

# OPERATING AND FINANCIAL REVIEW

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## **OPERATING AND FINANCIAL REVIEW**

## **▶** GROUP STRUCTURE

## **Utilities**

Sembcorp Utilities	100%
SINGAPORE	
Sembcorp Cogen	100%
Sembcorp Power	100%
Sembcorp Gas	70%
Sembcorp NEWater	100%
Sembcorp Renewables	100%
Sembcorp Project Engineering Co	100%
Changi Mega Solar	49%
CHINA	
Sembcorp (China) Holding Co	100%
Shanghai Cao Jing Co-generation Co	30%
Sembcorp Nanjing SUIWU Co	95%
Sembcorp NCIP Water Co	95%
Zhangjiagang Free Trade Zone	
Sembcorp Water Co	80%
Zhangjiagang Free Trade Zone	
Sembcorp Reclaimed Water Co	80%
Sembcorp Lianyungang Water Co	80%
Sembcorp Qidong Water Co	95%
Fuzhou Sembcorp Water Co	72%
Guohua AES (Huanghua) Wind Power Co	49%
Sembcorp Changzhi Water Co	100%
Sembcorp Tianjin Lingang Water Co	90%
Sembcorp Sanhe Yanjiao Water Co	94.3%
Guohua Sembcorp (Chenba'erhu) Wind Power Co	49%
Guohua Sembcorp (Hulunbeier) Wind Power Co	49%
Guohua Sembcorp (Xinba'erhu) Wind Power Co	49%
Sembcorp Shenyang Water Co	80%
Sembcorp Xinmin Water Co	90.9%
Qitaihe Sembcorp Water Co	90.9%
ChongQing SongZao Sembcorp Electric Power Co	49%
Sembcorp Jingmen Water Co	95%
Sembcorp Qinzhou Water Co	80%
INDIA	
Sembcorp India	100%
Thermal Powertech Corporation India	86.9%
Sembcorp Gayatri Power	88%
Sembcorp Gayatri O&M Co	70%
Sembcorp Green Infra	68.7%
Indonesia	
Adhya Tirta Batam	50%
Adhya Tirta Sriwijaya	40%

MYANMAR	4000/
Sembcorp Myingyan Power Co	100%
PHILIPPINES	
Subic Water and Sewerage Co	30%
VIETNAM	
Phu My 3 BOT Power Co	66.7%
BANGLADESH	
Sembcorp North-West Power Co	100%
OMAN	
Sembcorp Salalah Power and Water Co	40%
Sembcorp Salalah O&M Services Co	70%
Centralised Utilities Company	35%
UAE	
Emirates Sembcorp Water & Power Co	40%
Sembcorp Gulf O&M Co	100%
SOUTH AFRICA	
Sembcorp Utilities (South Africa)	100%
Sembcorp Silulumanzi	100%
Sembcorp Siza Water	73.5%
NORWAY	
Biowater Technology	29.6%
UK	
Sembcorp Utilities (UK)	100%
Merseyside Energy Recovery	40%
ANTIGUA	
Sembcorp (Antigua) Water	100%
CHILE	
Sembcorp Utilities (Chile)	100%
Sembcorp Aguas Chacabuco	100%
Sembcorp Aguas Del Norte	100%
Sembcorp Aguas Lampa	100%
Sembcorp Aguas Santiago	100%
PANAMA	
Aguas de Panama	100%
Sembcorp Environment	100%
SINGAPORE	
SembWaste	100%
Sembcorp Tay Paper Recycling	60%

<sup>\*</sup> Figure reflects the effective equity held by the Group

#### Marine

Sembcorp Marine	60.9%	
SINGAPORE		
Sembcorp Marine Integrated Yard	100%	
Sembcorp Marine Rigs & Floaters	100%	
Sembcorp Marine Repairs & Upgrades	100%	
Sembcorp Marine Specialised Shipbuilding	100%	
Jurong Shipyard	100%	
Sembcorp Marine Offshore Platforms	100%	
PPL Shipyard	100%	
Sembcorp Marine Technology	100%	
BRAZIL		
Estaleiro Jurong Aracruz	100%	
Jurong do Brasil Prestação de Serviços	100%	
INDONESIA		
SMOE Indonesia	90%	
Karimun Sembawang Shipyard	100%	
INDIA		
Sembmarine Kakinada	40%	
NORWAY		
Gravifloat	56%	
Aragon	50%	
LMG Marin	100%	
UK		
Sembmarine SLP	100%	
USA		
Sembmarine SSP	100%	
CHINA		
Shenzhen Chiwan Offshore Petroleum		
Engineering Co	35%	

## **Urban Development**

Sembcorp Development	100%
VIETNAM	
Vietnam Singapore Industrial Park JV Co	47.4%
Vietnam Singapore Industrial Park &	
Township Development Joint Stock Co	45.2%
VSIP Bac Ninh Co	45.2%
VSIP Hai Phong Co	45.2%
VSIP Quang Ngai Co	47.4%
VSIP Hai Duong Co	45.2%
VSIP Nghe An Co	47.4%
VSIP-Sembcorp Gateway Development Co	50.4%
CHINA	
Wuxi-Singapore Industrial Park Development Co	45.4%
Sino-Singapore (Chengdu) Innovation Park	
Development Co	25%
Sino-Singapore Nanjing Eco Hi-tech Island	
Development Co	21.5%
Nanjing Riverside Quay Co	100%
Indonesia	
Kawasan Industri Kendal	49%
SINGAPORE	
Sembcorp Properties	100%
Sembcorp Properties (China)	100%
Sembcorp Infra Services	100%
Sembcorp Development Indonesia	100%
Gallant Venture	12%
Sembcorp Parks Management	75%
Other Businesses	
Sembcorp Design and Construction	100%
Sembcorp EOSM	60%
Shenzhen Chiwan Sembawang	/
Engineering Co	32%
Singapore Precision Industries /	
Singapore Mint	100%

This list of companies is not exhaustive

The Utilities business also includes the SUT division of Sembcorp Industries

Figures reflect shareholding as at February 23, 2017. Shareholding figures for entities listed under Sembcorp Utilities, Sembcorp Environment, Sembcorp Marine and Sembcorp Development reflect stakes held by the above companies in these entities

## **OPERATING AND FINANCIAL REVIEW**

## **GROUP FINANCIAL REVIEW**

## **Group Financial Highlights**

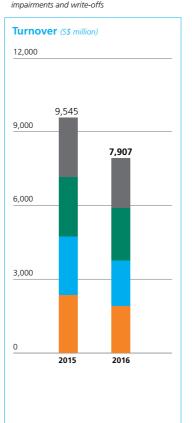
	2016	2015	Change (%)
For the Year (S\$ million)			
Turnover	7,907	9,545	(17)
Earnings before interest, tax, depreciation and amortisation	1,315	1,720	(24)
Profit from operations	909	631	44
– Earnings before interest and tax	784	625	25
– Share of results: Associates & JVs, net of tax	125	6	NM
Profit before tax	537	426	26
Net profit	395	549	(28)
Economic value added	(99)	(247)1	60
Return on total assets (%)	4.0	3.7	6
Return on equity (%)	6.2	9.4	(35)
Capital Position (S\$ million)		5.620	
Owners' funds	5,898	5,630	5
Total assets	22,290	19,915	12
Net debt	7,338	5,227	40
Operating cash flow	872	(704)	NM
Free cash flow	1,132	(12)	NM
Capital expenditure and equity investment	1,236	2,108	(41)
Total debt-to-capitalisation ratio	0.53	0.46	15
Total debt-to-capitalisation ratio (less cash and cash equivalents)	0.42	0.35	20
Interest cover (times)	3.3	7.2	(55)
Shareholder Returns			
Net assets per share (S\$)	3.75	3.60	4
Earnings per share (cents)	19.92	29.17	(32)
Ordinary dividend per share (cents)	8	11	(27)
Payout ratio (%)	40.2	37.7	6
Last traded share price (S\$) as at December 31	2.85	3.05	(7)
Total shareholder returns (%)	(3.3)	(28.8)	(89)

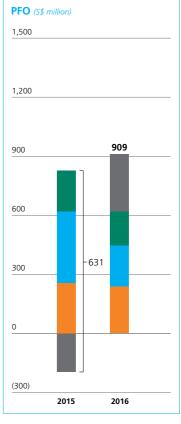
<sup>&</sup>lt;sup>1</sup> In the interest of consistency, the previous year's economic value added has been restated to include capital charge deferral. Capital charge deferral (net) refers to deferral of capital charges for investments made in projects where returns are not immediate at the time of investment (eg. greenfield projects) less cost of deferral of weighted average cost of capital

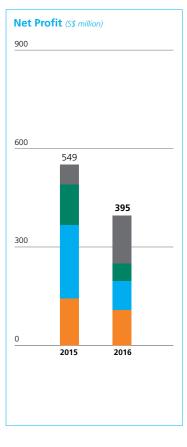
## **Group Quarterly Performance** (S\$ million)

		2016					2015		
10	<b>2Q</b>	3Q	4Q	Total	10	2Q	3Q	4Q	Total
1,895	1,846	2,140	2,026	7,907	2,338	2,388	2,400	2,419	9,545
313	286	326	390	1,315	305	410	324	681	1,720
237	208	172	292	909	254	364	207	(194)	631
202	170	168	244	784	214	305	186	(80)	625
35	38	4	48	125	40	59	21	(114)	6
161	123	88	165	537	228	314	150	(266)	426
107	87	54	147	395	142	224	122	61	549
5.45	4.29	2.47	7.71	19.92	7.83	12.19	6.29	2.86	29.17
	1,895 313 237 202 35 161 107	1,895 1,846  313 286 237 208 202 170  35 38 161 123 107 87	10 20 30  1,895 1,846 2,140  313 286 326 237 208 172 202 170 168  35 38 4 161 123 88 107 87 54	1,895 1,846 2,140 2,026  313 286 326 390 237 208 172 292 202 170 168 244  35 38 4 48 161 123 88 165 107 87 54 147	1Q         2Q         3Q         4Q         Total           1,895         1,846         2,140         2,026         7,907           313         286         326         390         1,315           237         208         172         292         909           202         170         168         244         784           35         38         4         48         125           161         123         88         165         537           107         87         54         147         395	1Q         2Q         3Q         4Q         Total         1Q           1,895         1,846         2,140         2,026         7,907         2,338           313         286         326         390         1,315         305           237         208         172         292         909         254           202         170         168         244         784         214           35         38         4         48         125         40           161         123         88         165         537         228           107         87         54         147         395         142	1Q         2Q         3Q         4Q         Total         1Q         2Q           1,895         1,846         2,140         2,026         7,907         2,338         2,388           313         286         326         390         1,315         305         410           237         208         172         292         909         254         364           202         170         168         244         784         214         305           35         38         4         48         125         40         59           161         123         88         165         537         228         314           107         87         54         147         395         142         224	1Q         2Q         3Q         4Q         Total         1Q         2Q         3Q           1,895         1,846         2,140         2,026         7,907         2,338         2,388         2,400           313         286         326         390         1,315         305         410         324           237         208         172         292         909         254         364         207           202         170         168         244         784         214         305         186           35         38         4         48         125         40         59         21           161         123         88         165         537         228         314         150           107         87         54         147         395         142         224         122	1Q         2Q         3Q         4Q         Total         1Q         2Q         3Q         4Q           1,895         1,846         2,140         2,026         7,907         2,338         2,388         2,400         2,419           313         286         326         390         1,315         305         410         324         681           237         208         172         292         909         254         364         207         (194)           202         170         168         244         784         214         305         186         (80)           35         38         4         48         125         40         59         21         (114)           161         123         88         165         537         228         314         150         (266)           107         87         54         147         395         142         224         122         61

<sup>&</sup>lt;sup>1</sup> Earnings before interest, tax, depreciation and amortisation excludes major non-cash items such as the effects of fair value adjustments, re-measurements, impairments and write-offs









## **Five-year Financial Performance Profile**

#### 2016

Sembcorp posted a net profit of \$\$394.9 million and a turnover of \$\$7.9 billion in 2016, compared to \$\$548.9 million and \$\$9.5 billion respectively in 2015.

