

Group Financial Review

Financial Highlights

| | 2023 | 2022 ¹ | Change (%) |
|--|---------------|-------------------|------------|
| For the year <i>(S\$ million)</i> | | | |
| Turnover | 7,042 | 7,825 | (10) |
| Gas and Related Services | 5,457 | 6,547 | (17) |
| Renewables | 703 | 503 | 40 |
| Integrated Urban Solutions | 418 | 444 | (6) |
| Decarbonisation Solutions | 16 | 3 | NM |
| Other Businesses and Corporate | 448 | 328 | 37 |
| Earnings before interest, tax, depreciation and amortisation (EBITDA) ² | 1,789 | 1,308 | 37 |
| Share of results: associates and joint ventures, net of tax | 264 | 248 | 6 |
| Adjusted EBITDA | 2,053 | 1,556 | 32 |
| Profit before tax | 1,230 | 865 | 42 |
| Net profit before exceptional items | 1,018 | 739 | 38 |
| Gas and Related Services | 809 | 622 | 30 |
| Renewables | 200 | 141 | 42 |
| Integrated Urban Solutions | 121 | 150 | (19) |
| Decarbonisation Solutions | (13) | (3) | NM |
| Other Businesses and Corporate | (99) | (171) | 42 |
| Exceptional items | 2 | (35) | NM |
| Net profit from continuing operations | 1,020 | 704 | 45 |
| Net profit from discontinued operation | (78) | 144 | NM |
| Net profit | 942 | 848 | 11 |
| Capital position <i>(S\$ million)</i> | | | |
| Owners’ funds | 4,588 | 3,977 | 15 |
| Total assets | 15,497 | 16,020 | (3) |
| Net debt | 6,487 | 5,816 | 12 |
| Operating cash flow | 1,481 | 1,652 | (10) |
| Free cash flow | 1,962 | 1,722 | 14 |
| Capital expenditure and equity investment | 1,566 | 1,747 | (10) |
| Shareholder returns | | | |
| Net assets per share <i>(S\$)</i> | 2.58 | 2.24 | 15 |
| Earnings per share <i>(cents)</i> | 52.83 | 47.59 | 11 |
| Earnings per share – continuing operations <i>(cents)</i> | 57.21 | 39.51 | 45 |
| Dividends per share <i>(cents)</i> | 13.00 | 12.00 | 8 |
| Last traded share price ³ <i>(S\$)</i> | 5.31 | 3.38 | 57 |
| Total shareholder return (%) | 62 | 73 | (15) |

NM: not meaningful

¹ Following shareholders’ approval of the sale of Sembcorp Energy India Limited (SEIL), SEIL was classified as a disposal group held for sale and as a discontinued operation

² EBITDA excludes major non-cash items such as effects of fair value adjustments, re-measurements, impairments, and write-offs

³ As at December 31 of the respective years

Overview

In 2023, Sembcorp continued to accelerate its portfolio transformation through disciplined investments in greenfield and brownfield renewables assets as well as organic growth. The Group achieved a 45% increase in net profit to S\$1 billion from continuing operations, attributable to higher earnings from the Gas and Related Services and Renewables segments.

In January 2023, the Group completed the sale of SEIL. Accordingly, the financials of SEIL were reported as a discontinued operation. A S\$78 million loss on disposal of SEIL was recognised in 2023, due to the realisation of an accumulated foreign currency translation loss recognised in the foreign currency translation reserve, offset by a gain in capital reserve and other reserves. Including discontinued operation, the Group reported a net profit of S\$942 million, 11% higher than S\$848 million in 2022.

In November 2023, the Group announced its 2024–2028 strategic plan, reaffirming its commitment to transform its portfolio from brown to green. The Group’s business is now categorised into five main segments, namely Gas and Related Services, Renewables, Integrated Urban Solutions, Decarbonisation Solutions and Other Businesses and Corporate, with comparatives re-presented accordingly.

Turnover

The Group’s turnover from continuing operations decreased by S\$783 million or 10% to S\$7.0 billion in 2023, from S\$7.8 billion in 2022.

The Gas and Related Services segment’s turnover of S\$5.5 billion was 17% or S\$1.1 billion lower than 2022. The decrease was attributed to lower gas sales revenue in Singapore and lower power prices in the UK.

Revenue from the Renewables segment increased by 40% to S\$703 million, compared to S\$503 million in 2022. The increase was attributable to acquisitions in India and China, higher operational capacity as well as contribution from the new energy storage system in Singapore.

The Integrated Urban Solutions segment recorded a turnover of S\$418 million, 6% lower than 2022 due to the cessation of a public waste collection contract in the Singapore waste management business.

The Decarbonisation Solutions segment comprises business activities from the Group’s carbon management business, GoNetZero™, low-carbon feedstock (green hydrogen and ammonia), power imports as well as carbon capture, utilisation and storage businesses. In 2023, GoNetZero™ reported a turnover of S\$16 million.

The Other Businesses and Corporate segment reported a turnover of S\$448 million, 37% higher compared to 2022, from higher activities in the construction business.

Net Profit

Net profit from continuing operations before exceptional items increased 38% to S\$1 billion, achieved through better performance from the Gas and Related Services and Renewables segments.

Including the discontinued operation, net profit after exceptional items in 2023 was S\$942 million compared to S\$848 million in 2022.

In 2023, the Gas and Related Services segment delivered a net profit before exceptional items of S\$809 million, compared to S\$622 million in 2022. The better performance was driven by the cogeneration power plants in Singapore, which continued to capture value in periods of high power prices through the optimisation of generation assets and fuel sources. The better performance was offset by lower power prices in the UK. Given the escalating conflict in Myanmar since October 2023, the credit risk on the service concession receivables for Sembcorp Myingyan Power Company Limited (SMPC) was assessed to have increased. An expected credit loss provision of S\$18 million was made for SMPC in 2023 (2022: S\$81 million).

The Renewables segment recorded a net profit before exceptional items of S\$200 million, 42% higher compared to S\$141 million in 2022. This was mainly driven by contributions from the completed acquisition in India, full-year contribution from acquisitions in China, and higher margins achieved as a result of higher energy prices for the Singapore solar business.

Net profit before exceptional items from the Integrated Urban Solutions segment was S\$121 million compared to S\$150 million in 2022. The lower net profit was due to lower commercial and residential land sales in Vietnam and the absence of a one-time termination fee received from a customer in China in 2022. Excluding the one-off termination

fee, earnings from the water business would have been higher year-on-year.

Cash Flow and Liquidity

As at December 31, 2023, the Group’s cash and cash equivalents in the cash flow statement stood at S\$732 million. Net cash from operating activities stood at S\$1.5 billion, compared to 2022 of S\$1.7 billion. 2022 amounts included cash flow from SEIL. Post disposal of SEIL, the consideration was received in the form of deferred payment note receipts, which is now recognised as cash from investing activities.

Net cash used in investing activities was S\$878 million, mainly for the acquisitions of renewables portfolios such as Vector Green in India, as well as Qinzhou Yuanneng Wind Power and Binyang County Santai Energy Technology in China totalling S\$502 million, and the purchase of property, plant and equipment of S\$826 million. The cash used in investing activities was offset by receipts of S\$355 million from the deferred payment note.

Net cash used in financing activities was mainly due to interest payments and net repayment of loans of S\$772 million, as well as dividend payments to shareholders of S\$231 million.

Financial Position

Group shareholders’ funds increased to S\$4.6 billion as at December 31, 2023, from S\$4.0 billion as at December 31, 2022. The increase was mainly due to higher profit for the year offset by dividends to shareholders, loss on fair value changes and increased foreign currency translation loss mainly from the depreciation of the Indian Rupee and Chinese yuan against the Singapore dollar.

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The net reduction in total assets was mainly because of the disposal of SEIL’s net assets, previously classified as assets and liabilities held for sale, net of increase in property, plant and equipment, including the effect of consolidation of the subsidiaries acquired during the year.

The lower cash balance resulted from the Group’s proactive capital management, where excess cash was deployed to fund investments and repayment of borrowings.

Net Debt

Gross debt was S\$7.3 billion as at December 31, 2023 compared to S\$7.1 billion in 2022. Net debt was S\$6.5 billion as at December 31, 2023 compared to S\$5.8 billion in 2022. The S\$671 million increase in net debt was largely due to the consolidation of borrowings of the subsidiaries acquired, offset by repayments of borrowings during the year.

