

# ENVIRONMENTAL, SOCIAL & GOVERNANCE REVIEW

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**Ang Kong Hua**  
**Chairman**  
**Non-executive & Independent Director**

*Appointed February 26, 2010*

As Chairman, Mr Ang is responsible for leading the board, setting its agenda and ensuring its effectiveness in all aspects of its role. Mr Ang is an independent director and heads the board's Executive Committee, Executive Resource & Compensation Committee and Nominating Committee.

A well-known corporate figure in Singapore, Mr Ang brings to Sembcorp many years of rich experience in the manufacturing and services sectors, including the chemicals, electronics, engineering and construction sectors. Currently, he is Chairman of Global Logistic Properties and also serves on the boards of the Government of Singapore Investment Corporation and Southern Steel.

Mr Ang holds a BSc (Hons) in Economics from the University of Hull, UK.

Past directorships in listed companies and major appointments 2009–2011:

- Yantai Raffles Shipyard
- NSL
- DBS Bank
- DBS Group Holdings
- GIC Special Investments



**Tang Kin Fei**  
**Group President & CEO**

*Appointed May 1, 2005*

Mr Tang is Group President & CEO of Sembcorp Industries. With over 20 years at Sembcorp, he is credited with spearheading its growth into a focused energy, water and marine group with operations across six continents.

Mr Tang also sits on the board of Sembcorp Marine, a subsidiary of Sembcorp Industries, as a non-executive and non-independent director.

Mr Tang is President of the Singapore Water Association, Vice Chairman of the Singapore Business Federation and a council member of the Singapore Chinese Chamber of Commerce and Industry. He also serves on several China-Singapore, Saudi-Singapore and Abu Dhabi-Singapore business councils. In addition, he is a council chairman of Ngee Ann Polytechnic and a member of the Singapore Chinese Chamber of Commerce Foundation, as well as a Vice Chairman and trustee of the Kwong Wai Shiu Hospital, a charitable hospital which provides care for needy patients.

Mr Tang holds a First Class Honours in Mechanical Engineering from the University of Singapore and completed the Advanced Management Programme at INSEAD.

Past directorships in listed companies and major appointments 2009–2011:

- GuocoLeisure



**Goh Geok Ling**  
**Non-executive & Independent Director**

*Appointed May 3, 2000*

Mr Goh is an independent director and serves on the board's Executive Committee, Executive Resource & Compensation Committee and Nominating Committee.

He is Chairman of Sembcorp Marine and serves as a member of the Board of Trustees of Nanyang Technological University. He is also an advisor of O2Micro International.

Mr Goh holds a BEng from the University of Sydney, Australia.

Past directorships in listed companies and major appointments 2009–2011:

- Venture Corporation



**Evert Henkes**  
**Non-executive & Independent Director**

*Appointed April 30, 2004*

Mr Henkes is an independent director. He heads the board's Risk Committee and is a member of the Audit Committee.

He has extensive experience in the petrochemical industry as the former CEO of Shell's global chemicals business. Mr Henkes is a director of Air Products and Chemicals, Outokumpu and Tate & Lyle.

He holds a BSc from Cornell University, USA.

## BOARD OF DIRECTORS



**Bobby Chin Yoke Choong**  
Non-executive & Independent Director

*Appointed December 1, 2008*

Mr Chin is an independent director. He chairs the board's Audit Committee and is a member of the Risk Committee.

The Managing Partner of KPMG Singapore from 1992 until his retirement in September 2005, Mr Chin is the Chairman of the Singapore Totalisator Board and a board member of the Competition Commission of Singapore and the Singapore Labour Foundation. He serves as a member of the Council of Presidential Advisers and a trustee of the Singapore Indian Development Association. He also sits on the boards of several listed companies including AV Jennings, Ho Bee Investment, Neptune Orient Lines, Oversea-Chinese Banking Corporation and Yeo Hiap Seng.

Mr Chin holds a BAcc from the University of Singapore. He is a fellow of the Institute of Certified Public Accountants of Singapore and an associate member of the Institute of Chartered Accountants in England and Wales.



**Margaret Lui**  
Non-executive & Non-independent Director

*Appointed June 1, 2010*

Mrs Lui is a non-independent director and also a member of the board's Executive Committee, Executive Resource & Compensation Committee, as well as its Nominating Committee.

Currently, Mrs Lui is Chief Operating Officer of Seatown Holdings International. In addition, she serves on the boards of Brookstone Company, Singapore Cruise Centre, Singbridge International Singapore and Seatown Holdings International.

Mrs Lui holds a BAcc from the National University of Singapore. She attended the Advanced Management Programme at Wharton School of the University of Pennsylvania.

Past directorships in listed companies and major appointments 2009–2011:

- Singapore Food Industries
- CitySpring Infrastructure Management



**Tan Sri Mohd Hassan Marican**  
Non-executive & Independent Director

*Appointed June 16, 2010*

Tan Sri Mohd Hassan Marican is an independent director and serves on the board's Audit and Risk Committees.

Tan Sri Mohd Hassan Marican was the President & CEO of Malaysia's PetroliaM Nasional (PETRONAS) from 1995 until his retirement in February 2010 and brings to the board over 30 years' experience in finance and management. He currently serves as a director of Sembcorp Marine, Regional Economic Development Authority of Sarawak, Sarawak Energy, Lambert Energy Advisory, MH Marican Advisory, Singapore Power and ConocoPhillips. He is also a Senior International Advisor of Temasek International Advisors, a subsidiary of Temasek Holdings.

Tan Sri Mohd Hassan Marican holds an honorary doctorate from the University of Malaya and is a fellow of the Institute of Chartered Accountants in England and Wales.

Past directorships in listed companies and major appointments 2009–2011:

- Malaysia International Shipping Corporation
- Engen
- PetroliaM Nasional (PETRONAS)
- Malaysia-Thailand Joint Authority
- Bank Negara Malaysia
- International Centre for Leadership in Finance



**Tham Kui Seng**  
Non-executive & Independent Director

*Appointed June 1, 2011*

Mr Tham is an independent director.

Formerly the Chief Corporate Officer of CapitaLand, Mr Tham brings to the board a strong background in management in various industries, including a decade's experience in the real estate business.

Currently, Mr Tham serves on the board of Global Logistic Properties, Raffles Medical Group, The Straits Trading Company, CapitaLand China Holdings, SPI (Australia) Assets and Maxwell Chambers. He is also a board member of the Housing & Development Board.

Mr Tham holds a BA (First Class Honours) in Engineering Science from the University of Oxford.

Past directorships in listed companies and major appointments 2009–2011:

- Alexandra Health

## KEY EXECUTIVES



**Tang Kin Fei**  
**Group President & CEO**

*Joined 1987*

Mr Tang is Group President & CEO of Sembcorp Industries. With over 20 years at Sembcorp, he is credited with spearheading its growth into a focused energy, water and marine group with operations across six continents.

Mr Tang also sits on the board of Sembcorp Marine, a subsidiary of Sembcorp Industries, as a non-executive and non-independent director.

Mr Tang is President of the Singapore Water Association, Vice Chairman of the Singapore Business Federation and a council member of the Singapore Chinese Chamber of Commerce and Industry. He also serves on several China-Singapore, Saudi-Singapore and Abu Dhabi-Singapore business councils. In addition, he is a council chairman of Ngee Ann Polytechnic and a member of the Singapore Chinese Chamber of Commerce Foundation, as well as a Vice Chairman and trustee of the Kwong Wai Shiu Hospital, a charitable hospital which provides care for needy patients.

Mr Tang holds a First Class Honours in Mechanical Engineering from the University of Singapore and completed the Advanced Management Programme at INSEAD.



**Koh Chiap Khiong**  
**Group Chief Financial Officer**

*Joined 2008*

Mr Koh is responsible for the corporate finance & treasury, reporting, accounts, tax, information technology and risk management of Sembcorp Industries and oversees these functions across the Group. He also handles investor relations matters as Group Chief Financial Officer (CFO) and is a director on the boards of various Sembcorp companies.

Mr Koh brings with him extensive expertise in finance, tax, treasury management and audit in various industries, over 10 years' experience in managing infrastructure businesses and a strong knowledge of the energy and water sectors. He rejoined Sembcorp in 2008 after a three-year stint with Power Seraya as its CFO. Prior to that, he spent seven years in Sembcorp and served as the Utilities business' Head of Finance and Chief Risk Officer.

Mr Koh holds a First Class Honours in Accountancy from the National University of Singapore.



**Wong Weng Sun**  
**President & CEO**  
**Sembcorp Marine**

*Joined 1988*

Mr Wong is President & CEO of Sembcorp Marine, as well as Managing Director of Jurong Shipyard. He also sits on the board of a number of the Group's subsidiaries including Jurong Shipyard, Sembawang Shipyard, SMOE and PPL Shipyard.

Prior to his present appointment, Mr Wong served as President & Chief Operating Officer of Sembcorp Marine. He first joined Jurong Shipyard in 1988 as an engineer before rising to the position of General Manager in charge of project management.

Mr Wong is the President of the Association of Singapore Marine Industries and sits on the boards of the Maritime and Port Authority of Singapore and the Singapore Maritime Foundation. Besides serving as a member of the Workplace Safety and Health Council, he is also Chairman of its Work at Height Safety Taskforce and Deputy Chairman of its Marine Industries Committee. He also chairs the Marine and Offshore Technology Advisory Committee and co-chairs the Advisory Committee of the Centre of Innovation, Marine and Offshore Technology at Ngee Ann Polytechnic.

Mr Wong holds a Bachelor of Mechanical Engineering (Marine). He also obtained a Masters in Business Administration from Oklahoma City University, USA.



**Tan Cheng Guan**  
**Executive Vice President**  
**Group Business & Strategic Development**

*Joined 2007*

Mr Tan is responsible for business and strategic development at Sembcorp and drives business development for the Group's energy and water businesses. He also oversees the Group's business in India, the Middle East & Africa, the UK and the Americas.

He brings with him broad experience in strategy, business and project development for the utilities industry. Mr Tan rejoined Sembcorp in 2007 after a three-year stint heading Vopak's operations in China. Prior to that, he spent 14 years with Sembcorp as well as over a decade in the oil and gas sector with Brown & Root Far East. While at Sembcorp, Mr Tan oversaw the early development of the Group's Utilities business on Jurong Island and the business' expansion into China, the UK and the Middle East. Most recently, he also led Sembcorp's acquisition of Cascal's global municipal water business.

Mr Tan holds a Bachelor of Civil Engineering (Honours) from the University of Liverpool, UK and completed the Advanced Management Programme at Harvard Business School, USA.

## KEY EXECUTIVES



**Ng Meng Poh**  
Executive Vice President  
Singapore and ASEAN (Utilities)

Joined 2007

Mr Ng is responsible for managing Sembcorp's Utilities business in Singapore, ASEAN and Australia and also sits on the boards of various companies within the Group.

He has over 25 years' experience in the energy industry and has held both government and private sector appointments. Prior to joining Sembcorp, Mr Ng was part of the executive management team of Senoko Power and also spent over a decade at Singapore's Public Utilities Board. In the course of his career, he was actively involved in the restructuring and liberalisation of Singapore's power and gas markets, as well as in negotiations for the importation of piped natural gas from Malaysia and Indonesia into Singapore.

Mr Ng holds a Bachelor of Mechanical Engineering from the National University of Singapore and a Masters of Science in Energy Resources from the University of Pittsburgh, USA.



**Low Sin Leng**  
Executive Chairman  
Sembcorp Development

Joined 2000

Ms Low spearheads the development of Sembcorp's Integrated Urban Development business. Leveraging on her business experience in Asia, Ms Low is also actively involved in the Group's activities in China, Vietnam and Indonesia. She is a Singapore Representative to the ASEAN Business Advisory Council and represents Sembcorp on several China-Singapore business councils.

Prior to joining Sembcorp, Ms Low was the Executive Vice President of Singapore Power and served 20 years in the Singapore Government Administrative Service holding senior positions in the Ministries of Finance, Trade & Industry and Education.

A Singapore President's Scholar, Ms Low holds a Masters in Business Administration (High Distinction) from the Catholic University of Leuven, Belgium, as well as a Bachelor of Electrical Engineering (Honours with Distinction) from the University of Alberta, Canada, and completed Harvard Business School's Advanced Management Programme in the USA.

## GROWTH & PERFORMANCE

**Group Business & Strategic Development**  
**Tan Cheng Guan**  
Executive Vice President

**Group Project Development**  
**Venkat Ram**  
Senior Vice President

**Group Asset Management**  
**Lau Gar Ning**  
Executive Vice President

**Technology**  
**Kwan Yuet Wing**  
Chief Technology Officer

**Corporate Headquarters**  
**Koh Chiap Khiong**  
Group Chief Financial Officer

**Richard Quek**  
Executive Vice President  
*Group Mergers & Acquisitions*

**Frank Koh**  
Senior Vice President  
*Group Corporate Finance*

**Goh Han Leng**  
Senior Vice President  
*Group Tax*

**Lim Suet Boey**  
Executive Vice President & General Counsel  
*Group Legal*

**Lau Gar Ning**  
Chief Health, Safety & Environment Officer

**Kwong Sook May**  
Company Secretary

**Lillian Lee**  
Senior Vice President  
*Group Human Resource*

**Jasmine Teo**  
Senior Vice President  
*Group Information Technology*

**Lee Swee Chee**  
Chief Risk Officer

**Ng Lay San**  
Vice President  
*Group Corporate Relations*

**Group Internal Audit**  
**David Wong**  
Vice President

## BUSINESS KEY MANAGEMENT

### Utilities

**SINGAPORE & ASEAN**  
**Ng Meng Poh**  
Executive Vice President

**CHINA**  
**Alan Yau**  
CEO

**INDIA**  
**Atul Nargund**  
Director  
*Sembcorp Utilities India*

**MIDDLE EAST & AFRICA**  
**Lim Yeow Keong**  
General Manager  
*Sembcorp Salalah O&M Services, Oman*

**William Chang**  
General Manager  
*Sembcorp Gulf O&M Company, UAE*

**Marius Van Aardt**  
Managing Director  
*Sembcorp Silulumanzi, South Africa*

**Shyam P Misra**  
Managing Director  
*Sembcorp Siza Water, South Africa*

**UK**  
**Douglas Annan**  
Senior Vice President & Site Director  
*Sembcorp Utilities UK*

**Roger Harrington**  
Managing Director  
*Sembcorp Bournemouth Water*

**THE AMERICAS**  
**Martin Greenhalgh**  
Executive President  
*Chile*

**Frederic Gautheron**  
General Manager  
*Panama and the Caribbean*

**Marine**  
**Wong Weng Sun**  
President & CEO  
*Sembcorp Marine Managing Director Jurong Shipyard*

**Ong Poh Kwee**  
Deputy President  
*Sembcorp Marine Managing Director Sembawang Shipyard*

**Douglas Tan**  
Managing Director  
*PPL Shipyard*

**Ho Nee Sin**  
Managing Director  
*SMOE*

**Freddie Woo**  
Executive Director  
*Jurong SML*

**Integrated Urban Development**  
**Low Sin Leng**  
Executive Chairman

**Kelvin Teo**  
President & COO

**Lim Buey Shyan**  
Senior Vice President

**Design & Construction**  
**Lim Kah Hing**  
Senior Vice President & Managing Director

**Mint**  
**Yip Pak Ling**  
Senior Vice President & Mint Director

### Sembcorp's corporate governance principles are built on our core value of integrity and reflect our commitment to protect and enhance shareholder value.

Sembcorp aspires to attain the highest standards of corporate governance. The board and management recognise that well-defined corporate governance processes are essential in enhancing corporate accountability and long-term sustainability and remain committed to ensuring high standards of corporate governance to preserve and maximise shareholder value.

In recognition of the company's continuous efforts towards excellent financial reporting and extensive disclosures beyond the minimum regulatory requirements, we were awarded Gold for Best Annual Report (for companies with market capitalisation of S\$1 billion and above) at the Singapore Corporate Awards 2011. We were also named the Most Transparent Company (Multi-industry / Conglomerates) at the Securities Investors Association (Singapore) Investors' Choice Awards 2011.

This report sets out the company's corporate governance processes and activities for the financial year with reference to the principles set out in the Singapore Code of Corporate Governance 2005 (Code). The board is pleased to report that the company has substantially complied with the principles and guidelines set out in the Code. Deviations from the Code, if any, are explained under the respective sections. The company continually reviews and refines its processes in light of the best practice, consistent with the needs and the circumstances of the Group.