In 2016, the Utilities business contributed S\$348.0 million in net profit to the Group. 63% of this net profit was generated by its overseas operations. Excluding exceptional items, the business delivered a profit growth of 4% over 2015, backed by record profits in China of S\$124.8 million. Exceptional items recorded by the business in 2016 amounted to S\$2.5 million, comprising S\$33.5 million from the divestment gain on the sale of a municipal water operation in Yancheng, China, less \$\$31.0 million total refinancing cost for the Thermal Powertech Corporation India power plant. Exceptional items recorded by the business for 2015 amounted to S\$369.9 million, comprising divestment gains of S\$425.6 million from the sale of a waste management joint venture in Australia and municipal water operations in Bournemouth, UK and Zhumadian, China, less S\$55.7 million comprising S\$31.4 million from the exit of the chemical feedstock business and impairment of assets in Singapore (net of settlement amounts from customers) and S\$24.3 million in net allowance for doubtful debts in China.

The Marine business' net profit contribution to the Group was \$\$48.3 million in 2016, compared to a net loss of \$\$176.4 million in 2015. The business' net loss in 2015

was mainly due to write-downs of inventory and work-in-progress and provisions for foreseeable losses for rig building projects. Meanwhile, the Urban Development business reported a net profit of \$\$33.3 million, comparable to \$\$33.5 million in the previous year.

Return on equity for the Group was 6.2% and earnings per share amounted to 19.9 cents.

#### 2015

Sembcorp posted a net profit of \$\$548.9 million and a turnover of \$\$9.5 billion for 2015 compared to \$\$801.1 million and \$\$10.9 billion in 2014 respectively.

In 2015, the Utilities business delivered a 72% growth in net profit to \$\$701.5 million compared to \$\$408.0 million in 2014. This increase was underpinned by growth from its overseas operations as well as gains from the sale of its Australian waste management joint venture and municipal water operations in the UK and Zhumadian, China.

Meanwhile, at the Sembcorp Industries level, the Marine business incurred a net loss of S\$176.4 million in 2015 compared to a net profit of S\$340.0 million in 2014. The Urban Development business posted a net profit of S\$33.5 million compared to S\$44.3 million in 2014.

#### 2014

Sembcorp delivered a healthy performance in 2014 amid challenging market conditions. Net profit for the year was \$\$801.1 million, while turnover stood at \$\$10.9 billion.

In 2014, the Utilities business reported a net profit of

S\$408.0 million, compared to S\$449.9 million in 2013. The business achieved a 7% net profit growth in 2014 from 2013 excluding gains from the initial public offering of Sembcorp Salalah Power and Water Company (Sembcorp Salalah) offset by an impairment made for operations in the UK.

The Marine business contributed \$\$340.0 million to the Group's net profit in 2014, compared to \$\$336.9 million in 2013.

Meanwhile, the Urban Development business reported a net profit of \$\$44.3 million, compared to \$\$50.2 million in the previous year.

#### 2013

Sembcorp delivered a robust performance for 2013. Net profit grew 9% to \$\$820.4 million from \$\$753.3 million in 2012, while turnover increased 6% to \$\$10.8 billion from \$\$10.2 billion the previous year.

In 2013, the Utilities business delivered strong profit growth of 20%, with net profit increasing to \$\$449.9 million from \$\$374.6 million in 2012, underpinned by solid growth from operations in China and gains from the initial public offering of Sembcorp Salalah, partially offset by an impairment made for operations in the UK.

The Marine business reported a net profit of \$\$336.9 million in 2013, up 3% from \$\$326.7 million in 2012. Meanwhile, the Urban Development business reported a 22% increase in net profit to \$\$50.2 million from \$\$41.1 million the previous year.

#### 2012

Sembcorp reported a net profit of \$\$753.3 million for the full year 2012, compared to \$\$809.3 million in 2011. Turnover grew 13% to \$\$10.2 billion from \$\$9.0 billion in the previous year.

In 2012, the Utilities business achieved a net profit of

S\$374.6 million, growing 23% from S\$304.4 million in 2011. This was due to a better performance by Singapore operations, attributable to additional gas sales during the year.

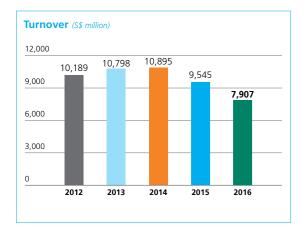
Our Marine business contributed \$\$326.7 million in net profit for the year.

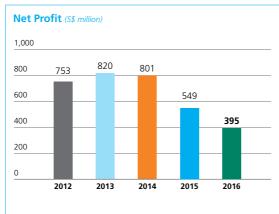
#### **Five-year Financials**

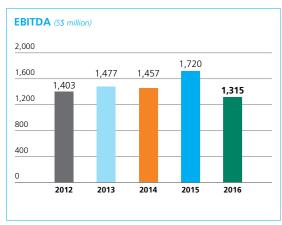
	2016	2015	2014	2013	2012
For the Year (S\$ million)					
Turnover	7,907	9,545	10,895	10,798	10,189
Earnings before interest, tax, depreciation and amortisation <sup>1</sup>	1,315	1,720	1,457	1,477	1,403
Profit from operations	909	631	1,297	1,315	1,266
– Earnings before interest and tax	784	625	1,139	1,160	1,103
– Share of results: Associates & JVs, net of tax	125	6	158	155	163
Profit before tax	537	426	1,246	1,214	1,155
Net profit	395	549	801	820	753
At Year End (S\$ million)					
Property, plant and equipment and investment properties	11,287	8,706	7,749	5,148	5,180
Other non-current assets	3,379	3,602	3,297	2,916	2,510
Net current assets	1,609	1,661	773	788	1,028
Non-current liabilities	(8,112)	(5,926)	(4,587)	(2,322)	(3,074)
Net assets	8,163	8,043	7,232	6,530	5,644
Share capital and reserves (including perpetual securities)	6,702	6,433	5,616	5,230	4,503
Non-controlling interests	1,461	1,610	1,616	1,300	1,141
Total equity	8,163	8,043	7,232	6,530	5,644
Per Share					
Earnings (cents)	19.92	29.17	44.31	45.70	42.17
Net assets (S\$)	3.75	3.60	3.15	2.93	2.52
Net ordinary dividends (including bonus dividends) (cents)	8	11	16	17	15
Financial Ratios					
Return on equity (%)	6.2	9.4	15.2	17.1	17.5
Return on total assets (%)	4.0	3.7	7.5	9.1	9.5
Interest cover (times)	3.3	7.2	20.8	12.5	10.0
Total debt-to-capitalisation ratio	0.53	0.46	0.40	0.23	0.30
Total debt-to-capitalisation ratio					
(less cash and cash equivalents)	0.42	0.35	0.26	Net cash	0.05

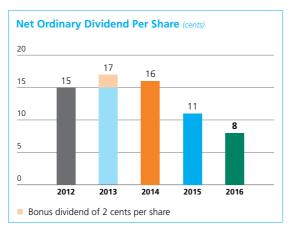
<sup>&</sup>lt;sup>1</sup> Earnings before interest, tax, depreciation and amortisation excludes major non-cash items such as the effects of fair value adjustments, re-measurements impairments and write-offs