Shareholder Returns

In 2023, the return on equity of the Group’s continuing operations

was 23.8% and earnings per share was 52.8 cents. Subject to approval by shareholders at the upcoming annual general meeting in April 2024, a final dividend of 8.0 cents per ordinary share has been proposed. Together with the interim dividend of 5.0 cents per ordinary share paid in August 2023, this brings the Group’s total dividend for the financial year ended December 31, 2023, to 13.0 cents per ordinary share, an increase from 12.0 cents per ordinary share in 2022.

Five-year Financial Performance

| | 2023 | 2022 ¹ | 2021 | 2020 ² | 2019 |
|--|--------------------|-------------------|---------|----------------------|---------|
| For the year (<i>S\$ million</i>) | | | | | |
| Turnover | 7,042 | 7,825 | 7,795 | 5,447 | 9,618 |
| Earnings before interest, tax, depreciation and amortisation (EBITDA) ³ | 1,789 | 1,308 | 1,288 | 1,184 | 1,535 |
| Share of results: associates and joint ventures, net of tax | 264 | 248 | 206 | 233 | 184 |
| Adjusted EBITDA | 2,053 | 1,556 | 1,494 | 1,417 | 1,719 |
| Profit before tax | 1,230 | 865 | 423 | 211 | 295 |
| Net profit from continuing operations | 1,020 | 704 | 279 | 157 | 247 |
| Discontinued operation | (78) | 144 | – | (1,154) ⁴ | – |
| Net profit | 942 | 848 | 279 | (997) | 247 |
| At year end (<i>S\$ million</i>) | | | | | |
| Property, plant and equipment, and investment properties | 6,618 | 5,438 | 7,232 | 7,339 | 12,331 |
| Other non-current assets | 6,173 | 4,074 | 3,230 | 3,219 | 4,826 |
| Net current (liabilities) / assets | (770) ⁵ | 1,687 | 1,028 | 877 | 83 |
| Non-current liabilities | (7,149) | (6,983) | (7,572) | (7,959) | (9,361) |
| Net assets | 4,872 | 4,216 | 3,918 | 3,476 | 7,879 |
| Share capital and reserves | 4,588 | 3,977 | 3,767 | 3,339 | 6,871 |
| Non-controlling interests | 284 | 239 | 151 | 137 | 1,008 |
| Total equity | 4,872 | 4,216 | 3,918 | 3,476 | 7,879 |
| Per share | | | | | |
| Earnings (<i>cents</i>) | 52.83 | 47.59 | 15.64 | (56.81) | 11.81 |
| Net assets (<i>S\$</i>) | 2.58 | 2.24 | 2.12 | 1.87 | 3.85 |
| Dividends (<i>cents</i>) | 13.0 | 12.0 | 5.0 | 4.0 | 5.0 |

¹ Following shareholders’ approval of the sale of SEIL on November 8, 2022, the performance of SEIL for the period was reported under discontinued operation

² Following the completion of the distribution *in specie* of ordinary shares in the capital of Sembcorp Marine to Sembcorp Industries shareholders, the performance of the Marine business for the period from January 1, 2020, to September 11, 2020, was reported as a discontinued operation

³ EBITDA excludes major non-cash items such as the effects of fair value adjustments, re-measurements, impairments, and write-offs

⁴ Loss from discontinued operation included fair value loss of S\$970 million on distribution *in specie* of ordinary shares in the capital of Sembcorp Marine

⁵ The Group’s net current liabilities position in 2023 was transitional, as approximately 85% of the total S\$1.3 billion borrowing due within the next 12 months is in various stages of being refinanced and 15% is under project finance amortised repayments. The Group has S\$1.9 billion of committed unutilised credit facilities available for drawdown with maturity beyond 2024

Value Added and Productivity Data

In 2023, the Group’s total value added was S\$2.6 billion. This was absorbed by employees in wages, salaries and benefits of S\$509 million, by governments in income and other taxes of S\$187 million and by providers of capital in interest, dividends and distribution of S\$642 million, leaving a balance of S\$1.3 billion reinvested in business

Value added statement (*S\$ million*)

| | 2023 ¹ | 2022 ¹ | 2021 | 2020 | 2019 |
|---|-------------------|-------------------|---------|---------|---------|
| Value added from | | | | | |
| Turnover | 7,042 | 7,825 | 7,795 | 5,447 | 9,618 |
| Less: Bought-in materials and services | (4,886) | (6,100) | (6,115) | (4,075) | (7,458) |
| Gross value added | 2,156 | 1,725 | 1,680 | 1,372 | 2,160 |
| Investment, interest and other income | 305 | 299 | 216 | 228 | 526 |
| Share of results: associates and joint ventures, net of tax | 264 | 248 | 206 | 233 | 184 |
| Other non-operating expenses | (77) | (96) | (67) | (88) | (147) |
| | 2,648 | 2,176 | 2,035 | 1,745 | 2,723 |

Distribution

| | | | | | |
|---|-------|-------|-------|-------|-------|
| To employees in wages, salaries and benefits | 509 | 485 | 494 | 396 | 820 |
| To government in income and other taxes | 187 | 116 | 62 | 37 | 233 |
| To provider of capital in: | | | | | |
| Interest on borrowings | 410 | 309 | 423 | 461 | 586 |
| Dividends to owners | 232 | 124 | 107 | 2,615 | 71 |
| Profit attributable to perpetual securities holders | – | – | – | 17 | 36 |
| | 1,338 | 1,034 | 1,086 | 3,526 | 1,746 |

Retained in business

| | | | | | |
|---------------------------------|-------|-------|-----|---------|------|
| Depreciation and amortisation | 454 | 372 | 457 | 444 | 682 |
| Deferred tax expense / (credit) | 14 | 36 | 63 | (25) | (91) |
| Retained profits | 788 | 580 | 172 | (2,443) | 140 |
| Non-controlling interests | 28 | 23 | 21 | 22 | (30) |
| | 1,284 | 1,011 | 713 | (2,002) | 701 |

| | | | | | |
|------------------------------|-------|-------|-----|---------|-----|
| Other non-operating expenses | 26 | 131 | 236 | 221 | 276 |
| | 1,310 | 1,142 | 949 | (1,781) | 977 |

| | | | | | |
|---------------------------|--------------|--------------|--------------|--------------|--------------|
| Total distribution | 2,648 | 2,176 | 2,035 | 1,745 | 2,723 |
|---------------------------|--------------|--------------|--------------|--------------|--------------|

Productivity data²

| | 2023 ¹ | 2022 ¹ | 2021 | 2020 | 2019 |
|---|-------------------|-------------------|-------|-------|--------|
| Average staff strength | 5,099 | 4,981 | 5,740 | 5,426 | 16,575 |
| Employment costs (<i>S\$ million</i>) | 509 | 485 | 494 | 396 | 820 |
| Profit after tax per employee (<i>S\$’000</i>) | 206 | 146 | 52 | 33 | 13 |
| Value added (<i>S\$ million</i>) | 2,156 | 1,725 | 1,680 | 1,372 | 2,160 |
| Value added per employee (<i>S\$’000</i>) | 423 | 347 | 293 | 253 | 130 |
| Value added per dollar employment costs (<i>S\$’000</i>) | 4.24 | 3.56 | 3.40 | 3.46 | 2.63 |
| Value added per dollar investment in property, plant and equipment (<i>S\$</i>) | 0.22 | 0.21 | 0.16 | 0.13 | 0.12 |
| Value added per dollar sales (<i>S\$</i>) | 0.31 | 0.22 | 0.22 | 0.25 | 0.22 |

¹ Excludes the loss on disposal of SEIL, which is reported under discontinued operation

² The figures reflect data for continuing operations only

Group Financial Review

Treasury Management

Sembcorp Financial Services (SFS), the Group’s wholly-owned treasury vehicle, manages the Group’s financing and treasury activities in Singapore and oversees such activities in other markets with the respective business units. Funds borrowed by SFS are on-lent to businesses within the Group, where appropriate.

SFS and its overseas treasury units undertake active cash management to recycle surplus cash within the Group and manage debt through prudent review of its refinancing requirements. We have set up cash pooling structures in various countries, utilising surplus funds from businesses and lending to those with funding requirements. Such proactive cash management continues to be an efficient and cost-effective way of managing the Group’s cash and meet funding requirements.

