

Managing Sustainability

Sembcorp has long held a strong commitment to sustainability. We believe that responsible corporates can play a role as agents of transformation for a sustainable future. We see sustainability at our company as inextricably linked to our ability to deliver long-term value and growth to all our stakeholders.

Our board of directors oversees the business affairs of the Group and is collectively responsible for our long-term success. The main duties of the board include providing leadership on Sembcorp's overall strategy, which takes into consideration sustainability issues. Following our last materiality review in 2016, our management, with guidance from the board, has determined the environmental, social and governance (ESG) issues that are material to the Group's long-term sustainability. These 10 ESG issues are presented on page 84 of this annual report.

Board Statement

Sembcorp's board of directors is collectively responsible for the long-term success of the company. The board considers sustainability issues as part of its strategy formulation. It has determined Sembcorp's material ESG factors, and exercises oversight in the management and monitoring of its material ESG factors.

We are a signatory to the United Nations Global Compact (UNGC), and our key sustainability principles are set out in our Sustainability Policy. These principles are applied throughout our management systems and processes. We adopt a precautionary approach to avoid or minimise negative impacts. A list of our policies, certified facilities as well as memberships and participation in external initiatives is available in the Sustainability section of our website. We participate in the annual Dow Jones Sustainability Index and respond to the CDP (formerly known as the Carbon Disclosure Project) climate change programme.

In 2017, Sembcorp was once again selected as an index component of the Dow Jones Sustainability Asia Pacific Index, and the SGX Sustainability Leaders Index. We were conferred the Sustainability Award and named runner-up for the Singapore Corporate Governance Award (Industrials) by the



Securities Investors Association (Singapore), and were ranked sixth in the Singapore Governance and Transparency Index. At the Singapore Corporate Awards 2017, Sembcorp took home the silver awards for both the Best Annual Report and Best Investor Relations in the category for companies with market capitalisation of S\$1 billion and above. We were also named one of Asia's Top Green Companies at the Asia Corporate Excellence & Sustainability Awards, and were ranked 21st out of 100 global renewable power generators in Energy Intelligence's Top 100 Green Utilities.

Sustainability governance

Sembcorp's Sustainability Steering Committee (SSC) provides strategic direction for managing sustainability-related risks and opportunities. The SSC directs the preparation of Sembcorp's ESG Review, and provides recommendation to the board's Risk Committee for its approval. It also guides the development and improvement of frameworks, policies, guidelines, processes and initiatives to ensure that sustainability issues are effectively managed. The SSC is chaired by our Group Chief Financial Officer, and comprises senior executives who are accountable for the management of Sembcorp's material issues.



A separate climate change strategy working committee was set up in 2017 to review and manage climate-related risks and opportunities, and to develop our climate change strategy and look into its implementation. This committee is led by the head of our Renewables & Environment business.

As an initial but significant step, in 2018, we revised the performance scorecard for our leadership team to include specific ESG components. With this, our award of senior executives' performance incentives will specifically take into account ESG performance and key ESG indicators. This underscores the importance we place on addressing ESG risks and opportunities.

Sustainability contact

Sembcorp welcomes feedback on our sustainability issues and reporting at sustainability@sembcorp.com.

Sustainable Development Goals

The Sustainable Development Goals (SDGs) and their accompanying targets were ratified by 193 states at the historic United Nations (UN) Summit in September 2015. The SDGs set out a plan of action needed to address areas of critical importance for humanity and the planet by 2030. The scale and ambition of the SDGs mean that they cannot be achieved by governments alone. Businesses and other organisations also play an important role in addressing the sustainable development agenda.

The Sustainable Development Goals offer businesses an invaluable opportunity to transform communities, society and economies for the better.

The framework set out by the SDGs aligns with our vision to support development, improve the quality of life and deliver long-term value and growth. We have reviewed the SDGs against our material issues to identify the most significant positive and negative impacts of our operations. We have also considered opportunities where we can make the biggest contribution towards the SDGs while growing our business sustainably.

Having defined our priorities, the next step for Sembcorp is to integrate these into our business strategy and set targets aligned to our priority SDGs. In order to make significant progress on our priority SDGs, we will have to engage in partnerships with stakeholders across our value chain including governments, civil society and other businesses.



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Priority SDGs

We have identified SDG 6 (Clean Water and Sanitation) and SDG 7 (Affordable and Clean Energy) as having the strongest links to our core business areas. These goals represent the greatest opportunity for Sembcorp to contribute towards the sustainable development agenda. We will develop specific commitments on these goals, and report on our progress in our next ESG Review.