## OPERATING AND FINANCIAL REVIEW | GROUP FINANCIAL REVIEW

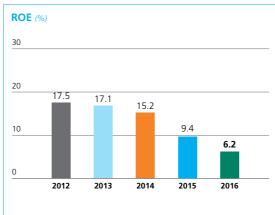












## Review by Business (S\$ million)

2016	%	2015	%	2014	%	2013	%	2012	%
4,111	52	4,227	44	4,850	44	5,095	47	5,615	55
3,544	45	4,968	52	5,831	54	5,523	51	4,428	44
7	_	8	-	7	-	9	_	12	_
245	3	342	4	207	2	171	2	134	1
7,907	100	9,545	100	10,895	100	10,798	100	10,189	100
737	81	948	150	522	40	613	47	607	48
171	19	(342)	(54)	718	55	660	50	599	47
38	4	38	6	47	4	45	3	44	4
(37)	(4)	(13)	(2)	10	1	(3)	-	16	1
909	100	631	100	1,297	100	1,315	100	1,266	100
348	88	701	128	408	51	450	55	375	50
48	12	(176)	(32)	340	42	337	41	327	43
33	9	34	6	44	6	50	6	41	6
(34)	(9)	(10)	(2)	9	1	(17)	(2)	10	1
395	100	549	100	801	100	820	100	753	100
	4,111 3,544 7 245 7,907 737 171 38 (37) 909	737 81 77 100 737 81 77 19 38 4 (37) (4) 909 100 348 88 48 12 33 9 (34) (9)	4,111     52     4,227       3,544     45     4,968       7     -     8       245     3     342       7,907     100     9,545       737     81     948       171     19     (342)       38     4     38       (37)     (4)     (13)       909     100     631       348     88     701       48     12     (176)       33     9     34       (34)     (9)     (10)	4,111     52     4,227     44       3,544     45     4,968     52       7     -     8     -       245     3     342     4       7,907     100     9,545     100       737     81     948     150       171     19     (342)     (54)       38     4     38     6       (37)     (4)     (13)     (2)       909     100     631     100       348     88     701     128       48     12     (176)     (32)       33     9     34     6       (34)     (9)     (10)     (2)	4,111     52     4,227     44     4,850       3,544     45     4,968     52     5,831       7     -     8     -     7       245     3     342     4     207       7,907     100     9,545     100     10,895       737     81     948     150     522       171     19     (342)     (54)     718       38     4     38     6     47       (37)     (4)     (13)     (2)     10       909     100     631     100     1,297       348     88     701     128     408       48     12     (176)     (32)     340       33     9     34     6     44       (34)     (9)     (10)     (2)     9	4,111       52       4,227       44       4,850       44         3,544       45       4,968       52       5,831       54         7       -       8       -       7       -         245       3       342       4       207       2         7,907       100       9,545       100       10,895       100         171       19       (342)       (54)       718       55         38       4       38       6       47       4         (37)       (4)       (13)       (2)       10       1         909       100       631       100       1,297       100         348       88       701       128       408       51         48       12       (176)       (32)       340       42         33       9       34       6       44       6         (34)       (9)       (10)       (2)       9       1	4,111       52       4,227       44       4,850       44       5,095         3,544       45       4,968       52       5,831       54       5,523         7       -       8       -       7       -       9         245       3       342       4       207       2       171         7,907       100       9,545       100       10,895       100       10,798            737       81       948       150       522       40       613         171       19       (342)       (54)       718       55       660         38       4       38       6       47       4       45         (37)       (4)       (13)       (2)       10       1       (3)         909       100       631       100       1,297       100       1,315         348       88       701       128       408       51       450         48       12       (176)       (32)       340       42       337         33       9       34       6       44       6       50         (34)       (9) <t< td=""><td>4,111       52       4,227       44       4,850       44       5,095       47         3,544       45       4,968       52       5,831       54       5,523       51         7       -       8       -       7       -       9       -         245       3       342       4       207       2       171       2         7,907       100       9,545       100       10,895       100       10,798       100         737       81       948       150       522       40       613       47         171       19       (342)       (54)       718       55       660       50         38       4       38       6       47       4       45       3         (37)       (4)       (13)       (2)       10       1       (3)       -         909       100       631       100       1,297       100       1,315       100         348       88       701       128       408       51       450       55         48       12       (176)       (32)       340       42       337       41</td><td>4,111       52       4,227       44       4,850       44       5,095       47       5,615         3,544       45       4,968       52       5,831       54       5,523       51       4,428         7       -       8       -       7       -       9       -       12         245       3       342       4       207       2       171       2       134         7,907       100       9,545       100       10,895       100       10,798       100       10,189         737       81       948       150       522       40       613       47       607         171       19       (342)       (54)       718       55       660       50       599         38       4       38       6       47       4       45       3       44         (37)       (4)       (13)       (2)       10       1       (3)       -       16         909       100       631       100       1,297       100       1,315       100       1,266     348  88  701  128  408  51  45  528  537  548  54  54  55  560  57  57  57  57  57  57  57  57  57  5</td></t<>	4,111       52       4,227       44       4,850       44       5,095       47         3,544       45       4,968       52       5,831       54       5,523       51         7       -       8       -       7       -       9       -         245       3       342       4       207       2       171       2         7,907       100       9,545       100       10,895       100       10,798       100         737       81       948       150       522       40       613       47         171       19       (342)       (54)       718       55       660       50         38       4       38       6       47       4       45       3         (37)       (4)       (13)       (2)       10       1       (3)       -         909       100       631       100       1,297       100       1,315       100         348       88       701       128       408       51       450       55         48       12       (176)       (32)       340       42       337       41	4,111       52       4,227       44       4,850       44       5,095       47       5,615         3,544       45       4,968       52       5,831       54       5,523       51       4,428         7       -       8       -       7       -       9       -       12         245       3       342       4       207       2       171       2       134         7,907       100       9,545       100       10,895       100       10,798       100       10,189         737       81       948       150       522       40       613       47       607         171       19       (342)       (54)       718       55       660       50       599         38       4       38       6       47       4       45       3       44         (37)       (4)       (13)       (2)       10       1       (3)       -       16         909       100       631       100       1,297       100       1,315       100       1,266     348  88  701  128  408  51  45  528  537  548  54  54  55  560  57  57  57  57  57  57  57  57  57  5

	2016	2015	Change (%
Turnover	7,907.0	9,544.6	(17
EBITDA <sup>1</sup>	1,314.9	1,720.2	(24
PFO	909.0	631.5	44
– EBIT	783.9	625.3	25
– Share of results: Associates & JVs, net of tax	125.1	6.2	NM
PBT	537.4	426.4	26
Net profit	394.9	548.9	(28
EPS (cents)	19.9	29.2	(32
ROE (%)	6.2	9.4	(34

#### **Overview**

Sembcorp posted a net profit of \$\$394.9 million and a turnover of S\$7.9 billion for 2016, compared to \$\$548.9 million and \$\$9.5 billion respectively in 2015.

#### Turnover

The Group achieved a turnover of S\$7.9 billion, with the Utilities and Marine businesses contributing 97% of total turnover.

The Utilities business' turnover was lower in 2016 compared to 2015, mainly due to lower high sulphur fuel oil prices recorded during the year, partially mitigated by higher contribution from India operations and recognition of service concession revenue for its Myanmar project.

The Marine business' turnover decreased over the previous year, mainly due to lower revenue recognition for rig building projects resulting from customers' delivery deferment requests and lower contributions from its repairs business. For the offshore platforms segment, turnover was higher in 2016.

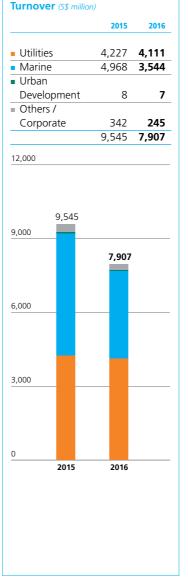
#### **Net Profit**

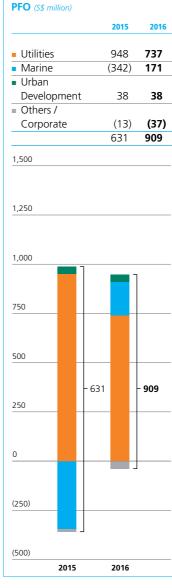
The Group recorded a net profit of S\$394.9 million in 2016 compared to \$\$548.9 million in 2015, while profit from operations was \$\$909.0 million, compared to \$\$631.5 million in 2015.

In 2016, the Utilities business made S\$348.0 million in net profit. 63% of this net profit was generated by its overseas operations. Excluding exceptional items, the business delivered a profit growth of 4% over 2015, backed by record profits in China of S\$124.8 million. Exceptional items recorded by the business in 2016 amounted to \$\$2.5 million, comprising \$\$33.5 million from the divestment gain on the sale of a municipal water operation in Yancheng, China, less S\$31.0 million total refinancing cost for the Thermal Powertech Corporation India power plant. Exceptional items recorded by the business for 2015 amounted to \$\$369.9 million, comprising divestment gains of S\$425.6 million from the sale of a waste management joint venture in Australia and municipal water operations in Bournemouth, UK and Zhumadian, China, less S\$55.7 million comprising S\$31.4 million from the exit of the chemical feedstock business and impairment of assets in Singapore (net of settlement amounts from customers) and S\$24.3 million in net allowance for doubtful debts in China.

The Marine business' net profit contribution to the Group was \$\$48.3 million in 2016, compared to a net loss of S\$176.4 million in 2015. The business' net loss in 2015 was mainly due to write-downs of inventory and work-in-progress and provisions for foreseeable losses for rig building projects.

Meanwhile, the Urban Development business





			2015	201
<ul><li>Utilities</li></ul>			701	348
<ul><li>Marine</li></ul>			(176)	48
<ul><li>Urban</li></ul>				
Develo			34	33
Others				
Corpor	ate		(10)	
			549	395
900				
750				
		1		
600				
450				
				1
300				
		- 549		- 395
150		1 349		393
130				
•				
0				
				J
(150)				
		J		
(300)				
	2015		2016	

reported a net profit of S\$33.3 million in 2016, comparable to \$\$33.5 million in the previous year. Net profit from Corporate included a fair value loss of S\$57.7 million in 2016, compared to a fair value loss of S\$34.5 million in 2015, due to the decline in the share price of Gallant Venture.

#### **Cash Flow and Liquidity**

As at December 31, 2016, the Group's cash and cash equivalents stood at S\$1.9 billion.

Net cash from operating activities for 2016 was mainly due to the Marine business' receipts from completed rig building projects, partially offset by the Utilities business' working capital for its India operations.

Net cash outflow from investing activities for 2016 was \$\$800.6 million, comprising mainly spending on step-up acquisition of subsidiaries and purchase of property, plant and equipment primarily for the expansion and operation of the Marine business' yards, partially offset by proceeds from the disposal of other financial assets and dividends received.

Net cash inflow from financing activities of S\$213.8 million for 2016 was related mainly to net proceeds from borrowings, partially offset by dividends and interest paid.

#### **Financial Position**

Group shareholders' funds increased to S\$5.9 billion as at December 31, 2016 from S\$5.6 billion as at December 31, 2015.

The Group's balance sheet reflects the consolidation of Sembcorp Gayatri Power as a subsidiary, following the Utilities business increasing its ownership in the unit from 49% to 65%, and subsequently to 88%. It also reflects the consolidation of Gravifloat as a subsidiary of the Group, following the increase in Sembcorp Marine's shareholding in the unit from 12% to 56%

Non-current assets increased in 2016, primarily due to the consolidation of Sembcorp Gayatri Power and Gravifloat by the Utilities business and Marine business respectively.

Inventories and work-in-progress decreased, primarily due to reduced work-in-progress at the

Marine business following the successful delivery of jack-up rigs. Recoverability of work-in-progress for rig building is dependent on customers taking delivery of the rigs in the future.

Interest-bearing borrowings increased in 2016 due to consolidation of Sembcorp Gayatri Power and the Marine business' borrowings for working capital and capital expenditure for its Singapore and Brazil yards.

#### **Shareholder Returns**

Return on equity for the Group was 6.2% and earnings per share amounted to 19.9 cents in 2016.

Subject to approval by shareholders at the next annual general meeting, a final ordinary one-tier tax-exempt dividend of 4.0 cents per share has been proposed for the financial year ending December 31, 2016. Together with an interim dividend of 4.0 cents per ordinary share paid in August 2016, this brings our total dividend for the year to 8.0 cents per ordinary share.

#### **Economic Value Added**

Economic value added (EVA) was negative in 2016, mainly due to weaker performance by the Marine business' rig building operations. In 2016, EVA also included the effect of new investments in early stages of operation.

#### **Value Added and Productivity Data**

In 2016, the Group's total value added was S\$2.2 billion. This was absorbed by employees in wages, salaries and benefits of S\$800 million, by governments in income and other taxes of S\$119 million and by providers of capital in interest, dividends and distribution of S\$620 million, leaving a balance of S\$678 million reinvested in our businesses.

#### **Critical Accounting Policies**

Sembcorp's financial statements are prepared in accordance with Singapore Financial Reporting Standards (FRSs).

With effect from January 1, 2016, the Group adopted the following new / amended FRSs, set out in the table below.

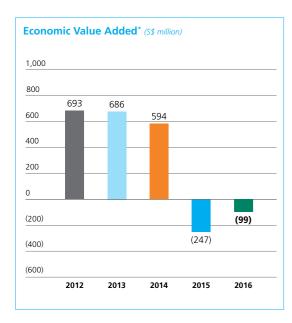
The adoption of the FRSs below (including consequential amendments) does not have any significant impact on the Group's financial statements.