Facilities

As at December 31, 2023, the Group’s total credit facilities, including its Multicurrency Debt Issuance Programmes and Euro Medium Term Note (EMTN) Programme, amounted to S\$17.0 billion (2022: S\$13.4 billion). This comprised borrowing facilities of S\$15.5 billion (2022: S\$12.0 billion) and trade-related facilities of S\$1.5 billion (2022: S\$1.4 billion), including but not limited to bank guarantees, letters of credit, bid bonds and performance bonds.

Borrowings and Bond Issuance

The Group aims to closely align the structure and maturity profile of its debt with the commercial profile of its core assets, while focusing on maintaining adequate liquidity for its businesses. Banking relationships

remain important to ensure that funding is secured on competitive terms, as and when commercially viable and strategically attractive opportunities arise.

On March 15, 2023, SFS issued a S\$350 million green bond under the S\$3 billion Multicurrency Debt Issuance Programme. The net proceeds of the green bond will be used to finance or refinance, in whole or in parts, new or existing energy projects which fall in the

list of Eligible Green Projects under the Sembcorp Green Financing Framework.

On July 31, 2023, the company, jointly with SFS, established an additional S\$5 billion EMTN Programme. This is in addition to the existing S\$3 billion and S\$2.5 billion Multicurrency Debt Issuance Programmes. Under the EMTN Programme, the company, together with SFS and certain other subsidiaries of the company

Financing and treasury highlights (\$ million)

| | 2023 | 2022 |
|---|---------|---------|
| Source of funding | | |
| Cash and cash equivalents | 767 | 1,254 |
| Borrowing facilities (including the Multicurrency Debt Issuance Programme) | | |
| Committed borrowing facilities | 9,662 | 9,496 |
| Less: Amount drawn down | (7,205) | (7,070) |
| Unutilised committed borrowing facilities | 2,457 | 2,426 |
| Uncommitted borrowing facilities | 5,850 | 2,536 |
| Less: Amount drawn down | (49) | – |
| Unutilised uncommitted borrowing facilities | 5,801 | 2,536 |
| Total unutilised borrowing facilities | 8,258 | 4,962 |
| Trade-related facilities | | |
| Facilities available | 1,498 | 1,412 |
| Less: Amount used | (550) | (500) |
| Unutilised trade-related facilities | 948 | 912 |
| Funding profile | | |
| Maturity profile | | |
| Due within one year | 1,281 | 1,096 |
| Due between one to five years | 3,180 | 3,593 |
| Due after five years | 2,793 | 2,381 |
| | 7,254 | 7,070 |
| Debt mix | | |
| Fixed rate debt | 5,234 | 4,699 |
| Floating rate debt | 2,020 | 2,371 |
| | 7,254 | 7,070 |

(the Subsidiary Issuers), may from time to time issue notes and securities under the EMTN Programme subject to availability of funds from the market. The obligations of SFS and the Subsidiary Issuers under the EMTN Programme are fully guaranteed by the company.

As at December 31, 2023, the Group’s gross borrowings amounted to S\$7.3 billion (2022: S\$7.1 billion). The Group remains committed

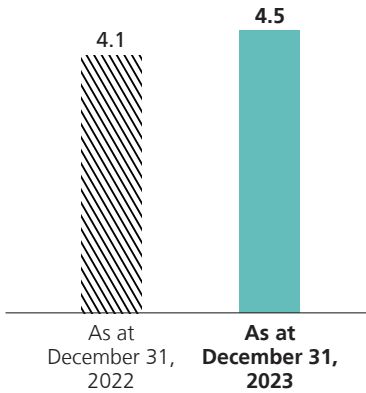
to ensuring a diversified and optimised funding base, while working towards achieving prudent financial ratios.

The overall debt portfolio in 2023 comprised 72% (2022: 66%) of fixed rate debt and 28% (2022: 34%) of floating rate debt. We will continue to actively monitor and manage the debt portfolio mix in the current high interest rate environment.

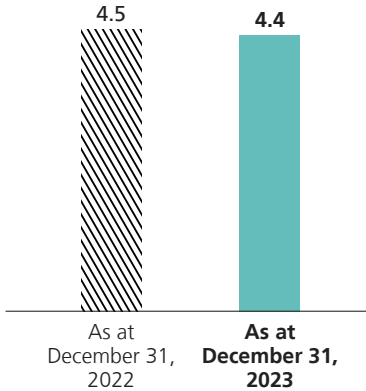
| | 2023 | 2022 |
|---|-------|-------|
| Group debt financial ratios | | |
| Interest cover ratio | | |
| Earnings before interest, tax, depreciation and amortisation (EBITDA) | 1,789 | 1,308 |
| Adjusted EBITDA ¹ | 2,053 | 1,556 |
| Finance costs | 409 | 310 |
| EBITDA / Finance costs | 4.4 | 4.2 |
| Adjusted EBITDA ¹ / Finance costs | 5.0 | 5.0 |
| Debt ratios | | |
| Net debt / EBITDA | 3.6 | 4.4 |
| Net debt / Adjusted EBITDA | 3.2 | 3.7 |

¹ Adjusted EBITDA = reported EBITDA + share of results of associates and JV, net of tax

Weighted Average Cost of Debt (%)

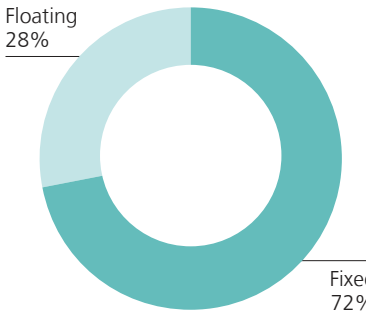


Weighted Average Debt Maturity (years)



Hedging Profile

As at December 31, 2023



Our Businesses

Gas and Related Services



Strategic Priorities

- Deliver efficient and reliable energy through the transition
- Implement optimisation projects to improve efficiency, manage assets for value

>> Refer to pages 22 to 24

Renewables



Strategic Priorities

- Accelerate growth via partnerships and platforms
- Enhance portfolio returns through robust asset and capital management

>> Refer to pages 25 to 30

Integrated Urban Solutions



Strategic Priorities

- Continue to build land bank
- Tap on capabilities to expand offerings in sustainable infrastructure and low carbon solutions

>> Refer to pages 31 to 33

Decarbonisation Solutions



Strategic Priorities

- Pursue renewables import projects
- Invest in low-carbon alternatives to drive energy transition beyond 2028

>> Refer to pages 34 to 35

Financial Indicators
(S\$ million)

| | 2023 | 2022 | Change (%) | 2023 | 2022 | Change (%) | 2023 | 2022 | Change (%) | 2023 | 2022 | Change (%) |
|---|-------|-------|------------|------|------|------------|------|------|------------|------|------|------------|
| Turnover ¹ | 5,457 | 6,547 | (17) | 703 | 503 | 40 | 418 | 444 | (6) | 16 | 3 | NM |
| EBITDA ² | 1,088 | 886 | 23 | 513 | 353 | 45 | 120 | 131 | (8) | (14) | (2) | NM |
| Adjusted EBITDA ³ | 1,182 | 979 | 21 | 601 | 415 | 45 | 202 | 225 | (10) | (14) | (3) | NM |
| Net profit before exceptional items | 809 | 622 | 30 | 200 | 141 | 42 | 121 | 150 | (19) | (13) | (3) | NM |
| Return on equity before exceptional items (%) | 40.7 | 34.8 | 17 | 11.0 | 10.2 | 8 | 6.7 | 8.5 | (21) | NM | NM | NM |

EBITDA: Earnings before interest, tax, depreciation and amortisation NM: not meaningful

¹ Turnover figures are stated before inter-segment eliminations

² EBITDA excludes major non-cash items such as the effects of fair value adjustments, re-measurements, impairments and write-offs

³ Adjusted EBITDA = reported EBITDA + share of results from associates and joint ventures, net of tax

Gas and Related Services

Competitive Edge

Established player with 6.1GW of gas-fired power portfolio comprising installed and under construction assets

Global track record as an originator, owner, investor, operator and optimiser of energy assets with strong technical, operational and management capabilities

One of the largest natural gas players in Singapore and the nation’s first commercial importer and retailer of natural gas, offering a comprehensive suite of gas and related services

The Gas and Related Services portfolio comprises 6.1GW of gas-fired power capacity across various geographies including Bangladesh, China, Myanmar, Oman, Singapore, the UK, the United Arab Emirates and Vietnam. In Singapore, Sembcorp is one of the largest natural gas players and provides a comprehensive suite of gas and related services such as gas sourcing, importation and trading.

