helped to improve the lives of the beneficiary students and their families and fostered a talent community of relevant technical skills and knowledge for our industry.

3

### INDUSTRY SHARING PROGRAMME

Our Batam yard in Indonesia conducted an industry sharing session for **45** vocational high school students, enabling them to gain insights into the marine industry.



## Environmental Care

Promote sustainable use of natural resources and protection of our ecosystems.

1

### COASTAL AREA CLEANUP

In August 2020, **15** employees from our Karimun yard volunteered to clean up the Karimun Coastal Area in Indonesia.



2

### GREEN WAVE ENVIRONMENTAL CARE COMPETITION

Sembcorp Marine launched our annual Green Wave Environmental Care Competition in 2003 to promote a green culture and sustainability mindset among the young generation.



## CARING FOR OUR COMMUNITIES



### Community Care

Foster community spirit and provide support to the less privileged.

# 1

#### SUPPORTING OUR COMMUNITIES WHERE WE OPERATE DURING COVID-19 PANDEMIC

With the COVID-19 pandemic outbreak in 2020, many lives, communities and businesses were impacted. Our yards in Singapore, Indonesia and Brazil continued to provide support to the local communities by contributing essential items.

In Singapore, we distributed care packages to our migrant workers residing in the yard dormitories.



In May 2020, Sembcorp Marine, in collaboration with Singapore's Economic Development Board (EDB) and 12 local companies, donated 100,000 face masks and five tonnes of hand sanitisers to frontline healthcare workers in Batam, Indonesia, to protect them against COVID-19.



Our Aracruz yard in Brazil donated **104,800** masks to the Espírito Santo State Health Secretariat to help the government in its pandemic protection efforts, **300** food baskets to help families impacted by the pandemic, and **500** masks and **900** gloves to seniors at the Recanto do Ancião elder care institution.

Our Aracruz yard promoted two solidarity campaigns to help families affected by heavy rains that occurred at the beginning of the year and families impacted by the COVID-19 pandemic.

# 2

#### COMMUNITY CHEST SHARE PROGRAMME

**\$64,995** was raised through our employees for the Community Chest SHARE Programme which provides financial assistance to the less privileged in Singapore.



## Industry Outreach

Encourage and promote effective public, public-private and civil society partnerships

# 2

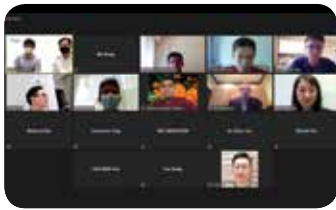
## ADVANCING SUSTAINABILITY

We support various programmes to advance sustainability within our communities. In 2020, we sponsored the GCNS Virtual Summit which aimed to promote corporate social responsibility and sustainable practices among corporations.

To nurture the next generation of sustainability leaders, we mentored a group of five undergraduates in a project to enhance SDG business integration. The team emerged as Champion in the Young SDG Leaders Awards at the GCNS Virtual Summit 2020.

# 1

## NATIONAL ENGINEERS DAY 2020



Sembcorp Marine sponsored the National Engineers Day 2020, organised by the Institute of Engineers Singapore, and shared its innovations and sustainability efforts at the virtual workshop and interactive booth.



## SERVING INDUSTRY AND PUBLIC

To promote and support the advancement and sustainable development of the Singapore's offshore and marine industry, Sembcorp Marine senior management staff volunteered their time and expertise through various industry associations and public councils where they

hold appointments. The Group also established collaborations with industry partners and participated in relevant external programmes. In 2020, our President & CEO, Mr Wong Weng Sun, was appointed the Co-chair of the International Advisory Panel on Maritime Decarbonisation (IAP).

### Key Partners



Scan for more information on the list of memberships and associations

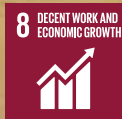




# OPERATING A RESPONSIBLE BUSINESS

A ROBUST GOVERNANCE STRUCTURE FOR AN ETHICAL AND RESILIENT BUSINESS

High standards of corporate governance are essential in sustaining the Group's businesses and performance. We work closely with our stakeholders in meeting stringent compliance in all areas.



## OPERATING A RESPONSIBLE BUSINESS

Sembcorp Marine upholds the highest standards of governance, transparency, accountability and ethics in all aspects of our operations. Our corporate governance framework encompasses:

- Good Governance & Prudent Decision Making;
- Effective Enterprise Risk Management;
- Regulatory Compliance; and
- Business Integrity.