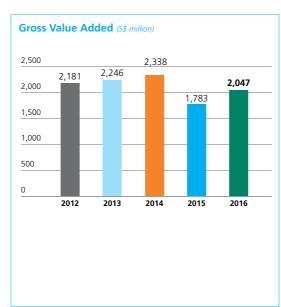
#### **Financial Risk Management**

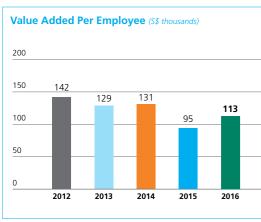
The Group's activities expose it to a variety of financial risks, including changes in interest rates, foreign exchange rates and commodity prices, as well as credit risk.

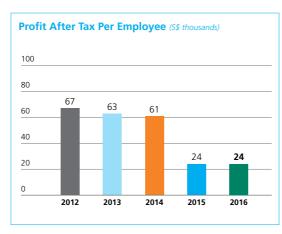
Please refer to the Environmental, Social and Governance Review in this annual report for details on the management of these risks.

Amendments to FRSs:	
FRS 1	Presentation of Financial Statements
FRS 16	Property, Plant and Equipment
FRS 19	Employee Benefit Plans: Employee Contributions
FRS 27	Separate Financial Statements
FRS 28	Investments in Associates and Joint Ventures
FRS 38	Intangible Assets
FRS 105	Non-current Assets Held for Sale and Discontinued Operations
FRS 110	Consolidated Financial Statements
FRS 111	Joint Arrangements
FRS 112	Disclosure of Interests in Other Entities









<sup>\*</sup> In the interest of consistency, prior years' economic value added has been restated to include capital charge deferral. Capital charge deferral (net) refers to deferral of capital charges for investments made in projects where returns are not immediate at the time of investment (eq. greenfield projects) less cost of deferral at weighted average cost of capital

#### Value Added Statement (S\$ million)

	2016	2015	2014	2013	2012
Value Added from					
Turnover	7,907	9,545	10,895	10,798	10,189
Less: Bought in materials and services	(5,860)	(7,762)	(8,557)	(8,552)	(8,008)
Gross value added	2,047	1,783	2,338	2,246	2,181
Investment, interest and other income	536	985	253	308	130
Share of results of associates and joint ventures, net of tax	125	6	159	155	163
Other non-operating expenses	(491)	(631)	(168)	(95)	(74)
	2,217	2,143	2,582	2,614	2,400
Distribution					
To employees in wages, salaries and benefits	800	832	871	916	781
To governments in income and other taxes	119	137	211	182	136
To providers of capital in:					
Interest on borrowings	402	238	70	118	140
Dividends to owners	179	285	393	268	304
Profit attributable to perpetual securities holders	39	28	9	4	_
	1,539	1,520	1,554	1,488	1,361
Retained in Business					
Depreciation and amortisation	454	405	315	303	282
Deferred tax expense / (credit)	32	(106)	26	(12)	23
Retained profits	178	236	399	548	450
Non-controlling interests	42	(94)	283	277	280
	706	441	1,023	1,116	1,035
Other non-operating (income) / expenses	(28)	182	5	10	4
	678	623	1,028	1,126	1,039
Total Distribution	2,217	2,143	2,582	2,614	2,400

#### **Productivity Data**

	2016	2015	2014	2013	2012
Average staff strength	18,072	18,676	17,806	17,401	15,343
Employment costs (S\$ million)	800	832	871	916	781
Profit after tax per employee (\$\$'000)	24	24	61	63	67
Value added (S\$ million)	2,047	1,783	2,338	2,246	2,181
Value added per employee (S\$'000)	113	95	131	129	142
Value added per dollar employment costs (S\$)	2.56	2.14	2.68	2.45	2.79
Value added per dollar investment in property,					
plant and equipment (S\$)	0.14	0.15	0.22	0.30	0.30
Value added per dollar sales (5\$)	0.26	0.19	0.21	0.21	0.21

The figures above reflect data for core businesses only

#### **Treasury Management**

Sembcorp Financial Services (SFS), the Group's wholly-owned treasury vehicle, manages the Group's financing activities, as well as its treasury activities in Singapore. SFS also oversees financing and treasury activities outside of Singapore together with the respective business units. In addition, SFS facilitates funding and on-lends funds borrowed by it to businesses within the Group, where appropriate.

SFS and our overseas treasury units actively manage cash within the Group by setting up cash pooling structures in various countries where appropriate, to take in surplus funds from businesses and lend it to those with funding requirements. We also actively manage the Group's excess cash, deploying it to a number of financial institutions, and closely track developments in the global banking sector. Such proactive cash management continues to be an efficient and cost-effective way of managing the Group's cash and financing its funding requirements.

#### **Facilities**

As at December 31, 2016, the Group's total credit facilities, including its multi-currency debt issuance programme, amounted to \$\$20.5 billion (2015: S\$18.8 billion). This comprised funded facilities of S\$16.1 billion (2015: S\$14.4 billion), including S\$10.8 billion in committed facilities (2015: S\$9.7 billion), and trade-related facilities of S\$4.4 billion (2015: S\$4.3 billion), including but not limited to bank guarantees, letters of credit, bid bonds and performance bonds. The increase over the previous year was mainly due to consolidation of Sembcorp Gayatri Power's credit facilities following our increased stake in the company from 49% to 88% in 2016 and an increase in SFS's multi-currency debt issuance programme limit from S\$2 billion to S\$2.5 billion in November 2016.

#### **Borrowings**

The Group aims to term out loans such that their maturity profile mirrors the operating life of our core assets, while continuing our focus on maintaining adequate liquidity for our businesses. We continue to build on our banking relationships to ensure that we are able to secure funding on competitive terms, as and when commercially viable and strategically attractive opportunities arise.

As at December 31, 2016, the Group's gross borrowings amounted to \$\$9.2 billion (2015: S\$6.8 billion). As compared to 2015, the increase of S\$2.4 billion in gross borrowings was mainly due to the consolidation of Sembcorp Gayatri Power's debt and new borrowings by Sembcorp Marine. The interest cover has also dropped from 7.2 times in 2015 to 3.3 times in 2016, mainly due to an increase in borrowings as well as greenfield projects that have not yet begun commercial operations. The Group remains committed to balancing the availability of funding and the cost of funding, while maintaining prudent financial ratios. We also aim to maintain an efficient and optimal mix of committed and uncommitted facilities.

Of the overall debt portfolio in 2016, 48% (2015: 66%) constituted fixed rate debt that was not exposed to interest rate fluctuations. The floating rate debt mainly comprised long-term bank loans in India to support the Group's projects in the country. These bank loans are typically pegged to the respective lenders' posted interest rates which are floating in nature. Currently, financial instruments that provide an effective hedge to movements in Indian rupee interest rates are not available in the domestic market. However, the Group's floating rate borrowings in the country have benefited from the Reserve Bank of India's reduction of interest rates in 2016. Should the right opportunity arise, the Group may consider issuing relatively shorter fixed rate bonds of up to seven years' "sweet spot" tenor in the India debt market.

## Financing and Treasury Highlights (S\$ million)

	2016	2015	2014
Source of Funding			
Cash and cash equivalents	1,883	1,606	1,661
Funded facilities (including multi-currency debt issuance programme)			
Committed funded facilities	10,827	9,687	5,868
Less: Amount drawn down	(9,009)	(6,864)	(4,525)
Unutilised committed funded facilities	1,818	2,823	1,343
Uncommitted funded facilities	5,322	4,748	4,383
Less: Amount drawn down	(1,012)	(768)	(418)
Unutilised uncommitted funded facilities	4,310	3,980	3,965
Total unutilised funded facilities	6,128	6,803	5,308
Facilities available Less: Amount used	4,379 (2,411)	4,347 (2,337)	4,291 (1,903)
Trade-related facilities Facilities available	4,379	4,347	4,291
Unutilised trade-related facilities	1,968	2.010	2,388
Onutinised trade-related facilities	1,500	2,010	2,300
Funding Profile			
Maturity profile			
Due within one year	2,126	1,801	1,086
Due between one to five years	4,043	2,957	1,369
Due after five years	3,052	2,075	2,288
	9,221	6,833	4,743
Debt mix			
	4,416	4,529	3,627
Fixed rate debt	4,410	.,	
Fixed rate debt Floating rate debt	4,805	2,304	1,116

## Financing and Treasury Highlights (S\$ million)

	2016		2015		2014	
Debt Ratios						
Interest cover ratio						
Earnings before interest, tax,						
depreciation and amortisation	1,315		1,720		1,457	
Interest on borrowings	402		238		70	
Interest cover (times)	3.3		7.2		20.8	
	2016	D/C ratio	2015	D/C ratio	2014	D/C ratio
Debt / capitalisation (D/C) ratios						
Sembcorp Industries corporate debt	1,697	0.10	1,197	0.08	1,322	0.11
Sembcorp Industries project finance debt	3,369	0.19	2,256	0.15	1,680	0.14
Sembcorp Marine debt	4,155	0.24	3,380	0.23	1,741	0.15
Sembcorp Industries Group gross debt	9,221	0.53	6,833	0.46	4,743	0.40
Less: Cash and cash equivalents	(1,883)	_	(1,606)	_	(1,661)	_
Sembcorp Industries Group net debt / (cash)	7,338	0.42	5,227	0.35	2 002	0.20
sembeorp industries droup het debt / (cash)	7,550	0.42	3,221	0.55	3,082	0.26

## **UTILITIES REVIEW**



### Competitive Edge \_\_\_

- A leading developer, owner and operator of energy and water assets with strong operational, management and technical capabilities
- Operations in 14 countries with a strong presence in growth markets and an established presence in Asia
- Global leader in the provision of energy, water and on-site logistics to multiple industrial site customers
- A balanced global portfolio of highefficiency thermal and renewable assets, with capabilities in gas, coal, wind, solar, biomass and energy-from-waste
- Solid track record in providing total water and wastewater treatment solutions for industries and water-stressed regions

#### **Performance Scorecard**

Financial Indicators (S\$ million)	2016	2015	Change (%)
Turnover	4,132.9	4,258.5	(3)
Earnings before interest, tax, depreciation and amortisation	916.8	1,211.0	(24)
Profit from operations	737.2	947.5	(22)
– Earnings before interest and tax	633.0	825.8	(23)
– Share of results: Associates & JVs, net of tax	104.2	121.7	(14)
Net profit	348.0	701.5	(50)
– Net profit before exceptional items	345.5	331.6	4
– Exceptional items <sup>1</sup>	2.5	369.9	(99)
Return on equity (%)	9.3	21.4	(57)

Exceptional items amounted to

2016: a total of S\$2.5 million, comprising S\$33.5 million from the divestment gain on the sale of the municipal water operation in Yancheng, China, less \$\$31.0 million total refinancing cost for the Thermal Powertech Corporation India power plant

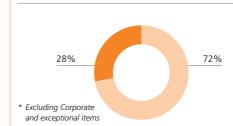
2015: a total of \$\$369.9 million, comprising divestment gains of \$\$425.6 million from the sale of a waste management joint venture in Australia and municipal water operations in Bournemouth, UK and Zhumadian, China, less \$\$55.7 million comprising \$\$31.4 million from the exit of the chemical feedstock business and impairment of assets in Singapore (net of settlement amounts from customers) and \$\$24.3 million in net allowance for doubtful debts in China

Operational Indicators	2016	2015
Power capacity (megawatts)	10,916	10,616
Steam capacity (tonnes per hour)	4,532	4,532
Water & wastewater treatment capacity (cubic metres per day)	8,821,252	9,232,226

Note: Capacity refers to total gross installed capacity of facilities in operation and under development

## PFO\* by Geography

- Singapore
- Overseas



## PFO\* by Segment

- Energy
- Water
- On-site logistics & solid waste management



## **Key Developments**



Completed a 1,320-megawatt supercritical expansion to the Chongging Songzao mine-mouth coal-fired power project in China, in January 2017. The project's proximity to its fuel source allows for a competitive generation cost



Opened the US\$3 billion Sembcorp Gayatri Power Complex, India's largest foreign direct investment-driven thermal power project on a single site



Signed key project agreements for power projects in Myanmar and Bangladesh, including long-term power purchase agreements



Grew global wind and solar power capacity to over 1.700 megawatts in line with our commitment to grow the renewable share of our global energy portfolio. Renewable capacity in India alone now stands at 971 megawatts

## **Operating and Financial Review**

## Overseas operations now contribute 72% of profit from operations

The Utilities business continued to provide a strong income base for Sembcorp in 2016. Operations in China turned in record profits for the year, while Singapore operations continued to be a key profit contributor despite intense competition in the power market.