High Contracted Position Underpins Strong Operating Cash Flow and Earnings Stability

In Singapore, we were the first in the market to secure multiple long-term power purchase agreements (PPAs) with our customers in 2023. These include an 18-year PPA to supply up to 450MW of power to Micron Semiconductor Asia Operations, a 10-year PPA with Singapore Telecommunications with an annual contract value of approximately S\$180 million and PPAs to supply up to 100MW of power to subsidiaries of ST Telemedia Global Data Centres over a period of between eight and 10 years. As of end 2023, our gas-fired power portfolio in Singapore is 99% contracted, an increase from 80% as of end 2022 and the proportion of contracts with a tenure of more than five years increased substantially to 74% from 1% of the portfolio the year before. These contracts have an average tenure of 12 years, transforming our merchant-centric portfolio into one that yields a stable, recurring income. The high level of contracted capacity also insulates the business from the impact of regulatory interventions on our Singapore portfolio.

Key Developments

- First gas-fired power generator in Singapore to secure multiple long-term PPAs with industrial and commercial customers
- Diversified our gas supply in Singapore with a gas sales agreement with Medco E&P Natuna for a contract value of approximately S\$1.9 billion for four years starting from 2024
- Commenced construction of a new multi-utilities centre on Jurong Island in Singapore including a 600MW hydrogen-ready combined cycle power plant

Operational Indicators *(MW)*

| | 2023 ¹ | 2022 |
|---|-------------------|-------|
| Gross gas-fired and diesel-fired power capacity | 6,119 | 5,517 |
| – Gas | 6,059 | 5,457 |
| – Diesel | 60 | 60 |
| Contracted gas-fired and diesel-fired capacity with long-term agreements ² | 3,782 | 3,114 |

¹ 2023 capacity included a 600MW hydrogen-ready power plant currently under construction in Singapore. The project is expected to be operational by 2026

² Long-term agreements refer to agreements with a tenure of at least five years from the contract effective date. The stated contracted capacity refers to the maximum contracted load by customers

As one of the largest importers of piped natural gas (PNG) and liquefied natural gas (LNG) into Singapore with established long-term gas supply, Sembcorp is able to offer long-term agreements to customers. Leveraging our reliable gas access and cost visibility, our customers are able to benefit from the predictability and the stability in managing their electricity cost for their operations.

Besides Singapore, our gas-fired power plants in Bangladesh, Myanmar, Oman, the United Arab Emirates and Vietnam

are also contracted under long-term PPAs. The contract for the Phu My 3 power plant in Vietnam expired in February 2024 and the plant has been transferred back to the government. Phu My 3 is Vietnam’s first build-operate-transfer power project and the transfer marks a successful collaboration between Sembcorp and its joint venture partners, and the Vietnam government, which spanned two decades. Excluding Phu My 3, contracted capacity accounted for 97% of the Group’s gas-fired power portfolio as of end 2023.

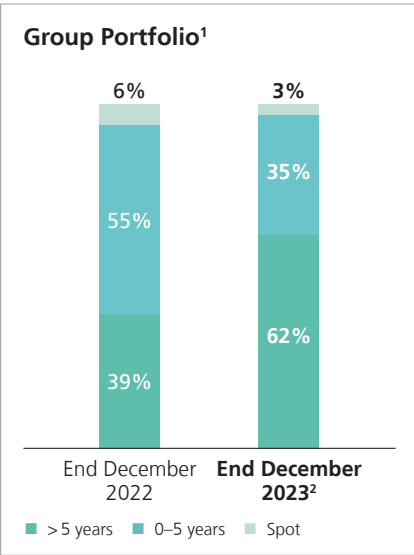
Going forward, we expect a stable stream of operating cash flow from our gas-fired assets, which can be channelled into funding green and energy transition investments.

Enhancing Energy Security through Diversified Gas Supply

Natural gas will continue to play a crucial role in maintaining energy security for Singapore as the country pursues its decarbonisation goals. During the year, we continued to diversify our gas sources to support the energy needs of the nation.

In June 2023, we entered into a gas sales agreement with Medco E&P Natuna, a wholly-owned subsidiary of PT Medco Energi Internasional, to import PNG from the West Natuna gas fields in Indonesia. The agreement is valued at approximately S\$1.9 billion, and gas deliveries are expected to commence in the later part of 2024, with a tenure of four years.

We subsequently inked a non-binding term sheet with West Natuna Exploration, a wholly-owned subsidiary of Conrad

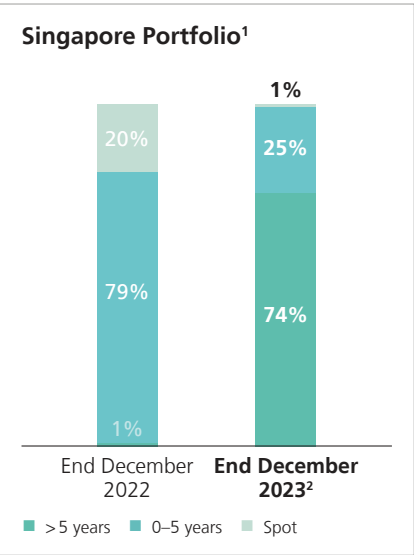


¹ Based on generation capacity of gas-fired power plants and maximum contracted load

² Group portfolio excludes Phu My 3 in Vietnam which reached its end of Term of Operation on February 29, 2024

Asia Energy. The term sheet outlines the key terms and framework for a binding gas sales agreement for the Mako gas field in Indonesia.

These initiatives will supplement Sembcorp’s existing natural gas supply from both piped and liquefied sources,



reinforcing our position as one of Singapore’s leading natural gas importers.

As Singapore progresses through its energy transition, Sembcorp, as the only player capable of offering our customers a comprehensive suite of diversified products across gas,



Sembcorp Gas Receiving Terminal on Jurong Island, Singapore

Gas and Related Services



Sembcorp Cogeneration Plant, Sakra on Jurong Island, Singapore

utilities and renewables, is able to provide not only competitive and reliable energy solutions but also a pathway for them to achieve their decarbonisation goals.

Decarbonising our Gas-fired Assets

Sembcorp will actively manage its gas portfolio to support Asia’s transition to a clean and responsible energy future and to meet its carbon commitment. In May 2023, we announced the development of a new multi-utilities centre on Jurong Island in Singapore which will supply power, steam, firewater and demineralised water to customers. This facility will include a new 600MW hydrogen-ready combined cycle power plant. The hydrogen-ready power plant is designed to allow for a potential blending of up to 30% hydrogen by volume with natural gas. Construction of the facility has commenced and is expected to be fully operational by 2026. In addition, we will explore technologies for a potential pathway towards achieving 100% hydrogen firing.

In collaboration with our partners, we are actively exploring the utilisation of hydrogen and ammonia as a fuel source in the energy and industrial sectors. In October 2023, we signed a

Memorandum of Understanding (MOU) with IHI Corporation (IHI) and GE Vernova’s Gas Power business to jointly explore the retrofitting of Sembcorp’s existing Sakra power plant in Singapore with ammonia-firing capabilities. This is an extension of our earlier MOU between Sembcorp and IHI in 2022 to explore decarbonisation pathways, particularly ammonia direct combustion systems.

Looking ahead, these initiatives will put us ahead of the learning curve and position us for faster adoption of low-carbon technologies as they advance towards commercial viability and maturity. To achieve our climate action commitments, we will continue to monitor opportunities to manage certain assets in the portfolio for value through possible divestments, as well as recycling of capital.

Maintaining High Standards of Operations

In 2023, our gas-fired assets continued to deliver reliable essential power to the communities we serve.

We strive to enhance our asset efficiency through optimising our operations, implementing predictive maintenance to minimise unplanned outages and

deploying digital solutions to monitor and improve asset performance. Our asset management system enables the gathering and consolidation of operational data for data analytics to enhance overall performance and achieve operational excellence.

Outlook

The Gas and Related Services segment performed well in 2023, on the back of better performance in the Singapore power market. Earnings of the segment are expected to remain robust in 2024, underpinned by our significantly contracted position. Contribution will be offset by a planned major maintenance in Singapore to ensure continued efficiency and high reliability of our asset. Income contribution from the Phu My 3 power plant in Vietnam has ceased in end February 2024.

We remain committed to managing our gas assets efficiently to aid the transition towards a clean energy future for economies, while exploring ways to further decarbonise and manage our gas portfolio for value.