#### Board of Directors

##### Effective board to lead and effect controls (Principle 1)

Sembcorp is led by an effective board comprising mainly independent non-executive directors. The board is headed by Ang Kong Hua. He is joined on the board by Tang Kin Fei, Goh Geok Ling, Evert Henkes, Bobby Chin Yoke Choong, Margaret Lui, Tan Sri Mohd

Hassan Marican and Tham Kui Seng, who joined the board on June 1, 2011. Richard Hale, OBE and Lee Suet Fern were also directors of the company until their retirement from the board at the last Annual General Meeting (AGM) held on April 21, 2011.

The fundamental responsibility of the directors is to exercise their independent judgement to act in good faith in what they reasonably believe to be the best interest of the company, for the creation of long-term value for shareholders. The board also relies on the integrity and due diligence of senior management, external auditors and advisors to oversee the Group's overall performance objectives, key operational initiatives, financial plans and annual budget, major investments, divestment and funding proposals, financial performance reviews, risk management and corporate governance practices.

To assist the board in the efficient discharge of its responsibilities and provide independent oversight of management, several board committees, including the Executive Committee, Audit Committee, Executive Resource & Compensation Committee, Nominating Committee and Risk Committee, have been established with written Terms of Reference (TOR). Primarily made up of independent non-executive directors, each committee makes decisions on matters within its TOR and applicable limits of authority, and recommends the course of action for the board's consideration on such matters. The committees' respective composition, roles and responsibilities are further explained in this report. Minutes of board committee meetings are circulated to the board to keep directors updated on the activities of each committee. Special purpose committees are also established as dictated by business imperatives. For instance, the Technology Committee, which is not a board committee,

is chaired by Mr Ang to lead the Group in setting up a framework to better manage existing and new technologies and research and development activities relating to the businesses of the Group. More details about the Technology Committee are explained in the Sustainability section of this annual report.

The composition of the board committees is structured to ensure an equitable distribution of responsibilities among board members, maximise the effectiveness of the board and foster active participation and contribution. Diversity of experience and appropriate skills are considered along with the need to maintain appropriate checks and balances between the different committees. Hence, membership of the Executive Committee (ExCo), with its greater involvement in key business and executive decisions, and membership of the Audit and Risk Committees, with their respective oversight roles, are mutually exclusive.

Board meetings are scheduled on a quarterly basis to review and approve the release of the quarterly results and discuss reports by management on the Group's financial performance, business development plans and prospects. A board meeting is also held at the end of each financial year to review the Group's strategy going forward and to consider and approve the Group's budget for the following year. Twice a year, the board also sets aside time during its scheduled meetings without the presence of management to discuss management's performance. Further board meetings may also be held to specifically consider other issues arising. Decisions of the board and board committees may also be obtained via circular resolutions. A two-day offsite board and management strategy meeting was organised in July 2011 to discuss in depth the strategic issues and direction of the Group. This also gave non-executive directors a better understanding of the Group and its businesses, and provided an opportunity for the non-executive directors to familiarise themselves with the management team.

To assist directors in planning for their attendance, board and board committee meetings as well as the AGM are scheduled one year in advance,

and telephonic attendance and conference via audio-visual communication are allowed under the company's Articles of Association. The company recognises that to focus on a director's attendance at formal meetings alone may lead to a narrow view of his contribution. Directors' contributions may be made in many other forms, such as bringing strategic relationships to the Group, providing guidance to management or offering an exchange of views outside the formal environment of the board or board committee meetings. Notwithstanding this, the company encourages active participation at formal meetings of the board.

The Group has adopted a set of internal controls and guidelines that set out financial authorisation and approval limits for borrowings, including off-balance sheet commitments, investments, acquisitions, disposals, capital and operating expenditures, requisitions and expenses. The board or ExCo approves transactions exceeding certain threshold limits, while delegating authority for transactions below those limits to management so as to facilitate operational efficiency.

The ExCo is chaired by Mr Ang and its members include Mr Goh, Mr Tang and Mrs Lui, who joined the ExCo in January 2011.

Within the limits of authority delegated by the board, the ExCo reviews and approves business opportunities, strategic investments, divestments, and major capital and operating expenditures. The ExCo also evaluates and recommends larger investments, capital and operating expenditures, as well as divestments to the board for approval.

Directors are briefed on changes to regulations, guidelines and accounting standards from time to time either during board meetings or at specially convened sessions, including sponsored training sessions and seminars conducted by external professionals. Articles and reports relevant to the Group's businesses are also circulated to the directors for information. The company conducts orientation programmes for newly-appointed directors where comprehensive presentations on Sembcorp's strategic

plans and direction, financial performance as well as business activities in the various geographical markets are given by senior management. In addition, the Group President & CEO briefs the board at each meeting on the business and project developments. A formal letter is also sent to newly-appointed directors upon their appointment explaining the Group's governance policies and practices, as well as their duties and obligations as directors. The newly-appointed director also receives an information pack which contains the Group's organisation structure, senior management's contact details, the company's Memorandum & Articles of Association, respective committees' TORs, Group Policy relating to disclosure of interests in securities and prohibition on dealings in Sembcorp securities, and guidelines on directors' fees. Further, facility visits to our subsidiaries' operation sites are arranged to provide newly-appointed directors an understanding of the Group's business operations. Existing directors are also invited to participate in such facility visits and orientation programmes.

### Strong and independent board exercising objective judgement (Principle 2)

The current board comprises eight directors, of whom six are independent directors. Excluding the Group President & CEO, all the directors are non-executive, including the Chairman.

The board members comprise business leaders and professionals with strong relevant experience in the Group's businesses. Best efforts have been made to ensure that, in addition to contributing their valuable expertise and insight to board deliberations, each director brings to the board an independent and objective perspective to enable balanced and well-considered decisions to be made. Given that the majority of the board comprises non-executive directors who are independent of management and independent in terms of character and judgement, objectivity on issues deliberated is assured. Profiles of the directors may be found on pages 60 to 63.

The Nominating Committee (NC) ensures that the board maintains at an appropriate size and comprises

members with a balance of skill, attributes, knowledge and experience. While reviewing the re-appointment and re-election of directors, the NC also considers the directors' other board directorship representations and ensures that directors have sufficient time to devote to their duties. Through the delegation of its authority to the NC, the board has applied its best efforts to ensure that the directors appointed possess the background, experience and knowledge in business, finance and related industries, as well as management skills critical to the company's businesses.

The NC is chaired by Mr Ang, who is joined on the committee by Mr Goh and Mrs Lui. In line with the Code, Mr Ang is not a substantial shareholder of the company, nor is he directly associated with Temasek Holdings, a substantial shareholder of the company.

Every year, the NC reviews the independence of directors. To this end, each director is required to complete a Director's Independence Checklist on an annual basis to confirm his independence. The checklist is drawn up based on the assessment guidelines provided in the Code and further requires each director to assess whether he considers himself independent despite not being involved in any of the relationships identified in the Code. The NC will then review the checklist completed by each director to determine whether that director is independent. For the year under review, with the exception of Mr Tang, who is Group President & CEO and an executive director, and Mrs Lui who is the Chief Operating Officer of Seatown Holdings International, a related company of Temasek Holdings, the NC has ascertained that all the other non-executive directors, including Tan Sri Mohd Hassan Marican who is appointed a Senior International Advisor of Temasek International Advisors, a subsidiary of Temasek Holdings, are independent. The NC believes that Tan Sri Mohd Hassan Marican is able to exercise strong independent judgement in his deliberations and act in the best interest of the company as his appointment is non-executive in nature and does not entail involvement in the day-to-day conduct of Temasek Holdings' businesses.

### Chairman and Chief Executive Officer (Principle 3)

The Chairman and the Group President & CEO are not related to each other. The roles of Chairman and the Group President & CEO are kept separate to ensure an appropriate balance of power, increased accountability and greater capacity of the board for independent decision making.

The Chairman, who is non-executive, leads and ensures effective and comprehensive board discussion on matters brought to the board including strategic issues as well as business planning. The Chairman monitors that the board's decisions are translated into executive action. The Group President & CEO's primary role is to effectively manage the operations of the Group in accordance with the Group's strategies and policies and provide close oversight, guidance, advice and leadership to senior management.

### Formal appointment and re-election of directors (Principle 4)

Sembcorp's board is periodically reviewed to ensure strong, independent and sound leadership for the continuous success of the company and its businesses. The board also recognises the

contribution of directors who, over time, have developed deep insights into the Group's businesses and exercises its discretion to retain the services of such directors where appropriate.

The NC supports and advises the company by nominating suitable board candidates to maintain the board's balance of skills, attributes, knowledge and experience. Appointments to the board are made on merit and against objective criteria. Candidates must be able to discharge their responsibilities as directors while upholding the highest standards of governance practised by the Group. While the directors may have several directorships in other companies, the NC takes care to ensure and is satisfied that appointees have contributed adequate time to meet the expectations of their role as directors.

The company subscribes to the principle that all directors including the Group President & CEO should retire and submit themselves for re-election at regular intervals, subject to their continued satisfactory performance. The company's Articles of Association requires a third of its directors to retire and subject themselves to re-election by shareholders at every AGM (one-third rotation rule).

### Board Members for 2011

Director	Position held on the board	Date of first appointment to the board	Date of last re-election / re-appointment as director	Nature of appointment
Ang Kong Hua	Chairman	Feb 26, 2010	Apr 22, 2010	Non-executive & Independent
Tang Kin Fei	Director	May 1, 2005	Apr 21, 2011	Executive & Non-independent
Goh Geok Ling	Director	May 3, 2000	Apr 22, 2010*	Non-executive & Independent
Evert Henkes	Director	Apr 30, 2004	Apr 22, 2010*	Non-executive & Independent
Bobby Chin Yoke Choong	Director	Dec 1, 2008	Apr 20, 2009*	Non-executive & Independent
Margaret Lui	Director	Jun 1, 2010	Apr 21, 2011	Non-executive & Non-independent
Tan Sri Mohd Hassan Marican	Director	Jun 16, 2010	Apr 21, 2011	Non-executive & Independent
Tham Kui Seng	Director	Jun 1, 2011	N.A.*	Non-executive & Independent
Richard Hale, OBE	Director (Retired on Apr 21, 2011)	Sep 1, 2000	Apr 22, 2010	Non-executive & Independent
Lee Suet Fern	Director (Retired on Apr 21, 2011)	Jul 1, 2005	Apr 20, 2009	Non-executive & Independent

\* Up for retirement at the upcoming AGM

## Composition of Board and Board Committees for 2011

Board Member	Executive Committee (ExCo)	Audit Committee (AC)	Risk Committee (RC)	Executive Resource Compensation Committee (ERCC)	& Nominating Committee (NC)
Ang Kong Hua	Chairman			Chairman	Chairman
Tang Kin Fei	Member				
Goh Geok Ling	Member			Member	Member
Evert Henkes <sup>1</sup>		Member	Chairman		
Bobby Chin Yoke Choong <sup>2</sup>		Chairman	Member		
Margaret Lui <sup>3</sup>	Member			Member	Member
Tan Sri Mohd Hassan Marican <sup>4</sup>		Member	Member		
Tham Kui Seng <sup>5</sup>					
Richard Hale, OBE <sup>6</sup> (Retired on Apr 21, 2011)		Chairman	Chairman		
Lee Suet Fern <sup>7</sup> (Retired on Apr 21, 2011)		Member	Member		

## Directors' Attendance at Board and Board Committee Meetings in 2011

Board Member	Board Meeting		Executive Committee (ExCo) Meeting	Audit Committee (AC) Meeting	Risk Committee (RC) Meeting	Executive Resource & Compensation Committee (ERCC) Meeting	Nominating Committee (NC) Meeting*
	Scheduled	Ad-hoc					
<b>Total No. of Meetings Held in 2011</b>	<b>5</b>	<b>3</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>-</b>
Ang Kong Hua	5/5	3/3	6/6	-	-	3/3	*
Tang Kin Fei	5/5	3/3	6/6	-	-	-	-
Goh Geok Ling	5/5	3/3	6/6	-	-	2/3	*
Evert Henkes <sup>1</sup>	5/5	2/3	-	3/3	4/4	-	-
Bobby Chin Yoke Choong <sup>2</sup>	5/5	3/3	-	4/4	4/4	-	-
Margaret Lui <sup>3</sup>	5/5	3/3	5/6	-	-	3/3	*
Tan Sri Mohd Hassan Marican <sup>4</sup>	5/5	3/3	-	4/4	3/3	-	-
Tham Kui Seng <sup>5</sup>	3/3	1/1	-	-	-	-	-
Richard Hale, OBE <sup>6</sup> (Retired on Apr 21, 2011)	0/1	0/1	-	0/1	0/1	-	-
Lee Suet Fern <sup>7</sup> (Retired on Apr 21, 2011)	1/1	1/1	-	1/1	1/1	-	-

<sup>1</sup> Evert Henkes was appointed Chairman of RC and a member of AC on Apr 21, 2011 and May 1, 2011 respectively.

<sup>2</sup> Bobby Chin was appointed Chairman of AC on Apr 21, 2011.

<sup>3</sup> Margaret Lui was appointed a member of ExCo on Jan 1, 2011.

<sup>4</sup> Tan Sri Mohd Hassan Marican was appointed a member of AC and RC on Jan 1, 2011 and May 1, 2011 respectively.

<sup>5</sup> Tham Kui Seng was appointed an independent non-executive director on Jun 1, 2011.

<sup>6</sup> Richard Hale, OBE retired as an independent non-executive director and Chairman of AC and RC on Apr 21, 2011.

<sup>7</sup> Lee Suet Fern retired as an independent non-executive director and member of AC and RC on Apr 21, 2011.

\* Decisions by NC were made via circular resolution.

Prior to seeking shareholders' approval at the AGM, the NC reviews and considers the retirement and re-election of directors. In addition, a newly-appointed director submits himself for retirement and re-election at the AGM immediately following his appointment. Thereafter, he is subject to the one-third rotation rule. Directors who are above the age of 70 are also statutorily required to seek re-appointment at each AGM.

Pursuant to the one-third rotation rule, Mr Henkes and Mr Chin will retire and submit themselves for re-election at the forthcoming AGM. Mr Tham, who was newly appointed to the board on June 1, 2011, will also submit himself for retirement and re-election by shareholders at the forthcoming AGM.

In addition, Mr Goh, who has turned 70 years old in September 2011, will also submit his retirement and offer himself for re-appointment pursuant to the Companies Act. Although Mr Goh has served on the board since 2000, the board considers his contribution significant and valuable as he possesses in-depth knowledge of the businesses of the Group. The board believes that Mr Goh's tenure would not materially interfere with his ability to exercise independent judgement in his deliberations and act in the best interests of the Group and its shareholders.

## Board Performance and Conduct of Its Affairs Active participation and valuable contributions are key to overall effectiveness of the board (Principle 5)

Each year, the board undertakes an informal assessment of its performance to identify key areas for improvement and requisite follow-up actions. To provide feedback to aid in this assessment, each director is required to complete a questionnaire on the effectiveness of the board as a whole. This questionnaire considers factors such as the size and composition of the board, directors' access to information, board processes and accountability, committee effectiveness as well as board performance in relation to its principal functions and

communication with senior management. The collective evaluation and feedback is then consolidated and presented to the board for discussion to highlight areas of strength and weakness for continuous improvement of the board and its committees.

The NC feels that the financial indicators set out in the Code as guidelines for the evaluation of the board are more a measure of management's performance and therefore less applicable to directors. The NC believes that board performance is ultimately reflected in the long-term performance of the Group.

## Full Access to Information and Resources Directors have complete, adequate and timely information and resources (Principle 6)

To assist the board in discharging its duties and to keep abreast of the Group's operational and financial performance, key issues, challenges and opportunities, Sembcorp's management furnishes adequate management and operation reports as well as financial statements to the board on a regular basis. As a general rule, board and board committee papers are submitted to directors at least three working days before each meeting so that they may better understand the matters prior to the meeting and discussions may be focused on questions that the directors have on these matters. Members of senior management who may provide insight into the matters to be discussed are also called on to be present during the relevant discussions.

Financial highlights of the Group's performance and key developments are presented on a quarterly basis at board meetings. The Group President & CEO, Group Chief Financial Officer and members of senior management are present at these presentations to address any queries which the board may have.

The Company Secretary facilitates good information flow between the board and its committees and senior management, in addition to attending to corporate secretarial matters such as arranging orientation for newly-appointed directors.



