Sustainability at Sembcorp is about striving for excellence and continuous improvement in identifying, understanding and responding to evolving environmental, social and governance challenges facing our businesses.

#### MANAGING SUSTAINABILITY

At Sembcorp, we believe in building sustainable businesses that deliver long-term shareholder value and growth. We believe that a truly sustainable business not only creates economic value, but does so in a way that benefits its stakeholders.

Environmental, social and governance (ESG) considerations are embedded in our business decisions and processes. We believe that taking ESG considerations into account helps us understand our risks and responsibilities in a holistic manner. We also believe that when our strategy and business decisions incorporate ESG concerns, we are better prepared to respond to the challenges we face.

The management of our sustainability issues is centred on five focus areas. Our key sustainability principles are set out in our Sustainability Policy. These principles are applied throughout our management systems and processes. We aim to continually improve our management systems, and evaluate our management approach by benchmarking it against industry best practice. 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 can be found in the Sustainability section of our website.

Sustainability is addressed at the highest levels at Sembcorp. 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. The board also ensures the adequacy of the Group's framework for risk management and internal controls.

Sembcorp's Sustainability Steering Committee (SSC) provides strategic direction for managing sustainability-related risks and opportunities. It also guides the development and improvement of frameworks, policies, guidelines and processes to ensure that sustainability issues are effectively managed. The SSC is a high-level committee chaired by the Group Chief Financial Officer, and comprises senior executives across various functions, including asset management, human resources, health, safety and environment (HSE) and corporate relations.

At the business unit level, economic, operational, as well as health and safety issues and other risks are reviewed by the head of operations at bi-monthly business unit management meetings and risk management committee meetings. The Group's performance in these areas is evaluated against internal targets. Business units also provide quarterly governance assurance certifications on the adequacy of their risk management and internal control systems in line with Sembcorp's Governance Assurance Framework (GAF).

In 2015, Sembcorp became a signatory to the United Nations (UN) Global Compact, joining more than 8,000 companies globally who have taken a stand for a sustainable future.

Sembcorp was also selected as an index component of the Dow Jones Sustainability Asia / Pacific Index 2015.

## **Sustainability contact**

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

## **Sustainability Performance Snapshot**

The table below shows quantitative data that reflects our performance in areas that have been identified as material to our businesses and stakeholders. More performance data, including qualitative data, is available in the individual sections for each focus area in this report, as well as in the Sustainability section of our website.

	2015	2014	2013
Economic			
Capital and Portfolio Management <sup>1</sup>			
Turnover (S\$ million)	9,545	10,895	10,798
Net profit (S\$ million)	549	801	820
Return on equity (%)	9.4	15.2	17.1
Return on total assets (%)	3.7	7.5	9.1
Total debt-to-capitalisation ratio	0.46	0.40	0.23
Total debt-to-capitalisation ratio (less cash and cash equivalents)	0.35	0.26	Net cash
Total shareholder returns <sup>2</sup> (%)	(28.8)	(15.6)	7.7
People			
People Development			
Employee turnover (voluntary and non-voluntary) (%)	11.0	18.4	12.4
Average training hours per employee (hours)	20.6	22.3	13.7
Health, Safety and the Environment			
Health, Safety and the Environment Occupational Health and Safety <sup>3,4</sup>	3	0	(
Occupational Health and Safety <sup>3,4</sup> Number of fatalities	3	0 3 5r	
Occupational Health and Safety <sup>3,4</sup>	3 1.3 12.9	0 3.5 <sup>r</sup> 59.4 <sup>r</sup>	2.0
Occupational Health and Safety <sup>3,4</sup> Number of fatalities  Lost time injury rate per million man-hours <sup>5</sup> Accident severity rate per million man-hours <sup>5</sup>	1.3	3.5 <sup>r</sup>	2.0
Occupational Health and Safety <sup>3,4</sup> Number of fatalities Lost time injury rate per million man-hours <sup>5</sup>	1.3	3.5 <sup>r</sup>	2.6 41.4
Occupational Health and Safety <sup>3,4</sup> Number of fatalities Lost time injury rate per million man-hours <sup>5</sup> Accident severity rate per million man-hours <sup>5</sup> Climate Change	1.3 12.9	3.5 <sup>r</sup> 59.4 <sup>r</sup>	2.6 41.4
Occupational Health and Safety <sup>3,4</sup> Number of fatalities Lost time injury rate per million man-hours <sup>5</sup> Accident severity rate per million man-hours <sup>5</sup> Climate Change  Direct greenhouse gas emissions <sup>6</sup> (million tonnes of CO <sub>2</sub> equivalent)	1.3 12.9	3.5 <sup>r</sup> 59.4 <sup>r</sup>	2.6 41.a
Occupational Health and Safety <sup>3,4</sup> Number of fatalities Lost time injury rate per million man-hours <sup>5</sup> Accident severity rate per million man-hours <sup>5</sup> Climate Change Direct greenhouse gas emissions <sup>6</sup> (million tonnes of CO <sub>2</sub> equivalent) Environmental Protection	1.3 12.9 6.9	3.5° 59.4° 5.7	2.0 41.4 6.4 1,595.
Occupational Health and Safety <sup>3,4</sup> Number of fatalities Lost time injury rate per million man-hours <sup>5</sup> Accident severity rate per million man-hours <sup>5</sup> Climate Change Direct greenhouse gas emissions <sup>6</sup> (million tonnes of CO <sub>2</sub> equivalent) Environmental Protection Water withdrawal (million m³)	1.3 12.9 6.9	3.5° 59.4° 5.7	2.6 41.4 6.4 1,595.3
Occupational Health and Safety <sup>3,4</sup> Number of fatalities Lost time injury rate per million man-hours <sup>5</sup> Accident severity rate per million man-hours <sup>5</sup> Climate Change Direct greenhouse gas emissions <sup>6</sup> (million tonnes of CO <sub>2</sub> equivalent)  Environmental Protection  Water withdrawal (million m²)  Waste disposal <sup>7</sup> (thousand tonnes)	1.3 12.9 6.9 1,823.1 39.3	3.5° 59.4° 5.7 1,593.7° 43.8°	2.6
Occupational Health and Safety <sup>3,4</sup> Number of fatalities Lost time injury rate per million man-hours <sup>5</sup> Accident severity rate per million man-hours <sup>5</sup> Climate Change Direct greenhouse gas emissions <sup>6</sup> (million tonnes of CO <sub>2</sub> equivalent) Environmental Protection Water withdrawal (million m³) Waste disposal <sup>7</sup> (thousand tonnes) Hazardous waste (thousand tonnes)	1.3 12.9 6.9 1,823.1 39.3 10.4	3.5° 59.4° 5.7 1,593.7° 43.8° 12.6	2.6 41.4 6.4 1,595.3 31.3

#### Note

Please refer to the section on Reporting Framework and Scope on page 130 for details on our scope.

- <sup>1</sup> Financial figures reported are for the Group, including Sembcorp Marine, as per audited financial statements.
- <sup>2</sup> Source: Bloomberg
- <sup>3</sup> Health and safety data reflects group-wide performance within the reporting scope stated for each respective year. For 2015, it covers both assets in operation and under construction. A detailed breakdown of health and safety data is available on our website.
- Data covers employees and contractors engaged to work on our sites. Details of fatalities are reported on page 150.
- <sup>5</sup> In 2015, we adopted standards set out by the US National Institute for Occupational Safety and Health (NIOSH) and the International Association of Oil and Gas Producers (IOGP), and now report on a per million man-hour basis. Figures for 2014 and 2013, which were reported on a per 200,000 man-hour basis have been restated accordingly.
- <sup>6</sup> Data covers operations that produce direct greenhouse gas emissions from the combustion of fossil fuel.
- 7 Data for waste disposal excludes waste that is collected and incinerated for our customers.
- <sup>8</sup> Figure excludes contributions from Sembcorp Marine. Including contributions from Sembcorp Marine, the Sembcorp Group's contributions amounted to S\$7.1 million.
- Indicates restated figure. Details can be found in the respective sections of this Sustainability Report and the Global Reporting Initiative content index in the Sustainability section of our website.

## Materiality

Materiality analysis enables Sembcorp to define sustainability issues that are of greatest significance to our businesses and stakeholders over the long term. As we seek to make progress in our sustainability journey, drive performance and transparency, and embed sustainability into Sembcorp's culture, this focus on materiality is vital.