Renewables

Competitive Edge

Leading Asian renewables player with 13.8GW¹ of wind, solar, hydro and energy storage capacity globally

Strong execution track record in greenfield developments; enhancing returns of brownfield portfolio through optimisation of operations and maintenance and financing structure

Leveraging partnerships and capitalising on platforms to build scale

Sembcorp is Asia’s leading renewables player equipped with expertise in greenfield development as well as operational management of renewables assets. Our renewables portfolio comprises wind, solar (including a concentrated solar plant), hydro and energy storage assets in China, India, Southeast Asia (Singapore, Vietnam and Indonesia) as well as Oman and the UK.

Refreshed Renewables Targets

In May 2021, we announced our strategy to transform from brown to green and to grow gross installed renewables capacity from 2.6GW to 10GW by 2025. Since then, we have achieved significant progress, more than tripling gross installed capacity to 9.8GW¹ with a further 4.0GW secured or under construction.

To drive the next phase of growth, we refreshed our renewables targets at Investor Day 2023. We target to achieve 25GW of gross installed renewables capacity by 2028. The prospects for renewables in Sembcorp’s key markets of China, India and Southeast Asia remain robust and represent addressable opportunities of 1,300GW². We will continue to strengthen our capabilities in wind, solar and energy storage systems, and further establish our presence in key markets through strong development and asset management capabilities, as well as quality partnerships.

¹ As of February 2024, the group had 13.8GW of gross renewables capacity, comprising 9.8GW of installed capacity and 4GW secured or under construction. This includes the acquisition of a 245MW renewables portfolio in Vietnam pending completion
² Source: GlobalData. Includes onshore wind, solar and energy storage

Key Developments

- Achieved growth totalling 3GW in China, through acquisitions and organic expansion in existing partnerships
- Grew portfolio in India to 4.2GW with 750MW of greenfield projects secured through competitive bids and completion of an acquisition comprising 228MW of wind assets
- Launched Southeast Asia’s largest energy storage system and awarded Singapore’s largest solar project of 117MWp, cementing Sembcorp’s position as Singapore’s leading renewables player
- Acquired a 245MW renewables portfolio in Vietnam, comprising onshore wind, solar and hydro assets

Operational Indicators¹ (MW / MWh)

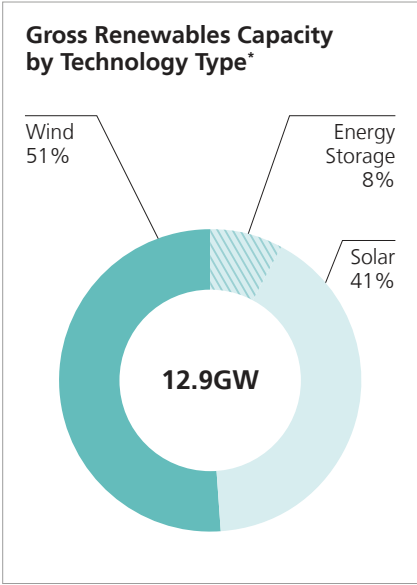
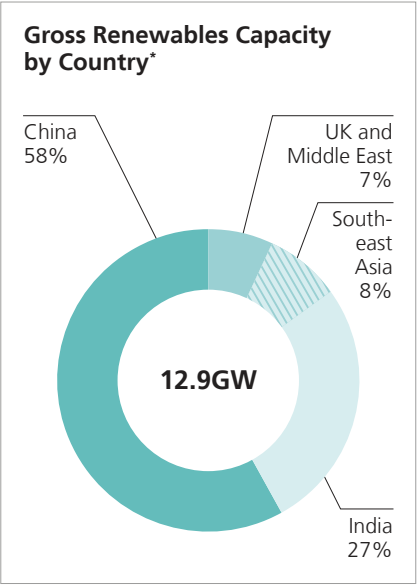
| | 2023 | 2022 |
|---------------------------------|--------|-------|
| Gross renewables capacity | 12,861 | 8,293 |
| – Wind | 6,546 | 5,553 |
| – Solar | 5,306 | 2,031 |
| – Energy Storage ² | 1,009 | 709 |
| Gross renewables capacity | 12,861 | 8,293 |
| – Installed | 9,353 | 6,832 |
| – Secured or under construction | 3,508 | 1,461 |

¹ Figures refer to total gross capacity as at December 31, 2023, and December 31, 2022
² Energy storage capacity is in MWh



Sembcorp Tengeh Floating Solar Farm in Singapore

Renewables



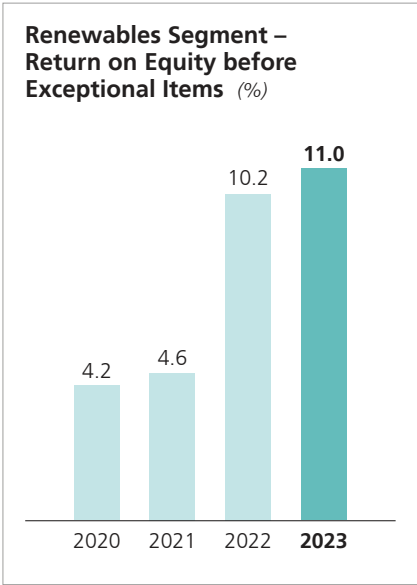
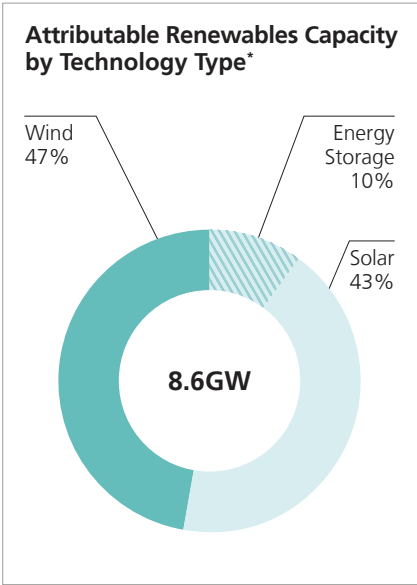
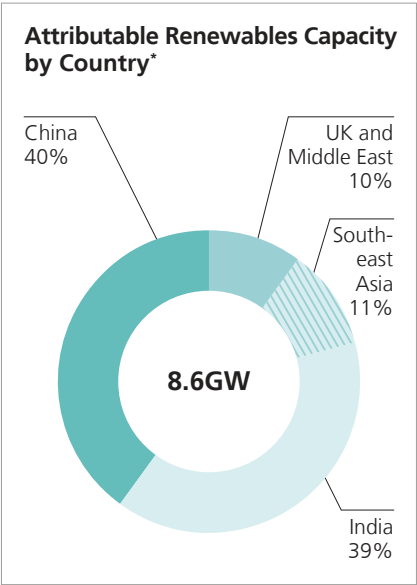
Ability to Drive Returns through Capabilities and Partnerships

We adhere to a disciplined investment framework that places a strong emphasis on asset quality as well as returns. Leveraging our unique capabilities in respective markets, we have successfully driven growth and optimised returns in our portfolio.

Strategic Positioning to Drive Growth

China: Growing organically with partners, enhancing capabilities through platforms

We have successfully developed partnerships with renewables players in China to scale our portfolio.



* As at December 31, 2023

Critical Success Factors

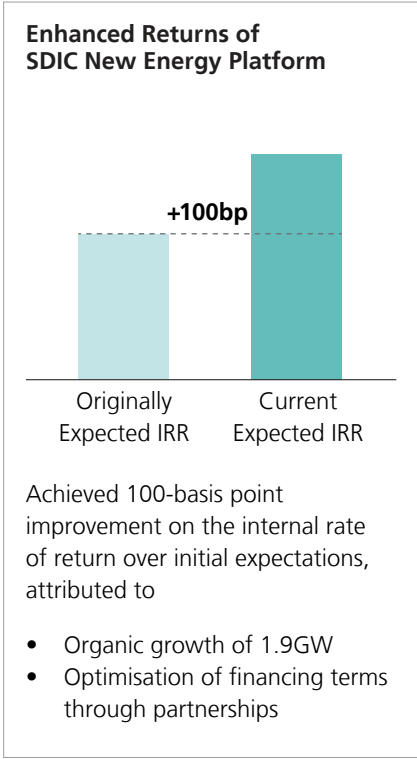
- Deep understanding of local market
- Focus on asset quality and project returns
- Proven operational capabilities with WindOS and SolarOS digital capabilities with asset integration ability
- Knowledge sharing and harnessing of capabilities in renewables segment across key markets

| China | India | Southeast Asia |
|---|---|--|
| <ul style="list-style-type: none">• Strong track record in establishing and nurturing relationships• Leverage partners’ networks• Demonstrate speed and flexibility | <ul style="list-style-type: none">• Strong development capabilities with ability to participate across renewables segments• Established track record in commissioning of greenfield projects | <ul style="list-style-type: none">• Proven development capabilities with proficiency in renewables solutions• Leading renewables player in Singapore• Established presence in countries of interest and strong partnerships with local players |

Total renewables capacity in China grew by 3GW in 2023 to 7.4GW as of end 2023, largely driven by organic growth in our joint ventures, SDIC New Energy and Hunan Xingling New Energy. Since the establishment of these partnerships, our SDIC New Energy portfolio has grown by 1.9GW to 3.8GW and Hunan Xingling New Energy grew by 210MW to 1.1GW.