In consultation with the Chairman and the Group President & CEO, the Company Secretary assists the board with the preparation of meeting agendas, and administers, attends and prepares minutes of board proceedings. She also assists the board on the compliance of the Group with the Memorandum and Articles of Association and regulations, including requirements of the Companies Act, Securities & Futures Act and the SGX-ST. She liaises with the SGX-ST, the Accounting and Corporate Regulatory Authority and, when necessary, shareholders.

The board has ready and independent access to the Group President & CEO, senior management, the Company Secretary and internal and external auditors at all times. The board exercises its discretion to seek independent professional advice at the company's expense, if deemed necessary, to ensure that full information is available before important decisions are made.

## Competitive Remuneration System Remuneration of directors adequate and not excessive (Principle 7)

The Executive Resource & Compensation Committee (ERCC) is chaired by Mr Ang and its members include Mr Goh and Mrs Lui.

The ERCC is responsible for ensuring a formal procedure for developing and reviewing policies on compensation and development of the Group's senior management. It assists the board to ensure that competitive remuneration policies and practices are in place to attract, motivate and retain talented executives. The ERCC also reviews the remuneration of the board members.

The ERCC reviews succession planning for key positions in the Group and the leadership pipeline for the organisation. It reviews the development of senior staff and assesses their strengths and development needs based on the Group's leadership competencies framework, with the aim of building talent and maintaining strong and sound leadership for the Group. The ERCC conducts a succession planning review of the Group President & CEO, officers

reporting directly to him, as well as selected key positions in the company on an annual basis. Potential internal and external candidates for succession are reviewed for different time horizons according to immediate, medium-term and long-term needs.

The ERCC also establishes guidelines on share-based incentives and other long-term incentive plans and approves the grant of such incentives to key executives. These incentives aim to motivate executives to maximise operating and financial performance and shareholder value, and are aimed at aligning the interests of the executives with those of shareholders.

The ERCC has access to expert professional advice on human resource matters whenever there is a need for such external consultations. In its deliberations, the ERCC takes into consideration industry practices and norms of compensation. The Group President & CEO does not attend discussions relating to his own compensation, terms and conditions of service, or the review of his performance. No ERCC member or any director is involved in deliberations in respect of any remuneration, compensation, share-based incentives or any form of benefits to be granted to himself.

## Competitive reward system to ensure highest performance and retention of best talents and key executives (Principle 8)

Sembcorp believes that a competitive remuneration and reward system based on individual performance is important in order to retain and incentivise the best talents. Sembcorp's remuneration and reward system is also responsive to the economic climate as well as the performance of the Group and its business units.

The Group President & CEO, as an executive director, does not receive director's fees. As a lead member of management, his compensation consists of his salary, allowances, bonuses and share-based incentives conditional upon meeting certain performance targets. Details on the share-based incentives and the performance targets are available in the Directors' Report and Note 4 in the Notes to the Financial Statements.

In its yearly review, the ERCC, with the advice and assistance from compensation consultant, updated the compensation framework of non-executive directors. To align the interests of the non-executive directors with the interests of shareholders, up to 30% of the aggregate directors' fees approved by shareholders for a particular financial year may be paid out in the form of restricted share awards under the Sembcorp Industries Restricted Share Plan 2010.

The following Directors' Compensation Framework is based on a scale of fees divided into basic retainer fees, attendance fees, fees for service on board committees and travel allowance:

### Directors' Compensation by Type of Appointment

	S\$
<b>Board of Directors</b>	
■ Basic fee	65,000
■ Chairman's allowance	80,000
<b>Executive Committee</b>	
■ Chairman's allowance	40,000
■ Member's allowance	25,000
<b>Audit Committee</b>	
■ Chairman's allowance	40,000
■ Member's allowance	25,000
<b>Executive Resource &amp; Compensation Committee / Nominating Committee</b>	
■ Chairman's allowance	25,000
■ Member's allowance	15,000
<b>Risk Committee</b>	
■ Chairman's allowance	25,000
■ Member's allowance	15,000

#### Notes:

- 1 Tang Kin Fei, as an executive director, does not receive director's fees.
- 2 The Executive Resource & Compensation Committee and the Nominating Committee have the same members, who each receives one payment for service on both committees.
- 3 The directors also receive attendance fees of S\$4,500 for each board meeting; and S\$2,200 for each committee meeting.
- 4 The directors receive additional travel allowance for travelling out-country to attend board and / or committee meetings:  
Duration of travel (to and fro) ≤4 hrs: S\$2,000; >4 to 15 hrs: S\$5,000;  
>15 hrs: S\$10,000

The directors' cash fees and share awards will only be paid and granted upon approval by shareholders at the forthcoming AGM of the company.

For the year 2011, the awards granted under the Sembcorp Industries Restricted Share Plan 2010 to all directors as part of their directors' fees (except for Mr Tang, who is the Group President & CEO and does not receive any directors' fees) will consist of the grant of fully paid shares outright with no performance and vesting conditions attached, but with a selling moratorium. Non-executive directors are required to hold shares (including shares obtained by other means) worth at least one-time the annual base retainer (currently S\$65,000); any excess may be sold as desired. A non-executive director can dispose of all of his shares one year after leaving the board.

The actual number of shares to be awarded to each non-executive director will be determined by reference to the volume-weighted average price of a share on the SGX-ST over the 14 trading days immediately following the date of the AGM. The number of shares to be awarded will be rounded down to the nearest hundred and any residual balance will be settled in cash.

The company does not have a retirement remuneration plan for non-executive directors.

Key executives are rewarded based on actual performance relative to pre-agreed performance targets, which include financial and non-financial performance indicators such as economic value added (EVA), total shareholder return and promoting and maintaining health, safety and environmental standards. The Group believes that the current reward systems are in line with market norms and formulated to motivate executives to give their best to the Group. Rewards include long-term share-based incentives, which would further ensure the retention of the most talented and high-performing executives in the Group. For further details on the share-based incentives and performance targets, please refer to the Directors' Report and Note 4 in the Notes to the Financial Statements.

The Group has an incentive compensation plan for key executives that is tied to the creation of EVA, as well as to the achievement of individual and Group performance goals. A 'bonus bank' is used to hold incentive compensation credited in any year. Typically, one-third of the available balance is paid out in cash each year and the balance carried forward to the following year. Such carried-forward balances of the bonus bank may either be reduced or increased in future, based on the yearly EVA performance of the Group and its subsidiaries.

### Disclosure on remuneration (Principle 9)

The directors' fees totalled S\$1,280,613 in 2011, comprising S\$896,429 in cash (2010: S\$937,626) derived using the compensation structure above and S\$384,184 to be paid in the form of restricted share awards under Sembcorp Industries Restricted Share Plan 2010.

More information on directors and key executives' remuneration may be found under the related item in the Supplementary Information section of the Financial Statements.

### The board is accountable to the shareholders (Principle 10)

Sembcorp is committed to open and honest communication with shareholders at all times. The company presents a balanced, clear and coherent assessment of the Group's performance, position and prospects to shareholders through the timely release of its quarterly and annual financial reports.

The company believes that prompt compliance with statutory reporting requirements is imperative to maintaining shareholders' confidence and trust in the company. In line with stock exchange requirements, negative assurance statements were issued by the board to accompany the company's quarterly financial results announcements, confirming that to the best of its knowledge, nothing had come to its attention which would render the company's quarterly results false or misleading.

### Audit Committee (Principle 11)

The Audit Committee (AC) comprises directors who are both independent and non-executive. The AC was chaired by Mr Hale until his retirement from the board at the AGM on April 21, 2011. Mr Chin, an existing member of the AC, took over as Chairman with effect from April 21, 2011. The other members are Tan Sri Mohd Hassan Marican and Mr Henkes, who joined the AC in January and May 2011 respectively. Mrs Lee was also a member of the AC until her retirement from the board in April 2011.

The AC assists the board in fulfilling its fiduciary responsibilities relating to the internal controls, audit and accounting and reporting practices of the Group. Its main responsibilities are to review the company's policies and control procedures with the external auditors, internal auditors and management and act in the interest of the shareholders in respect of interested person transactions as well as any matters or issues that affect the financial performance of the Group. The AC reviews the quarterly, half-yearly and full-year results announcements, accompanying press releases and presentation slides as well as the financial statements of the Group and company before they are submitted to the board for approval.

Each year, the AC also reviews the independence of the company's external auditors and makes recommendations to the board on the re-appointment of the company's external auditors. The AC meets the external and internal auditors at least once a year without the presence of management.

The AC has explicit authority to investigate any matter within its TOR and enjoys full access to and co-operation from management to enable it to discharge its function properly.

Where relevant, the AC is guided by the recommended best practices for audit committees as set out in the Guidebook for Audit Committees issued by Singapore's Audit Committee Guidance Committee in October 2008.

The AC has reviewed the nature and extent of non-audit services provided by the external auditors

to the Group for the year, excluding services provided to Sembcorp Marine, a listed subsidiary that has its own audit committee. The AC is satisfied that the independence of the external auditors has not been impaired by their provision of non-audit services. Details of non-audit fees payable to the external auditors are found in Note 35(b) in the Notes to the Financial Statements.

The AC also oversees the Group's whistle-blowing policy.

### Internal control and risk management (Principle 12)

The board and management of the company are fully committed to a robust system of internal controls, procedures and risk management to safeguard shareholders' interests and the Group's assets, and to manage risks. The company seeks to improve internal control and risk management on an ongoing basis to ensure that they remain sound and relevant. The board, with the concurrence of the AC and Risk Committee (RC), is of the opinion that the operational, financial and compliance controls are adequate to meet the needs of the Group in the current business environment. This assessment is based on risk mitigating measures taken by management, work done by the company's Group Internal Audit and Group Risk Management departments, as well as the statutory audit(s) conducted by external auditors. Internal controls, because of their inherent limitations, can provide reasonable but not absolute assurance regarding the achievement of their intended control objectives. In this regard, the board will ensure that if any significant internal control failings or weaknesses were to arise, necessary remedial actions would be swiftly taken.

During the year under review, the RC was chaired by Mr Hale until his retirement in April 2011. Mr Henkes took over as Chairman of the RC with effect from April 21, 2011. The other members include Mr Chin and Tan Sri Mohd Hassan Marican, who joined the RC in May 2011. Mrs Lee was a

member of the RC until she retired from the board in April 2011. The RC's main role and function is to assist the board in overseeing risk management for the Group. It appraises the adequacy and effectiveness of the Group's risk management plans, systems, processes and procedures, Group-wide risk policies, guidelines and limits, as well as its risk portfolio, risk levels, and risk mitigation strategies.

For more information on the company's enterprise risk management system, please refer to page 80.

### Internal Audit

#### Independent internal audit function (Principle 13)

The internal audit function of the Group is performed by the Group Internal Audit department (GIA), which reports directly to the AC on audit matters and to the Group President & CEO on administrative matters.

GIA adopts a risk-based methodology in defining its annual internal audit plan, which is reviewed and approved by the AC. The internal audits performed are aimed at ensuring that the Group maintains a sound system of internal controls and that the operations comply with the internal controls framework. GIA also assists the board and management in the discharge of their corporate governance responsibilities as well as in improving and promoting effective and efficient business processes within the Group. To ensure that the internal audits are performed by competent professionals, GIA employs qualified staff and identifies and provides training and development opportunities for them so that their technical knowledge remains current and relevant. GIA is guided by and has met the standards for the professional practice of internal audit promulgated by the Institute of Internal Auditors.

The board has been kept informed of the AC's review of GIA's reports and the management controls in place, and is satisfied that GIA is adequately resourced and given appropriate authority and support within the company to carry out its audits.

## Whistle-blowing Policy

To strengthen corporate governance and ethical business practices across the Group, the company has implemented a whistle-blowing policy and procedures which provide employees with accessible channels to GIA to report suspected fraud, corruption, dishonest practices or other misdemeanors. The aim of this policy is to encourage the reporting of such matters in good faith, with the confidence that employees making such reports will, to the extent possible, be protected from reprisal.

For more information on the whistle-blowing policy, please refer to page 81.

## Communication with Shareholders

### Regular, effective and equal treatment of shareholders (Principle 14)

Sembcorp remains committed to upholding high standards of corporate transparency and disclosure. The company disseminates all price-sensitive and material information to its shareholders via SGXNET on a non-selective basis and keeps all stakeholders informed of its corporate activities in a timely and consistent manner. Financial and other performance data is given for the Group as well as business units where appropriate, to provide shareholders with a better insight into the Group's performance. The date of the release of quarterly results is disclosed at least two weeks prior to the date of announcement via SGXNET. On the day of announcement, the financial statements as well as the accompanying press release and presentation slides are released via SGXNET as well as on the company website at [www.sembcorp.com](http://www.sembcorp.com). Thereafter, a briefing or teleconference by management is jointly held for the media and analysts. For first half and full year results announcements, results briefings are concurrently broadcast live via webcast.

Following the release of financial statements or price-sensitive developments, investor relations officers are available by e-mail or telephone to answer questions from shareholders, analysts and the

media as long as the information requested does not conflict with the SGX-ST's rules of fair disclosure.

### Greater shareholder participation at general meetings (Principle 15)

The company encourages shareholder participation at general meetings of shareholders. Information on general meetings is disseminated through notices in the annual reports or circulars sent to all shareholders. The notices are also released via SGXNET and published in local newspapers, as well as posted on the company website. All registered shareholders are invited to participate in the company's general meetings.

The company's Articles of Association allow all shareholders the right to appoint up to two proxies to attend general meetings and vote on their behalf. The company also allows Central Provident Fund investors to attend general meetings as observers.

To ensure greater transparency of the voting process, the company is considering electronic poll voting at the upcoming general meetings to allow shareholders present or represented at the meetings to vote on a one share, one vote basis. Voting in absentia by mail, facsimile or e-mail is currently not permitted as such voting methods would need to be cautiously evaluated for feasibility to ensure that there is no compromise to the integrity of the information and the authenticity of the shareholders' identity.

At general meetings, every matter requiring approval is proposed as a separate resolution. Shareholders present are given an opportunity to clarify or direct questions on issues pertaining to the proposed resolutions before the resolutions are voted on. The board and management are present to address these questions and obtain feedback from shareholders. The external auditors and legal advisors (if necessary) are also present to assist the board. Minutes of shareholder meetings are available upon request by registered shareholders.

At each AGM, the Group President & CEO delivers a short presentation to shareholders to update them on the performance of Sembcorp's businesses.

For further details on Sembcorp's communications with its shareholders, please see the Investor Relations chapter of this annual report.

## Dealings in Securities

The company has adopted a Code of Compliance on Dealing in Securities, which prohibits dealings in the company's securities by its directors and senior management within two weeks prior to the announcement of the company's financial statements for each of the first three quarters of its financial year and within one month prior to the announcement of the company's full-year financial statements. Directors and employees are also expected to observe insider trading laws at all times, even when dealing in the company's securities outside the prohibited trading period.

## Interested Person Transactions

Shareholders have adopted an Interested Person Transaction (IPT) Mandate in respect of interested person transactions of the company. The IPT Mandate defines the levels and procedures to obtain approval for such transactions. Information regarding the IPT Mandate is available on the company website, [www.sembcorp.com](http://www.sembcorp.com). All business units are required to be familiar with the IPT Mandate and report any interested person transactions to the company. The Group maintains a register of the company's interested person transactions in accordance with the reporting requirements stipulated by Chapter 9 of the SGX-ST Listing Manual. Information on interested person transactions for 2011 may be found in the related item under the Supplementary Information section of the Financial Statements in this report.

### Sembcorp is fully committed to a robust system of internal controls and risk management.

The Group manages risk under an overall strategy determined by the board of directors, supported by the board-level Risk Committee and Audit Committee. Formed in August 2003 to assist the board of directors, the Risk Committee, which now comprises three directors, reviews and enhances the effectiveness of the Group's risk management plans, systems, processes and procedures. The Risk Committee also reviews Group-wide risk policies, guidelines and limits as well as significant risk exposure and their risk treatment plans. Since April 2005, the Sembcorp Marine Risk Committee has assumed responsibility for oversight of the Marine business' risk management activities and practices.

#### Enterprise Risk Management

The Group has established the Sembcorp Industries Enterprise Risk Management Framework to standardise the risk management methodologies within the Group. In line with Sembcorp's commitment to deliver sustainable value to its shareholders, the objective of the Enterprise Risk Management Framework is to provide guidance to the operating units in implementing a comprehensive and consistent approach to identifying and managing the risks that they face. The Enterprise Risk Management Framework applies to the actions of all employees of the Group and is implemented in each operating unit. Within this framework, critical and major risks of the Group and the operating units are identified and assessed to determine the appropriate type of risk management plans to be implemented and which are to be monitored at the Group level as well as by each operating unit.