Turnover was S\$4.1 billion compared to S\$4.3 billion in 2015. Profit from operations (PFO) was S\$737.2 million compared to S\$947.5 million, while net profit was \$\$348.0 million compared to S\$701.5 million. In 2015, the business divested an Australian waste management joint venture and municipal water operations in the UK and Zhumadian, China and recorded exceptional items totalling S\$376.3 million. In 2016, the business recorded S\$13.5 million in exceptional items, which includes a gain from the divestment of the

Yancheng municipal water operations in China. Excluding exceptional items which mainly comprised gains from these divestments, PFO grew 27% to S\$723.7 million, while net profit rose 4% to \$\$345.5 million from \$\$331.6 million in 2015.

Overseas operations contributed almost three-quarters of the Utilities business' PFO before exceptional items in 2016 or S\$513.1 million, a growth of 30% over last year. Meanwhile, Singapore operations contributed 28% of the Utilities business' PFO, with S\$198.3 million.

On a net profit basis, overseas operations generated 63% or S\$222.8 million of the business' net profit, while Singapore operations turned in the remaining 37% or S\$132.1 million.

Our **Singapore** operations achieved a steady performance in 2016 with a PFO of S\$198.3 million, driven by a solid performance by its centralised utilities and solid waste management units. This was roughly comparable to the business' 2015 PFO of S\$203.9 million.

PFO (S\$ million)			
FTO (53 million)	2016	2015	Change (%)
Singapore	198.3	203.9	(3)
China	140.1	110.7	27
India	239.5	127.3	88
Rest of Asia	16.7	51.7	(68)
Middle East & Africa	64.0	52.7	21
UK & the Americas	52.8	51.4	3
Corporate	12.3	(26.5)	NM
PFO before exceptional items	723.7	571.2	27
Exceptional items <sup>1</sup>	13.5	376.3	(96)
Total PFO	737.2	947.5	(22)
Less: Interests, taxes and non-controlling interests	(389.2)	(246.0)	(58)
Net profit	348.0	701.5	(50)

Exceptional items amounted to

2016: a total of \$\$13.5 million, comprising \$\$34.7 million from the divestment gain on the sale of the municipal water operation in Yancheng, China, less \$\$21.2 million total refinancing cost for the Thermal Powertech Corporation India power plant

2015: a total of \$\$376.3 million, comprising divestment gains of \$\$425.6 million from the sale of a waste management joint venture in Australia and municipal water operations in Bournemouth, UK and Zhumadian, China, less \$\$49.3 million comprising \$\$25.0 million from the exit of the chemical feedstock business and impairment of assets in Singapore (net of settlement amounts from customers) and S\$24.3 million in net allowance for doubtful debts in China

On a net profit basis, the Singapore business turned in S\$132.1 million, compared to S\$146.8 million in 2015. Our power business in the country continues to face intense competition. However our diversified utilities operations, supplying power, steam, natural gas, total water and wastewater treatment solutions, on-site logistics as well as solid waste management, has provided resilience.

In 2016, PFO from China operations increased to S\$140.1 million from S\$110.7 million in 2015. On a net profit basis, the business turned in a record profit of S\$124.8 million, representing a growth of 31% over 2015. Both the energy and water segments posted improvements in earnings. In addition, earnings from the country included a final dividend from the Yangcheng coal-fired power plant, for which the cooperative joint venture agreement expired in October 2016.

Meanwhile in December 2016, we completed the divestment of our 49% stake in municipal water unit Yancheng China Water Co to the local government's municipal utilities investment company. Arising from this, a divestment gain of S\$34.7 million (S\$33.5 million at net profit level) was recognised as an exceptional item.

PFO from **India** operations was S\$239.5 million in 2016 compared to S\$127.3 million in 2015, however in net profit terms the business posted a net loss of S\$16.1 million.

Sembcorp Green Infra, our India renewable energy arm, performed better in 2016 over the previous year. The unit's profits benefited from improved wind speeds in the second half of 2016 after the passing of El Niño, as well as an additional 139 megawatts of wind power coming into operation.

On the thermal power side, our first 1,320-megawatt coal-fired power plant, Thermal Powertech Corporation India (TPCIL) generated 9,091 million units and operated at an average plant load factor of 78%. Our focus during the year was stabilising the operations of the plant, and resolving teething issues typical of large-scale coal-fired

power plants in their initial stage of operations. At the operating level, TPCIL generated a healthy PFO of S\$162.1 million, and posted a net profit of S\$2.5 million after deducting financing costs and taxes. Notwithstanding this, TPCIL made good progress on the commercial front. The plant contracted 86% of its net capacity, or 1,070 megawatts, under longterm power purchase agreements, securing a steady source of recurring income. 500 megawatts have been contracted to Andhra Pradesh and Telangana for 25 years, while another 570 megawatts are contracted to Telangana for eight years. With these long-term power purchase agreements in place, we took the opportunity to refinance the project finance loan for the asset. Total refinancing cost of S\$31.0 million (at net profit level) was incurred and recognised as an exceptional item. The reduction in interest expense will more than offset this cost of refinancing over the long term. Meanwhile, our second coal-fired power plant Sembcorp Gayatri Power commenced operation of the first of two 660-megawatt generating units in November and reported a net loss for the year.

PFO from the **Rest of Asia**, where operations comprise gas-fired power plants in Vietnam and Myanmar as well as municipal water operations in Indonesia and the Philippines, declined 68% to S\$16.7 million. This was primarily due to the absence of contribution from our former waste management joint venture in Australia, which was grouped under this region prior to our divesting it in November 2015. While our build-operate-transfer Sembcorp Myingyan power project in Myanmar is still under construction, S\$231.3 million in service concession from the project was recognised in 2016 in accordance with the INT FRS 112 accounting guideline.

PFO from Middle East & Africa operations increased 21% to S\$64.0 million due to a better operating performance by our UAE operations. Meanwhile, PFO from the **UK & the Americas** was \$\$52.8 million, comparable to PFO from the region in 2015.

## Positioning the business for long-term growth

Expanding our recurring income base, deepening our presence in key markets and actively growing our renewables business

During the year, we continued efforts to position the Utilities business for the future. Firstly, we

expanded our recurring income base through focused execution of our pipeline of projects. Secondly, we continued to make progress in building strong operations in key markets to sow the seeds for future growth. Thirdly, we maintained concerted efforts to broaden and deepen our renewable energy capabilities and develop this emerging business as a new engine of growth for the Group.

### **Focused Execution of Pipeline**

In 2016, we continued to focus on execution of our project pipeline to strengthen recurring income streams for the long term. During the year, we completed and began operation of over 1,600 megawatts of power capacity, amounting to more than 40% of our pipeline of new power projects due to come onstream between 2016 and 2018. This included two 660-megawatt supercritical coal-fired units at the Sembcorp Gayatri Power and Chongqing Songzao projects in India and China, as well as our energy-from-waste project Wilton 11 in the UK. On the renewables front, increases in operating capacity included the Rojwas and Vagarai projects and part of the Ananthalli & Harpanhalli project in India, as well as part of the Huanghua Laoshibeihe wind power project in China.

In addition, we completed three industrial wastewater treatment projects in Lianyungang, Qidong and Jingmen, China.

### **2016 Project Completions**

>1,600MW and 40,000m<sup>3</sup>/day completed and commissioned in 2016

## Thermal Energy

## 1,320MW



- Sembcorp Gayatri Power (1,320MW), India – 660MW completed
- Chongqing Songzao (1,320MW), China – 660MW completed

## Renewable and **Energy-from-Waste**

## 325MW

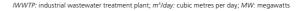


- Wilton 11 (50MW), UK
- Parner, Rajgarh (17MW), India
- Rojwas (60MW), India
- Vagarai (26MW), India
- Ananthalli & Harpanhalli (80MW), India – 36MW completed
- Huanghua Laoshibeihe (150MW), China - 136MW completed

#### Water

## 40,000 m<sup>3</sup>/day

- Lianyungang IWWTP (20,000 m<sup>3</sup>/day)
- Qidong IWWTP (10,000 m<sup>3</sup>/day)
- Jingmen IWWTP (10,000 m<sup>3</sup>/day)



## **Focused Execution of Pipeline (Cont'd)**

Looking ahead in 2017, we are targeting to complete development and commence operation of another 1,500 megawatts of power capacity. We will also begin operation of our Changzhi total water management facility, in conjunction with our anchor customer's commencement of operations.

## **Target Completions &** Commissionings

Around 2,500MW of power and over 1.3 million m<sup>3</sup>/day of water and wastewater treatment capacities to be added in 2017-2018















#### Renewable & Energy-from-Waste







Energy-from-Waste

#### Water

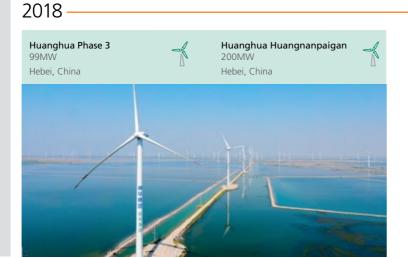


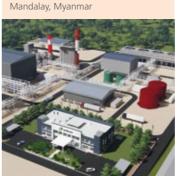
Water

<sup>1</sup> To operate in open-cycle mode in 2018

Note: Capacity refers to total gross installed capacity of facilities in operation and under development

EfW: energy-from-waste; m³/day: cubic metres per day; MW: megawatts; tph: tonnes per hour; TWMP: total water management plant





Myingyan 230MW



Sirajganj Unit 41

427MW

#### Maintaining momentum in China and India

In China, our Chongging Songzao mine-mouth coalfired power project commenced operation of its first 660-megawatt expansion unit in November 2016, followed by a second 660-megawatt expansion unit in January 2017, ahead of schedule. Together with the project's existing 300-megawatt facility, this brings the asset's total capacity to 1,620 megawatts. On the water front, we completed new industrial wastewater treatment plants in Jingmen, Hubei province and Qidong, Jiangsu province. Also in Jiangsu, we successfully completed upgrading works for a wastewater treatment plant in a chemical industrial park in Lianyungang. Following our successful reconfiguration, the plant is now able to treat industrial wastewater to meet more stringent discharge regulations imposed by the authorities. We have also built in a pre-ozonation system to treat wastewater that is not easily biodegradable, further enhancing the plant's performance and ensuring its ability to operate consistently and reliably. With increasing emphasis on environmental sustainability,

we see a growing demand for sustainable industrial wastewater treatment solutions. This pilot project will allow us to showcase our abilities in upgrading brownfield facilities, and present a new business model that we can replicate elsewhere in China and beyond.