### GOOD GOVERNANCE & PRUDENT DECISION MAKING

We recognise that our business activities have an impact on society and the environment. As a responsible corporate citizen, we have a comprehensive and integrated governance system of policies, processes and control measures to manage this impact. Our sustainability

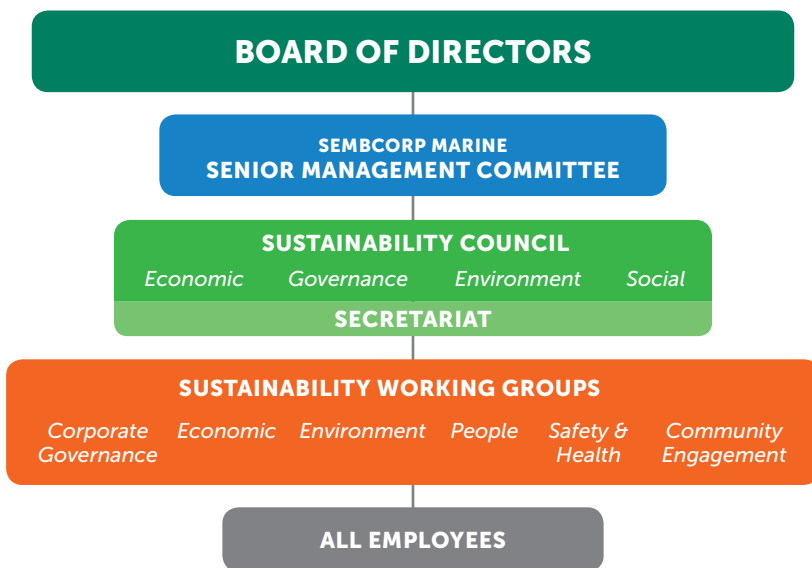
performance is governed by the Sembcorp Marine Sustainability Council, Senior Management Committee (SMC) and the Board Executive Committee. Sembcorp Marine’s Board of Directors is ultimately responsible and accountable for the Group’s sustainability performance and reporting.

The Sustainability Council oversees the Group’s sustainability performance. Led by the President & CEO, the Council is tasked with creating value for all our stakeholders by integrating economic, environmental, social and governance standards and responsibilities into the Sembcorp Marine approach to business.

The Council, comprising sustainability champions from various working

groups, is responsible for advancing Sembcorp Marine’s sustainability opportunities, and managing our environmental and social impacts through formulating corporate sustainability strategies, policies and mitigation actions. The Council reports to the SMC, which meets regularly to discuss major operational issues. The SMC reports Sembcorp Marine’s performance and targets at our Board Executive Committee meetings.

The Sustainability Secretariat coordinates with the working groups to implement strategies, identify specific emerging issues and engage stakeholders. All Sembcorp Marine employees are expected to uphold the Group’s sustainability efforts.





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

- Sembcorp Marine's Board of Directors is committed to sustainability;
- The Board believes that the Sustainability Report 2020 provides a reasonable and clear presentation of the Company's sustainability strategy, in which seven material issues are determined and adopted under the four key sustainability dimensions;
- The Sustainability Council assists the Board in overseeing and monitoring the Company's sustainability initiatives;
- On behalf of the Sustainability Council, the Sustainability Secretariat provides regular updates at Board meetings on the Company's sustainability initiatives, challenges, targets and progress; and
- The Sustainability Report 2020 is prepared in accordance with the SGX-ST Sustainability Reporting Guide and the Global Reporting Initiative Standards: Core Option.

### **EFFECTIVE ENTERPRISE RISK MANAGEMENT**

Sembcorp Marine considers a wide range of risks and opportunities in its efforts to create value over the long term. We focus on a set of economic, environmental, social and governance topics that speak to our stakeholders' interests and help us create and preserve value in our business. In particular, environmental issues and climate-related risks have been identified in Sembcorp Marine's enterprise risk management matrix.

In the World Economic Forum (WEF) Global Risk Report 2020, extreme weather events and climate action failures are the top two global risks in terms of likelihood and impact. We are paying greater attention to these risks, and addressing them through our sustainability targets. Our risk management framework is structured to progressively meet our mid- and long-term targets, and ultimately reduce the negative impact of our operations and activities on society and the environment.

To address growing stakeholder interests and concerns around climate change, Sembcorp Marine identifies, assesses and manages climate-related risks and opportunities following the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD). Please refer to pages 34 to 35 in the "Environmental Sustainability" section for more information on how Sembcorp Marine addresses the key TCFD elements of Governance, Strategy, Risk Management, and Metrics and Targets.

Risk Champions, appointed from various units, help the Enterprise Risk Management Committee (ERMC) drive key risk initiatives and review risk issues across the Group. The ERMC, also chaired by the President & CEO, reports to the Board Risk Committee.