Our reporting is currently focused on 11 material issues, grouped into five focus areas. Each focus area is owned by an appointed SSC member. The five focus areas and 11 material issues are recognised by both internal and external stakeholders. For each material issue, we report the sustainability context, its relevance to Sembcorp, and our management approach and performance.

Sustainability issues were identified in line with Global Reporting Initiative (GRI) guidelines. The materiality review took into account GRI's Electric Utilities Sector Supplement, the Dow Jones Sustainability 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 according to clearly defined criteria based on the AA1000AS five-part materiality process.

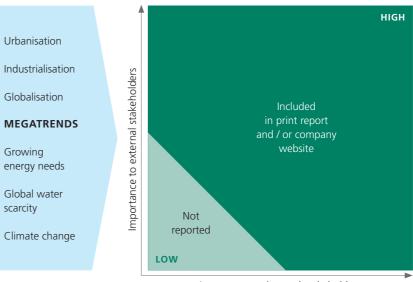
The materiality assessment and review were conducted with input from an independent sustainability consultant. To increase the robustness of this assessment, we incorporated feedback from our stakeholders, including shareholders, financial institutions, the investment community, regulators,

customers, suppliers and non-governmental organisations. The survey, commissioned in 2012, was conducted by an independent firm to ensure anonymity for respondents. On the whole, respondents agreed on where our focus should lie. Their responses also helped us refine aspects of the material issues that our key stakeholders were interested in, and provided input on how we could better communicate these issues.

Sembcorp embarked on reviewing and updating our materiality issues in late 2015. As part of this materiality review process, we will be undertaking a stakeholder engagement survey, and gathering input from internal and external stakeholders across our different business units globally and at the corporate level. We will review and use the information we gather from our stakeholders to refresh our material issues and ensure that Sembcorp continues to align our sustainability efforts with business growth. The results of this materiality review and the corresponding updates to our material issues and indicators will be presented in our 2016 report.

In 2015, we strengthened the link between risk management and sustainability at Sembcorp, by developing risk appetite statements for each of our sustainability focus areas. The risk appetite statements and associated key risk indicators set the direction and boundaries for the execution of our strategy, and provide early warning of increasing risk exposure in each focus area.

## **Sembcorp's Materiality Matrix**



Sustainability strategy

Stakeholder engagement

#### **PROCESSES**

Governance framework

Risk management

Reporting on key performance indicators

Importance to internal stakeholders

### Reporting framework and scope

Our annual Sustainability Report is prepared in accordance with GRI G4 Core requirements. It is guided by SGX Guidelines on Sustainability Reporting as well as the Ten Principles of the UN Global Compact. Our GRI content index can be found in the sustainability section of our website.

Our report provides information on Sembcorp's subsidiaries and covers the calendar year. It excludes joint ventures, partnerships and associates for which Sembcorp does not have management and / or operational control. As our Marine business is separately listed in Singapore and reports its activities separately, it is therefore excluded from this report.

New acquisitions and subsidiaries are given one year or more 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 pertaining to entities divested during the year is excluded from our report. This year, we expanded the scope of our occupational health and safety reporting to also include assets and projects under construction, with data reported from the onset of construction activities. We aim to work towards external assurance of the report.

The table below shows our reporting scope by business line and focus area.

FOCUS AREAS	Econo	Economic			Governance, Risk and Compliance		People	Health, Safety and the Environment			Community
MATERIAL ISSUES	Capital and portfolio management	Reliability	Innovation	New income streams	Governance and ethical business	Risk and regulatory compliance	People development	Occupational health and safety	Climate change	Environmental protection	Community integration
UTILITIES											
Existing assets											
Energy	•	•	•	•	•	•	•	•	•	•	•
Water	•	•	•	•	•	•	•	•		•	•
Solid waste management	•			•	•	•	•	•		•	•
Assets under construction	•	•	•	•	•	•		•			•
MARINE	•	Our Marine business (Sembcorp Marine) is listed separately and reports its activities separately.									
URBAN DEVELOPMENT	•				٠	•	•	•			•
OTHER BUSINESSES	•				•	•	•	•			•

Information provided in the Sustainability Report relates to the subsidiaries of Sembcorp, excluding Sembcorp Marine. It excludes joint ventures, partnerships and associates for which Sembcorp does not have management and / or operational control

### Data measurement and quality

All data measurements are in line with GRI G4 recommendations for our chosen indicators. Greenhouse gas (GHG) emission factors are based on the 2006 Intergovernmental Panel for Climate Change (IPCC) guidelines, except for those relating to our operations on Teesside, UK, which use emission factors adapted from the US Environmental Protection Agency and the 2013 and 2014 Government Greenhouse Gas Conversion Factors for Company Reporting issued by the UK's Department for Environment, Food & Rural Affairs and Department of Energy & Climate Change. Occupational health and safety indicators follow standards set out by the

US National Institute for Occupational Safety and Health (NIOSH) and the International Association of Oil and Gas Producers (IOGP).

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

#### **Focus Areas and Material Issues**

Sembcorp manages sustainability through five areas of focus. These focus areas are aligned with how we drive success for the Group. Under each focus area, we discuss our management approach to the relevant material issues and our performance against each issue.

## **MATERIAL ISSUES**

Focus Areas	Material Issues
Economic	
To deliver long-term value and growth	Capital and portfolio management     Reliability     Innovation     New income streams
Governance, Risk and Compliance	
To maintain high standards of behaviour and integrity and be best in class for governance practices	Governance and ethical business     Risk and regulatory compliance
People	
To provide a fair, diverse and inclusive workplace, and continually improve our human resource management and people development	People development
Health, Safety and the Environment	
To instil sound and practical health and safety management as part of our workplace culture, and protect the environment in our business activities, products and services through good environmental practices	Occupational health and safety     Climate change     Environmental protection
Community	
To be a responsible business, making a positive contribution to our communities	Community integration

### **Stakeholder Engagement**

We recognise the importance of building relationships and communicating openly with our stakeholders.

We identified our stakeholder groups following a stakeholder mapping exercise, done in accordance with the AA1000 Stakeholder Engagement Standard by an independent consultant in 2012. Using a structured approach, stakeholders were mapped based on their level of influence and interest. The level of stakeholder interest against each material issue was also reviewed and a survey

was conducted to invite feedback on our material issues from selected key stakeholder groups. This allowed us to understand the concerns and perspectives of our external stakeholders in relation to our material issues, in order to formulate our sustainability priorities. It also helped to guide our communication to stakeholders on our performance and progress on our material issues.

More information on the platforms we use to regularly engage our stakeholders can be found in the Sustainability section of our website.

#### CASE STUDY

# Working together to respond to a drought crisis: Sembcorp Siza Water

As a result of El Niño, South Africa is facing one of its worst droughts in 30 years. The drought, which began in late 2014, has been declared a crisis by the government. Amongst the worst-hit areas in the country is the Dolphin Coast, where our municipal water business Sembcorp Siza Water operates.

As the local water provider, Sembcorp Siza Water has played a key role in managing the impact of the drought from an early stage. When the drought hit, it became apparent that it would be impossible for the conventional water system to be fully operational. Sembcorp Siza Water worked out a drought plan with local authorities and the bulk water supplier, and rolled this out to the community through an intensive communications campaign. Through daily slots on local radio, regular updates in newspapers and on the company website, flyers and text message alerts, we educated consumers on the crisis, called for support for the drought plan and communicated tips on how to save water. We

also met key stakeholders face-to-face, including local councillors and authorities, as well as the ratepayers' association, chamber of commerce and local business leaders, and held media interviews and briefings. The response to these measures led to the community reducing its water usage by 5,000 cubic metres per day.

In the course of engaging consumers and local councillors, the need to find innovative solutions to the water crisis was raised. Arising from this, we commissioned boreholes to augment water supply. In addition, we conducted a month-long online survey, during which 96% of consumers voted in favour of introducing recycled water to their potable water. We then completed a facility that reclaims potable water from effluent, increasing the water supply by 4,000 cubic metres. This has been a great success, eliminating the need for water shedding in the community.

This experience demonstrates that technical expertise is only part of the solution. To change public behaviour and generate sustainable solutions, engagement and partnership with stakeholders is also key.