In India, we marked a key milestone in the official opening of the Sembcorp Gayatri Power Complex in Andhra Pradesh in February 2016. The US\$3 billion (approximately S\$4 billion) power complex is the largest foreign direct investmentdriven thermal power project on a single site in India to date and houses two supercritical coal-fired power plants of 1,320 megawatts each. The first of these plants, TPCIL, commenced full commercial operations in September 2015 and achieved its first full year of operations in 2016. Meanwhile, the second plant, the Sembcorp Gayatri Power project, commenced full commercial operations in February 2017. Its first 660-megawatt unit was completed in November 2016 and its second 660-megawatt unit in February 2017.

#### **Notable Project Completions in China and India**



The 1,320-megawatt Chongging Songzao power plant in Chongging, China



An upgraded 20,000m3/day industrial wastewater treatment facility in Lianyungang, Jiangsu, China



The 1,320-megawatt Sembcorp Gayatri Power facility in Andhra Pradesh, India

## Making progress in Myanmar and Bangladesh

In addition, we also made progress in other rapidly developing economies. In Myanmar, we secured a power purchase agreement for our gas-fired combined cycle Sembcorp Myingyan power project, which has a contracted capacity of 225 megawatts. A build-operate-transfer agreement with the government was secured in January 2017. Construction for the project is progressing well and the project is on track to begin operation in 2018. Once operational, the Sembcorp Myingyan power project will be one of Myanmar's largest and most efficient gas-fired power plants, and will play a key role in meeting the country's growing demand for electricity.

Meanwhile in Bangladesh, we signed a long-term power purchase agreement for our upcoming Sirajganj Unit 4 dual-fuel combined cycle power project. Project financing was secured from the International Finance Corporation of the World Bank Group, Clifford Capital and CDC Group, the UK government's development finance institution. The World Bank Group's Multilateral Investment Guarantee Agency was also engaged to provide political risk cover. Construction for the plant, which has a contracted capacity of 414 megawatts, has commenced. At present, Bangladesh's power demand exceeds supply and per capita consumption of power remains among the lowest in the world. The government of Bangladesh is working towards providing power for all its citizens by 2021 and plans to add nearly 16 gigawatts of capacity over the next five years. Given this background, the country presents significant opportunities for Sembcorp.

#### Actively growing our renewable energy business

We remain committed in our focus to grow the renewable share of our energy portfolio. In 2016, we made good progress towards this objective.

In India, which is Sembcorp's largest market in terms of our renewable energy presence, we have reached 971 megawatts in renewable power capacity in operation and under construction. During the year, an additional 139 megawatts of wind power capacity came into operation, bringing total operating capacity to 788 megawatts. We completed a 60-megawatt project in Madhya Pradesh, a 26-megawatt project in Tamil Nadu and part of an 80-megawatt project in Karnataka. At the same time, we continue to keep an active lookout for new viable renewable projects to add to our pipeline. Demonstrating our confidence in the strong potential of the business, we increased our equity interest in India renewables arm Sembcorp Green Infra by another 4%, to 68.7%.

In China, the 150-megawatt Laoshibeihe wind farm in Huanghua, Hebei is now 97% complete. When fully completed in 2017, it will take our renewable energy operating portfolio in the country to 446 megawatts. Additionally, two new wind power projects in Huanghua, the 99-megawatt Huanghua Phase 3 and the 200-megawatt Huangnanpaigan projects, are planned for development and expected to come onstream in 2018. Our renewable power capacity in the country now totals 745 megawatts in operation and under development.

Besides expanding capacity with new projects, we have also deepened the capabilities of our renewables business. To enhance our competitiveness, we implemented key initiatives during the year to increase revenue and reduce cost. The first initiative was a performance optimisation programme driven by improvements in technology, engineering and operations. In addition, instead of outsourcing operations and maintenance, our renewables business started to implement selfperformed operations and maintenance to manage its facilities.

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## OPERATING AND FINANCIAL REVIEW UTILITIES REVIEW

#### Outlook

The World Bank expects growth in the global economy to improve in 2017, and forecasts a growth of 2.7% compared to 2.3% in 2016.

In Singapore, the Ministry of Trade and Industry forecasts the economy to expand by 1% to 3% in 2017. Meanwhile, the Economic Development Board expects fixed asset investment commitments to be between \$\$8.0 billion and \$\$10.0 billion for the year, comparable to the \$\$9.4 billion achieved in 2016. We expect the operating environment in Singapore's power sector to remain challenging, with continued intense competition. However, the performance of our centralised utilities, gas and solid waste management businesses in the country is expected to remain steady.

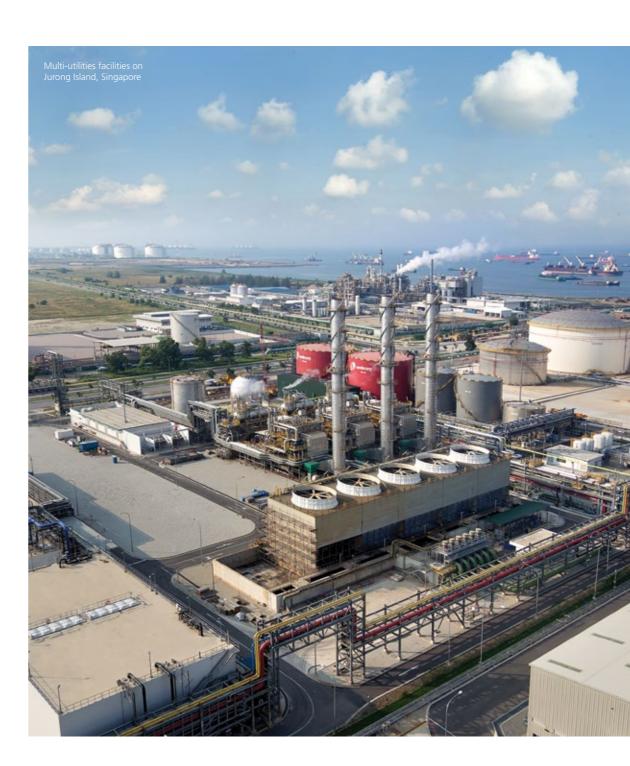
Meanwhile, China's growth is projected to moderate from 6.7% in 2016 to 6.4% between 2017 and 2019, according to World Bank forecasts. The rebalancing of the economy, from investment to consumption, and from industry to services, is expected to continue at a more measured pace. In 2016, our China Utilities business delivered record profits. Its performance in 2017 is expected to remain steady although lower than in 2016, given

the expiry of the Yangcheng cooperative joint venture agreement in 2016. In the medium to long term, we believe that China's strong emphasis on environmental protection presents opportunities for our business. For instance, the country has demonstrated its commitment to sustainability through more stringent targets to reduce water pollution, improve water quality and protect water resources in its 13<sup>th</sup> Five-year Plan, as well as through targets to increase the renewable share of its energy mix.

In India, we have a combined power capacity of over 3,600 megawatts, with two thermal power plants as well as renewable energy assets. The second thermal power plant, Sembcorp Gayatri Power, commenced full commercial operations in February 2017 but has yet to secure long-term power purchase agreements. As spot and short-term power tariffs remain weak, its performance is expected to be adversely affected.

Operating performance in the other regions is expected to be stable.

The Utilities business will remain focused on operational excellence as well as the execution of its pipeline of projects to deliver long-term growth.



## **OPERATING AND FINANCIAL REVIEW**

#### MARINE REVIEW



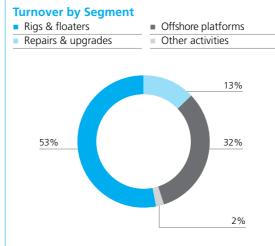
## **Competitive Edge**

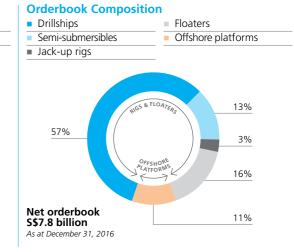
- A global leader in integrated offshore and marine solutions with more than 50 years' proven track record
- Able to offer diversified, innovative solutions across the offshore and marine value chain, both within and beyond the oil and gas sector
- Established capabilities in rigs & floaters, repairs & upgrades, offshore platforms and specialised shipbuilding
- Global network with yard facilities strategically located in Singapore, Indonesia, India, the UK and Brazil

#### **Performance Scorecard**

2016	2015	Change (%)
3,544.8	4,968.1	(29)
384.5	501.1	(23)
170.7	(342.0)	NM
205.8	(168.5)	NM
(35.1)	(173.5)	80
78.8	(289.7)	NM
3.1	(10.6)	NM
	3,544.8 384.5 170.7 205.8 (35.1) 78.8	3,544.8 4,968.1 384.5 501.1 170.7 (342.0) 205.8 (168.5) (35.1) (173.5) 78.8 (289.7)

Operational Indicators (S\$ billion)	2016	2015
Net orderbook	7.8	10.4





# Key Developments



Successfully delivered key projects to customers, improving cash flows and strengthening the business' balance sheet



Made strategic acquisitions to deepen proprietary design and engineering capabilities and support diversification. These included investments in Gravifloat, Aragon and LMG Marin, amongst others



Completed Phase II of the Sembcorp Marine Tuas Boulevard Yard in January 2017

## **Operating and Financial Review**

# Disciplined execution amidst a challenging macro environment

Despite a challenging macro environment and uncertainty in the oil and gas sector, the Marine business returned to profitability in 2016.

Turnover was \$\$3.5 billion, compared to \$\$5.0 billion in 2015. Profit from operations was \$\$170.7 million, compared to negative \$\$342.0 million in 2015. Net profit was \$\$78.8 million compared to a net loss of \$\$289.7 million in 2015.

In 2015, Sembcorp Marine had made impairment and provisions totalling \$\$609 million for its rig contracts, comprising \$\$329 million for the Sete Brasil contracts and \$\$5\$280 million for the deferment and possible cancellation of rigs. The business regularly reviews the adequacy of the provisions, and in its latest review determined that the provisions remain adequate under the present circumstances.

#### Focused execution of orderbook

Despite uncertainty in the industry, Sembcorp Marine stayed focused and disciplined in the execution of its orderbook. Key projects were completed and handed over to customers in 2016, generating significant operating cash flows and a stronger balance sheet.