In March 2023, we completed the acquisition of a 49% stake in a 795MW portfolio in Beijing Energy Sembcorp. We also expanded our majority-owned platforms with the completion of acquisitions of two portfolios in Guangxi comprising 200MW of operational wind assets and 92MW of operational solar assets.

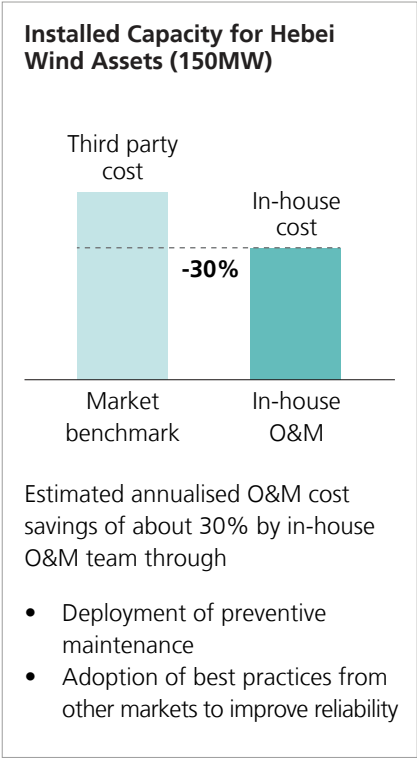
During the year, we furthered our renewables offerings in China through our strategic partnerships. We entered the battery energy storage system segment with the construction of a 100MW / 200MWh battery energy storage system under Hunan Xingling New Energy. This is our first organic growth project in the partnership. Under our SDIC New Energy platform, we successfully constructed and completed our first four-hour battery totalling 25MW / 100MWh in the



IRR: Internal Rate of Return O&M: operations and maintenance

fourth quarter of 2023. A 110MW concentrated solar plant in Gansu is also under construction, with expected completion in end 2024.

Under our majority-owned platforms, we continue to build capabilities in



asset management and operations to enhance performance. This includes adopting best practices from other markets to improve portfolio reliability and bringing operations and maintenance (O&M) in-house to achieve cost savings.



Sembcorp wind assets in Yunnan, China

Renewables



Conducting maintenance on a wind turbine in India

India: Uplifting returns with strong asset management capabilities, leveraging development expertise to drive growth

During the year, we completed the acquisition of the 583MW Vector Green portfolio, successfully integrating the assets in our operations. We also completed the acquisition of a 228MW operational wind portfolio from Leap Green Energy, an independent power producer in Tamil Nadu, India, in February 2024.

Our experienced on-site team possesses a robust understanding of the local market, thereby bolstering our competitive advantages. We continue to enhance our development capabilities by engaging in disciplined project bidding.

In December 2023, we received the Letter of Award for a 300MW Inter State Transmission System connected solar power project from NHPC. The following month, we were awarded our first wind-solar hybrid power project, comprising the development of 300MW solar and 150MW wind assets, from the Solar Energy Corporation of India. These greenfield projects are underpinned by long-term power purchase agreements of 25 years, providing certainty in earnings. In addition, the projects will be constructed in the same regions as some of the other Sembcorp’s projects currently under construction, enabling potential significant synergies in project development, economies of scale in procurement as well as operational efficiency in management.

We continue to build up our renewables capacity through organic growth and acquisitions of brownfield assets. With a portfolio of 4.2GW comprising 2.4GW of wind capacity and 1.8GW of solar capacity, our balanced portfolio enables us to develop deep operating capabilities. This diversification across energy resources enhances the stability of our generation profile, mitigating dependence on any single resource.

Our proficiency in digital capabilities has facilitated the seamless integration of asset data into our in-house OS (operating system) platform. This has translated into improved efficiency, optimised cost and hence, superior asset productivity compared to peers.

Increasing proportion of O&M conducted in-house

| | 2023 | | | 2022 | | |
|---------------------------|----------|-----|-------|----------|-----|-------|
| | In-house | OEM | Total | In-house | OEM | Total |
| Operational Capacity (MW) | | | | | | |
| Wind | 980 | 779 | 1,759 | 980 | 715 | 1,695 |
| Solar | 638 | 18 | 656 | 43 | 10 | 53 |
| Total | 1,618 | 797 | 2,415 | 1,023 | 725 | 1,748 |
| % | 67% | 33% | 100% | 59% | 41% | 100% |

We continue to deepen our asset management capability within the team. During the year, we successfully brought majority of the O&M in-house for the Vector Green portfolio. The capacity of operational wind assets under O&M conducted by original equipment manufacturer (OEM) increased mainly due to new commissioned capacity which remains under warranty. In 2023, the proportion of assets under in-house O&M increased to 67%, from 59% in 2022. More notably, we have been able to achieve cost savings of up to 30% on our generation assets through in-house O&M.

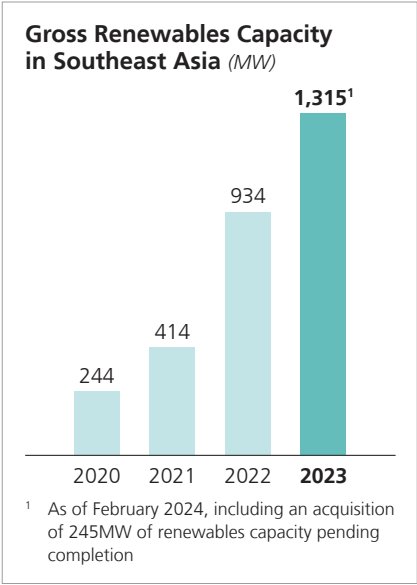
Southeast Asia: Expanding footprint

Our gross renewables portfolio in Southeast Asia crossed the 1GW milestone during the year. In Singapore, our gross renewables portfolio comprises 723MWp of solar projects and 289MWh of energy storage systems. Sembcorp was awarded a 117MWp project by JTC in December 2023 to solarise interim vacant land and rooftops of five buildings on Jurong Island, Singapore. In addition, Sembcorp will be collaborating with

JTC for the development of a Virtual Power Plant (VPP) solution for Jurong Island. The VPP aims to integrate data from distributed energy resources, such as solar as well as energy storage systems, and allows for energy management through real-time data monitoring, analytics, as well as the optimisation of energy asset.

In February 2023, we officially opened the Sembcorp Energy Storage System (ESS) in Singapore. The Sembcorp ESS has a maximum storage capacity of 285MWh, making it Southeast Asia’s largest ESS, and is the fastest in the world of its size to be deployed. As the largest solar and battery developer and operator in Singapore, Sembcorp is well-placed to offer a full suite of solar solutions to help customers in their sustainability journey, as well as to support Singapore’s decarbonisation goals.

In Vietnam, solar capacity grew year-on-year from 251MWp to 328MWp, largely due to the proposed acquisition of majority interests in various subsidiaries of Gelex Group



Joint Stock Company. The acquisition is a strategic fit for Sembcorp as it enables us to scale up in one of our countries of focus, diversify our resources and develop new technological capabilities. With the acquisition, renewables capacity in Vietnam will reach 453MW, comprising wind, solar as well as hydro.



Sembcorp Banyan Energy Storage System on Jurong Island, Singapore



Battery energy storage system under construction at the Wilton International site on Teesside, UK

Strategic growth in selected markets

In March 2023, we expanded into the Middle East with the successful award of our first greenfield renewables project in Oman. The 500MW build-own-operate solar plant augments Sembcorp’s well-established presence in Oman’s power and water desalination sector. The project leverages our strong network and presence for over 10 years in the country through our Salalah Independent Water and Power Plant and demonstrates our capabilities in supporting the energy transition globally.