#### **Economic**

To deliver long-term value and growth

#### Why this is material

Long-term economic viability is at the core of Sembcorp's approach to building sustainable businesses. As we build successful, sustainable businesses, societies and communities benefit. Our businesses deliver the economic engine to support industrialisation and urbanisation. Our operations generate employment, contracts for local suppliers and tax revenues for governments and result in infrastructure development in our host communities. For more information on our contributions to communities, please refer to the Community section of this report. We drive our economic sustainability by monitoring and managing four key facets of our business: capital and portfolio management, reliability of our assets, products and services, innovation and business development for new income streams.

DIRECT VALUE
GENERATED &
DISTRIBUTED
BY SEMBCORP

TURNOVER

S\$9.5 billion

DIRECT VALUE DISTRIBUTED TO OTHERS Materials and services costs

S\$7.8bn\*

These include materials and subcontract costs, which comprise purchases from suppliers, contractor costs and other operating expenses

**Employees** 

**S\$832m** 

This includes wages, salaries and benefits Governments

S\$137m

This includes income taxes paid, net of refunds received

Capital providers

S\$551m

This includes dividends, distributions on perpetual securities and interest paid Communities

S\$7.1m\*

This includes donations and sponsorships from our businesses' engagement with charitable organisations or activities

DIRECT VALUE RETAINED BY SEMBCORP

S\$263 million

<sup>\*</sup> On an accrued basis

<sup>\*\*</sup> Figure is based on the reporting scope stated in the Sustainability Report, and includes Sembcorp Marine's community contributions

#### Capital and portfolio management

Sembcorp's businesses often involve large-scale, long-term projects that require significant initial capital outlay. Strong financial health and a disciplined approach to investment are therefore necessary for us to succeed. At the same time, as Sembcorp continues to grow, we believe it is important for us to maintain a balanced portfolio of businesses across geographical regions and business segments, with the appropriate level of risk. Capital allocation, including the geographical distribution of our investments, is managed from this perspective.

### Reliability

The reliability of our supply, assets and products is vital not only for our reputation, but also for our long-term profitability. Our Group is heavily invested in the Utilities business, which involves the development and sustained operation of energy and water facilities. We are committed to long-term customer contracts and our products and services, such as power, steam, water and wastewater treatment, are essential to our customers. By investing in the proper care and maintenance of our assets, we ensure that their useful life, and therefore their ability to generate stable recurring income and a reliable supply of products and services, is sustained throughout our long investment horizon.

#### Innovation

We recognise that technology and innovation is important in maintaining and enhancing our relevance, profitability and competitive advantage. This includes applied research and development (R&D) and improvements that optimise our operations and enhance our efficiency, as well as new technologies and methodologies that offer wider sustainability benefits.

#### New income streams

To deliver long-term growth, we continuously explore new business opportunities and maintain a pipeline of upcoming projects, which includes both greenfield and brownfield investments.

# Positioned for Growth in the Right Businesses, in the Right Markets

As part of our strategy to ensure long-term growth, we continue to expand our operations overseas. In 2015, overseas contributions amounted to 60% of our Utilities business' net profit excluding corporate costs and significant items.

We leveraged our strong development capabilities to grow through greenfield projects in rapidly developing economies, announcing our first energy projects in Myanmar and Bangladesh. In addition, we expanded our desalination capacity in the UAE and wind power assets in China. These projects, when completed, will provide us with new income streams.

### Our approach

Capital and portfolio management
We have robust frameworks and processes in place
to ensure our investment and business decisions
take into account long-term considerations.
In addition, potential acquisitions and growth
opportunities are evaluated based on strict
investment guidelines. Depending on criteria
such as project value and country risk, approval
for projects may involve the Senior Management
Committee, the board and / or its Executive or
Risk Committee.

We actively manage our risk portfolio, including monitoring balance sheet liquidity ratios and country risk profiles. For more information on risk management at Sembcorp, please refer to the Risk Management and Internal Controls chapter.

## Reliability

Reliability of our assets, products and services
The reliability of our assets is of critical importance,

and is rigorously managed from the design phase through to the operation and maintenance phase. In the design and construction phases, we focus on installing sufficient operational flexibility and selecting quality equipment. In the operation and maintenance phases, regulatory and manufacturers' standards are strictly adhered to. The reliability of our plants is further monitored through monthly performance indicators which our management oversees. Technical audits and checks are also conducted on our plants.

#### Product safety and compliance

Product safety is a priority in our business, as non-compliance can result in serious health, safety and operational issues for our customers, many of whom depend on us for basic utilities or require our products for their industrial processes. We implement a robust maintenance and monitoring regime, which

includes stringent inspections and the installation of meters and sensors at both our and our customers' facilities. To ensure the safe delivery of our products, we have rigorous maintenance regimes in place and regularly inspect our delivery systems, including checking pipelines for leaks. We also conduct regular sampling and laboratory tests to meet regulatory requirements and to ensure that the water we produce is safe for our customers and end users.

## **Our Supply Chain**

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

Equipment manufacturers supply us with large-scale equipment such as gas turbines and desalination units as well as process equipment such as switchgears and control systems. Raw material suppliers supply fuel and chemicals needed to run our plants, while EPC contractors develop and construct our greenfield plants. Our plants are designed and built to have a long, productive lifespan, and it is with this perspective that we procure our equipment. We seek to ensure we procure high-quality and technologically advanced equipment that will last. We have stringent requirements for quality and therefore engage reputable suppliers who abide by global environmental, social and governance standards.

Our Group Procurement Policy provides guidelines and control principles for various stages of the procurement process.

We also recognise the importance of evaluating our suppliers to ensure supply chain risks and negative impacts are minimised. For example, our operations in Singapore carry out an annual vendor performance evaluation for our top suppliers by volume and dollar value. 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 EPC contracts, contractors are

assessed based on their track record with respect to project type, size and location experience, among other criteria. We value the opportunity to positively influence our 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.

#### **Supplier diversification**

Our efforts to ensure supply chain security include diversifying supply to mitigate concentration risk. In Singapore, for instance, Sembcorp's operations maintain at least one primary and one secondary supplier for key spare parts and consumables, wherever possible.

#### **Fuel procurement**

Fuel is a significant cost component for Sembcorp's power and steam generation operations. The security of our fuel supply is also vital to the sustained performance of our assets. In view of this, we have a Group Fuel Management department that looks into issues such as security of supply, monitoring of price fluctuations and optimisation of fuel mix. To further diversify our fuel mix and tap sustainable sources, Sembcorp has increased our use of alternative fuels and renewables. In Singapore, for instance, our solid waste management operations provide a reliable supply of waste wood for our woodchip boiler plant. In our biomass power plant in the UK, waste wood from sustainably-managed forests and sawmills, as well as arboricultural residues, is used as fuel.

#### Innovation

Sembcorp's Technology Advisory Panel, which includes our Chairman, Group President & CEO and other invited experts, provides strategic direction for our technology and innovation programmes. The panel oversees the development and application of significant emerging technologies in the energy and water sectors and provides guidance to Sembcorp's leadership on technological trends and opportunities. It is supported by an in-house Group Technology department.

Headed by our Chief Technology Officer, our Group Technology department oversees our R&D and innovation efforts. Besides tracking our investment in innovation and its corresponding returns, we also track indicators such as the number of projects screened. This ensures that we have a pipeline of innovation projects being developed and implemented in a timely manner.

To further encourage innovation from bottom up, Sembcorp's !DEA Awards programme rewards innovative ideas and efforts across the Group. Past winning entries have included process innovations that have resulted in cost savings and improved HSE performance, as well as innovations that have led to the development of new products and services.

Our ongoing engagement with venture capitalists, technology companies and tertiary research institutes helps us keep abreast of the latest technological advancements. In looking at new technology, we prioritise innovations that address the needs of our operations, but also consider more general proposals.

# **Promoting Clean Technology**

Sembcorp pioneered the commercial reclamation of water from treated industrial and municipal wastewater effluent in Singapore. We have established ourselves as a trusted wastewater treatment provider in Singapore as well as in industrial clusters in China. By integrating wastewater treatment, water reclamation and water supply in a closed loop, Sembcorp helps its customers reduce their water consumption and conserve this precious resource.