The Enterprise Risk Management Framework sets out a systematic and ongoing process for identifying, evaluating, controlling and reporting risk, comprising the following key elements:

- Identification and assessment of all risks
- Formulation of risk management strategies
- Design and implementation of risk management and mitigation action plans
- Monitoring and reporting of risk management performance and risk exposure levels; and
- Continuous improvement of risk management and mitigation action plans and capabilities

These processes are put in place to manage and monitor the Group's risk management activities on a regular and timely basis.

#### System of Financial Discipline

To ensure financial discipline across the Group, we have implemented a self-check, review and certification process since 2003 called the System of Financial Discipline for all subsidiaries, joint ventures and associates, to confirm their commitment to and compliance with a prudent financial discipline framework. The Group conducts periodic review of the System of Financial Discipline to ensure its relevance, effectiveness and compliance.

At the business unit level, the process involves a comprehensive self-review exercise by management at various levels to ensure that transactions are in compliance with the accounting standards and acceptable accounting policies and that the internal controls in place are adequate. The System of Financial Discipline also sets out a structured approach to identifying and facilitating the continued assessment of key risk areas with financial implications, such as provisioning for project losses, asset impairment, significant long outstanding debts, fraud incidents and any transactions and events with material impact or potential material impact on the business unit's financial results.

On a quarterly basis, business units' operating and finance heads are required to certify and report

the results of their self-review exercise to the Group. This process serves to facilitate and ensure consistency of accounting treatments adopted by business units and allows early identification of areas of potential exposure that can be addressed to minimise adverse impact to the Group. The reporting also serves as a periodic platform for all business units' operating and finance heads to highlight any transactions and / or events with material or potential material financial impact to the Group.

#### Whistle-blowing

Since 2005, Sembcorp has had a whistle-blowing policy and procedure which provides employees with well-defined and accessible channels within the Group through which they may, in confidence, raise concerns about possible improprieties in matters of business activities, financial reporting or other matters to the Audit Committee. This arrangement facilitates independent investigation of such matters for appropriate resolution. The policy is subject to review on a regular basis.

#### Internal Audit

The Group also has a Group Internal Audit department, which assists the Audit Committee to ensure the maintenance of a sound system of internal controls for the company. Our internal auditors perform this function by monitoring key controls and procedures and ensuring their effectiveness, undertaking investigations as directed by the Audit Committee and conducting a programme of internal audits. For more information on the company's independent internal audit function, please refer to the relevant section on page 77 in the Corporate Governance chapter of this annual report.

#### Mitigation Strategies

Our risk management efforts are focused on the following risks:

- a. Financial and counterparty / credit risk

- b. Operational risk
- c. Investment risk
- d. Compliance and legal risk
- e. Interested person transaction risk
- f. Human resource risk
- g. Fraud risk

#### a. Financial and counterparty / credit risk

The Group's activities expose it to a variety of financial risks, including liquidity risk, interest rate risk, foreign exchange risk, commodity risk and counterparty / credit risk.

To manage these risks, the Group's Treasury Policies and Financial Authority Limits are reviewed periodically and communicated to the Group's entities. The policies set out the parameters for management of the Group's liquidity, counterparty, foreign exchange and other transactions risk exposures.

The Group utilises approved financial instruments to manage exposure to interest rate, foreign exchange and commodity price risks arising from operational, financing and investment activities. The commodities involved basically include fuel oil, coal and natural gas. Transactions such as foreign exchange forwards, interest rate swaps, commodities swaps, purchase of options and contracts for differences are used, as appropriate, to manage these risks. Under the Group's overall Treasury Policies, transactions for speculative purposes are strictly not allowed. Transactions are allowed only for hedging purposes based on the underlying business and operating requirements. Exposure to foreign currency risks is also hedged naturally where possible.

The Financial Authority Limits seek to limit and mitigate operational risk by setting out the threshold of approvals required for entering into contractual obligations and investments.

#### Liquidity risk

The Group manages its working capital requirements with a view to balancing the risk of non-availability of funding, the cost of funding and an

## RISK MANAGEMENT & MITIGATION STRATEGIES

optimal level of liquidity appropriate for the operating environment and expected cash flow of the Group. Working capital requirements, which are maintained within the credit facilities established, are adequate and available to the Group to meet its obligations.

### Interest rate risk

The Group's policy is to maintain an efficient and optimal interest cost structure using a mix of fixed and variable rate debts and long-term and short-term borrowings. The Group enters into interest rate swaps to minimise its interest rate risk, and targets to have a minimum of 50% of its loan portfolio in fixed rate debts.

### Foreign exchange risk

The Group operates globally and is exposed to foreign currency exchange rate movements, primarily for the US dollar, pound sterling, euro, Australian dollar and *renminbi*. Such risks are either hedged by foreign exchange forward contracts in respect of actual or forecasted net currency exposure or hedged naturally by a sale or purchase of a matching asset or liability of the same currency and amount. The Group does not engage in any form of proprietary trading.

### Commodity risk

The Group hedges against fluctuations in commodity prices that affect revenue and cost. Exposure is managed via swaps, purchase of options, contracts for differences and forward contracts.

Contracts for differences are entered into with appropriate counterparties to hedge against adverse price movements on the sale of electricity. Exposure to price fluctuations arising from the purchase of fuel is managed via fuel oil swaps, where the price of fuel is indexed to a benchmark fuel price index, for example the Singapore High Sulphur Fuel Oil 180-CST.

For precious metal commodities, such as gold, exposures to fluctuations in price are hedged through the use of forward contracts or purchase of options that fix the purchases at an agreed price.

The quantum of commitment is based on actual or forecasted requirements.

### Counterparty / credit risk

The Group monitors its exposure to credit risk arising from sales to trade customers and default risks from suppliers and contractors on an ongoing basis. Credit evaluations are done on these counterparties from time to time. The Group generally deals with pre-approved customers, suppliers, contractors and financial institutions with good credit rating. On a case by case basis, the Group will require additional securities when dealing with counterparties of lower credit standing.

### b. Operational risk

Operational risk, which is inherent in all business activities, is the risk of potential financial loss and / or business instability arising from failures in internal controls, operational processes or the systems that support them.

It is recognised that operational risk can never be entirely eliminated and that the cost of minimising it may outweigh the potential benefits. Accordingly, the Group manages operational risk by focusing on risk management and incident management. The Group has also put in place operating manuals, standard operating procedures, delegation of authority guidelines and a regular reporting framework, which encompasses operational and financial reporting. This allows for early identification of areas of potential exposure which can be addressed to minimise adverse impact to the Group. Independent checks on the operating units' internal controls and risk management process are undertaken by the Group Internal Audit department to ensure their effectiveness and adequacy. Where appropriate, this is supported by risk transfer mechanisms such as insurance.

### Insurance

It is not practicable to insure every insurable risk event to the fullest extent as the insurance market

may lack the capacity, both in terms of the breadth and extent of coverage, and in some cases external insurance is simply unavailable or not available at an economical price. The Group regularly reviews both the type and amount of insurance coverage that it buys, bearing in mind the availability of such cover, its price and the likelihood and magnitude of the risks involved.

During the year, the Group renewed its global insurance programme for property damage, business interruption and public liability for its Utilities operations in Singapore and the UK, under the advice of established global insurance broker and risk adviser Marsh (Singapore), and maintained insurance levels deemed appropriate in view of the cost of cover and risk profiles of the businesses.

The Group's wholly-owned captive insurance subsidiary, Sembcorp Captive Insurance, which is advised and managed by Marsh Management Services, also participates as a reinsurer in the property damage and business interruption portion of the Group's global insurance programme. Sembcorp Captive Insurance retains a maximum exposure of S\$2.5 million for each and every loss with an annual maximum of S\$5 million in aggregate in excess of the existing retentions of the business entities within the Group.

### c. Investment risk

The Group's capital investment decision process is guided by investment parameters instituted on a Group-wide basis. All investments are subject to rigorous scrutiny to ensure that they are in line with the Group's strategic business focus, meet the relevant hurdle rates of return and take into account all other relevant risk factors, such as market risks, operating risks, environmental risks and foreign exchange risks. In addition, the board requires that each major investment proposal submitted to the board for decision is accompanied by a comprehensive risk assessment and management's proposed mitigation strategies.

### d. Compliance and legal risk

The Group's operations are subject to regulation and future changes in regulation that may adversely affect results, particularly in the areas of corporate law, competition law, consumer protection and environmental law. The responsibility of compliance with applicable laws and regulations lies with the respective operating business heads, and oversight of the discharge of their responsibilities is provided by the Group's legal department.

Legal risk is the risk that the business activities of the Group may have unintended or unexpected legal consequences. This includes risks arising from:

- Actual or potential violation of laws or regulations (which may attract a civil or criminal fine or penalty)
- Inadequate documentation, legal or regulatory incapacity, insufficient authority of a counterparty and uncertainty about the validity or enforceability of a contract in a counterparty insolvency
- Failure to protect the Group's property (including its interests in its premises and its intellectual property, such as Sembcorp's logo and other related logos, brand names and products); and
- The possibility of civil claims (including acts or other events that may lead to litigation or other disputes)

The Group identifies and manages legal risk through effective use of its internal and external legal advisers. Sembcorp's internal legal department assists in identifying, monitoring and providing the support necessary to identify and manage legal risks across the Group.

### e. Interested person transaction risk

In respect of transactions entered into by the Group, its subsidiaries and associated companies that are "entities at risk" with interested persons (namely its controlling shareholders, Group President & CEO, directors and their respective associates), the Group is guided by and complies with the provisions of Chapter 9 of the SGX-ST Listing Manual. This is to

## RISK MANAGEMENT & MITIGATION STRATEGIES

ensure that such interested person transactions (IPTs) are entered into on an arm's length basis and on normal commercial terms, which are generally not any more favourable than those extended to unrelated third parties.

The Group has internal control procedures to ensure that transactions carried out with interested persons comply with the provisions of Chapter 9 and Sembcorp Industries' Shareholders' Mandate. This mandate is renewed on an annual basis and will be updated at the extraordinary general meeting to be convened on April 24, 2012. These internal control procedures are intended to ensure that IPTs are conducted at arm's length and on normal commercial terms that are not prejudicial to the interests of minority shareholders.

The Group maintains a register of all IPTs, recording the basis on which they are entered into, including quotations obtained to support such basis. The Group's annual internal audit plan incorporates a review of all IPTs for the relevant financial year.

The Audit Committee periodically reviews Group Internal Audit's IPT Reports to ascertain that the guidelines and procedures on IPTs have been complied with. The review includes the examination of the nature of the IPTs and relevant supporting documents or other such information deemed necessary by the Audit Committee. If a member of the Audit Committee has an interest in an IPT, he or she abstains from participating in the review and approval process of that IPT.

### f. Human resource risk

In order to develop, support and market the products and services offered by the Group and to grow our businesses internationally, it is necessary to hire and retain skilled and professional employees with the relevant expertise. The implementation of the Group's strategic business plans could be undermined by failure to recruit or retain competent key personnel, the unexpected loss of such key senior employees or failure in the company's succession planning.

In this respect, the Group places great emphasis on establishing comprehensive human resource policies for the recruitment, compensation and development of staff. This ensures that the Group's human assets – its skilled workforce and competent senior management – are nurtured and retained, so that the Group's competitive edge is preserved. The board's Executive Resource & Compensation Committee has oversight of the Group's remuneration policies and oversees management, development and succession plans for key management positions. Further details on the Executive Resource & Compensation Committee as well as on Sembcorp's human resource management may be found at pages 74 to 75 and 103 to 108 of this annual report.

### g. Fraud risk

In 2011, the Group established the Group Fraud Risk Management Framework to formulate the Group's strategies and improve its existing antifraud measures to manage the risks of fraud and misconduct effectively. The framework was approved by the Risk Committee and is in various stages of implementation within the Group.

## INVESTOR RELATIONS

At Sembcorp, we are committed to ensuring that all capital market players have easy access to clear, reliable and meaningful information on our company in order to make informed investment decisions.

In the context of constantly evolving requirements of disclosure, transparency and corporate governance, we aim to provide investors with an accurate, coherent and balanced account of the Group's performance. To do this, multiple communication platforms are utilised including group briefings to analysts, investors and the media, one-on-one meetings with shareholders and potential investors, investor roadshows and the investor relations section of our corporate website. In addition, company visits and facility tours are also organised to help investors gain better insight into the Group's operations.

### Proactive Communication with the Financial Community

During the year, senior management and the investor relations team continued to actively maintain open communication channels with the financial community. We held over 130 one-on-one and group meetings with shareholders, analysts and potential investors. These included non-deal roadshows in major international financial centres. In Asia, we covered Singapore and Hong Kong; in Europe, Frankfurt and London; and in North America, New York, Boston and Toronto. We also participated in six investor conferences during the year. In Singapore, we participated in the DBS Vickers Pulse of Asia Conference and OSK-DMG Corporate Day in January, the Deutsche Bank Access Asia Conference and the CLSA Corporate Access Forum in May, the Nomura Asia Equity Forum in June, and the Morgan Stanley Asia Pacific Summit in November. We also organised site visits to our Utilities operations on Jurong Island to help give analysts and investors a better understanding of our capabilities in energy and water.

During the year, Sembcorp Industries was awarded, for the third year running, the Most Transparent Company under the multi-industry / conglomerates category at the Securities Investors Association (Singapore) Investors' Choice Awards, in recognition of our commitment to corporate governance and transparency.

In July, the company ranked eleventh in Singapore's Governance and Transparency Index out of 660 companies listed locally. Jointly launched by The Business Times and the NUS Business School's Centre for Governance, Institutions and Organisations, the index assesses the transparency of companies' financial disclosures as well as governance, ethics and rigour in financial reporting.

2011 also marked the first year in which Sembcorp was selected as an index component of the Dow Jones Sustainability Asia Pacific Index. The index represents the top 20% of the largest 600 companies in the developed Asia Pacific region based on long-term economic, environmental and social criteria. Sembcorp is one of only four Singaporean companies in this index.

### Total Shareholder Return

Sembcorp Industries' share price closed the year at S\$4.05 with a market capitalisation of S\$7.2 billion. The company's share price averaged S\$4.66 during the year, registering a low of S\$3.32 on October 3, 2011 and a high of S\$5.52 on April 25, 2011. Daily turnover in 2011 averaged 3.6 million shares. In May, we paid out a final tax exempt one-tier dividend of 17 cents per ordinary share comprising an ordinary dividend of 15 cents and a bonus dividend of 2 cents.

## INVESTOR RELATIONS

In a market affected by the Eurozone crisis and weaker than expected growth from both developing and high-income countries, Sembcorp Industries' total shareholder return recorded a negative 18%, slightly below the Straits Times Index's negative 15%.

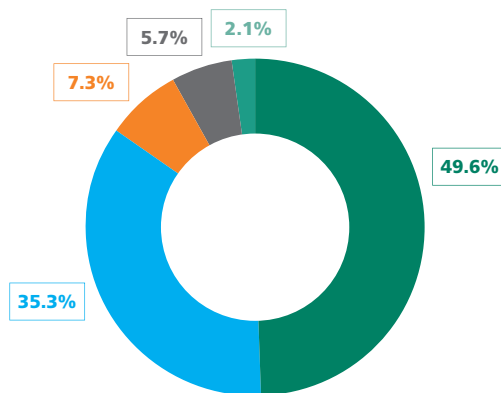
### Shareholder Information

In 2011, other than our major shareholder Temasek Holdings, which held 49.6% of our shares as at the end of 2011, institutional shareholders as a group continued to dominate Sembcorp's shareholder base. Institutional shareholders

accounted for 35.3% of our issued share capital or 69.8% of free float. Retail shareholders, shareholders holding less than 100,000 shares, and others held the remaining 15.1% of issued share capital or 30.2% of free float. In terms of geographical breakdown, excluding the stake held by Temasek Holdings, Singapore shareholders accounted for 10% of issued share capital. Our largest geographical shareholding base was North America with 13% of issued share capital. Shareholders from Europe and Asia excluding Singapore accounted for 11% and 5% of issued share capital respectively.