The Marine business continued to actively pursue opportunities in spite of challenging market conditions. A total of \$\$320 million in new contracts was secured during the year. At the end of 2016, net orderbook stood at \$\$7.8 billion. Excluding the Sete Brasil contracts, net orderbook stood at \$\$4.7 billion. The majority of projects in the current net orderbook are based on progressive payment terms.

Sembcorp Marine has continued to make good progress on the execution of its current orderbook. Leveraging the capabilities of the state-of-the-art Tuas Boulevard Yard and other facilities in Singapore, the business has been able to secure and deliver mega construction projects which were previously undertaken by competitors outside of

Singapore. Examples of such projects currently under construction include: a semi-submersible crane vessel for Heerema, a newbuild floating storage and offloading (FSO) vessel for MODEC, and harsh environment topside modules for Maersk Oil targeted for deployment in the Culzean field. In addition, work is also progressing on the floating production storage and offloading vessels

(FPSOs) Pioneiro de Libra, Kaombo Norte, Kaombo Sul and Gina Krog.

Over in Brazil, the Estaleiro Jurong Aracruz yard made good progress on the construction and integration of topside modules for Petrobras' *P-68* and *P-71* FPSOs. A number of repair and upgrading jobs on vessels were also completed at the yard during the year.

#### **Notable Deliveries in 2016**



**Safe Zephyrus**A harsh environment accommodation semi-submersible unit for Prosafe



**Noble Lloyd Noble**The world's largest ultra highspecification harsh environment
jack-up rig, for Noble Corporation



**Professor John Evans Atta Mills**An FPSO conversion for MODEC



**Maersk Highlander**A harsh environment jack-up rig for operations in the Culzean Field, for Maersk Oil



Platform topsides for *Ivar Aasen*development
Process, drilling and quarters
platform topsides for Det Norske



**Dudgeon offshore substation platform**An offshore substation platform for

An offshore substation platform for the Dudgeon Offshore Wind Farm, for Siemens

## A Next-Generation Fully Integrated Offshore and Marine Engineering Hub

Sembcorp Marine Tuas Boulevard Yard, Singapore



- Sembcorp Marine recognises the need to deepen and broaden its yard capabilities to enable cost-effective execution and maintain global competiveness.
- Its new flagship yard at Tuas Boulevard has unlocked new opportunities and enabled the business to move up the value chain and take on projects of greater complexity and scale.
- The new yard's capabilities also boost Sembcorp Marine's long-term competitiveness against other global players.

#### Drydocks

- 350m x 66m x (-8.5m)
- 2 360m x 89m x (-8.5m)
- 3 412m x 66m x (-11m)
- 4 350m x 66m x (-8.5m)
- 5 6 255m x 52m x (-8m)
  - 255m x 110m x (-12m)

## Steel Structure **Fabrication Workshop**

Offers a streamlined and extensively automated production process. The central kitchen for steel fabrication for all three phases of the yard, greatly improving efficiency

#### **Natural deep waters**

Special reinforced load-out areas for offshore modules of up to 20,000 tonnes

Three finger piers and a basin ranging from 210m to 400m with maximum draft from 9m to 15m

dwt: deadweight tonnes; m: metres

Enables installation of semi-submersible thrusters without towing the rig to sea

Enables direct lifting and deployment of topside modules onto hulls without requiring the hulls to be towed out to sea

Enables ultra-deepwater semi-submersibles and cruise ships to be berthed without restrictions

## Monitoring developments on deferred projects, actively engaging with customers

Sembcorp Marine continues to monitor developments relating to deferred rigs and drillship projects, while taking the appropriate actions to protect its interests in these contracts.

While Sembcorp Marine has agreed with some customers to defer the delivery of their jack-up rigs, these rigs have already been technically accepted by the same customers. The business is evaluating different courses of action for these rigs, including sales to third parties. In 2016, a customer, Perisai, announced its insolvency and plans to undergo financial restructuring. Our Marine business has taken steps to protect its interests in the two rigs that have been completed and technically accepted by Perisai. Meanwhile, the standstill agreement with North Atlantic Drilling for the West Rigel semi-submersible rig has been further extended to July 6, 2017, whilst North Atlantic Drilling and Sembcorp Marine continue to market the unit for charter or sale.

In 2016, the business' customer, Sete Brasil, filed for judicial restructuring and submitted its restructuring plans. In connection with this, Sembcorp Marine commenced arbitration proceedings against various subsidiaries of Sete Brasil to preserve its interests under the Sete Brasil contracts. Discussions between Sete Brasil and its creditors, shareholders and other stakeholders are ongoing to find equitable solutions. Without prejudice to its ongoing arbitration proceedings, Sembcorp Marine continues to engage with Sete Brasil, in order to monitor the situation and any implications for its business.

### **Managing costs tightly**

During these tough times, the Marine business continues to focus on liquidity, costs and balance sheet management. This includes active management of manpower requirements in line with changing needs.

Sembcorp Marine's overall strategy is to ensure long-term workforce sustainability. To this end, it has sought to maintain and enhance capabilities required for the safe, efficient and effective execution of its projects, while positioning itself for the market's eventual recovery.

With the increase in activities to serve the non-drilling segment, the business has been actively reallocating excess manpower from drilling to non-drilling projects, whilst being mindful not to compromise safety or the quality of execution. It has optimised the number of sub-contractors in its yards in line with the volume of work and allowed for natural attrition of its employees. In addition, it has taken measures to reduce operating costs through salary freezes and adjustments to variable remuneration components for management since 2015. At the same time, the business has sought to strengthen its capabilities in support of future growth in new segments, through selective recruitment, skills training and upgrades. In particular, this has been to strengthen its expertise in near-shore gas infrastructure solutions.

In January 2017, Phase II of the Tuas Boulevard Yard was completed, offering further opportunities to optimise yard capacities and realise operational efficiencies. The business intends to maximise utilisation of the Tuas Boulevard Yard, while reviewing the schedule for the return of other Singapore yards at or before their lease expiry dates. To date, the Marine business has returned the Pulau Samulun Yard to the Singapore government, and in 2017, the Shipyard Road Yard and Tuas Road Yard are scheduled to be returned. To date, most of the business' capital expenditure for new yard infrastructure has been expended. Going forward,

## OPERATING AND FINANCIAL REVIEW | MARINE REVIEW

capital expenditure for yards that is required for execution of secured contracts, or which will realise cost savings, will proceed. Meanwhile, non-essential capital expenditure will be deferred. The business will also explore potential for cost savings by further optimising the rate of development of its Tuas Boulevard Yard.

## Diversifying solutions, targeting new customers and positioning the business for the future

To position itself for the future, the Marine business made several selective strategic acquisitions in 2016 to enhance its proprietary design and engineering capabilities. These investments support its push to diversify its offering and expand beyond drilling solutions to non-drilling solutions. They will also strengthen the business' ability to offer innovative solutions across the offshore and marine value chain, both within and outside the oil and gas sector.

One area where we have identified potential opportunities is in offering innovative solutions to players in the gas value chain. This is given greater interest in the use of gas, a cleaner fuel, in power generation, bunkering and other operations. In March, our Marine business acquired an additional 44% equity stake in Gravifloat, increasing its ownership to 56%. Gravifloat designs and holds patents for a suite of cost-effective, redeployable, modularised near-shore solutions. These include import and export terminal infrastructure for treatment, storage, liquefaction, regasification

and offloading of liquefied natural gas (LNG) and liquefied petroleum gas (LPG). Already, these solutions are attracting market interest. In 2016, the business entered into a memorandum of understanding with ENGIE to collaborate on the use of Gravifloat technology in integrated solutions for near-shore receiving, storage and regasification of LNG as well as power generation. As a Group, we are also exploring opportunities for potential collaboration between the Marine and Utilities businesses. In addition, in June the Marine business acquired a 50% stake in process design and engineering group Aragon. Aragon's customised solutions for the FPSO market enhance the business' capabilities to serve the production segment of the oil and gas sector.

In August, the Marine business also acquired 100% of LMG Marin, a Norway-based naval architecture company with expertise in naval design, engineering and technology development. The company originated several key designs adopted by Sembcorp Marine over the years, including the nextgeneration Espadon drillship design, a newbuild FSO vessel design and Gravifloat's modular platform solutions. In the same month, the Marine business also acquired the remaining 15% of PPL Shipyard, obtaining sole ownership of the yard which has helped propel it to be a global player in the rig market over the years. Having full control of the vard's operations will allow Sembcorp Marine to manage its resources optimally and better align the yard with its overall strategic direction.

## A Focus on New Technologies and Solutions

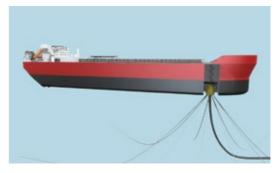
Diversifying product capabilities



Gravifloat Modularised LNG and LPG terminals



SSP Offshore Next-generation circular hull forms



LMG Marin Advanced ship design and engineering

### **FEATURE** What are Gravifloat solutions?

- Gravifloat solutions are steel-based modularised and floatable structures fixed to the seabed in shallow waters. They present a compelling alternative to onshore LNG terminals and floating liquefied natural gas (FLNG) units
- These structures are scalable and can be redeployed to other locations
- Gravifloat structures are completely constructed at Sembcorp Marine yards, with topsides included, tested and pre-commissioned prior to their delivery to site and installation in shallow waters
- Gravifloat is flexible in accommodating various topside functions, from LNG liquefaction plants for LNG exports to LNG regasification plants for LNG imports. In addition to accommodating LNG import solutions, Gravifloat structures can also house simple or combined cycle power plants

Various applications of Gravifloat's designs:



GF-SRU A floating LNG storage and regasification unit



GF-Power A small-scale floating combined cycle gas turbine power plant running on LNG with an integrated terminal and storage and regasification capabilities



GF-LNG Integrated floating LNG terminals, liquefaction plants and export terminals



GF-Bunkering Terminal Floating storage facilities for redistribution and / or bunkering

#### **Outlook**

While prospects for the oil and gas industry have taken a more positive turn following the November 2016 agreement by the Organization of the Petroleum Exporting Countries (OPEC) and major non-OPEC countries to cut production, Sembcorp Marine believes that a more robust recovery may take longer. Despite the challenging outlook and intense competition, the business believes that growth prospects for the offshore and marine industry remain positive in the medium to long term.

With increasing enquiries for non-drilling solutions, an earlier recovery in demand for fixed platforms, FPSO and FSO conversions and newbuilds in the next few years is foreseeable. Rising global demand for gas also augers well for broad-based LNG solutions and capabilities. Sembcorp Marine believes that these are the key segments that will offer opportunities in 2017.

The Marine business' strategy and focus remain anchored on strengthening and optimising its talent pool, pursuing operational excellence in executing its projects, investing in new capabilities, products and technological innovation to help grow its orderbook and prudently managing its financial resources to preserve financial flexibility and ensure the overall sustainability of its business.