Sembcorp has also established a dedicated Renewables department to pursue clean technology opportunities. In 2015, Sembcorp acquired Green Infra, a leading renewable energy company in India, and expanded its wind power capacity in Huanghua, Hebei, China.

#### New income streams

Sembcorp's Group Business Development & Commercial department is structured and equipped to pursue new business opportunities with agility and focus. Dedicated teams look into growing our businesses in both existing and new markets.

To ensure our continued growth, we identify and develop a healthy pipeline of projects. We also seek to grow through strategic partnerships with our customers, by continuously developing innovative and competitive solutions that meet their evolving needs.

We actively invest in sustainable and green business lines, which will give us an edge in an increasingly resource-scarce world. We take a disciplined approach and employ a stringent evaluation process to all our projects and investments.

#### Our performance

Sembcorp's financial performance and key economic indicators can be found in our Group Financial Review chapter and Financial Statements.

As a global energy and water company with a rich history of being driven by technology and innovation, Sembcorp hopes to contribute towards raising Singapore's profile as a hub for applied R&D, while supporting the long-term growth of the energy and water sectors. To this end, we have collaborated with several partners in various innovation projects. Ongoing partnerships include the Sembcorp Industrial Living Laboratory with the Singapore Economic Development Board and the Sembcorp-EMA Energy Technology Partnership with the Energy Market Authority (EMA) of Singapore. These projects leverage Sembcorp's facilities for late-stage test-bedding and coinnovation of energy, water and environmental technologies, and explore the commercialisation of R&D solutions. The investments in these multi-year projects, which include matching

grants from the authorities and other partners, are worth up to S\$18 million.

In 2015, we acquired Green Infra, a renewable energy company in India. This acquisition not only marked our entry into India's renewable energy market, but also signified a major step in our strategy to grow our renewable business. In Myanmar, we were selected to develop the largest independent gas-fired power plant in the country. This project marked Sembcorp's entry into Myanmar's fast-growing power market. We also announced our entry into the Bangladesh power market and expanded our renewable energy business in Huanghua, China, with the development of two wind farms.

A strong push for innovation, coupled with a keen pursuit of growth opportunities, puts Sembcorp in an excellent position to build a strong future.

## **Going forward**

The Group will maintain a disciplined approach to managing its financial position and portfolio. We will continue to deepen our asset management as well as business development and commercial capabilities, optimise plant performance and grow our asset portfolio for a greater recurring income base.

We will continue to identify and develop new and innovative technologies and leverage investments made for technologies relevant to our business. In addition, we will build on our culture of innovation through the recognition and implementation of !DEA Awards projects and other innovation proposals. In the near future, we expect to implement further phases of the Virtual Brain predictive maintenance and optimisation project and develop it for application to other water treatment processes. We will also continue to engage our partners in our ongoing projects, while scanning the landscape for more innovation opportunities.

Governance, Risk and Compliance
To maintain high standards of behaviour
and integrity and be best in class for
governance practices

### Why this is material

Governance and ethical business
Responsible business conduct ensures the longterm viability of our businesses and builds trust
and confidence with our stakeholders. We commit
to high standards of behaviour and integrity in
everything we do, and comply with all laws and
regulations wherever we operate. We believe in
conducting our business legally, fairly, honestly and
with integrity, and expect the same of those with
whom we do business. Sembcorp has zero tolerance
for fraud, bribery and corruption.

Risk and regulatory compliance
Risk management is an integral part of Sembcorp's
approach to operating sustainably. As we continue
to grow and expand our global footprint, we are
inadvertently exposed to diverse risks, such as politic

to grow and expand our global footprint, we are inadvertently exposed to diverse risks, such as political and regulatory, market, competition, supply chain, human resources, project and cost management risks, environmental and social risks, as well as the risk of possible fraud, corruption and bribery.

Besides helping to preserve our bottom line by reducing the likelihood and impact of potential losses, risk management provides a common basis on which to evaluate new business opportunities. It also assures our board and shareholders that key enterprise and business risks faced by the organisation have been identified, assessed and managed with appropriate risk mitigation and controls.

Sembcorp is committed to a high standard of regulatory compliance. Non-compliance with applicable laws and regulations may subject us to statutory and regulatory fines, resulting in material litigation. It may also affect our reputation, financials and licence to operate.

# Communicating Our Code of Business Conduct Through Electronic Learning

The Sembcorp Code of Business Conduct expresses the high standards of behaviour and integrity expected from our employees worldwide.

An e-learning course in multiple languages was launched globally to further communicate our Code of Business Conduct and help employees better understand its requirements, guiding principles and application in their daily course of work.

## Our approach

Governance and ethical business

Sembcorp is led by an effective board mainly comprising of independent non-executive directors. The board is collectively responsible for the long-term success of the Group. Part of its role is to ensure that the Group's internal control and risk management systems are adequate and effective, and that our obligations to key stakeholders are understood and met. Several board committees, including the board's Risk Committee, have been established with clearly written terms of reference, both to assist the board in fulfilling its responsibilities, and to provide an independent oversight of management. The board's Risk Committee has oversight of our Fraud Risk Management and Anti-Bribery and Corruption Policy.

Sembcorp complies with the Code of Corporate Governance 2012 issued by the Monetary Authority of Singapore, and reports our governance processes and activities with reference to the principles set out in it.

In addition, Sembcorp's core values of *Insight*, *Integral* and *Integrity* define our approach to sustainable growth and form the foundation of Sembcorp's Business Principles and Code of

Business Conduct (CBC). Employees are required to comply with the requirements of the CBC, which addresses Sembcorp's stance in the following areas:

- Providing a fair, equitable workplace environment that is free from harassment
- Corruption and bribery
- Money laundering
- Political contributions
- Contributing to communities
- Health, safety and the environment

Requirements of the CBC are communicated to employees globally through an e-learning course delivered in multiple languages. The CBC is also published on our website. Employees are required to acknowledge that they agree to abide by its principles and requirements and promptly report any violation through available reporting channels. Suppliers and contractors who work with Sembcorp are expected to respect and follow the CBC as well.

The standards of our CBC are also applied in our approach towards tax risk management. It is our policy to:

- Observe compliance with relevant taxation laws and regulations and other regulatory disclosure requirements
- Apply diligent professional care and judgement to arrive at well-reasoned recommendations, supplemented by advance rulings from tax authorities, written advice and confirmation from external tax advisors / experts, as appropriate
- Ensure that all decisions are taken at an appropriate level and supported by a business purpose / commercial rationale and the appropriate documentation
- Establish and maintain adequate documentation of the Group's tax risk evaluation and tax risk management, and update the Group's tax risk management policies including internal controls, as and when appropriate

 Develop and foster good and respectful professional relationships with all tax authorities, government bodies and other related third parties

#### Risk and regulatory compliance

Risk management and system of internal controls Sembcorp actively equips our management with tools to manage and control any risks associated with our existing business activities and investment decisions.

We also closely monitor key risk indicators as part of the requirements of our Risk Appetite Framework.

Our enterprise risk management (ERM) framework and GAF are aligned with best practice standards such as ISO31000 and standards issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

The Group's risks and monitoring of internal controls are managed through:

- Periodic review and reporting of corporate and operational risks and controls through detailed risk and controls registers
- Review of major occurrences, key risk areas and significant control lapses at business unit management meetings and risk management committee meetings
- Risk assessments at the investment appraisal and due diligence stages
- Monitoring of key risks and control lapses through a quarterly governance assurance certification submission

An internal controls policy and manual have also been established to provide a clear framework for what constitutes an effective and adequate system of internal controls. They also provide guidelines on the appropriate segregation of duties and a checklist of recommended internal controls for our business units to put in place.

Internal audits are regularly performed based on an approved audit work plan, and cover high-risk areas such as possible fraud, bribery and corruption. Emergency response plans are in place and crisis simulation exercises are conducted to ensure that we are adequately prepared for foreseeable emergencies. This is to ensure that in the event of an emergency, we are better able to handle the crisis and can minimise any negative impacts.

For more information on Sembcorp's governance and risk management systems, please refer to our Corporate Governance Statement and Risk Management and Internal Controls chapter.

## Training and performance management

The Group provides awareness training and workshops on ERM, GAF, as well as fraud risk management and business continuity management on a periodic basis. Desktop exercises and simulation for crisis management, emergency response drills and business continuity exercises are also conducted regularly to validate and fine-tune our procedures and plans and improve our preparedness.