In the UK, the 150MW / 300MWh of battery energy storage system on Teesside at Wilton International is under construction. Together with our operational battery energy storage portfolio of 120MWh, we seek to enhance our presence in the energy storage segment in the UK through active management of the charge and discharge cycles of our energy storage assets to capture higher rates for frequency services.

Outlook

According to the International Energy Agency, renewables capacity grew by almost 50% to nearly 510GW in 2023, the fastest growth rate in the past two decades. In 2025, renewables are anticipated to surpass coal as the primary global electricity source. Sembcorp is well-positioned in some of the world’s largest and fastest growing renewables markets and will continue to build on its leading positions with more diversification across countries and technologies.

The Renewables segment is expected to perform well as more greenfield projects are commissioned and brownfield acquisitions are completed progressively, in the course of the year. We will continue to leverage our key success factors to grow our renewables capacity and enhance returns within the portfolio.



Competitive Edge

| | | |
|---|--|---|
| Established master developer with over three decades of transforming large-scale raw land into sustainable urban developments | International investment and promotion team with local knowledge to drive investments by high-quality, long-term investors and tenants | Suite of low-carbon and sustainable solutions including renewable energy, waste and waste-to-energy as well as recycling to cater to the needs of customers |
|---|--|---|

The Integrated Urban Solutions segment encompasses Urban, Water, and Waste-to-resource businesses. With over 30 years of experience, the Urban business has a proven track record in integrated developments, encompassing industrial parks, industrial properties, business hubs, and residential properties.

In the Water business, we manage specialised facilities in China, the Middle East, Singapore, and the UK. Our water and wastewater management solutions include water supply, wastewater treatment, and water reclamation. The Waste and Waste-to-resource businesses comprise solid waste management services in Singapore and energy-from-waste facilities in Singapore and the UK.

Urban: Expanding Portfolio with Sustainable Development

The Urban business registered land sales of 248ha in 2023, an increase compared to 172ha in 2022, mainly driven by improved economic sentiments. However, earnings declined year-on-year as contributions from commercial and residential (C&R) sales and residential units were lower. In 2022, C&R land, which commands a higher value, accounted for a bigger proportion of sales.



Sino-Singapore Nanjing Eco Hi-tech Island in China

Key Developments

- Scaled up land bank with the award of investment licenses for three new industrial parks in Vietnam totalling 1,290 hectares (ha)
- Groundbreaking of four Vietnam Singapore Industrial Parks (VSIPs) projects to mark the commencement of land development for handover to customers from 2024

Operational Indicators

| | 2023 | 2022 |
|--|-----------|---------------------|
| Urban¹ | | |
| Saleable land inventory (ha) | 5,885 | 6,363 |
| Land sold (cumulative) (ha) | 3,556 | 3,308 |
| Total net orderbook (ha) | 262 | 312 |
| Remaining saleable land (ha) | 2,072 | 2,743 |
| Water | | |
| Water and wastewater treatment capacity (m³/day) | 8,075,114 | 8,051,470 |
| Waste and Waste-to-resource | | |
| Waste collection (tonnes) | 943,055 | 1,085,404 |
| Recyclables collection (tonnes) | 36,379 | 29,102 ² |
| Energy-from-waste (Efw) gross installed capacity | | |
| – Wilton 11 Efw Plant ³ (MW) | 48 | 48 |

¹ Figures for Urban operational indicators are based on current planned estimates
² Figures were restated from 11,775 to 29,102 as earlier data pertained to recyclables recovered, rather than collected
³ The Wilton 11 Efw Plant produces both power and steam. The asset’s gross installed steam capacity is 160 tonnes per hour

Integrated Urban Solutions

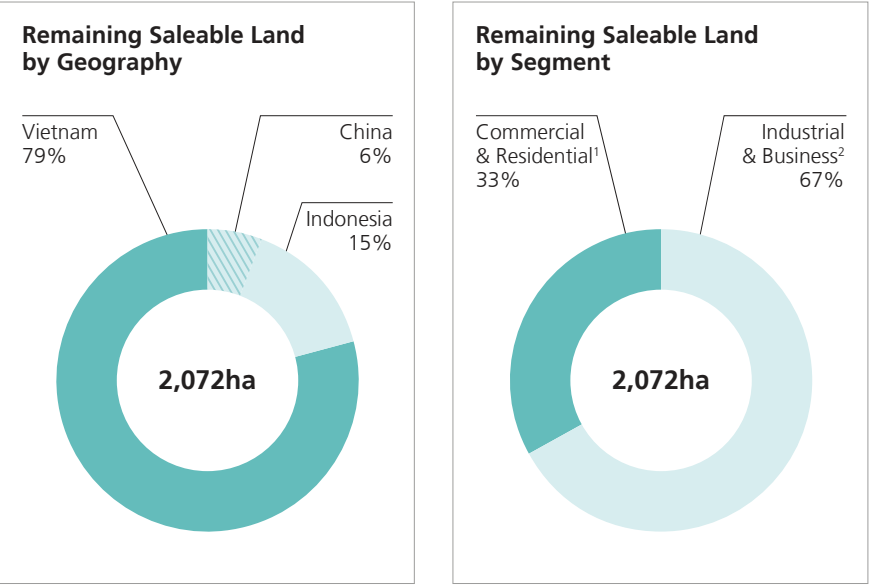
Sales in Kendal Industrial Park (KIP) project in Central Java, Indonesia, more than doubled year-on-year to 77ha from 36ha in 2022, boosted by enhanced clarity on investment incentives in the special economic zone. In line with Indonesia’s initiative to establish an electric vehicle ecosystem, KIP has attracted high-tech companies including lithium iron phosphate cathode and anode materials processors. The growth of medical equipment manufacturing and pharmaceutical manufacturing at KIP is also on the rise due to the presence of abundant labour and locally-sourced pharmaceutical active ingredients.

In Vietnam, we continued to build up our land bank with the award of three new investment licences for VSIP Ha Tinh (phase 1), VSIP Lang Son and VSIP Nghe An II during the year. Including these projects, Sembcorp now has 15 VSIPs in its portfolio across 11 provinces in Vietnam. These new VSIPs are envisaged to be the future model of sustainable industrialisation.

The groundbreaking ceremonies for VSIP Can Tho in the Mekong Delta, VSIP Bac Ninh II in the Red River Delta, VSIP Nghe An II and Quang Tri Industrial Park in the North Central Coast were held during the year. Totalling over 1,500ha in gross land area, the groundbreaking ceremonies mark the commencement of land development for handover to customers from 2024.

In August 2023, the Prime Ministers of Singapore and Vietnam witnessed the presentation of Memoranda of Understanding (MOUs) from 10 provincial leaders who reiterated their commitment to work with Sembcorp and our joint venture partner, Becamex IDC Corporation (Becamex), to jointly engage in feasibility studies for more VSIPs. Sembcorp and Becamex have committed to modelling the next generation of VSIPs as smart and sustainable industrial parks.

In December, we completed the construction of two warehousing complexes in Vietnam in accordance



As at December 31, 2023

¹ Commercial & Residential land includes space for residences, food and beverage businesses, malls, hotels, serviced apartments and modern services such as accounting and legal firms, consultancies and corporate headquarters

² Industrial & Business land includes space for general and high-tech manufacturing, research and development, as well as business and technology incubators

Land Sales (ha)

| | 2023 | | | 2022 | | |
|-----------|-----------------------|--------------------------|-------|-----------------------|--------------------------|-------|
| | Industrial & Business | Commercial & Residential | Total | Industrial & Business | Commercial & Residential | Total |
| Vietnam | 150 | 10 | 160 | 100 | 34 | 134 |
| China | * | 11 | 11 | 2 | – | 2 |
| Indonesia | 77 | – | 77 | 36 | – | 36 |
| Total | 227 | 21 | 248 | 138 | 34 | 172 |

* Denotes less than 1ha



Prime Ministers of Singapore and Vietnam at the MOU presentation ceremony

with the Lotus Silver green building standards, a certification system developed by the Vietnam Green Building Council. Including these new Sembcorp Logistics Parks in Quang Ngai and Nghe An provinces, there are a total of 42 modern ready-built warehouse units co-developed by Sembcorp within the VSIP projects with total gross floor area of approximately 134,000 square metres.