Supporting SDGs

We have identified the following goals as our supporting SDGs that align with our material issues:

- SDG 3 (Good Health and Well-being)
- SDG 8 (Decent Work and Economic Growth)
- SDG 9 (Industry, Innovation and Infrastructure)
- SDG 11 (Sustainable Cities and Communities)
- SDG 12 (Responsible Consumption and Production)
- SDG 13 (Climate Action) and;
- SDG 16 (Peace, Justice and Strong Institutions)

We will continue to actively manage these areas to reduce negative impacts while enhancing positive impacts, and continue to report on our performance and plans related to these goals.

Underlying SDGs

The remaining SDGs do not have such a direct link to our current material issues. However, as a company we believe that we have some impact across all 17 SDGs in different ways. The SDGs are a holistic framework; having an impact in one area will often impact other goals as well.

We will ensure that our sustainability strategy considers our broader impact across all 17 SDGs. While we will not report directly against the underlying SDGs, our ESG Review will cover many topics relevant across these SDGs.

Our Material ESG Issues

Through engagement with our stakeholders, and our materiality identification and review process, the issues presented in the table below have been identified to be material to us. Mitigating the risks and pursuing the opportunities presented by these issues, as well as the related SDGs, is part and parcel of how we drive success for the Group.

Our Material ESG Issues

	Material Issues	Relevant Sustainable Development Goals
ENVIRONMENTAL To responsibly manage and reduce our impact on the environment as well as to effectively manage environmental risks to our operations	Climate Change	
	Local Environmental Protection	
	Energy and Water Efficiency	
SOCIAL To be a responsible business that ensures the health and safety of our people, and makes a positive impact on our people and communities	Health and Safety	
	Our People	
	Community	
GOVERNANCE To maintain high standards of behaviour and integrity and be best in class for governance practices	Corporate Governance	
	Risk Management	
	Compliance	
	Ethical Business Practices	

Key performance indicators

	2017	2016	2015
Environmental			
Climate Change			
Direct greenhouse gas (GHG) emissions ¹ (million tonnes of CO ₂ equivalent)	23.0 ²	15.4	6.9
GHG emissions intensity ¹ (tonnes of CO ₂ equivalent per megawatt hour)	0.53 ²	0.45	0.28 ³
Local Environmental Protection			
Water withdrawal (million cubic metres)	1782.3 ^e	1874.0 ^f	1823.1
Waste generated ⁴ (thousand tonnes)	1452.7 ^e	927.1	39.3
Hazardous waste (thousand tonnes)	10.0	11.9	10.4
Non-hazardous waste (thousand tonnes)	1442.7	915.2	28.9
Social			
Health and Safety⁵			
Number of fatalities ⁶	3	3	3
Lost time injury rate per million man-hours ⁷	1.1	1.2	1.3
Accident severity rate per million man-hours ⁸	15.3	17.2	12.9
Our People			
Employee turnover ⁹ (%)	10.1	11.4	11.0
Average training hours per employee ¹⁰ (hours)	23.8	28.2 ^e	20.6
Community			
Community contributions ¹¹ (\$ million)	5.5	4.2	3.3

More performance data, including Governance data and qualitative data on each of our material issues, is available in this ESG Review, as well as in the Sustainability section of our website.

Notes: Please refer to the Reporting Practice section on page 86 for details on our reporting scope

¹ Emissions data covers entities that produce GHG from the combustion of fossil fuels consumed in our Utilities business' assets. It excludes emissions from anaerobic wastewater treatment plants, and maintenance and servicing equipment. Only CO₂, CH₄ and N₂O emissions are included in the calculation of direct GHG emissions. Global warming potential factors used are from the IPCC Fourth Assessment Report for 2015 and 2016 data, and the IPCC Fifth Assessment Report for 2017 data. The time horizon applied is a 100-year time horizon. Commentary on our performance can be found on page 94 of this report

² Data presented here is calculated using an operational consolidation approach. Data by equity share can be found on page 94 of this report

³ The GHG emissions intensity figure for 2015 has been estimated. A small proportion of data on energy attributed to steam production in 2015 was not available and was estimated based on data from 2016

⁴ Data for waste generated excludes waste that is collected and incinerated for our customers