#### Share Ownership by Investor Category

- Strategic\*
- Institutional
- Shareholders holding less than 100,000 shares
- Retail
- Others

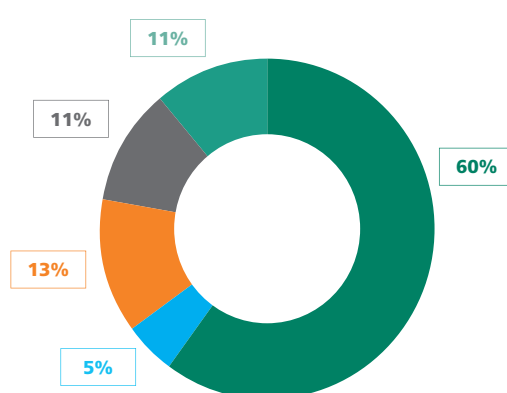


\* Includes indirect interest

As at December 31, 2011

#### Share Ownership by Geographical Distribution

- Singapore
- Asia
- North America
- Europe
- Rest of the world\*

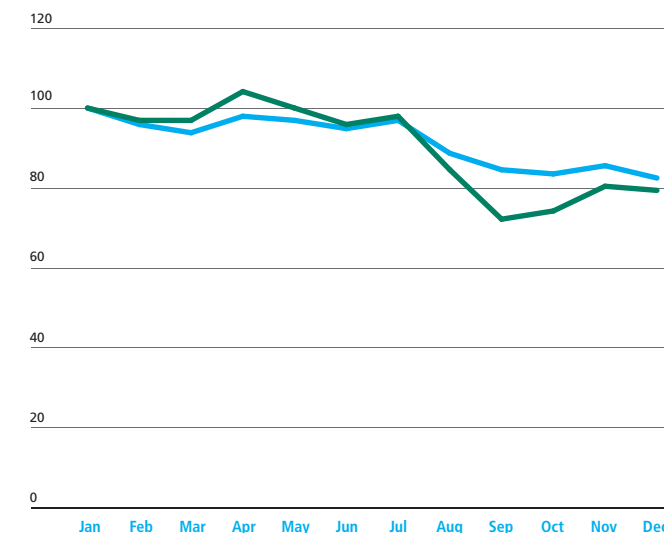


\* 'Rest of the world' also includes shareholders from all geographies who hold less than 100,000 shares. These shareholders collectively hold 7% of total shares

As at December 31, 2011

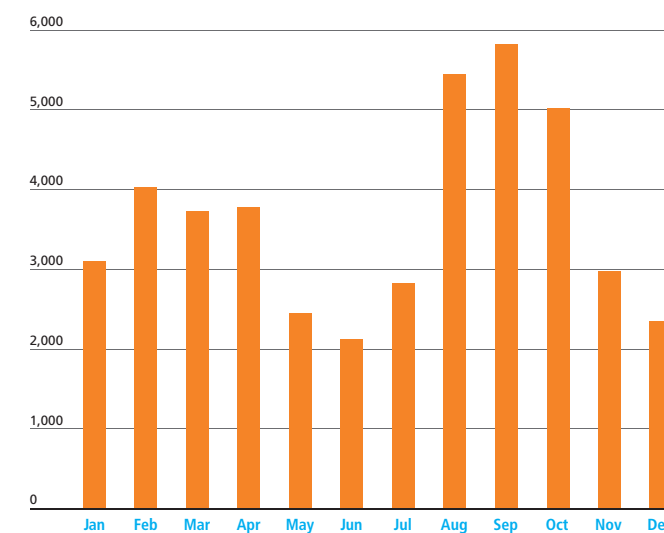
#### Average Monthly Sembcorp Industries Share Price and Straits Times Index in 2011 (Rebased)

Month	Sembcorp Industries Share Price (S\$)	Straits Times Index
January	5.15	3,230.29
February	4.97	3,091.92
March	5.01	3,036.54
April	5.37	3,162.86
May	5.15	3,138.10
June	4.93	3,077.51
July	5.06	3,134.47
August	4.37	2,879.93
September	3.75	2,761.50
October	3.89	2,713.60
November	4.15	2,763.86
December	4.14	2,691.27



#### Average Monthly Trade Volume of Sembcorp Industries Shares in 2011 (in thousands)

Month	Average Volume ('000)
January	3,097
February	4,032
March	3,725
April	3,778
May	2,454
June	2,123
July	2,824
August	5,452
September	5,829
October	5,023
November	2,978
December	2,353



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 today.

## Managing Sustainability

Sembcorp's priority is to deliver long-term value and sustainable returns to its shareholders. As a multinational enterprise and a public listed company, we understand that there is a complex value chain to which Sembcorp belongs and that our wider responsibility incorporates sustainability issues. We recognise that these issues may be outside the traditional view of corporate activity, but as the global business landscape evolves, managing these issues is increasingly viewed as vital in maintaining a company's 'licence to operate' by society and our stakeholders.

This widening role of business is taken seriously and is reflected in Sembcorp's commitment to excellence and continuous improvement. In late 2011, we established a Sustainability Steering Committee to drive Sembcorp's sustainability performance and to develop our priorities across the Group. The Committee will also review our sustainability roadmap and make strategic recommendations to improve sustainability performance across the organisation. The Committee is chaired by the Chief Health, Safety and Environment Officer and Executive Vice President of Group Asset Management.

## Material risks and opportunities

Sembcorp's management and monitoring of sustainability issues is based on a risk management approach. Issues that are material to Sembcorp and our stakeholders are reviewed on an ongoing basis as the company continues to expand. In late 2011, a materiality review was conducted by an independent consultant to identify the company's key sustainability issues. This involved identifying potential issues

and prioritising them based on a Materiality Matrix approach, which charts their level of importance to Sembcorp and our stakeholders, using clearly defined materiality criteria. The initial findings of the review identified key sustainability issues such as environmental protection and safety. We will be taking steps to engage our key stakeholders on the findings of this initial review.

## Scope of report

Sembcorp is an international company with customers and operations around the world. In 2011, we focused on enhancing our sustainability data management systems and as a result, we have been able to broaden the scope of our sustainability reporting this year. The data in this year's report covers all our Utilities business units where Sembcorp has either operational control or majority ownership in Singapore, China, the UAE, UK and Vietnam. We have also been able to include data from our China and UK municipal water operations which we acquired in 2010.

Our Marine business is excluded from this report, as it is separately listed in Singapore and reports its activities separately. Our target for our ongoing reporting is to incorporate data from all businesses in which Sembcorp has a majority stake or operational control.

Data and activities for key performance indicators for the included operations have been tracked and reported in the areas of:

- Health, safety and environment
- Human resource and employee welfare
- Wider community

Where data is unavailable or has been excluded, this has been clearly stated. All data measurement is in line with Global Reporting Initiative (GRI) G3.1 recommendations for our chosen indicators.

Further information on the company's corporate governance, risk management & mitigation strategies and investor relations, all of which are part of our wider remit of sustainability, can be found in the relevant chapters under the Environmental, Social & Governance Review section of this annual report.

Sembcorp has included aspects of sustainability in our annual report since 2001 and was one of

the first companies listed on the Singapore Stock Exchange to publish a voluntary sustainability report using the GRI G3 guidelines. We continue to use the reporting principles and framework of GRI and have considered its principles in terms of materiality, stakeholder inclusiveness, sustainability context, completeness, accuracy and comparability. This report is checked against the GRI G3.1 Framework as Application Level B and addresses activities and data that fall within the company's financial year for the period from January 1 to December 31, 2011.

## Sembcorp's Sustainability Policy

Sembcorp, as a member of the international business community, recognises that our business activities have varying direct and indirect impacts on the societies in which we operate. We commit to manage these in a responsible manner, believing that sound and appropriate performance in this area is important for business success.

For Sembcorp, being a responsible corporate citizen is reflected in the following principles:

- **Standards of business conduct**  
We ensure that our business is conducted according to rigorous ethical, professional and legal standards, through maintaining robust corporate governance and an Employee Code of Conduct.
- **Health, safety and the environment**  
We place the management of our health, safety and environmental (HSE) responsibilities as our first priority. We are committed to continuously improving our HSE performance and managing HSE risks associated with our activities, products and services. We integrate HSE considerations into all aspects of our business operations and processes with the aim of preventing accidents, injuries, occupational illnesses and pollution and conserving natural resources.
- **Employees**  
We aim to be a fair and caring employer offering our staff equitable opportunities to develop and grow.
- **Community**  
We act as a responsible corporate citizen through support for community care initiatives, community partnerships and philanthropic and charitable causes, in particular those supporting children and youth, education and the environment.

Sembcorp's operations throughout the world are committed to these principles. The stage and level of implementation varies according to each operation and the maturity of the business.





This report fulfills the requirements of GRI Application Level B. The GRI Application Level Check Statement as well as the index of GRI G3.1 performance indicators covered can be found on our website at [www.sembcorp.com](http://www.sembcorp.com).

development of sustainable or green business lines has become a growing part of our ongoing business. Our sustainable products and services deliver an additional competitive edge to our customers, enabling them to achieve their sustainability and environmental goals. Our sustainable business operations include the following:

### Sustainable and efficient energy solutions Energy-from-waste, renewable energy

In December 2011, Sembcorp commenced operations of our woodchip-fuelled biomass steam production plant on Jurong Island, Singapore. The plant produces up to 20 tonnes of steam per hour

### Sustainable Sembcorp: Our Green Business Lines

In line with our continuous drive for innovation and to widen our sustainable business portfolio, the

### Energy-from-waste Solutions for a Sustainable Future

As the needs of the world grow, Sembcorp recognises that there are tremendous opportunities to actively invest and grow sustainable businesses. Using our integrated group strength, we apply proven technologies to produce energy in greener ways, create innovative solutions for clean sustainable water and help to manage resources through the treatment and recovery of recyclables from waste. Producing energy from waste is an opportunity as well as a platform for Sembcorp to move towards a more sustainable future.

In December 2011, we commenced operations of our new woodchip-fuelled biomass steam production plant on Jurong Island, Singapore. The plant is the first of such energy-from-waste facility in Singapore to produce process steam for third-party commercial customers on Jurong Island. The facility is capable of taking up to 150 tonnes of waste wood per day to produce 20 tonnes per hour of steam with only a very small amount of ash (2%) generated during the woodchip combustion process. Stack emissions data is continually provided to the National Environment Agency through a direct communication link to monitor and ensure that the plant complies with the national emissions guidelines.

Sembcorp also leverages our expertise in solid waste management to manage the entire energy-from-waste process. Our solid waste management arm in Singapore collects and recovers recyclables from industrial and commercial waste from over 3,000 customers that are otherwise sent for incineration and disposed of in landfills. Our integrated construction and demolition materials recovery facility in Lim Chu Kang, Singapore, is capable of processing 300,000 tonnes of construction and demolition waste per year, recovering timber hardcore and fines during the sorting process. The recovered wood waste from the above two sources are then processed efficiently into woodchip to fuel the biomass steam production plant. The biomass plant, designed to the Building and Construction Authority's Green Mark Gold standard, incorporates natural ventilation and lighting, solar power and recycled building materials, and is also highly automated to ensure safety and efficiency.

for customers using waste wood collected from industrial and commercial waste and processed by our solid waste collection business. For more details on the plant, please refer to the write-up on energy-from-waste solutions on page 90.

Meanwhile, in the UK, the Sembcorp Biomass Power Station in Teesside uses sustainable wood for fuel. The 35-megawatt combined heat and power plant is the first large scale wood-fired renewable energy plant in the country and saves 200,000 tonnes of carbon dioxide emissions a year.

### Natural gas

Sembcorp is Singapore's first commercial importer and retailer of natural gas, considered the cleanest

of all fossil fuels. Since 2001, we have been importing 341 billion British thermal units of natural gas per day from West Natuna in Indonesia and supplying it to major power generators and petrochemical companies. From the fourth quarter of 2011, we started importing an additional 90 billion British thermal units of gas per day.

### Energy efficiency

Sembcorp aims to apply technology to achieve greater efficiency and lower emissions in our power, steam and desalination operations. A summary of our use of such technologies may be seen in the table below.

Sembcorp's technologies for more efficient power, steam and desalination operations	Where Sembcorp has applied it
<b>Combined cycle gas turbine technology (CCGT)</b> – Refers to the production of electricity using a gas turbine where waste heat from the gas turbine exhaust is used to produce steam to generate additional electricity via a steam turbine. This technology allows Sembcorp's plant to operate more efficiently per unit of fuel input.	Singapore, China, UK, Vietnam, UAE and Oman
<b>Cogeneration</b> – In addition to the CCGT process, steam is further recovered from the steam turbine to meet customers' demand, making the entire combined production of electricity and steam more fuel efficient and further reducing carbon dioxide emissions.	Singapore, China and UK
<b>Combined power and desalination</b> – Refers to the production of electricity and water where heat which might otherwise have been lost in the form of flue gas, is recovered to produce steam from the heat recovery steam generator to generate power and for use in seawater desalination, allowing for greater efficiency.	UAE and Oman

## Supercritical technology

In May 2010, Sembcorp announced a joint venture agreement with Gayatri Energy Ventures to build, own and operate a 1,320-megawatt coal-fired power plant in Andhra Pradesh, India. While the plant will be fired by coal, it will utilise supercritical technology which reduces emissions of carbon dioxide and other pollutants by consuming less fuel per unit of electricity generated, reducing its associated environmental impacts. Sembcorp expects the power plant to be substantially fuelled by low sulphur non-coking coal.

## Sustainable water solutions

Sembcorp's water business is actively playing a part in providing sustainable water solutions to meet the growing needs of industries and communities and support ongoing development in emerging economies. We supply water to over five million people worldwide through our municipal water operations and also support the specialised water needs of industrial companies while reducing their impact on the environment.

## Wastewater treatment and reclamation

Sembcorp owns and operates facilities capable of treating high organic concentration and high salinity industrial wastewater. Our industrial wastewater treatment facilities in China and Singapore are capable of treating wastewater up to 20 times more concentrated than municipal sewage and up to 1.5 times more saline than seawater. By treating our industrial customers' wastewater to meet discharge standards, we help industries limit their impact on the environment.

In Singapore, our largest industrial wastewater treatment plant on Jurong Island is expected to commence operations in the second half of 2012. The 9,600 cubic metres per day plant is capable of treating multiple streams of complex industrial wastewater and will more than double our current capacity on the island.

We were the first company in China to be allowed to treat highly concentrated industrial wastewater directly from source without requiring our customers to invest in pre-treatment facilities. Chinese government regulations require industrial companies to pre-treat their wastewater to the standard of municipal sewage before discharging the wastewater to a standard sewage treatment plant. The decision to permit industrial companies to discharge effluent directly to our wastewater treatment facility signifies a new milestone for advanced wastewater management in China.

Beyond treating wastewater, Sembcorp also reclaims water from treated effluent. This integrated closed loop approach minimises liquid discharge, conserves precious water resources and offers a sustainably-sourced alternative water supply to industries and households. In Singapore, we are a pioneer in reclaiming industrial effluent on Jurong Island. In China, we opened our first industrial water reclamation plant in the Zhangjiagang Free Trade Port Zone which is capable of reclaiming industrial water from treated effluent for reuse by industries. Our industrial wastewater treatment and water reclamation facilities in the area have been selected by the governments of Singapore and China as Government-to-Government showcases for bilateral cooperation in water management, and won prestigious Honour Awards at both the East Asian and Global International Water Association Project Innovation Awards in 2010.

Our NEWater plant in Singapore, capable of producing 228,000 cubic metres per day of water, is one of the largest water reclamation plants in the world and plays a significant part in Singapore's water sustainability journey. It won the Water Reuse Project of the Year at the Global Water Awards 2010, which recognises the water reuse project that represents the most significant achievement for the industry internationally.

## Desalination

We provide sustainable water supply through desalination to meet growing water demand. Our

US\$1.7 billion plant in Fujairah, UAE and our upcoming US\$1 billion plant in Salalah, Oman, have a water capacity of 100 million and 15 million imperial gallons per day of desalinated water respectively. Both integrated power and desalination plants use various desalination technologies such as multi-stage flash and reverse osmosis.

## Waste-to-resource

Through Sembcorp's range of services, waste that would usually be disposed of in landfills and incineration facilities is diverted for recycling. Within the Sembcorp Group, we have capabilities in advanced waste treatment and resource recovery, including composting and waste-to-resource. Our waste-to-resource facilities in Singapore extract recyclables from waste collected through our waste collection arm, which is the leading operator in Singapore serving five out of the nation's nine municipal sectors. Sembcorp also operates a construction and demolition materials recovery facility in Singapore recovering timber, hardcore and fines, as well as ferrous and non-ferrous metals. Waste wood collected is processed and used to fuel our new woodchip-fuelled biomass steam production plant to produce steam for our customers. Furthermore, a comprehensive range of waste paper recycling services is offered from collection, sorting and baling to bulk supply of recovered paper to paper manufacturers.