Our Enterprise Risk Management (ERM) framework guides Management in dealing effectively with uncertainties and the associated risks in pursuing business opportunities.

For more information on Sembcorp Marine's risk management practices, please refer to pages 68 to 75 of our FY2020 Annual Report.



## OPERATING A RESPONSIBLE BUSINESS

### REGULATORY COMPLIANCE

As a multinational corporation, Sembcorp Marine complies with local and cross-border laws, rules and regulations. Our employees, vendors and suppliers must also adhere to the Group's internal policies and procedures, and applicable codes of conduct.

We aspire to build and strengthen a culture of compliance, control and ethical conduct across the Group. To anticipate compliance risks, we identify and assess emerging regulations and best practices regularly. Sembcorp Marine has developed and implemented a set of tax policies with a focus on compliance and transparency. We commit to complying with tax laws in all jurisdictions where we operate, and aspire to uphold high standards of tax fairness and align our tax practices with the spirit of the law. Please refer to page 161 of our FY2020 Annual Report for more information on Sembcorp Marine's tax expenses.

We review and enhance our policies and perform compliance assurance activities to ensure that we are adhering to all regulatory requirements. We provide our staff with compliance training and keep the Board and designated committees apprised of any compliance issues encountered and corresponding remedial measures.

### 2020 Highlights



**NO** material incidents of non-compliance



**ZERO** legal actions for anti-competitive behaviours, anti-trust, and monopolistic practices



Successfully completed **surveillance audit for ISO 37001** Anti-bribery Management System certification



Sembcorp Marine documents all our policies and procedures in our internal Dolphin Manual which is made available to all employees through the Company's intranet.

**BUSINESS INTEGRITY**

Business integrity safeguards Sembcorp Marine’s assets and reputation, and the long-term interests of our stakeholders. We adhere to the Anti-corruption Principle under the United Nations Global Compact and do not tolerate fraud, bribery and corruption in our business dealings and operations.

We perform our duties with honesty, dedication and respect for confidentiality. We value loyalty, trustworthiness and openness as essential personal attributes in our corporate culture. Our Code of Business Conduct applies to all directors, employees of related companies, and suppliers. It sets out the Group’s core values and expectations regarding business ethics.

In operations, we identify and assess corruption risks and implement stringent procedures to manage business processes (e.g. engaging suppliers, contractors, and intermediaries and agents who act as representatives of Sembcorp Marine) for which the corruption risks are assessed to be high. With support from designated committees, the Board of Directors oversees and approves Sembcorp Marine’s Code of Business Conduct and Anti-bribery Compliance policies.

Sembcorp Marine regularly reviews the effectiveness of our Code of Business Conduct and Anti-bribery & Anti-corruption policies as part of our ISO 37001-certified Anti-bribery Management System.

To further promote business integrity among our employees, in 2020, Sembcorp Marine updated our e-learning training modules on business integrity, anti-bribery and anti-corruption topics to align with ISO 37001 Anti-bribery Management System standard. In 2020, we conducted 6,819 hours of compliance training for 6,512 employees, covering topics such as laws and regulations, mitigating potential risks, responsibilities and obligations.

Following our successful certification of ISO 37001 in 2019, Sembcorp Marine completed a follow-up surveillance audit in 2020 for our operations in Singapore. Our Aracruz yard in Brazil has also successfully received the ISO 37001 Anti-bribery Management System certification in early 2021.



Our Anti-bribery & Anti-corruption policies and procedures are communicated to **ALL** our directors, employees and suppliers

Our vision is to achieve **100%** global workforce participation in our Anti-bribery and Anti-corruption e-learning

Achieved today: **6,334** employees (**66.1%**)

Of the **6,334** employees who took the Anti-bribery and Anti-corruption e-learning,

**3,566** were executives and **2,768** were non-executives

**5,849** are from Singapore

**266** are from Brazil

**109** are from Indonesia

**110** are from the rest of the world<sup>20</sup>

(20) Rest of the world includes Norway, USA, Malaysia, Poland, France and United Kingdom.

**WE LOOK FORWARD TO PARTNERING  
YOU IN OUR JOURNEY TO CREATE  
LONG-TERM VALUE AND A MORE  
SUSTAINABLE FUTURE!**





Well-positioned to deliver cleaner, greener and smarter solutions  
with our future-ready integrated Tuas Boulevard Yard





**SEMBCORP MARINE LTD**

Co. Reg. No. 196300098Z

80 Tuas South Boulevard, Singapore 637051

Tel: +65 6265 1766

[www.sembmarine.com](http://www.sembmarine.com)