⁵ Health and safety data reflects group-wide performance within the reporting scope stated for each respective year. Data covers both assets in operation and under construction. A detailed breakdown of health and safety data is available in the Sustainability section of our website

⁶ Data covers employees and contractors as well as members of the public. Details of fatalities are reported on page 103

⁷ The lost time injury rate covers fatalities of employees and contractors only

⁸ The accident severity rate excludes fatalities. The accident severity rate including fatalities is reported as part of detailed performance data, available in the Sustainability section of our website. We record lost time due to one fatality as 6,000 lost work days, in line with guidelines by the US National Institute for Occupational Safety and Health

⁹ Data covers both voluntary and involuntary turnover of permanent employees of Sembcorp and its subsidiaries, excluding Sembcorp Marine

¹⁰ Data covers permanent and contract employees

¹¹ Data from 2017 covers assets under construction

^f Indicates restated figure. Details can be found in the Performance and Data Commentary Report of the respective year, in the Sustainability section of our website

^e Indicates data is based on management's best estimates; we look to further refine the accuracy and consistency of the data

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Stakeholder engagement

Stakeholder engagement is the first key step in determining issues that are material to us. It gives us insight into perspectives of our stakeholders, and what they deem important in the context of their partnership with us. We engage and receive feedback from a diverse range of stakeholders with the intention to improve our performance and drive long-term sustainability. Stakeholders are identified in accordance with the AA1000 Stakeholder Engagement Standard and they include customers, employees, financial institutions, governments and regulators, industry and academic groups, the investment community, the local community, and suppliers. Our stakeholders are managed by various departments at the corporate as well as market level.

For more information on our stakeholder engagement platforms, please visit the Our Approach page in the Sustainability section of our website.

Reporting Practice

Materiality process

Materiality analysis enables Sembcorp to define sustainability issues that are of greatest significance to our businesses and stakeholders over the long term.

We conducted our first materiality analysis in 2012, where we invited external stakeholder feedback on our material issues. In 2016, we conducted a review of our material issues, which included a stakeholder engagement survey, inviting input from internal and external stakeholders globally. Over 300 stakeholders were invited to provide feedback on our material issues. Following the review, we streamlined our areas of focus to 10 material ESG issues. These material issues were approved by our board and senior management. In 2017, the SSC reviewed the material issues and validated their continued relevance. As part of the review, Security was highlighted as an emerging issue. The Group Health, Safety, Security and Environment (GHSSE) department will oversee the management of the issue. For each material issue, we report its importance in the context of sustainability and its relevance to Sembcorp, as well as our management approach and performance.

Sustainability issues have been identified in line with the Global Reporting Initiative (GRI) Standards for sustainability reporting. The materiality review took into account GRI G4's Electric Utilities Sector Supplement Disclosure, the Dow Jones Sustainability Asia Pacific Index and other relevant frameworks and peer reviews. We prioritised issues using a materiality matrix, taking into account their significance to Sembcorp and our stakeholders.

Reporting framework

Our ESG Review has been prepared in accordance with the GRI Standards: Core option. It is guided by the SGX Sustainability Reporting Guide as well as the Ten Principles of the UNGC. Our climate-related disclosures are guided by the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD). Our previous report was published in March 2017.

We report on our key ESG indicators in our ESG Review. A complete set of information, including our GRI content index, is available in the Sustainability section of our website.

Reporting scope and assurance

Our report provides information on Sembcorp's subsidiaries and covers the period from January 1 to December 31, 2017. It excludes joint ventures, partnerships and associates for which Sembcorp does not have management and / or operational control, with the exception of GHG emissions data. In line with the methodology used for the development of our carbon emission targets, we now report our GHG emissions and GHG emissions intensity using an equity share approach. Our Marine business is excluded from our report as it is separately listed in Singapore and reports its activities independently. New acquisitions and subsidiaries are given one to two years upon the completion of construction or agreement to integrate their reporting systems with that of the Group. Thereafter, their sustainability data will be reported externally once a full calendar year of data is collected. Data on health and safety, and community investments from our Utilities assets under construction is included. Data pertaining to entities divested during the year are excluded from our report.

Our key ESG data has been independently reviewed by PricewaterhouseCoopers LLP. Please refer to pages 134 and 135 for their assurance statement and scope of assurance.

For more information on the assurance coverage, please visit the GRI Content Index in Our Performance page in the Sustainability section of our website.

The table on the right shows our reporting scope by business line and material issue.