In order to enhance corporate governance and risk management excellence at Sembcorp, key risk and governance performance indicators have been identified and incorporated as part of the remuneration requirements for senior management. For more details on senior management remuneration and reward, please refer to our Corporate Governance Statement.

#### Our performance

Through the successful global roll-out of two e-learning courses on anti-bribery, corruption and the CBC, we continued to emphasise the importance of fraud risk management and measures to guard against the risk of bribery and corruption in our business. Employees are required to pass a test to affirm their knowledge and understanding of the subject. They are also required to acknowledge that they agree to abide by the principles and the requirements of the CBC. We continued to communicate our zero tolerance for fraud, bribery and corruption to our employees and

engage them on our whistle-blowing policy and guidelines through fraud awareness workshops with updated case studies and training sessions.

Sembcorp received the Most Transparent
Company Award in the oil and gas category at the
Securities Investors Association (Singapore) Investors'
Choice Awards 2015. We were also ranked sixth in
the 2015 edition of the Governance & Transparency
Index, a well-respected index assessing the
transparency of 639 Singapore-listed companies.

Two significant incidents resulting in fines amounting to S\$109,000 were incurred by our operations in Chile for non-compliance to water quality and discharge standards. Additional treatment plants as well as facility enhancements have been installed to ensure non-recurrence. Our operations in Singapore incurred a penalty of S\$50,000 due to an unsuccessful gas turbine fuel changeover.

As part of our ongoing effort to build in-house capabilities, readiness and resilience to crisis and emergency response situations, we have conducted regular crisis simulation exercises and awareness trainings. Notably, we successfully conducted an exercise simulating a raw water contamination incident at our Fuzhou municipal water operations. This exercise was conducted in partnership with the local authorities, and received media coverage highlighting Sembcorp and the local government's resolve in being prepared for such incidents. In Singapore, we also successfully conducted a crisis preparedness exercise simulating a pipeline leakage and used our incident management system to monitor the incident remotely from the crisis command centre. The exercise included involvement of the Singapore Civil Defence Force and a customer that would be affected by such an incident.

#### Going forward

We understand that the pursuit of excellence in corporate governance and risk management is a continuous journey. Hence, we will continue to

strengthen our frameworks and policies to align them with industry best practice. To build a positive risk and governance culture, we will continue to communicate and engage our employees and stakeholders through continuous awareness workshops and training sessions. We will also provide the right systems and tools to enhance the risk management and governance process.

#### People

To provide a fair, diverse and inclusive workplace, and continually improve our human resource management and people development

#### Why this is material

Our employees play a vital role in ensuring we achieve our business strategy and goals. Of the issues relating to our people, such as fair employment, labour relations and human rights, we have identified people development to be the most material.

### People development

To be a high-performance organisation, it is crucial to develop a competent, capable and motivated workforce that can meet the business challenges of today and tomorrow.

The nature of our business is such that we require specialist technical expertise. However, some of the markets in which we operate lack a qualified labour force with the necessary technical skill sets that our business demands. In other markets, these skill sets are highly sought after across several industries. In addition, the commercial and regulatory environment we operate in is also becoming increasingly complex. Therefore, there is a critical need to attract, retain and develop competent employees who possess a deep understanding of the company and its industry sectors.

# **Developing Capabilities for the Future**

To meet the demands of our growing business, specialised training programmes were organised in different countries and operations to ensure a pipeline of qualified employees who demonstrate both core and functional competencies. For instance, in Andhra Pradesh. India, more than 160 graduates of local engineering colleges have been admitted to our training programme since 2013. This programme is equivalent to a postgraduate diploma course in thermal power plant engineering, and is offered free of charge. After the course, suitable participants are recruited for full-time positions at our power plant. In China, the general managers of our operations underwent training which covered our core competency framework, business conduct, internal audit procedures, as well as operational case studies. In Singapore, executives attended renewable energy teach-ins to increase depth of knowledge in that area.

#### Our approach

Human resource policies and management The Senior Management Committee, supported by the Group Human Resources department, is responsible for setting key policies relating to our employees.

Country-specific human resource policies, as well as all other company policies and guidelines, are available and accessible to employees on our intranet.

We stay abreast of the latest developments and best practice for human resource management through our membership and participation in external organisations such as the Singapore National Employers Federation, the Temasek Human Resource Council and The Conference Board, as well as numerous local roundtable groups.

Further details on our approach and initiatives on labour relations, remuneration and employee welfare and engagement can be found in the People portion of the Sustainability section of our website.

Human rights and labour relations The Group is committed to uphold and respect the spirit of the UN Universal Declaration of Human Rights and the International Labour Organisation's Declaration on Fundamental Principles and Rights at Work. We fully support the UN Global Compact principles on human rights and labour, and abide by the Employers' Pledge of Fair Employment Practices under Singapore's Tripartite Alliance for Fair and Progressive Employment Practices. Our CBC sets out our stand on fairness, opportunity, non-discrimination, dignity, respect and harassment. We do not hire forced or child labour, and comply with local regulations restricting forced or child labour wherever we operate. While our operations span five continents where labour laws, regulations and practices differ widely, we remain committed to high standards of human resource management globally. We abide by local laws wherever we operate, including meeting or exceeding minimum wage requirements where such requirements exist. Examples of other regulations our global operations comply with include the Broadbased Black Economic Empowerment Amendment Act 2013 in South Africa, and localisation requirements at our operations in Oman and the UAE.

We recognise the value and benefit of mutual discussion. Our grievance handling policy seeks to manage employee grievances in a fair and reasonable manner, with an escalation path to the Group President & CEO where necessary. We seek to maintain good labour management relations, and hold constructive ongoing exchanges with employee unions in our various operations. All Sembcorp employees are entitled to practise freedom of association and to be covered by collective agreements in the workplace, within the regulatory boundaries of each of the jurisdictions in which we

operate. In countries where our operations are covered by collective agreements, procedures for grievance handling are specified in the agreements.

### People development

People development is driven at the board level by the Executive Resource & Compensation Committee.

Our "My Career Journey @ Sembcorp" programme guides the identification, development and deployment of employees across the organisation. The programme encompasses three aspects:

- i. Strategic workforce planning
- ii. Competency framework
- iii. Development journeys

The framework aligns the development of the organisation and the individuals within it, addressing both organisational needs and employee aspirations.

#### Employee learning and development

Employees at Sembcorp are empowered to be responsible for their learning and development, supported by their supervisors.

Our engineers and technicians receive up-to-date technical training by experts. All employees are also encouraged to attend relevant professional courses.

We offer our employees the opportunity to develop their careers and gain international exposure through job rotations and attachments in different cultural and operational settings. We currently have more than 50 employees of different nationalities seconded from our Singapore offices to various overseas operations. We also provide internships and industrial attachments that offer students and Sembcorp scholars practical experience and exposure to our operations.

We support our employees in their pursuit of continuous improvement and sponsor selected employees who wish to pursue higher qualifications in fields relevant to their work. To develop our leaders, we sponsor senior executives' enrolment in

programmes at leading institutes such as Harvard Business School, The University of Pennsylvania Wharton School, INSEAD and Temasek's Business Leadership Centre. Sembcorp scholarships are also offered to promising students at various tertiary institutions. Once they graduate, a comprehensive development plan is mapped out to groom them for management positions.

As a leader in our industry sectors, Sembcorp encourages our employees to share and exchange best practices through seminars, roadshows and local and international conferences.

#### Developing local capability

We believe in recruiting, grooming and retaining local talent as a long-term investment in our future and an integral part of our strategy for our overseas operations. This leads to knowledge transfer and capability development in the local community.

Localisation is an important part of our strategy to grow our overseas projects sustainably. We aim to progressively localise the workforce at our overseas operations across all positions, including management positions, in line with each jurisdiction's regulatory and operating environment. When we begin operating in a new market, employees who are seconded from our head office to start up the operations are given a clear responsibility to develop local talent. As the capabilities of local employees grow, the team is gradually localised, and the number of expatriates seconded from head office progressively reduced.

All employees across the Group are offered the same development opportunities. At our overseas operations, local employees are also encouraged to develop their professional and managerial skills through international exposure, such as on-the-job training in Singapore or at other Sembcorp operations around the world.