In China, the Wuxi-Singapore Industrial Park continued to maintain a healthy occupancy rate of 95%, despite a slowdown in global demand for manufactured goods. Our Sino-Singapore Nanjing Eco Hi-tech Island project registered sales of three plots of commercial and residential land and one plot of industrial and business land, compared with two industrial and business land plots sold in 2022. However, the real estate market continued to remain challenging, despite government measures, such as lower downpayment requirements and lower interest rates of existing mortgages for first home purchase, to facilitate the recovery of the real estate market.

Promoting Circularity in Waste Management

During the year, SembWaste partnered Coca-Cola to launch an initiative that allows consumers to responsibly deposit polyethylene terephthalate (PET) or recycled polyethylene terephthalate (rPET) bottles at nine convenient locations across Singapore. In addition, SembWaste’s Rebottle initiative launched in 2022 has successfully recycled more than 6,700 bottles as of end 2023. The Rebottle initiative was also adopted by the National Day Parade (NDP) 2023 organising committee where customised ReBottle machines were fabricated and placed at the event to take in PET and rPET bottles for recycling. SembWaste also worked in partnership with the NDP 2023 organising committee to look at ways of reducing waste. Waste profiles were generated through the analysis of data on food and non-food waste, following which, the NDP committee adjusted the food menu, leading to a



SembWaste forms strategic partnerships with organisations such as Coca-Cola to promote a closed-loop resource system

subsequent reduction in overall food waste. Consequently, the event noted a 20% reduction in waste generation, reversing the upward trend in waste observed in previous years.

To raise awareness of plastic recycling among youths and children, SembWaste kickstarted its inaugural Plastic Recycling League which garnered interest and participation from nearly 300 schools across Singapore. Through the programme, more than 11,000kg of plastic recyclables were collected, translating to an equivalent of 15.7 tonnes of carbon dioxide emissions avoided.

SembWaste’s energy-from-waste plant continues to make significant strides in creating a closed-loop system. Through the incineration of waste, the plant supplied 308,728 tonnes of steam to the petrochemical industries on Jurong Island, an energy output equivalent to powering 144,272 households annually.

In the UK, earnings from our energy-from-waste plant, Wilton 11 moderated year-on-year, due to lower electricity prices.

Outlook

Outlook of the Integrated Urban Solutions segment is expected to remain stable.

In the Urban segment, upcoming amendments to Vietnam’s Land Law 2013, Real Estate Business Law 2014 and Housing Law are expected to bring positive changes. With enhanced regulation clarity, we are cautiously optimistic of the future prospects of the sector. China’s property sector crisis is expected to continue to weigh on sentiments and land sales. We will seek to improve our value proposition in Indonesia to maintain competitiveness.

We continue to build up our land bank and invest in sustainable infrastructure to provide low-carbon solutions to our tenants to meet their emissions goals. Sembcorp’s capabilities in providing integrated urban solutions and sustainable development put us in good stead to capitalise on the growing trend and capture growth opportunities.

Decarbonisation Solutions

Competitive Edge

Ability to play a key role in green hydrogen and green ammonia production, given Sembcorp’s growing renewables presence in India and China, Asia’s top renewable energy markets

As one of the largest importers and retailers of natural gas in Singapore, Sembcorp is well-positioned to act as a hydrogen off-taker for power generation or as a supplier to industries

GoNetZero™ provides a one-stop digital platform for corporates to procure and manage environmental attributes to support the clean energy transition

Well-positioned to Drive Decarbonisation and Energy Transition

Energy alternatives for a cleaner future

While Singapore has limited renewable energy resources, the country is able to access low-carbon electricity that is abundant in the region by connecting to regional power grids. This also promotes the development of renewable energy in the region and paves the way in realising the ASEAN Power Grid vision.

In October 2023, Sembcorp was granted conditional approval to import 1.2GW of low-carbon electricity from Vietnam to Singapore by the Energy Market Authority (EMA). This is the largest conditional award for importation from EMA. Together with Petrovietnam Technical Services Corporation, a member of Vietnam Oil and Gas Group (Petrovietnam), Sembcorp will develop offshore wind farms over a sea area of approximately 200,000ha off the shores of South Vietnam, subject to the receipt of relevant approvals. Sembcorp is also in exclusive discussions to import 1GW of low-carbon electricity from Sarawak. These imports will enable our customers to have greater access to green energy, and also contribute towards Singapore’s target to import up to 4GW of low-carbon electricity by 2035.

Exploration of green fuels and carbon capture solutions

Clean and green fuels such as green hydrogen and ammonia, as well as carbon capture and storage solutions, will help to decarbonise existing gas plants. We are exploring these solutions and

Key Developments

Received conditional approval to import 1.2GW of low-carbon energy from Vietnam to Singapore – largest conditional award for importation from Energy Market Authority (EMA)

Joint development agreement with Sojitz Corporation and Kyushu Electric Power Co to pursue potential opportunities for green ammonia production

GoNetZero™ increased its international presence, serving more than 40 multinational customers’ operations across 14 countries: Achieved 2.6 million tonnes of carbon credit sales, and 1.8 million Renewables Energy Certificates (RECs) sales during the year

have signed agreements with strategic partners to pursue these opportunities. They include:

- Joint development agreement with Sojitz Corporation and Kyushu Electric Power Co to pursue potential opportunities for green ammonia production in India for export to Japan. Japan aims to import 3 million tonnes of ammonia for fuel by 2030, with anticipated demand reaching 30 million tonnes by 2050
- Joint development study agreement with PT PLN (Persero) to assess the feasibility of green hydrogen production in Indonesia for export to Singapore
- Memorandum of Understanding with Gentari to explore the development of hydrogen production facilities and transportation of hydrogen from Malaysia to Singapore

In October 2023, Sembcorp was shortlisted by EMA and the Maritime and Port Authority of Singapore to participate in the request for proposal to provide a low- or zero-carbon ammonia solution for power generation and bunkering on Jurong Island in Singapore. The project entails the generation of 55MW to 65MW of electricity from imported low- or zero-carbon ammonia via direct combustion in a gas turbine or combined cycle gas turbine; and facilitating ammonia bunkering at a capacity of at least 0.1 million tonnes per annum. A lead developer will be chosen to jointly develop the proposed end-to-end ammonia solution.

As one of the largest importers and retailers of natural gas into Singapore, we can offer decarbonisation solutions to our customers through low-carbon feedstock, either as an alternative



Sembcorp solar assets in Yunnan, China

fuel to, or blend with natural gas. We will continue to leverage our energy and renewables expertise to participate in opportunities across the green hydrogen and ammonia value chain.

Leverage technology to abate emissions

GoNetZero™ is a decarbonisation solution provider helping its clients to achieve their carbon neutrality goals through the provision of verified environmental attributes (such as RECs and carbon credits) and digital platform solutions. GoNetZero™’s suite of digital services includes GoNetZeroConnect, which provides emission estimation and tracking in a single dashboard, a platform for buying and selling of credible RECs and carbon credits, as well as NetZeroOS, for management and optimisation of energy assets across solar and wind.

During the year, GoNetZero™ sold 2.6 million tonnes of carbon credits.

It also sold 1.8 million RECs, a nine-fold increase from the previous year. Since its launch in 2022, GoNetZero™ has secured over 40 multinational customers, including OCBC, Razer as well as UBS. GoNetZero™ is supporting these companies to meet their decarbonisation goals across operations in 14 countries. To support international markets expansion, GoNetZero™ has set up office presence in three key markets: Singapore, the UK and Vietnam. GoNetZero™ further announced the launch of Renewable Energy Navigator Explorer (René), a natural language, conversational Artificial Intelligence that provides users with simplified energy insights, at the 28th United Nations Climate Change Conference. René is built to provide real-time and global accessibility that allows business leaders and owners to gain a holistic overview of their energy assets across operations; deliver readily digestible information, enhancing comprehension and decision-making in the management of renewable energy assets.

Outlook

The pursuit of decarbonisation solutions for power generation remains important to achieve net zero. Building upon its leading position in Singapore, Sembcorp is strategically positioned to capitalise on decarbonisation trends across the region. Sembcorp is able to play a key role in green hydrogen production, given our growing renewables presence in China and India, Asia’s top renewable energy markets. Our focus on low-carbon electricity for Singapore, as well as securing and sourcing low-cost green feedstock positions us well to participate in the development of a regional clean and green energy exchange and distribution network in ASEAN.

We will continue to focus on developing our capabilities and invest circumspectly in the Decarbonisation Solutions segment. We expect the segment to generate positive earnings by 2028 and position the company for growth beyond 2028.