Data measurement and quality

All data measurements are in line with GRI Standards requirements for our chosen indicators. GHG emission factors are based on the 2006 Intergovernmental Panel for Climate Change (IPCC) guidelines, except for those relating to our

Reporting Scope by Business Line and Material Issue

	ENVIRONMENTAL			SOCIAL			GOVERNANCE			
	Climate Change	Local Environmental Protection	Energy and Water Efficiency	Health and Safety	Our People	Community	Corporate Governance	Risk Management	Compliance	Ethical Business Practices
MATERIAL ISSUES										
UTILITIES										
Existing assets	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Assets under construction				✓		✓	✓	✓	✓	✓
MARINE	<i>Our Marine business (Sembcorp Marine) is separately listed and reports its activities separately</i>									
URBAN DEVELOPMENT				✓	✓	✓	✓	✓	✓	✓
OTHER BUSINESSES				✓	✓	✓	✓	✓	✓	✓

Information provided in the ESG Review relates to the subsidiaries of Sembcorp, excluding Sembcorp Marine. With the exception of GHG emissions data, it excludes joint ventures, partnerships and associates for which Sembcorp does not have management and / or operational control

operations on Teesside, UK, which uses the stoichiometric basis of calculation. Global warming potential factors used are from the IPCC Fourth Assessment Report for 2015 and 2016 data, and the IPCC Fifth Assessment Report for 2017 data. The time horizon applied is a 100-year time horizon. In 2017, we have changed our accounting basis for GHG emissions from an operational consolidation to an equity share approach.

Occupational health and safety indicators follow standards set out by the US National Institute for Occupational Safety and Health and the International Association of Oil and Gas Producers.

While there are inherent limitations to the accuracy of data, we seek to minimise any errors and irregularities by strengthening our internal controls.

Our Supply Chain

We recognise the importance of evaluating our suppliers to ensure supply chain risks and negative impacts are minimised.

Sembcorp's main suppliers consist of original equipment manufacturers (OEMs), material suppliers, and engineering, procurement and construction (EPC) contractors.

OEMs supply us with large scale equipment such as gas turbines and desalination units as well as process equipment

such as switchgears and control systems. Material suppliers supply fuel and chemicals needed to run our plants. EPC contractors provide detailed engineering, procurement and construction services for our greenfield plants.

Our plants are designed and built to international codes and standards, and it is with this perspective that we procure our equipment. We seek to procure high-quality and technologically-advanced equipment that is durable. We have stringent requirements for quality and expect our suppliers to abide by our Code of Business Conduct. Our Group Procurement Policy provides guidelines and control principles for various stages of the procurement process.

Our key operations carry out an annual evaluation of vendor performance for our top suppliers. Through this process, we rate these suppliers on health, safety and the environment (HSE), as well as quality assurance and service level criteria. We also review their audited financial reports. In addition, for all our EPC contracts, contractors are assessed based on their track records with respect to safety, project type, size and location experience, among other evaluation criteria. We value the opportunity to positively influence our service providers and suppliers towards greater HSE awareness and social responsibility. We believe that securing a pool of suppliers that share our commitment to sustainability will mitigate risks to our operations and reputation.

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Supplier diversification

Our efforts to ensure supply chain security include diversifying supply to mitigate concentration risk. Coal supply is managed via a portfolio of suppliers and country sources. In Singapore, Sembcorp's operations maintain at least one primary and one secondary supplier for critical spare parts and consumables, where possible.

Fuel management

Fuel is a significant cost component for Sembcorp's power and steam generation operations. Therefore, managing our various fuel sources, along with their supply chains, is a key focus.

Our fuel management teams look into issues such as fuel contract management, fuel hedging / trading and fuel procurement, as well as fuel logistics such as transportation and shipping, to ensure the security and reliability of our fuel supply. We secure long-term contracts for coal and gas supply with reliable counterparties who have reserves that can sustain the useful life of our assets. To further diversify our fuel mix and tap on sustainable sources, Sembcorp has increased our use of renewables and alternative fuels.

Sembcorp's Unique Utilities Business

The challenge facing industries and communities today is one of balancing development with resource scarcity and environmental concerns. At Sembcorp, we believe that we have a part to play in contributing to a sustainable future. Our Utilities business uniquely offers both energy and water solutions. We leverage group capabilities and strengths to limit the impact of our activities on the environment and to create innovative solutions for our customers.