### **Performance appraisals**

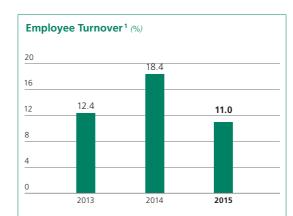
All employees undergo half-yearly performance appraisals, where performance, expectations, training needs and targets for the coming year are discussed and agreed upon by the employee and supervisor. An assessment of core competencies and areas for improvement is embedded in the appraisal format. Going through the appraisal process helps us inculcate our core values in every employee, and clearly articulate the competencies and functional skills needed for their development.

### Our performance

The continued implementation of our competency framework and the enhancement of our learning and development framework were our main areas of focus in 2015. We revamped our approach towards learning and development, with a focus on engaging internal stakeholders to ascertain the learning and development needs across the business. Through this process, we developed our learning model and framework and documented methods of learning. These will form the basis for the implementation of our learning management system (LMS). This system was launched in late 2015 with initial e-learning courses on our CBC, as well as on anti-bribery and corruption awareness.

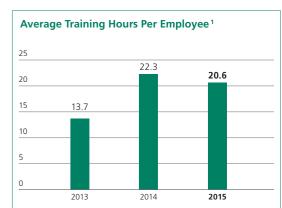
We embarked on a review of our global employee health benefit packages, and aim to work towards harmonising our employee health benefit entitlements globally. This ensures that our health benefits are transparent and consistent across the Group.

We remain committed to meeting localisation targets and to training local talent at our overseas operations. In 2015, our operations in Singapore hosted 30 student interns from Singapore as well as China, India, Oman, Chile, Indonesia and Australia.



Following a restructuring of our operations in the UK in 2014, our employee turnover rate returned to an expected range in 2015. The voluntary turnover rate was 8.5%.

<sup>1</sup> The data covers both voluntary and involuntary turnover of permanent employees of Sembcorp and its subsidiaries, excluding Sembcorp Marine.



We have changed the indicator used to report training within the Group from training cost per employee to average training hours per employee, to better capture participation in in-house training programmes. Training hours fell slightly from 2014, when they had increased significantly due to the roll-out of our competency framework programmes that year. Going forward, we aim to leverage our LMS to increase training.

Training data covers both permanent and contract employees of Sembcorp and its subsidiaries, excluding Sembcorp Marine. The other indicators in the People section relate to permanent employees of Sembcorp and its subsidiaries, excluding Sembcorp Marine.

#### Going forward

A study was commissioned in 2015 to harmonise our employee health benefit (EHB) programme globally. We aim to execute country specific EHB programmes in 2016. We will continue to roll out more e-learning courses while promoting greater availability and use of the LMS throughout the organisation. We will participate in the new Industry

Mentors' Network Programme organised by the Ministry of Education. As part of this initiative, students from polytechnics in Singapore will be matched with mentors from Sembcorp, who will provide advice on career goals. The students will also have the opportunity to shadow their mentors at work or networking functions.

Health, Safety and the Environment To instil sound and practical health and safety management as part of our workplace culture, and protect the environment in our business activities, products and services through good environmental practices

Health, safety and the environment (HSE) is a top priority at Sembcorp and an area in which we are committed to continuous improvement. We recognise the importance of incident investigation, and set aside resources to ensure that all incidents are thoroughly investigated, corrective actions are implemented and any areas of improvement are shared across the organisation.

#### Why this is material

Occupational health and safety
It is important to us that occupational health
and safety is stringently managed. As a global
developer, owner and operator of power and water
plants, we recognise our responsibility in ensuring
that all workers and contractors are competent and
equipped to work in the safest way possible. Many
of our plants are in developing economies and it is
often a challenge to build a local workforce that is
attuned to our global health and safety standards.
By effectively and proactively managing workrelated hazards, we minimise health and safetyrelated incidents wherever we operate and protect
our workforce, including staff of our contractors.

#### Climate change

We recognise the threat that climate change represents to the planet and the impact this would have on our businesses. The 2015 United Nations Climate Change Conference reflected the commitment of governments to reduce global warming. Hence, to mitigate potential regulatory, physical and supply risks, we adhere to and

support common policy positions adopted by governments on climate change. We also keep abreast of the wider body of academic and institutional research on the subject.

By employing innovative technology and renewable resources, we provide competitive and reliable energy and water solutions to customers and communities, while mitigating the impact of our activities on climate change.

### **Environmental protection**

Sembcorp recognises its duty to protect the environment and conserve resources. Since our utilities businesses consume natural resources directly, it is here that our responsible stewardship can have the greatest impact.

## **Increasing Our Renewable Energy Portfolio**

As part of our strategy to maintain a balanced portfolio, we grew our renewable energy assets in 2015 with the acquisition of a leading renewable energy company in India present across six states, and expanded our wind farms in China. Today, we have 918 megawatts of wind and solar power in operation and in development in India, and 544 megawatts of wind power in China.



### **HSE** policy and guidelines

The Group's HSE department establishes key HSE operating philosophy and standards, including benchmarks and key performance indicators to drive improvements across Sembcorp's global sites. It works closely with regional HSE coordinators to ensure that issues across the Group are managed in an effective and timely manner. Our Group HSE Policy articulates our commitment to our stakeholders with respect to health, safety and the environment.

Our Group HSE Guidelines are part of a broader HSE management system, which establishes tools and requirements to monitor and report HSE indicators based on Sembcorp's "four zero" (4/0) targets. The 4/0 targets are: zero harm to people, zero damage to the environment, zero damage to assets and zero instances of non-compliance with legal and regulatory requirements. Our board's Risk Committee reviews our HSE performance quarterly.

We are committed to meeting or exceeding our regulatory obligations as well as the HSE standards and certifications we subscribe to. For a list of the

certifications achieved by Sembcorp's businesses, please refer to the Awards, Memberships and Certifications portion of the Sustainability section of our website.

In addition, we believe in actively engaging both internal and external stakeholders to help keep our workplace and environment safe.

### **Training and audits**

Providing our employees with relevant training ensures that we have a competent team that works safely. Specific training needs are identified and customised based on job requirements.

Once a year, the Group HSE department organises a workshop for HSE officers from various global sites to keep them abreast of corporate initiatives. The workshop is also aimed at encouraging and facilitating the exchange of ideas and best practices across our global operations. This annual event provides a platform for the planning of group-level HSE goals and initiatives, and allows participants to learn from their colleagues.

HSE assurance audits are conducted regularly to review key internal controls and ensure compliance with regulatory and corporate requirements. Our assurance process is supported by a validation and on-site verification process which involves in-depth examination of the site's HSE Management System and its implementation. To further enhance our performance in this area, we leverage expertise across business units, and weave training and peer assistance elements into an assurance programme to promote good practices across the Group.

#### Occupational health and safety

We actively monitor and manage the risks associated with our activities and services, including those at assets that are still under construction, to prevent and reduce workplace injuries and occupational illnesses. Our approach towards managing health and safety risks is to strive to eliminate any risks that we identify.

Our health and safety framework is anchored by Sembcorp's 10 Elements for Good HSE. Each element is linked to a set of expectations and standards, with emphasis on effective risk management and good planning for safe operations and construction. For example, the setting up of a Safe Operation Committee is a mandatory requirement at all our operations and projects. This is to ensure that adequate review and assessment of risks and controls for critical activities is conducted prior to approval being granted to carry out the work.

Every year, the Group HSE department sets and drives the year's objectives and targets based on a performance gap analysis to improve on areas of weakness.



Project and asset life cycle risk assessment and injury prevention

Integrating HSE considerations into all phases of our operations demonstrates our commitment to proactive HSE management. The asset life cycle assessment approach is embedded in our project conceptualisation phase, development and construction phase, as well as operation phase. Project due diligence studies provide a good understanding of the potential impact of our operations and allow the most appropriate solutions to be applied in order to prevent or reduce the likelihood of incident occurrence. For example, hazard and operability studies during the design and construction stages identify potential risks, legal requirements and safety considerations. Final design and construction activities are organised to avoid or minimise the impact of the risks identified. We seek to ensure that operation and process controls are implemented to prevent harm to people and the environment.

