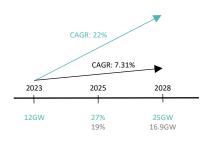


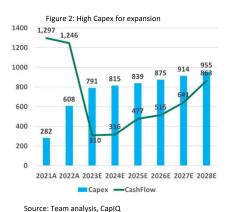
#### RECOMMENDATION

# DATE 20/01/2024 RECOMMENDATION SELL DOWNSIDE 21.89% CURRENT PRICE SGD 5.39 TARGET PRICE SGD 4.21 INDUSTRY ENERGY TICKER U96: SI STOCK EXCHANGE SGX

Figure 1: Sembcorp's expansion plans







source: ream analysis, capit



Source: EMA, Team analysis

## INVESTMENT SUMMARY

We issue a **SELL** recommendation for Sembcorp Industries (SCI) with a one-year price target of \$4.21, presenting a **21.89** % downside potential on the closing price of \$5.39 on 20 January 2024. The price target is derived from a combined valuation of 70% Discounted Cash Flow method (DCF) and 30% Multiples Approach.

Our recommendations lie in the following catalyst (1) Biting off more than they can chew, (2) Trapped in transition, and (3) Finding the competitive edge.

#### BITING OFF MORE THAN THEY CAN CHEW

Sembcorp's expansion plan, involving a substantial \$14 billion investment, appears to be excessively ambitious, posing potential risks to the company's financial stability. The considerable infusion of capital into these expansion initiatives is expected to lead to a decrease in short-term cash flow, potentially straining the company's liquidity. Additionally, the decision to finance this expansion through increased debt raises concerns about the long-term financial health of the organization. While expansion is a common strategy for growth, the scale of Sembcorp's investment outpaces the global renewable capacity CAGR of 7.31% with an ambitious forecast of 22% in assumed renewable capacity CAGR.

#### TRAPPED IN TRANSITION

Sembcorp finds itself in a precarious position, caught in a transition where the consequences of over allocating its cashflow to an overly ambitious expansion plan are becoming apparent. The company's significant investment in expansion, amounting to a substantial \$14 billion, has strained its financial resources and tipped the balance unfavorably. The overcommitment to expansion initiatives has led to a drop in profitability, as short-term cash flow is diverted towards funding the ambitious projects, leaving limited resources for day-to-day operational needs. This financial predicament not only jeopardizes the company's immediate profitability but also raises concerns about its ability to navigate the transitional period successfully. Sembcorp now faces the challenge of recalibrating its financial strategy to ensure a more sustainable balance between growth objectives and maintaining profitability during this critical phase of transition.

#### FINDING THE COMPETITIVE EDGE

Sembcorp appears to be struggling to find its competitive edge, evident in its lackluster pricing strategies, a noticeable shift in investment focus, and a relatively minor market share. The company's inability to establish a compelling pricing structure has placed it at a disadvantage in the market, hindering its ability to attract and retain customers. Furthermore, a discernible shift in investment focus may have diverted resources away from key areas that could enhance its competitive position. With a minority market share, Sembcorp faces challenges in asserting its presence and influence in the industry, particularly when competing against more dominant players. To regain a competitive edge, the company may need to reassess its pricing models, realign its investment priorities, and implement strategies to increase its market share, ensuring a more robust and sustainable position in the competitive landscape.

## BUSINESS DESCRIPTION



FY22 Revenue by Segment



- Conventional Energy Renewables
- Integrated Urban Solutions Others

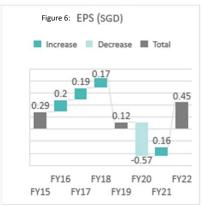
Source: Team analysis, Company Data Figure 5:

FY22 Revenue by Geography

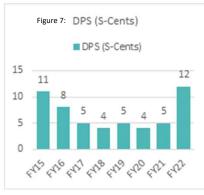


Singapore = UK = China = India = Others

Source: Team analysis, Company Data



Source: Team analysis, Company Data



Source: Team analysis, Company Data

#### Alliance:

BCG energy Ltd, Energy Market Authority, Great Eastern Holdings Limited, Investment and Industrial Development Corporation - JSC, PT Intraco Penta/PT PLN Batam, Zero Degrees Whitetail Development Itd.

## BUSINESS SEGMENTS AND GEOGRAPHIC REACH

Sembcorp Industries Ltd. is an investment holding company, which engages in the production and supply of utilities services, terminaling and storage of petroleum products and chemicals, and the provision of energy and urban solutions. It operates through the following segments: Renewables, Integrated Urban Solutions, Conventional Energy, and Other Businesses and Corporate.

The Renewables segment provides electricity from solar and wind resources, energy storage, system services that support integration of renewables into grid, and trading of Energy Attribute Certificates.

The Integrated Urban Solutions segment supports sustainable development through its suite of urban, water as well as waste and waste-to-resource solutions.

The Conventional Energy segment deals with the sale of energy molecules including natural gas, steam, and electricity from a diversity of fossil fuels such as natural gas and coal.

The Other Businesses and Corporate segment refer to businesses relating to specialized construction, minting, the Group's captive insurance and financial services, as well as corporate costs. The company was founded on May 20, 1998, and is headquartered in Singapore.