## Sustainable integrated urban development

Sembcorp develops self-sufficient integrated urban developments comprising industrial parks as well as business, commercial and residential space. The business' integrated approach to delivering urban work and living environments attracts local and international investments which facilitate development, promotes a conducive business environment and creates jobs for locals.

Sembcorp manages integrated urban developments with a total gross project size of

7,687 hectares. The integrated developments are master planned with proper zoning of industrial, commercial and residential areas, and have strict effluent discharge guidelines to prevent toxic discharge into the environment. In addition, on-site sewage treatment plants treat the effluent before discharge. Where possible, conservation of the natural environment and preservation of greenery are incorporated into the master plans.

Our fourth Vietnam Singapore Industrial Park development in Hai Phong, Vietnam, incorporates conservation considerations into its master plan, with 30% of the land within the development reserved for green space and preservation of local flora and fauna. Existing wetlands on the site as well as tributaries from the Cam River running through the property will be preserved and made a feature of the development, while two large retention ponds will be created to aid water flow during the monsoon season. These ponds integrate with the community's leisure space, while providing a source of water for landscaping.

Our joint venture project in China, Sino-Singapore Nanjing Eco Hi-tech Island, is envisioned as a world-class integrated urban development on a green island which will have more than 50% of its area preserved for eco-tourism. It will also feature an exhibition centre and a research and development park with green roofs to alleviate urban heat effect as well as rain collection canopies. Wetland biofilters and park connectors are also incorporated into the integrated development's overall design plan.

In 2011, we added a new development to our portfolio, the 1,000-hectare Singapore-Sichuan Hi-tech Innovation Park in China. With the promotion of research and development, high-tech upgrading and environmental protection among the central government's twelfth "Five Year Plan" objectives, the park will focus on technology-driven, knowledge-intensive industries and showcase a modern, innovative and low carbon emission city.

## Research and Development

Research and development plays an important role in strengthening Sembcorp's sustainable capabilities. As a business, our continuous drive for technology and innovation allows us to optimise existing facilities and processes and use energy more efficiently. This means better use of resources, lower costs, better safety performance and reduced environmental impact.

Sembcorp's operations are supported by our in-house Technology department and our Group Technology Committee which is headed by Sembcorp's Chairman. Members of the Committee include external academics and industry experts such as Tan Gee Paw, Chairman, Public Utilities Board, Dr Josephine Kwa, ex-CEO, NSL and Dr Ng How Yong, Associate Professor, Faculty of Engineering, National University of Singapore.

The Committee meets three to four times a year to oversee the direction of Sembcorp's research and technology programmes, providing vision and strategy to meet Sembcorp's growth. The Committee reviews emerging technologies and trends in the industry, and facilitates research and development linkages with academic and research institutions, technology suppliers and end users. An example of such a partnership is our ongoing collaboration with Nanyang Technological University's Nanyang Environment and Water Research Institute to jointly develop a computerised tool to optimise plant operation. This 'Virtual Brain' technology will be capable of identifying process deviations which will alert our operators to initiate changes to the process, saving time and cost.

Sembcorp is also working closely with one of our customers in Singapore to run a pilot plant test using Oxidation Flocculation Reactor technology, a technology patented by Sun Yat Sen University, China. This innovative solution significantly reduces the treatment cost of industrial wastewater containing recalcitrant organic substance.

In 2011, Sembcorp secured a research grant from the Energy Market Authority to explore an innovative energy-from-waste technology. The technology developed will help convert organic waste into biogas.

Pulling together these extensive intellectual resources, our continuous push for technology and innovation helps to build our competitive advantage and support the sustainable growth of the Group.

## Stakeholder Engagement

Sembcorp recognises that its business operations are intertwined with various stakeholders. In early 2012 we conducted a stakeholder engagement planning exercise in line with AA1000 Stakeholder Engagement Standard with the help of an independent consultant to review and identify our key stakeholder groups.

Sembcorp's key sustainability stakeholder groups have been identified as shareholders, financial institutions, the investment community, government, regulators, customers, employees and members of communities where we have operations.

Our internal stakeholders are crucial in our day-to-day practice of sustainability and in

determining our sustainability-related risks and identifying areas for future improvement. As part of our efforts to create a culture of open two-way communication, employees are encouraged to contribute ideas on improving workplace practices and the delivery of products and services. This includes feedback on issues such as dishonesty and fraud via our whistle-blowing scheme and confidential feedback channels. To further promote sustainability as a part of Sembcorp's corporate culture, employee appraisals take into account HSE performance as appropriate. Further information on employee engagement can be found in the Human Resource section on page 105.

Sembcorp maintains open communication channels with the investment community including shareholders, analysts and potential investors. We actively engage our stakeholders through various platforms such as one-to-one meetings, group meetings, presentations and site visits. In 2011, we had over 130 meetings with the investment community. Further information on such communication can be found in the Corporate Governance and Investor Relations chapters on pages 68 and 85 respectively.

We engage in regular dialogues with the government, regulator and community through different platforms such as meetings, briefings and presentations. For example, our solid waste management operations in Singapore hold monthly meetings with the respective town councils of every municipality that we serve.

We proactively engage with customers to find out how we can improve our services. In the UK, focus groups and internal surveys are conducted annually to find out how our municipal water operations can enhance or improve our service offering. These also help identify key drivers of satisfaction, so we know where to focus our efforts and investment. All feedback is used to make improvements either via training of advisors, enhancements to existing processes or the development of new service enhancements. Our operation in Bournemouth, UK, is currently developing a framework to form a customer engagement panel for the next review of prices by the regulator. In Singapore, our Utilities operations conduct a bi-annual survey with its gas, power and utilities customers. The online survey is sent to all customers, and in 2010, the overall customer satisfaction rate was 95%. Aside from the survey, customers have access to an online portal to retrieve their consumption information, and they can provide further feedback via email or a hotline telephone number. Our solid waste management operations also conduct an annual online survey with its

customers, and provide a hotline number as well as an email address for further feedback.

Through these and other formal engagement programmes, we aim to continue to align relevant stakeholder issues with our overall strategy.

## Supply Chain

Sembcorp has a complex supply chain and our actions influence many businesses along the value chains we operate in. Many clients are in the process of developing their own sustainability programmes. As a provider of essential solutions, we aim to assist our customers to improve their HSE performance, limit their environmental impact and conserve resources.

## Contractors

As a provider of utilities, Sembcorp directly consumes primary resources, produces waste and emissions and manages people, buildings, treatment processes and machinery. As such, we work closely with our suppliers, business partners and contractors to ensure adherence to our Group HSE guidelines. All suppliers are subject to a vendor pre-qualification review that includes checks on its HSE provisions. We ensure that the appointment of all vendors and contractors comply with the applicable government certification requirements as well as our guidelines and policies. Platforms such as safety induction programmes and contractor HSE engagement help to actively identify gaps and improve performance.

In Singapore, where over 70% of Sembcorp's contract workers are employed, we require contractors to comply with all requirements stated in a Permit to Work application, issued by the Ministry of Manpower, before they can work in our facilities or operating sites. This includes requirements for health and safety provisions and the submission of proper paperwork to demonstrate the presence of adequate workers' compensation insurance coverage, as well as relevant resident visa and work permits. Employees of our contractors must also attend HSE training before any work is started.

## External Initiatives and Memberships

At Sembcorp, we recognise the importance of being an active player within our industry and engaging with our peers and the wider business community on sustainability issues. Sembcorp is a founding member and supporter of the Singapore Compact for Corporate Social Responsibility, a national society promoting sustainability issues in Singapore.

Our Group President & CEO also serves as a member of Singapore's Climate Change Network, a forum started by Singapore's National Climate Change Secretariat. The network serves as a platform for representatives from various sectors to nurture dialogue on climate change matters and to exchange information on climate change issues.

At the industry level, Sembcorp participates in the Responsible Care voluntary initiative, endorsed by the Singapore Chemical Industry Council (SCIC). This encourages members to adopt 10 guiding principles for a safer chemical industry through the six management practices of employee health and safety, distribution, pollution prevention, process safety, product stewardship and community awareness, and emergency response. Our Utilities business in Singapore has actively participated in a number of industry workgroups organised by the SCIC looking at issues such as capacity building on process safety and drafting new quantitative risk assessment guidelines.

In Singapore, Sembcorp is also a member of the Sakra Island Community Awareness Group, which seeks to promote community awareness and a standardised management practice code for emergency responses among companies located in the Sakra district on Jurong Island. Similarly, our Teesside, UK operations are active in the North East of England Process Industry Cluster which serves as a unified voice for the process industry in Northeast England, where a substantial part of the UK's chemical, petrochemical, speciality chemical, pharmaceutical, polymer and biotechnology

industries are based. In the UAE, our operations in Fujairah are part of the Abu Dhabi Water & Electricity Authority's task force in formulating HSE procedures and guidelines for the energy sector.

## External Recognition and Awards

In 2011, Sembcorp received both national and global recognition and a number of awards for its efforts to promote and practise sustainability.

### Dow Jones Sustainability Asia Pacific Index

Sembcorp has been selected as an index component of the Dow Jones Sustainability Asia Pacific Index for 2011. The index represents the top 20% of the largest 600 companies in the Asia Pacific developed region based on long-term economic, environmental and social criteria. Sembcorp is honoured to be one of only four Singapore companies selected for the index.

### Singapore Corporate Awards

Sembcorp clinched the coveted Gold award for Best Annual Report (for companies with S\$1 billion and above in market capitalisation) at the Singapore Corporate Awards 2011 for our Annual Report 2010, in recognition of our excellence in reporting and disclosure. The prestigious awards showcase excellence in corporate governance and shareholder communication, and the Best Annual Report award was introduced to encourage social responsibility reporting as well as increase the awareness of the organisations' responsibility to the community.

### Frost & Sullivan Asia Pacific Awards

Sembcorp won the Frost & Sullivan Asia Pacific Waste Recycling Company of the Year award in 2011, in recognition of our excellence in solid waste recycling, waste treatment support and applying environmentally-friendly waste recycling technologies in our businesses. The award also recognises the company's position as a major

industry player providing waste recycling services across customer verticals, and our ability to successfully respond to our customers' needs with a business strategy that incorporates best sustainable practices.

### Securities Investors Association (Singapore) Investors' Choice Awards

Sembcorp was named the Most Transparent Company (multi-industry / conglomerates category) at the Securities Investors Association (Singapore) Investors' Choice Awards 2011 for the third year running. This recognises our continuous drive towards transparency and good governance, and our efforts to give stakeholders an accurate, coherent and balanced account of our company and performance.

### Singapore Sustainability Awards

Sembcorp was conferred top honours at the Singapore Sustainability Awards 2011, winning the Sustainable Business Award (Enterprise category). The awards, presented by the Singapore Business Federation, recognise local enterprises with outstanding sustainable business practices. Companies are assessed on their innovation, corporate social responsibility, commercial potential and sustainable business growth, as well as their environmental, health and safety and production process management systems.

### Responsible Care Awards

Sembcorp was honoured by the SCIC with gold awards in the categories of Community Awareness and Emergency Response and Pollution Prevention, and three achievement awards in Distribution, Employee Health and Safety and Process Safety at the Responsible Care Awards 2011. The awards honour companies who have incorporated Responsible Care management practices into their operations and recognise those with exemplary performance in maintaining high HSE standards.

### South African Blue and Green Drop Status

In recognition of our continuing efforts to provide water and sanitation services of the highest quality, both Sembcorp's South African operations were awarded the prestigious Blue Drop and Green Drop status in 2011 by the Department of Water and Environmental Affairs. Only 7.2% of all water systems in South Africa were awarded the Blue Drop (drinking water quality management) status in 2011, while the Green Drop (wastewater quality management) status was achieved by only 4.7% of South Africa's wastewater systems. In addition, one of our operations was conferred the Platinum status for achieving the Blue Drop status for three consecutive years, making it among just 10 operations in the country to be awarded Platinum.

## Health, Safety and Environment

### Managing our material issues

HSE issues are clearly linked to Sembcorp's long-term success and have been identified as material factors in terms of their potential impact on our business operations. In managing our HSE issues, we continue to be guided by four main principles:

- Implementing internationally recognised HSE management systems such as ISO 14001:2004 and OHSAS 18001:2007
- Actively investing in financially viable sustainable business lines, which form part of our core operations
- Using continuous improvement to enhance HSE performance of our processes, products and services
- Working closely with our business partners and seeking active engagement to promote mutual HSE performance improvement

Sembcorp's operations are in various phases of development. They include facilities that are under construction, newly commissioned as well as recently acquired. As such, our priority continues to be on aligning and improving standards across the Group

and proactively managing HSE performance throughout the asset management life cycle, from business development and project conception, to operation and the end of the asset life.

## Management of HSE efforts within Sembcorp and HSE progress

With operations that spread across six continents, our Group HSE department is the driver of our management systems and coordinates our global HSE efforts. Management committees and reporting structures have been established with regional coordinators working closely with the department. This ensures the effective management of HSE issues with the purpose of setting long-term HSE objectives and targets and complying with regulatory requirements, voluntary group guidelines, standards and initiatives. Reporting to the Board Risk Committee (BRC) was formalised in 2011, and HSE issues have been incorporated into regular reports to the board with key HSE risks and controls also presented to the BRC.

The key goal for the Group HSE department in 2011 was to strengthen overall Sembcorp Group HSE culture, create more HSE awareness and shape the development of the HSE management framework across the Group. The framework outlines the roles and responsibilities of various relevant departments and business units, in line with the Group HSE policy. The Group HSE policy can be viewed on our website at [www.sembcorp.com](http://www.sembcorp.com).

The framework was endorsed by the BRC and implemented across all Utilities businesses in the Group. Periodic HSE assurance audits help to ensure that HSE matters are managed professionally in order to meet legal compliance and ensure continuous improvement in all our activities.

## HSE reporting to management

In an effort to standardise HSE guidelines and reporting, Group HSE has reviewed and developed a standardised set of reporting parameters to track

and monitor key HSE statistics across the Group. The new parameters and template are based on the Sembcorp 4/0 targets. The 4/0 targets refer to: zero harm to people, zero damage to the environment, zero damage to assets and zero non-compliance to legal and regulatory requirements. Along with the Group HSE guidelines, the 4/0 targets and reporting parameters were approved by the BRC in February 2011.

It is compulsory for all business units under the operational control of the Sembcorp Group to follow these guidelines.

## HSE workshops and training

A Group HSE workshop is conducted annually where employees from our operations around the world will meet and contribute ideas towards the formulation of key HSE initiatives as well as a set of global mandatory HSE guidelines for all business units under our operational control.

In addition, in 2011, Group HSE also conducted an inaugural HSE workshop for Sembcorp's China operations, with the objective of promoting HSE awareness and best practice. This resulted in the establishment of a China HSE Committee comprising representatives from each site, providing a platform for HSE colleagues in China to communicate, share best practices and support improvements in HSE. Moving forward, Group HSE and Group Asset Management will support the coordination of a regular asset management and HSE workshop to support China's operations and its HSE performance improvement.

## HSE audits

Group HSE conducts regular HSE audits for the operations to achieve continuous improvement. In 2011, we covered our operations in Fujairah, UAE, and three facilities in China. The audits were conducted in accordance with Group HSE guidelines, to help identify and bridge gaps so that these business units can improve on their HSE

performance. Our water operations in China have also embarked on automating their reporting of HSE and operational statistics through collaboration with the Group HSE and Group Performance Management departments.

Sembcorp's two greenfield projects in India and Oman are in the construction and commissioning phases respectively. Group HSE works closely with their counterparts at the new plants to share and communicate Group HSE guidelines and requirements. The team visited the plant in Oman for a two-day HSE review in November 2011, and established an understanding of the plant's HSE management system framework and existing HSE practices. Potential areas for improvement were identified and recommendations were made for establishing HSE procedures and processes.

## HSE management certifications

We continue to work towards implementing internationally recognised HSE management systems across our operations.

In early 2012, Sembcorp Gulf O&M Company in the UAE underwent a certification audit for both ISO 14001 and OHSAS 18001 and was awarded both certifications with zero non-conformities. Following these certifications, we will be working towards the additional requirement of attaining the Abu Dhabi Environment, Health and Safety Management System qualification, for which assessments will conclude by end 2012.

Meanwhile, Sembcorp Utilities Singapore obtained the integrated OHSAS 18001 and ISO 14001 Environmental Management System in March 2011.