## Climate change

The quest for greater energy efficiency presents both cost and opportunities for Sembcorp. We recognise that investing in energy-efficient, renewable and low-carbon technologies not only helps manage emissions, but also makes business sense. We are committed to setting achievable energy efficiency and renewable energy targets, and developing strategies to mitigate the impact of our operations on the environment.

We take a four-pronged approach to this issue:

- Maintaining a diversified energy generation portfolio
- ii. Growing our renewable energy business as part of a balanced portfolio
- iii. Maintaining and building efficient energy and water facilities
- iv. Actively engaging stakeholders

### **Environmental protection**

At Sembcorp, we aim to ensure compliance to environmental regulations and adequate resource allocation for the maintenance of environmental quality wherever we operate.

We conduct environmental studies in accordance with national and / or international standards and methodologies for new projects and major expansions. These include environmental impact assessments, environmental baseline studies, and pollution control studies. Recommendations from the assessments form part of our management of HSE risks and these recommendations are incorporated into the planning, design, construction and commissioning of new plants.

#### Atmospheric emissions

Our approach to managing atmospheric emissions is through reducing fuel consumption and increasing energy efficiency. We adhere to local regulatory emission limits and aim to minimise our impact on the environment and the surrounding community.

#### Water

We apply integrated water and wastewater management solutions for better efficiency and resource use. For example, by integrating wastewater treatment, water reclamation and water supply in a closed loop, we help our customers reduce their water consumption and conserve this precious resource. We bring the same expertise to our own operations so as to consume water responsibly and efficiently.

We treat wastewater in the most effective and energy-efficient manner. With our strong technical expertise, we tailor the treatment process and technical configuration based on the expected wastewater profile. Treatment processes applied include mechanical, chemical, biological or membrane technologies, or a combination of these.

Sembcorp is able to effectively treat multiple streams of industrial wastewater with wide-ranging

chemical oxygen demand and salinity to meet effluent discharge standards. Our comprehensive water sampling and testing regime ensures consistent compliance with such standards. Treated effluent from our wastewater treatment facilities may be further treated to produce demineralised water at our water reclamation facilities.

Our large-scale water reuse and seawater desalination facilities offer high-quality water to industries and households in water-scarce areas such as the UAE and Oman.

#### Waste and spills

We apply stringent controls in the management of waste generated from our operations. We adhere to discharge and emission limits set by local authorities, and implement containment measures to minimise any direct impact to the environment, vegetation and the surrounding community.

All waste generated by our operations or collected by us on behalf of our customers is disposed of in accordance with local regulations. In the event that an emergency occurs from, for example, a major spillage or hazard at our industrial facilities, we will immediately activate emergency response plans that have been put in place.

Sembcorp also actively develops its capabilities to recover energy from waste. For example, at our Sembcorp Woodchip Boiler Plant in Singapore, woodchips processed from waste wood collected by our solid waste management operations are used to produce economical and renewable steam. This way, we are able to manage the entire energy-fromwaste value chain and take advantage of the synergies between our energy and solid waste management businesses.

#### Our performance

This year, we expanded the scope of our occupational health and safety reporting to include assets and projects under construction. These projects are generally undertaken by our

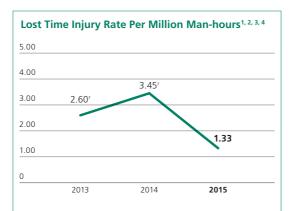
contractors and sub-contractors. In recognising that we have a responsibility as developers of any project, we aim to promote health and safety amongst all companies and individuals within our sphere of influence. We believe that this commitment will become increasingly important as we strengthen our presence in emerging markets, where local health and safety regulations and enforcement may not be as mature as in developed countries.

Our health and safety performance charts reflect group-wide performance and cover both assets in operation and under construction. A detailed breakdown of health and safety data is available on our website. We also adopted NIOSH and IOGP standards in our health and safety reporting, as part of our efforts to adopt best practice.

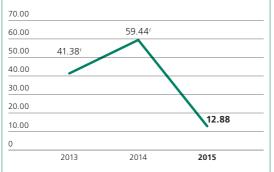
As our operations expanded in 2015, we continued to strengthen health and safety management and made process improvements. Key initiatives included:

- Strengthening ownership of HSE by all employees across all levels of seniority
- Focusing on mitigating risk for critical activities with high potential for serious consequences
- Enforcing compliance to safety requirements and expectations
- Promoting active engagement of on-site staff, including those employed by our contractors

It is with great regret that we report three fatalities in 2015. One fatality was the result of a vehicular accident involving our employee in Mbombela, South Africa. The other two fatalities respectively resulted from a fall from height at the site of our Thermal Powertech Corporation India facility in India and a forklift accident at a construction site in Singapore where our design and construction business was carrying out work.



# Accident Severity Rate Per Million Man-hours 1, 2, 3, 5



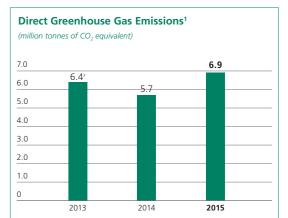
The lost time injury rate<sup>4</sup> and the accident severity rate<sup>5</sup> improved in 2015 compared to 2014. In particular, we saw a decrease in the frequency and severity of incidents at our solid waste management operations, arising from focused efforts to improve safety standards and practices.

- Group figures are based on the reporting scope stated for each year. We expanded our scope in 2015 to include assets under construction.
- <sup>2</sup> Occupational health and safety data covers both employees and contractors.
- 3 In 2015, we adopted standards set out by NIOSH and IOGP, and now report on a per million man-hour basis. Figures for 2014 and 2013, which were reported on a per 200,000 man-hour basis, have been restated accordingly.
- The lost time injury rate includes fatalities.
- <sup>5</sup> The accident severity rate (ASR) is charted excluding fatalities. ASR including fatalities is reported in our detailed performance data online. Lost time due to one fatality is taken as 6,000 lost work days.
- Indicates restated figure.

Every incident was investigated thoroughly to identify root causes and the necessary corrective actions have been taken.

We remain committed to ensuring the efficiency of our operations while optimising the use of resources. In 2015, we grew our renewable energy capacity with the acquisition of Green Infra, a leading renewable energy company in India, and new wind farm capacity in Huanghua, Hebei province, China.

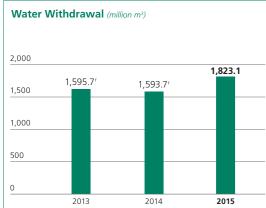
Our nitrogen oxide (NOx) emissions amounted to 3,700 tonnes, sulphur oxide (SOx) emissions amounted to 800 tonnes and particulate matter (PM) emissions amounted to 200 tonnes in 2015.



The increase in direct GHG emissions was largely due to our second cogeneration plant in Singapore and an increase in activity at our operations in Fujairah. The new cogeneration plant commenced operations in late 2014, and with the availability of a full year's data, it is included in our reporting scope this year. Direct greenhouse gas emissions for 2013 have been restated as 6.4 million tonnes of CO<sub>2</sub> equivalent following retrospective application of more accurate calculation methodology for data from operations in Fujairah, instead of 5.8 million tonnes of CO<sub>2</sub> equivalent as reported previously.

We report emissions from the combustion of biomass separately, in accordance with GRI guidelines. These emissions amounted to 1.0 million tonnes of  ${\rm CO_2}$  equivalent in 2015 compared to 1.1 million tonnes in 2014.

- <sup>1</sup> Emissions data covers entities that produce direct GHG emissions from the combustion of fossil fuel. It excludes emissions from anaerobic wastewater treatment plants, as well as emissions from the use of diesel in vehicles and maintenance and servicing equipment. CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O emissions are included in the calculation of direct GHG emissions. HFCs, PFCs, SF<sub>6</sub> and NF<sub>3</sub> emissions are excluded. Global warming potential factors used are from the IPCC Fourth Assessment Report for the 100-year time horizon.
- Indicates restated figure.



The increase in our water withdrawal was largely due to the commencement of operations of our second cogeneration plant in Singapore. The plant started operations in late 2014, and with the availability of a full year's data, it is included in our reporting scope this year. Water withdrawal for 2013 and 2014 has been restated to 1,595.7 and 1,593.7 million cubic metres respectively after an internal verification exercise, instead of 1,502.2 and 1,593.0 million cubic metres as previously reported.