## **OPERATING AND FINANCIAL REVIEW**

## URBAN DEVELOPMENT REVIEW



### **Competitive Edge**

- Over 20 years' track record in undertaking master planning, land preparation and infrastructure development to transform raw land into urban developments
- Significant land bank of integrated urban developments comprising industrial parks as well as business, commercial and residential space in Vietnam, China and Indonesia
- A valued partner to governments, with the ability to deliver the economic engine to support industrialisation and urbanisation by attracting local and international investments

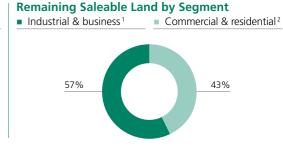
#### **Performance Scorecard**

Financial Indicators (S\$ million)	2016	2015	Change (%)
Turnover <sup>1</sup>	11.2	12.2	(8)
Profit from operations	38.4	38.5	_
– Earnings before interest and tax	(11.9)	(7.0)	(70)
– Share of results: Associates & JVs, net of tax	50.3	45.5	11
Net profit	33.3	33.5	(1)
Return on equity (%)	3.9	4.2	(7)

Most of our Urban Development businesses are associates or joint ventures. Turnover reflected consists of payment for services provided to these associates or joint ventures

Operational Indicators (hectares)	2016	2015
Saleable land inventory	5,729	5,669
Land sold (cumulative)	2,061	1,860
Net orderbook	240	220
Land available for sale	3,428	3,589





- <sup>1</sup> Industrial & business land includes space for general and high-tech manufacturing, research and development, as well as business and technology incubators
- <sup>2</sup> Commercial & residential land includes space for food and beverage businesses, malls, hotels, serviced apartments and modern services such as accounting and legal firms, consultancies and corporate headquarters

#### **Key Developments**



Celebrated the 20th anniversary of Vietnam Singapore Industrial Park (VSIP). With seven projects across the country, VSIP has become a showcase of successful economic cooperation and close bilateral ties



Broke ground for the Nanjing International Water Hub on the Sino-Singapore Nanjing Eco Hi-tech Island in March. Construction is progressing well, with completion targeted for 2018



Officially opened Park by the Bay, a new 2,700-hectare integrated township in Semarang, Central Java, Indonesia

## **Operating and Financial Review**

# Strong Vietnam performance but higher costs

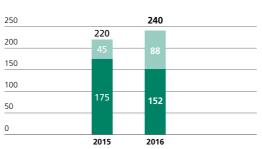
The Urban Development business turned in steady profits in 2016. Profit from operations (PFO) stood at \$\$38.4 million compared to \$\$38.5 million in 2015, while net profit was \$\$33.3 million compared to \$\$33.5 million the previous year. While Vietnam operations turned in a better performance, the business incurred higher corporate costs and pre-operating costs from new projects.

In 2016, the business sold a total of 201 hectares of land. Land sales in Vietnam increased 9% to 163 hectares from 149 hectares in the previous year, driven by robust demand for industrial land at the Vietnam Singapore Industrial Park (VSIP) projects. Land sold in China totalled 30 hectares compared to 60 hectares in 2015, due to delayed land sales in Nanjing.

Land commitments received from customers remained healthy at 221 hectares, bringing the business' net orderbook to 240 hectares as at the

#### Net Orderbook (hectares)

- Industrial & business land
- Commercial & residential land<sup>2</sup>



- Industrial & business land includes space for general and high-tech manufacturing, research and development, as well as business and technology incubators
- <sup>2</sup> Commercial & residential land includes space for food and beverage businesses, malls, hotels, serviced apartments and modern services such as accounting and legal firms, consultancies and corporate headquarters

end of 2016. This included a sizeable 42.6-hectare site on the Sino-Singapore Nanjing Eco Hi-tech Island, for which an auction closed in December. Profit from the sale of this site will be recognised in 2017.

## **Development Progress in Vietnam**



VSIP Hai Phong in northern Vietnam has attracted US\$1.5 billion in investment capital from tenants



Seven out of 14 manufacturers have commenced operations at VSIP Quang Ngai in central Vietnam

#### Vietnam

Our Vietnam business continued to perform well in 2016.

Positive investor sentiment towards the country's manufacturing sector continued to drive take-up for industrial and business land, which accounted for 98% of land sold. Commercial and residential land accounted for the remaining 2% of land sales.

In September, VSIP celebrated its 20<sup>th</sup> anniversary with an event graced by the Deputy Prime Ministers of Singapore and Vietnam. This gesture signifies the success of VSIP as a showcase of successful economic cooperation and close bilateral ties. Since its founding in 1996, VSIP has evolved into a leading developer in Vietnam with seven projects across the southern, central and northern economic corridors of the country spanning 6,660 hectares in gross project size. It has drawn US\$9.4 billion in total investment

capital from 670 companies, and created more than 183,000 jobs. With demand for land at its projects remaining strong, VSIP signed memoranda of understanding with the People's Committees of Binh Duong and Bac Ninh provinces to explore the feasibility of new expansions in these provinces. These could potentially add 1,500 hectares to VSIP's current land bank.

During the year, we launched the first phase of our residential project, *The Habitat Binh Duong*. Located in Thuan An District at our first VSIP, the condominium will cater to the needs of tenants of VSIP as well as professionals working in the province. The initial launch of 139 units was well received, and a further 128 units were released for sale at the end of October. As at end December, 184 units or 69% of the project have been taken up. Construction of the project is on track for handover of units to buyers in 2017, upon which profits from the sale of these units will be recognised.

#### **Development Progress in China**



The Singapore-Sichuan Hi-tech Innovation Park completed the west zone of Xinchuan Heartbeat Central Park in 2016. This scenic 18-hectare public park has resulted in stronger uptake and enhanced prices for land parcels in the vicinity



Island Residences, a residential project on the Sino-Singapore Naniing Eco Hi-tech Island co-owned by Sembcorp Development, was launched and sold out in August

#### China

During the year, our 1,000-hectare Singapore-Sichuan Hi-tech Innovation Park project attracted RMB 4.7 billion in investment from companies in the interactive digital media sector, adding to the RMB 9.5 billion of investments attracted in 2015 from biomedical science companies. This has firmly established it as a home for high-technology companies in Chengdu.

We have completed development of the 18-hectare west zone of the Xinchuan Heartbeat Central Park, a public park featuring scenic man-made lakes. The park is the first of three major landscaped areas anchoring the live-and-play areas of Singapore-Sichuan Hi-tech Innovation Park. Already, its partial completion has enhanced the value of land in the vicinity and improved take-up.

In recognition of the Singapore-Sichuan Hi-tech Innovation Park's success in attracting investors, as well as its progressive concept, green

building design standards and ecological initiatives, Sichuan's Provincial Department of Housing and Urban-Rural Development has selected it as a provincial-level eco-city showcase project. It is the only development in Chengdu to receive this honour.

Meanwhile, at the Sino-Singapore Nanjing Eco Hi-tech Island project, performance was affected by the timing of land sales. In December, we sold a 42.6-hectare commercial and residential plot on the eco-island for which the profit will be recognised in 2017. In addition, our jointly developed and 21.5%-owned Island Residences condominium, located within the eco-island's upcoming New One North mixed development, was launched in August. The launch was well received and the project's 182 units of 34,243 square metres gross floor area were sold out. Profits from these sales will be recognised in 2018, when construction is completed and the apartments are handed over to buyers.

In March, we broke ground for our Nanjing International Water Hub project on the Sino-Singapore Nanjing Eco Hi-tech Island. Targeted for completion in 2018, the water hub will feature fully equipped research and development (R&D) facilities, as well as office and conference space. It aims to bring together leading investors and operators of water facilities, technology and R&D providers, government agencies, academia as well as research institutes, to create a vibrant industry ecosystem. So far, four water technology companies have signed letters of intent to set up at the water hub, joining respected state-level water research institutes that are backed by local universities in Nanjing.

Over in Wuxi, our Wuxi-Singapore Industrial Park continued to generate healthy revenue from electricity and rental income. Average occupancy rates for its ready-built and built-to-specifications factories remained at healthy levels of above 85%. In light of the continued demand for industrial space in the industrial park, we are developing an additional 30,000 square metres of standard factory space, targeted for completion in 2017.

#### Indonesia

In November, we celebrated the official opening of Park by the Bay, our 2,700-hectare integrated township project in Semarang, Central Java. The occasion was graced by the President of Indonesia and the Prime Minister of Singapore. The project is set to form the economic engine to draw investment and create jobs for the region.

The first integrated township of its kind in Central Java, Park by the Bay is a coastal development located along the Jakarta-Semarang-Surabaya Economic Corridor, which includes industrial, commercial as well as residential space to be developed over several phases. Its master plan features themed industrial clusters such as Fashion City, Food City, Furniture Hub and Building Materials Zone. Each will target companies involved in various stages of the industry value chain, from the processing of raw materials, to design, manufacture and marketing of finished products. In addition, the project will have commercial space for trade shows and retail activities.

Land and infrastructure development have commenced for the project's 860-hectare first phase. So far, the project has received an encouraging level of interest. In total, 27 companies have indicated interest to set up operations in the township, bringing in more than US\$330 million in investments and creating 4,000 jobs to support their initial operations.

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## OPERATING AND FINANCIAL REVIEW | URBAN DEVELOPMENT REVIEW

#### Outlook

In 2016, Vietnam's gross domestic product (GDP) grew by 6.2%, with manufacturing and merchandise trade as the country's main economic drivers. Foreign direct investments increased 9% to US\$15.8 billion. Favourable labour costs and tax incentives available in Vietnam, as well as the country's proximity to Asian markets, continue to make the country attractive to international manufacturers. Reflecting the buoyant investment climate, VSIP has a healthy orderbook for 2017.

In 2016, China's GDP grew 6.7%. While this was below the country's target, it nonetheless represented one of the highest rates of growth among major economies. As China focuses on restructuring its economy and developing value-added industries, we have positioned our projects to attract investments from high-technology and innovation-driven sectors. Given improved infrastructure at our Chengdu and Nanjing projects, auction prices for land have increased. This is set to lift contributions from our China projects. However, the timing of land sales at our China businesses will continue to be dependent on auction schedules set by the government. For 2017, we can look forward to improved contributions from our Nanjing project, when the profit from the sale of a 42.6-hectare commercial and residential site will be recognised following the close of a tender for it in December 2016.

Meanwhile, Indonesia recorded GDP growth of 5.0% for the full year with its manufacturing purchasing managers' index contracting below 50 by the end of December. Notwithstanding this, our *Park by the Bay* project has drawn a respectable orderbook for 2017, following the official opening of the project in 2016. The project may also benefit from major infrastructure improvements by the government going forward.

The Urban Development business has a healthy orderbook totalling 240 hectares of land, comprising 152 hectares of industrial and business land and 88 hectares of commercial and residential land. The business remains well positioned as one of the most established players in the region, with a strong track record in land development. Its wholly-owned subsidiary, Sembcorp Properties, launched a residential project in Vietnam in 2016 and commenced the design and development of two projects in China. These initiatives are expected to yield good contributions to the Urban Development business over the next two years.

The Urban Development business is expected to deliver a better performance in 2017, underpinned by land sales in Vietnam, China and Indonesia.