## Certifications Achieved by Sembcorp's Businesses

Unit	ISO 9001	ISO 14001	OHSAS 18001
Sembcorp Utilities (Singapore)	✓	✓	✓
Sembcorp Gas	✓	✓	✓
Sembcorp Environment	✓	✓	✓
Sembcorp Bournemouth Water	✓	✓	✓
Zhangjijagang Free Trade Zone Sembcorp Water	✓		
Fuzhou Sembcorp Water	✓	✓	✓
Qitaihe Sembcorp Water	✓		
Sembcorp Xinmin Water	✓		
Sembcorp Sanhe Yanjiao	✓	✓	✓
Subic Water and Sewerage	✓	✓	✓
Sembcorp Silulumanzi	✓	✓	
Sembcorp Siza Water		✓	
Sembcorp Gulf O&M Company		✓	✓

## Environmental management

As a key player in the energy and water sector, we are keenly aware of global climate change issues. We aim to limit and manage the impact of our operations on the environment by enhancing our efficiency and investing in assets which apply technologies to manage and reduce emissions. For example, our new woodchip-fuelled biomass steam production plant in Singapore produces process steam for third-party commercial customers. The plant was designed to the Building and Construction Authority's Green Mark Gold standard, and incorporates natural ventilation and lighting, solar power and recycled building materials.

Environmental studies including environmental impact assessments are a part of Group HSE's requirements for new major projects and expansions. Environmental impact assessments are carried out in accordance with national and / or international standards and methodologies. All recommendations put forth from the assessments form part of our management of HSE risks and are incorporated in the planning, design, construction and commissioning of the new plants. Other environmental assessments such as environmental baseline studies and pollution control studies are conducted as required in the relevant countries.

## Energy and carbon

In 2011, we have included data on our environmental management from our operations in Singapore, China, the UAE, UK and Vietnam. We continued to track our primary energy sources usage. Natural gas still accounts for the largest proportion of our fuels used. We also monitored indirect energy usage in the form of electricity consumption by our operations within the scope of the report.

We are proactive in seeking to reduce our energy consumption and corresponding greenhouse gas emissions through investing in energy efficient and renewable energy technologies. In Singapore, our energy-from-waste technology, which converts

Utilities' Energy Sources Consumption	
Fuel Type (in gigajoules)	
<b>Primary energy sources</b>	
Natural Gas	109,327,532
Fuel Oil	435,894
Diesel	3,974,042
Coal	4,475,256
Biomass	2,924,763
<b>Total Primary Energy Source Consumption</b>	<b>121,137,488</b>
<b>Indirect Energy Consumption</b>	
Electricity	703,016 MWH
Steam	933,340 tonnes

*Data covers Utilities operations in Singapore, China, the UAE, UK and Vietnam  
MWH: Megawatt-hour*

organic waste into biogas, has led to a reduction in the consumption of over six million megajoules of natural gas. In Bournemouth in the UK, our operations used 244 megawatt-hours less of grid electricity compared to the previous year. Standby generation was also reduced, saving 6,028 litres of gasoil which led to a reduction of over 150 tonnes of carbon dioxide emissions. Photovoltaic cells will be installed to generate clean electricity for the plant. In addition, pumps will be refurbished to ensure efficiency during operation. Page 91 provides a summary of the energy efficiency technologies which we apply in our operations.

Our carbon dioxide emission estimate<sup>1</sup> is derived from stationary fuel combustion and does not cover process emissions. In 2011, our carbon dioxide emission amounted to over 6,500 kilotonnes as compared to over 7,600 kilotonnes in 2010. Our emissions estimate is based on the World Resource Institute / World Business Council for Sustainable Development Protocol as well as site specific data.

<sup>1</sup> Emission data excludes plants in China which are not stationary fuel combustion plants

Utilities' Direct and Indirect Greenhouse Gas Emissions		
	Tonnes	CO <sub>2</sub> Equivalent in Tonnes
Carbon dioxide (CO <sub>2</sub> )	6,578,944	6,578,944
Methane (CH <sub>4</sub> )	257	5,392
Nitrous oxide (N <sub>2</sub> O)	129	39,928
<b>Total CO<sub>2</sub> equivalent</b>		<b>6,624,264</b>

*Calculated using Defra conversion figures published in August 2011*

## Atmospheric Emissions

In addition to carbon dioxide and greenhouse gas emissions, we monitor emissions of sulphur oxides (SOx) and nitrogen oxides (NOx). The data tracked is from our energy generation operations in Singapore, the UAE and UK. Our operation in Teesside is the main contributor of SOx and NOx due to its use of coal.

Utilities' Atmospheric Emissions	
	Tonnes
SOx	1,997
NOx	1,989

*Data covers Utilities operations in Singapore, the UAE and UK*

## Water use and quality

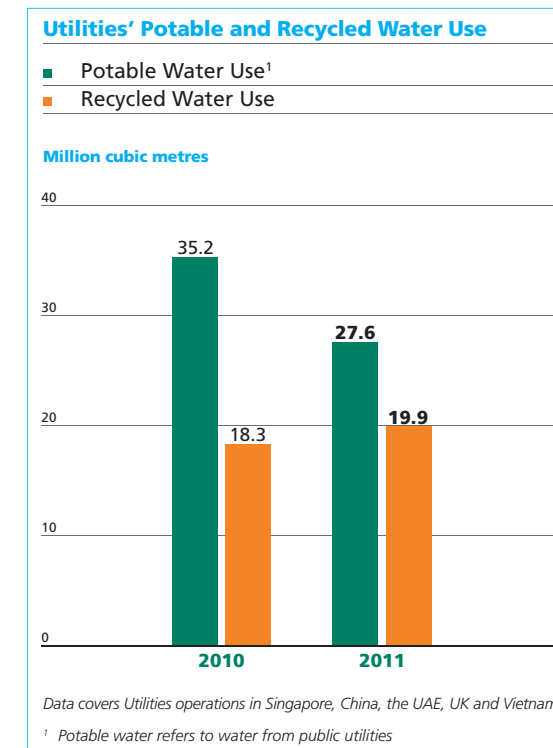
Our water business has grown significantly over the recent years through acquisitions and organic growth. We provide services ranging from specialised industrial wastewater treatment to water reclamation, desalination and the supply of potable and industrial water. Sembcorp manages facilities capable of producing and treating over seven million cubic metres of water and wastewater daily and serves over five million people worldwide. Through innovation, we make every effort to ensure the efficient use and reuse of water resources.

As part of the water solutions we offer to our customers, we treat and supply water extracted

from surface water, groundwater (including lakes, rivers, oceans and aquifers) as well as public utilities (including wastewater). In 2011, our operations in Singapore, China, the UAE, UK and Vietnam extracted over 1,500 million cubic metres of water primarily for treatment, supply to our customers and use in our operations. Out of the total water extracted, 91% was surface water, 4% was groundwater, 3% was wastewater and 2% was water from public utilities.

In 2011, Sembcorp recycled almost 20 million cubic metres of water, or over 1% of our total volume used, for supply to our customers and use in our operations, reducing the intake of potable or raw water supplies and also helping our customers to reduce the amount of raw water needed for their operations.

The graph below shows our potable water use and the amount of water recycled.



Sembcorp received numerous awards in 2011 for its water services, including being named Water Company of the Year at the prestigious Global Water Intelligence's Global Water Awards. This award recognises Sembcorp as the water company that has made "the most significant contribution to the development of the international water sector in 2010". Further information on the awards won by Sembcorp in 2011 can be found on page 96.

## Waste

As one of the largest solid waste management players in Singapore, Sembcorp provides services that aim to reduce waste going to incineration or landfill facilities. We also promote waste reduction by encouraging recycling. In line with our business focus to reduce waste for disposal, we are actively developing differentiating know-how including energy-from-waste capabilities. Our woodchip-fuelled biomass steam production plant began full commercial operations in late 2011, and is the first such energy-from-waste facility in Singapore to produce renewable process steam for third party commercial customers on Jurong Island.

## Pollution

Our Group HSE guidelines require that any uncontrolled and / or unauthorised discharge of substances or any spill and / or leak of 500 litres or more without secondary containment is reported. There were no reportable spills or leaks in 2011.

## Accident and injury rate

An enhanced set of HSE reporting parameters including the Sembcorp 4/0 targets was agreed upon in February 2011 for application across all business units in Singapore and overseas.

Using indicators of accident frequency rate (AFR) and accident severity rate (ASR), in accordance with the tracking criteria set by Singapore's Ministry of Manpower, the safety performance from our Utilities operations in Singapore, China, the UAE, UK and Vietnam has been recorded.

### Accident Statistics for the Utilities Business (excluding Solid Waste Management)

	2011
Accident Frequency Rate <sup>1</sup>	2.05
Accident Severity Rate <sup>2</sup>	24

<sup>1</sup> Number of workplace accidents per million man-hours worked

<sup>2</sup> Number of man-days lost to workplace accidents per million man-hours worked

Data covers operations in Singapore, China, the UAE, UK and Vietnam

Our Utilities operations, excluding solid waste management, reported 14 lost time injuries and 19 first aid cases in 2011, plus 166 man-days lost in 2011 (0.01% of the total man-hours worked) due to injuries sustained by our employees and contractors during operations.

Our employees are monitored for noise induced hearing loss and dermatitis and no case of either incident was reported in 2011.

The solid waste management business' safety performance in Singapore is reported separately from the performance of the rest of our Utilities operations. This is due to the fact that the solid waste management business' waste collection operations employ manual labour to a greater degree and therefore have a different risk profile from our energy, water and on-site logistics operations.

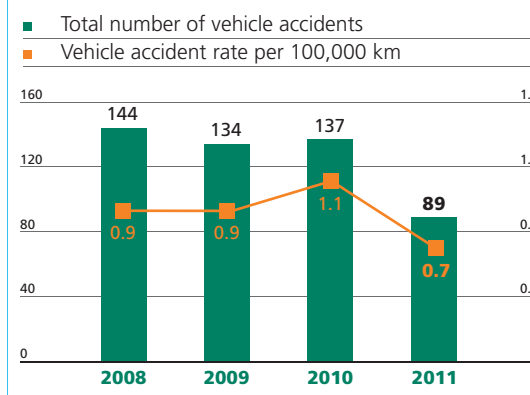
Our solid waste management business in Singapore saw an increase in the AFR from 6.4 in 2010 to 10.6 in 2011. However, its ASR decreased from 346.9 in 2010 to 148.3 in 2011. Safety remains important to us and our solid waste management business has taken preventive action to improve its AFR and ASR levels. This includes 'toolbox meetings' with management and employees to cover the importance of health and safety and spot inspections at operational sites. In addition, monthly briefing sessions are organised to allow employees to share their lessons learnt in managing safety in their work.

## Vehicle accident rates

Sembcorp's solid waste management business

in Singapore operates a fleet of 200 commercial vehicles and our staff undertake a considerable amount of driving each year. One of our key safety indicators for this business is vehicle accidents. In 2011, there was a substantial decrease in the accident rate both in terms of absolute numbers (89 in 2011 compared to 137 in 2010) and number of incidents per 100,000 kilometres driven (0.7 in 2011 compared to 1.1 in 2010).

### Solid Waste Management's Vehicle Accident Rate



In January 2011, in addition to the stringent selection process in the recruitment of drivers, the company also commenced a safety training programme for our waste collection truck drivers in Singapore. This has improved their road safety awareness and defensive driving ability to reduce accident rates.

## Health and safety life cycle assessments

All our products and services are assessed according to internationally recognised HSE and quality management systems. HSE and quality internal audits are conducted regularly to ensure that the quality of our water supply meets legal and product specifications. For the list of certifications achieved by Sembcorp's businesses, please refer to page 99.

## Human Resource and Employee Welfare Management approach to human resource and employee welfare

At Sembcorp, we recognise that our employees are our most valuable asset and a key stakeholder group. We are committed to providing a fair, diverse and inclusive workplace, and to continuous improvement in our human resource and people development practices.

## Diversity and fair employment approach and statistics

Sembcorp strives to maintain a fair, diverse and inclusive workplace for all its employees. At the end of 2011, there were over 5,000 permanent employees in the entire Sembcorp group, excluding employees from the Marine business. 11% of our total headcount were contract employees. Please see the charts on the following pages for the distribution of all Sembcorp's permanent employees, excluding employees from the Marine business, by age, geographical region, gender and education. Any deviation from this scope is noted under the individual sections.

With our headquarters based in Singapore, the Group subscribes to the Principles of Fair Employment formulated by the Singapore Tripartite Alliance for Fair Employment Practices and has endorsed the Tripartite Alliance's Employers' Pledge of Fair Employment Practices. These principles, embedded into our human resource practices and implemented by Sembcorp on a global level, include a commitment to:

- Recruit and select based on merit, such as skills, experience and ability, regardless of age, race, gender or family status
- Treat employees fairly and with respect and implement progressive human resource management systems
- Provide equal opportunities for training and development based on employees' strengths and needs, to help them achieve their full potential.
- Reward fairly, based on ability, performance, contribution and experience
- Abide by labour laws and adopt tripartite guidelines which promote fair employment practices

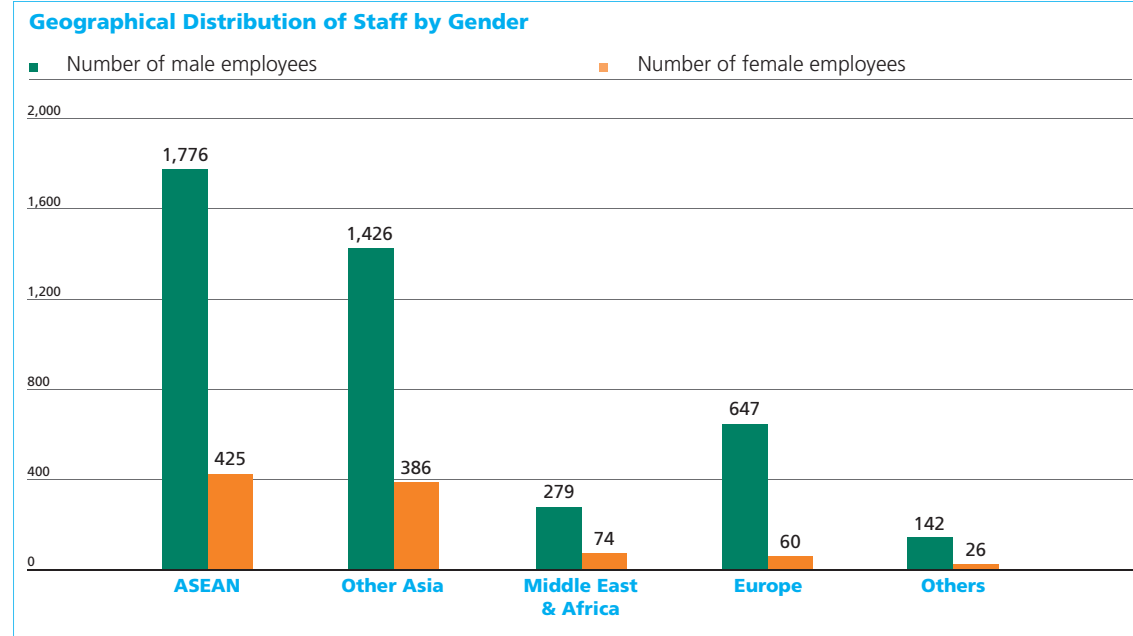
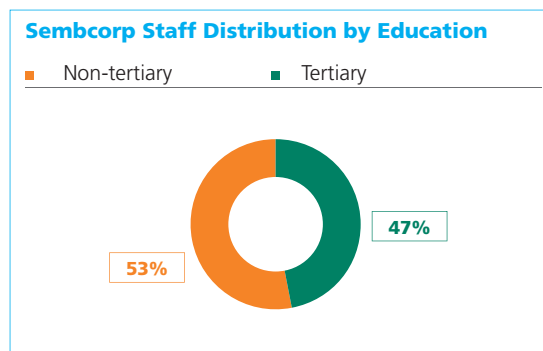
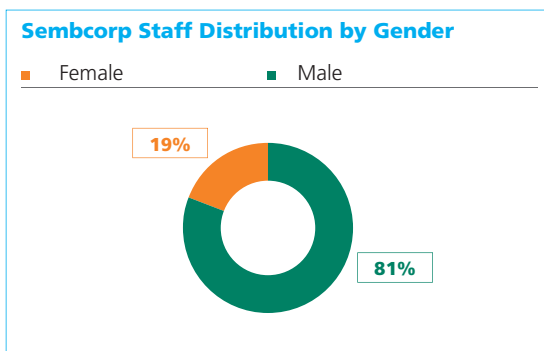
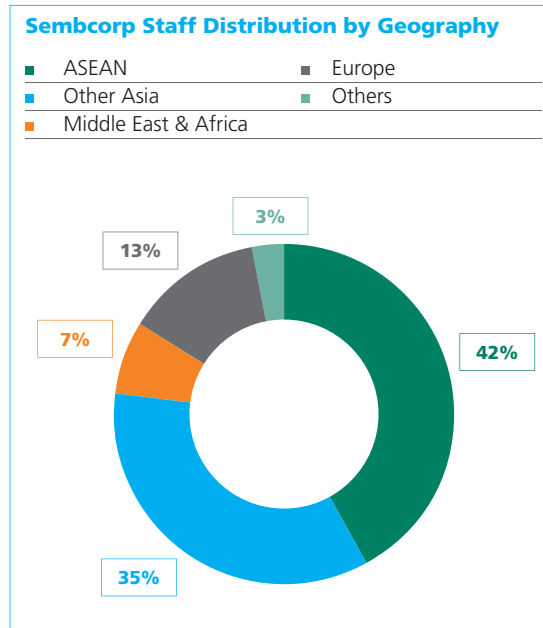
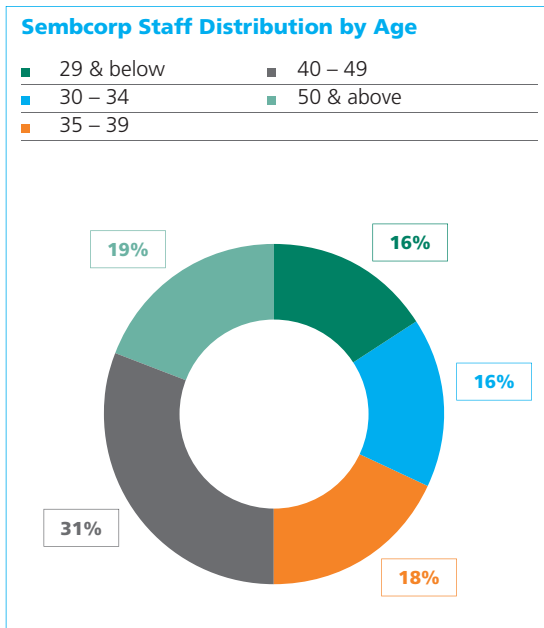
The significantly higher proportion of male employees in Sembcorp's headcount is consistent with industry norms, where the nature of work required in plants involves more physically demanding tasks. Sembcorp ensures that equal opportunity is given to all female employees across the Group.