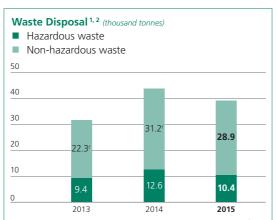
Indicates restated figure.

# **Going forward**

As Sembcorp continues to grow its businesses and footprint globally, we expect more challenges ahead in the management of on-site HSE.

In 2016, we will concentrate on strengthening the foundations of our HSE management based on the key themes of:

- Visible HSE leadership
- Project HSE management
- Management of critical risks with Life-saving Rules and Safe Operations Committees
- Promoting active engagement within sites and with all stakeholders



We registered a decrease in waste that we disposed of. The decrease in hazardous waste for disposal was due to our ceasing to manage a process which had formerly contributed to hazardous waste generated. The reduction in non-hazardous waste that we disposed of was largely due to optimisation trials at our wastewater plants in China, which reduced the volume of sludge discharged and disposed of. The figures for non-hazardous waste disposed of in 2013 and 2014 have been restated as 22.3 and 31.2 thousand tonnes respectively after an internal verification exercise, instead of 22.4 and 30.5 thousand tonnes as previously reported.

- The data excludes waste that is collected and incinerated for our
- Hazardous waste and non-hazardous waste are defined by relevant country regulations in each market.
- Indicates restated figure.

Specific programmes tailored around these key themes have been implemented progressively across our global sites. We will continue to build upon these foundations in response to the challenges ahead. We believe that the application of validation and verification will be the key to continuous improvement. Therefore, our internal validation and verification peer assist programme will be instrumental in the compliance and continuous improvement in HSE management.

# Community

To be a responsible business, making a positive contribution to our communities

#### Why this is material

**Community integration** 

Sembcorp provides solutions that are essential to everyday life. We view our integration with, support of and contribution to our host communities as part of our licence to operate. We are committed to assessing and responsibly managing our impact on our local communities, as well as investing in them.

# Sembcorp Gives Back Day: Celebrating the 20<sup>th</sup> Anniversary of our Utilities Business

At Sembcorp, we recognise that our success is made possible by the trust that our communities place in us. This year, we marked the 20<sup>th</sup> anniversary of our Utilities business on August 12 in a meaningful way, with Sembcorp Gives Back Day.

As part of this global initiative in aid of our communities, employees in more than 10 countries, including Singapore, China, India, Vietnam, Oman, UAE, South Africa, UK, Chile, Panama and Antigua, volunteered their time and participated in activities in support of local worthy causes. These activities included helping out at hospices, orphanages and old folks' homes, installing or repairing facilities to provide drinking water for the local community, improving shower and sanitation facilities at schools, and cleaning up local beaches.

#### Our approach

The needs of one community can be very different from those of the next. It is our belief that our local operations are best placed to not only understand these different needs but also to forge the necessary partnerships with relevant local stakeholders to address them. Therefore, while the Group provides the strategic framework, tools and guidelines to ensure consistency and acceptable standards, community integration is managed at the local level.

Our business grows through the development or acquisition of utilities assets. In the development of greenfield plants, we recognise that there is often a social and environmental impact on the communities around us. Therefore, environmental and social impact studies are carried out in accordance with both international and national standards for major new projects and expansions. These studies typically include social management plans that are implemented by the operations teams through the various stages of the site's development.

Sembcorp's global corporate social responsibility (CSR) framework provides a strategic and consistent approach for our charitable contributions and community investments. We focus on fostering environmental stewardship and improving the quality of life of the communities we are in.



#### **Environment**

We are committed to fostering environmental stewardship in our community through contributions to sustainability and environmental initiatives.



#### Community

We are committed to improving the living standards and quality of life of the community, such as through providing access to energy and water, social welfare and education.

Our CSR framework aligns the tracking and reporting of our community contributions with guidelines set by the London Benchmarking Group. This allows us to account for our total community giving – or the amount disbursed through sponsorships or donations – using standard definitions and valuations, and helps us ensure that the contributions recorded are meaningfully spent on community investment activities.

We encourage open communication with the communities we operate in. At our local sites, we use various communication platforms, including community liaison panels and meetings, as well as telephone and email exchanges, to connect with our communities.

### Key programmes

The Sembcorp Water Initiative

In many of the emerging markets which we have recently entered, communities surrounding our sites lack access to clean water. The Sembcorp Water Initiative was established in 2013 to address this problem. Under the initiative, we work with local authorities to implement solutions or facilities to improve access to water for communities in the immediate vicinity of our operations. To date, the Sembcorp Water Initiative has been launched for communities in Quang Ngai and Nghe An in Vietnam, where we are developing urban development and power projects, as well as in Andhra Pradesh in India, where we have two power projects. So far, this initiative has benefited more than 23,000 people.

#### The Sembcorp Garden City Fund

The Sembcorp Garden City Fund was established in 2010 to support the conservation of Singapore's natural heritage. Through the fund, we have sponsored the establishment of the Sembcorp Forest of Giants, a living gallery of rare giant tree species under threat. The fund has also supported

public green education programmes such as the Festival of Biodiversity. In celebration of Singapore's golden jubilee in 2015, Sembcorp pledged S\$10 million through the fund to expand and enhance the Cool House at the Singapore Botanic Gardens' National Orchid Garden. This is a temperature-controlled glasshouse where visitors can view rare and beautiful orchids from Asia, the Americas and Africa.

The Sembcorp Water Technology Prize and the Sembcorp-EMA Energy Challenge

Established in 2010 and 2014 respectively, these competitions give young people exposure to the water and energy challenges faced by countries and governments, and aim to inspire bright young minds to consider a career in the water and energy industries. The Sembcorp Water Technology Prize is an annual competition co-organised with Singapore's national water agency PUB for secondary school and junior college students, while the Sembcorp-EMA Energy Challenge is co-organised by Sembcorp and the EMA for students from institutes of technical education, polytechnics and universities.

#### Sembcorp Gives Back

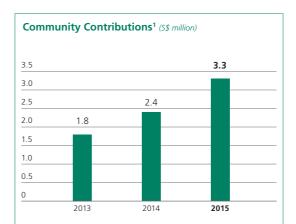
Sembcorp's operations all over the world actively contribute to a range of causes, whether in cash, in kind or through lending its employees' time and expertise. Sembcorp encourages employee volunteerism by organising regular volunteering events and by giving volunteers time off from work to help out with local worthy causes.

## Our performance

In 2015, Sembcorp and Sembcorp Marine contributed a total of \$\$7.1 million to charities and community investments globally. Excluding Sembcorp Marine's contribution, \$\$3.3 million in cash and in-kind donations was contributed by Sembcorp, of which \$\$19,700 comprised mandatory

contributions. These contributions supported causes such as youth development, environmental and water conservation education, as well as apprenticeships and job training programmes. Total volunteer man-hours amounted to more than 9,200 hours, of which 16% were spent outside of working hours due to event requirements.

We continued to work on improving internal guidelines and controls with regard to community and social impact. We established our Group stakeholder and community engagement policy as well as our community grievance management



Despite a challenging business environment, we remained committed to investing in our communities in 2015. In celebration of the 50<sup>th</sup> anniversary of Singapore's independence, we made a S\$2 million contribution to enhance the Cool House at the National Orchid Garden, as part of a S\$10 million commitment over four years. In addition, during the year, we organised Sembcorp Gives Back Day, a global initiative in aid of communities in which we operate. Employees in more than 10 countries took part in the initiative by volunteering their time and participating in activities in support of local worthy causes. Total employee volunteer hours in 2015 amounted to more than 9,200 hours.

policy to ensure that our businesses, especially those at project development stage, adopt a structured process to engage stakeholders within their communities and ensure grievances are addressed.

In 2015, 89% of our operations had local community engagement and / or development programmes.

#### **Going forward**

In line with our focus on managing community and social impact responsibly, we aim to enhance our internal processes with an environmental and social investment framework. This framework aims to embed environmental and social impact considerations at the onset of projects during the investment approval process. By highlighting potential environmental or social impacts, this will help mitigate impact and support integration with our communities, while ensuring that obligations to our communities, partners and capital providers are met.

<sup>&</sup>lt;sup>1</sup> Data excludes contributions by Sembcorp Marine.