The staff distribution of non-executive staff by gender is 12% female and 88% male. The distribution of staff by gender for executives is 28% female and 72% male.

**Annual Employee Turnover (%)**

	2009	2010	2011
Turnover	12	12	12

*2009 and 2010 data does not cover our municipal water businesses acquired in 2010.*



## Human rights

Sembcorp fully supports the basic principles of human rights and has implemented a number of policies throughout the Group in support of these principles, including fair employment practices and a grievance and harassment policy.

A key tenet of Sembcorp's business ethics is strict respect for labour laws within each of the countries we operate in, all of which preclude forced or child labour, and is further supported through our policies and employment practices. The technical nature of our operations requires an experienced workforce, both within the organisation and in our supply chain, as specialist skills are required.

## Employee health and welfare

Sembcorp continues to promote a holistic and balanced lifestyle for our employees, which we believe is good for both their physical and mental health. We encourage employees at our various business units to participate in employee recreation

activities throughout the year, including community outreach and volunteering initiatives, team sports events, talks, gatherings and employee family days. Some of these activities welcome employees to participate with their family members, such as our Sembcorp Family Day in Singapore and Fujairah.

Sembcorp also organises an annual Health Week, a company-funded health education initiative that helps equip employees in Singapore with essential health knowledge and personal lifestyle skills.

## Employee engagement

We recognise the importance of engaging with our employees and have various platforms through which we communicate with and receive feedback from our staff. We provide information on our financial and business performance as well as on applicable company standards and policies to our staff. Interactive staff communication sessions with management are in place to ensure two-way communication between the company and its employees.



## Staff communication

In 2011, we continued to hold employee briefing sessions in conjunction with the company's quarterly financial reporting cycle. At these sessions, senior management provides employees with information on the company's performance and key developments. Presentations are also held to brief employees on topics such as corporate social responsibility or specific company policies such as fraud management.

We continue to hold an annual communication forum in Singapore for managers from Sembcorp offices all over the world, with detailed briefings from top management and external experts on our Group's operating environment, performance, outlook and strategy. This forum incorporates an interactive networking and question and answer session.

Furthermore, at the country level, some business units also hold quarterly learning and sharing sessions, senior manager briefings and staff consultation group sessions. At Sembcorp Bournemouth Water in the UK, there is also a staff consultative group made up of elected staff representatives and management representatives, which meets quarterly to discuss relevant employee issues.

Over the course of the year, we continued to communicate corporate updates and business milestones to all staff through employee emails and bi-monthly e-newsletters. Relevant and up-to-date information on staff welfare and benefits was also publicised to employees via the company intranet.

## Other forms of engagement

Sembcorp welcomes feedback from its employees and provides confidential channels through which employees can submit feedback and staff suggestions, including an easily accessible online channel on the employee intranet. All feedback is sent to the Group Human Resource department and, if sent via the internet, is also automatically copied to the Senior Vice President of Group Human Resource and the Group President & CEO's office.

In line with our commitment to high ethical standards and good corporate governance practices, we have in place a group-wide whistle-blowing policy and encourage all employees to report any possible improprieties on a confidential basis without fear of recrimination. We have an easily accessible whistle-blowing link on our company intranet and employees may also provide feedback via email, mail or fax.

## People development

### Labour and union relations

Within the boundaries of each of the jurisdictions under which we operate, Sembcorp employees are entitled to practise freedom of association in the workplace. Sembcorp's operations span six continents where labour relations, regulations and practices differ widely. In 2011, 42% of Sembcorp's employees were union members.

Sembcorp maintains excellent labour management relations with its unions, and holds constructive ongoing exchanges with employee unions in its various locations. In Singapore, Sembcorp is committed to working closely with the Building Construction and Timber Industries Employees Union (BATU) as well as the Union of Power and Gas Employees (UPAGE). Our re-employment policy, endorsed by BATU and UPAGE, gives medically fit employees the option of continuing on their jobs beyond the statutory retirement age. In an event organised by BATU and Sembcorp, the Prime Minister of Singapore visited our Bukit Merah Depot on the first day of Lunar New Year in 2011 to show appreciation to the workers who continued to work tirelessly and perform vital duties on this public holiday.

In the UK, Sembcorp Bournemouth Water has a long standing relationship with its recognised unions GMB and Unison. Both unions sit on Sembcorp's staff consultative group and the health and safety committee, where they also participate in safety inspections. At our Teesside operations, discussions with Unite (the UK's biggest union) are conducted in

line with our collective 'Together Agreement' which covers over 90% of our employees at this operation. Formal joint consultation meetings with employees and unions are conducted three times a year, and meetings between management and the company's senior union representatives are held bi-monthly.

## Personal and professional development opportunities

Sembcorp's success is driven by the calibre and performance of its people. We recognise that it is essential to equip our employees across all levels of seniority to meet the changing needs of the marketplace. Sembcorp offers employees a range of personal and professional development opportunities including career development, education, talent management and leadership programmes.

## Competency building and succession planning

In 2011, the Group continued to invest in competency building for our employees, spending over S\$1.5 million on training for employees within our operations in Singapore, China, the UAE and UK.

It is a priority for us to enhance the skill level of our employees to ensure smooth succession. Sembcorp's learning and development programmes factor in issues such as succession planning and addressing skill gaps with relation to core competency requirements.

Around 5% of our non-executive staff worldwide are due to retire in the next five years, and a further 7% in the next six to 10 years. Around 2% of our executive staff worldwide are due to retire in the next five years, and a further 5% in the next six to 10 years.

## Executive and leadership development

The Sembcorp Leadership Competencies programme is our unique talent management and development system that defines the qualities and performance expectations of a Sembcorp leader. Capable leaders are crucial in achieving business success and the Sembcorp Leadership Competencies

detail the ways in which Sembcorp leaders should act and respond. Managers also attend courses to enhance their presentation, negotiation, communication and coaching skills as well as courses on building and leading high-performance teams. Senior executives are expected to undertake regular training to update and upgrade their skills and education programmes are accessible to them at prestigious institutes such as the Harvard Business School, INSEAD and the Temasek Business Leadership Centre.

## Attachments, job rotations and working tours

We offer employees the opportunity to experience different cultural and operational settings through job rotations and attachments. We currently have more than 50 employees of different nationalities posted from our Singapore office to various overseas businesses. Internships and industrial attachments also provide students and Sembcorp scholars with practical experience and exposure to our operations while they undergo their studies.

## Professional and on-the-job training

We send our employees for professional training to allow them to develop skill sets that better equip them for their roles. Working with local educational institutions in Singapore, we send our engineers to specialised technical competency courses. Our employees are also sent for professional training related to the industry, including courses under Singapore's National Skills Recognition Scheme and Workforce Skills Qualification scheme under the Workforce Development Authority.

In Singapore, staff are also encouraged to pursue higher qualifications which are sponsored by the company.

In the UK, our operations are signed up to the 'Investors in People' standard, the UK's leading people management standard. This provides a business improvement tool to help organisations develop performance through their people. Both our

operations aim to provide education and training for all employees to carry out their duties and provide them with appropriate opportunities for development. This involves identifying skill gaps in accordance with core competencies. Sembcorp is also helping to shape the future of the industry by proactively engaging in training and skills development throughout the northeastern region, as well as raise the performance bar of apprentices and other workers in the industry.

### Knowledge sharing

As an industry leader in various sectors, Sembcorp encourages our employees to share and exchange best practices through platforms such as seminars and conferences on a local and international basis. In the UK, our Senior Vice President of Regional Human Resource sits as the Chairman of the North East Regional Skills Board for the National Skills Academy for the Process Industries and uses his expertise to improve the skills of the existing workforce as well as attract and retain new entrants to the industry.

### Performance management

Sembcorp has implemented a system for performance appraisals across its operations in all countries. The appraisal system allows all employees to comment on their personal contribution throughout the year and to jointly identify areas for further career development and learning with their supervisors on a regular basis. It enables constructive discussion and uses the feedback process to ensure that employees share the responsibility for managing their career and goals. The appraisal process incorporates shared future objectives to ensure that employee outputs are also aligned to the needs of the business. Selected senior managers are also assessed using a 360-degree appraisal system where feedback is sought from a range of superiors, peers and colleagues and other partners. The profile of essential competencies for the job function compiled from this process is also incorporated into these

managers' development plans, helping them lead their teams successfully and enhance their professional performance.

### Remuneration, benefits and rewards

Rewarding performance is the key component of Sembcorp's employment retention strategy. The Group offers competitive base pay packages throughout our global businesses that are based on country-specific conditions. Rewards include annual salary increments and annual performance bonuses, as well as longer-term incentives linked to sector practices and based on the performance of the Group, the company and the individual.

Share-based incentives, administered by a board nominated committee, remain a key component of the Group's pay structure and are deliberately aligned to long-term Group performance objectives. Since 2007, share options granted to staff have been replaced with restricted shares. This Restricted Share Plan applies to employees of the Group, while the Performance Share Plan is primarily for key executives of the Group.

All employees are eligible for comprehensive insurance coverage on a global basis. They can join the company's private medical and dental insurance scheme under which the company meets the cost of employee membership and allows employees to include eligible dependants. The company also provides additional insurance cover for life, travel, personal accidents, workers' compensation and hospitalisation and surgical expenses.

### Wider Community

Sembcorp maintains an ongoing commitment to support the local communities in which we operate through supporting social development and community investment projects. In 2011, Sembcorp contributed over S\$1.3 million in cash and in-kind support to its communities (excluding community investment initiatives by our separately listed Marine business). We took part in many initiatives in our

communities in support of children and the elderly, education, the environment and sports and fitness. Our employees are active volunteers in the community, providing helping hands as well as management expertise. 48% of our operations have local community engagements and development programmes.

### Volunteering

Our employees offer their time to volunteer in a number of initiatives that the company organises. For example:

- Sembcorp has been a supporter of Singapore's Assisi Hospice (which provides palliative care for people with life-limiting illnesses) since 2008. Sembcorp volunteers help with the running of the charity's Fun Carnival, which generated more than S\$800,000 in donations in 2011, as well as its Christmas carnival, bringing goodwill and cheer to the patients.
- For the third year running, Sembcorp has partnered with the Sunshine Welfare Action Mission (SWAMI) in Singapore to bring festive cheer to needy elderly households. SWAMI is a non-profit organisation providing nursing care and shelter for the sick, aged and handicapped from needy backgrounds. In the run-up to the Lunar New Year in 2011, SWAMI identified 23 households whose residents do not have the ease of movement, to benefit from volunteers spring cleaning their homes.

- In the UK, Sembcorp employee Jane Atkinson was granted an honorary doctorate in Business Administration by Teesside University, one of the leading UK universities for engineering, in recognition of her work in championing engineering education among youths.

### Community outreach activities

Sembcorp supports projects that help communities, such as:

- In 2011, Sembcorp, through its joint venture in the Vietnam Singapore Industrial Park, launched the first community clinic in Binh Duong. With a medical team from My Phuoc Hospital, this clinic provides free first aid, medical consultation and counselling services for the medically underserved populations of Binh Duong province.
- In China, our Yancheng operations organised their fifth 'Water Services For The Community' event in the Chaoyang district to promote the accessibility of municipal water for all. The event helped facilitate water maintenance and repair services for the residents, and also generated greater awareness on water conservation, quality and pricing.
- In South Africa, Sembcorp Siza Water donated an immune haematology test machine to a local non-governmental organisation HIV / AIDS centre to help overcome traveling and cost barriers to getting tested.

### Sembcorp Water Technology Prize

In 2011, Sembcorp presented the Sembcorp Water Technology Prize to winning teams from three schools. The first such competition of its kind in Singapore, it exposes secondary and junior college students to the challenges facing the water industry, spurring them to develop solutions to those challenges. Students attend site visits as well as hands-on training sessions, and are mentored by top researchers as well as lecturers for their projects. By giving students an insight into the latest water technologies, as well as access to resources and materials for their projects, the competition inculcates an interest in water technology and environmental issues to help develop Singapore's pool of water and environmental specialists.

The competition is co-organised by Singapore's national water agency PUB, the Nanyang Technological University's Singapore Membrane Technology Centre and Singapore Polytechnic.

## SUSTAINABILITY

- Sembcorp Bournemouth Water has been a supporter of international charity WaterAid. In 2011, Sembcorp Bournemouth Water received The President's Award, endorsed by WaterAid's President, His Royal Highness The Prince of Wales, for its support over the last 30 years.
- Our operations in Teesside extended their professional expertise to a neighbouring village to help secure lower costs with the building suppliers for the renovations of their historic village hall.
- Sembcorp Utilities Chile worked with local community leaders to pilot a campaign in two Santiago regions, entitled '*Yo cuido mi grifo*' (I take care of my fire hydrant), to educate the local community about the importance of fire hydrants. The project also saw the opening of two children's water parks. The project resulted in savings of over 600,000 litres of water a day.

### Wildlife and biodiversity

Sembcorp also contributes to programmes supporting wildlife and biodiversity. We continue to support the Sembcorp Forest of Giants in the Southern Ridges through donations to the Singapore National Parks Board's registered charity, the Garden City Fund. In 2011, we further developed the programme to promote greater awareness and appreciation of nature. Sembcorp volunteers were trained to be guides of the Southern Ridges, which span the hills of Mount Faber Park in Singapore.

Sembcorp's municipal water operations in Bournemouth, UK, continues its long-standing support of the Dorset Wildlife Trust which manages more than 40 nature reserves in the county. In 2011, Sembcorp Bournemouth Water provided support to the charity to restore areas of chalk streams that have been affected by human intervention. The crystal clear waters of chalk streams support more wildlife than any other waters in Britain, with a huge range of aquatic insects, spawning sites for trout and salmon and food for predators.

### Sustainability Contact

*For further information on sustainability at Sembcorp Industries, please visit our website at [www.sembcorp.com](http://www.sembcorp.com). If you have any comments or wish to discuss any of the contents of this report or other sustainability issues, please contact:*

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*Sembcorp's woodchip-fuelled biomass steam production plant on Jurong Island, Singapore*