#### **BUSINESS SEGMENTS**

The company's main businesses areas are the Conventional Energy, Renewables, Integrated Urban Solutions and Others. Conventional energy accounts for 83.7% of revenue, followed by 6.5% from Renewables and 5.6% from Integrated Urban Solutions (Figure 4).

Sembcorp' customers are spread across the globe with 74.5% of revenues coming from Singapore, 14.9% from UK, 3.5% from India, 3.8% from China and 3.3% from Others in 2022 (Figure 5).

#### PRODUCT HIGHLIGHTS AND USP

#### **UNCERTAIN ENERGY LANDSCAPE**

Sembcorp Industries Limited is grappling with the challenges of an energy landscape undergoing rapid transformation. The energy transition has gained momentum, with the path forward characterized by uncertainty in technology trends, geopolitical risks, and shifting consumer behavior. This uncertainty makes it difficult to shape resilient investment strategies that align with both long-term decarbonization goals and short-term economic return expectations.

#### CHANGING FOSSIL FUEL DEMAND AND THE SHIFTING ENERGY MIX

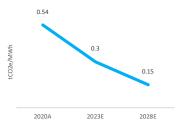
Fossil fuel demand is projected to peak by 2030, with coal facing a sharp decline. However, the outlook for natural gas and oil remains uncertain, and the extent of their decline varies across scenarios. Sembcorp's diversified portfolio covering renewable energy, water, and wastewater management may face headwinds in this evolving landscape.

Renewables are expected to dominate the power mix by 2050, providing between 65 and 85 percent of global generation. While this aligns with Sembcorp's commitment to sustainable development, the challenges in the renewables buildout, including supply-chain issues and slow permitting, could impact the company's growth prospects.

#### COST DISPARITY IN THE RENEWABLE ENERGY TRANSITION

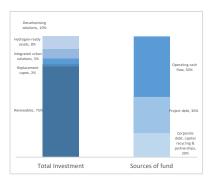
The global energy transition, intended to be a green recovery from the COVID-19 pandemic, faces hurdles, according to the Renewables 2022 Global Status Report, challenges such as delayed transitions due to fossil fuel subsidies. permitting processes, and the need for direct support in heating, cooling, and transport sectors. Delaying the energy transition poses risks, with increased costs of loss and damage to society, businesses, individuals, and governments.

Figure 8: SCI's Planned Reduction in Emissions



Source: Team analysis, Company Data

Figure 9: Access to Diversified Funding Sources



Source: Team analysis, Company Data

Figure 10: 2024-28 Capital Allocation Plan



Figure 11: External Factors driving green demand











The transition from conventional to renewable energy, while a commendable long-term strategy, poses short-term financial challenges due to the higher costs associated with renewable sources. The industry's shift towards sustainability is accompanied by financial implications. Sembcorp's investors should be aware that the transition, while promising, might not yield immediate financial returns, affecting short-term profitability.

Sembcorp's ambitious shift from conventional to renewable energy aligns with global imperatives. However, immediate challenges, including cost disparities, delayed transitions, and persistent fossil fuel subsidies, suggest a sell recommendation. The global energy transition, though marked by rising renewable investments, lags due to complex relationships between fossil fuels and climate action. Short-term obstacles against the long-term potential should be considered, navigating a landscape where immediate market realities may outweigh Sembcorp's visionary plans.

#### **DEMAND DRIVERS**

We expect strong industry growth in energy and urban solutions to be propelled by 4 key demand drivers each: In navigating the evolving energy landscape, Sembcorp is strategically positioned to harness significant growth driven by four distinctive demand drivers, shaping a favorable macro environment for the company.

#### **NET-ZERO 2050 SCENARIO:**

Sembcorp's commitment to sustainability resonates with the global urgency to combat climate change, placing it at the forefront of industry leaders. Aligning with initiatives like the UN's Net-Zero by 2050 and the Paris Agreement, the company's focus on renewable energy solutions is poised to capitalize on the increasing demand for carbon-neutral alternatives.

#### **RESILIENT SUPPLY CHAIN:**

In response to the dynamic changes in the global energy landscape post-Russia's war on Ukraine, Sembcorp's proactive approach to diversifying energy sources showcases its commitment to ensuring energy security.

#### HARNESSING RENEWABLE & HYDROGEN POWER:

Sembcorp's robust demand for renewable energy solutions aligns with the global shift toward a renewable energy mix, set to progress from 29% in 2020 to 70% by 2050. (Sembcorp Annual Report) The company's consistent investments in renewable energy capacity and capability, coupled with the government's carbon tax increments, position Sembcorp as a major player in the clean energy transition. Furthermore, Sembcorp's exploration of potential energy generation from hydrogen places it at the forefront of an emerging energy frontier, reflecting its commitment to technological innovation and sustainability.

#### OFFSHORE AND ONSHORE GROWTH POTENTIALS:

Sembcorp's strategic approach to offshore growth aligns with the challenge of limited space, especially in Singapore. The company's involvement in various offshore projects, such as windfarms and solar farms, showcases its capability to seamlessly integrate renewable energy infrastructures into society while addressing land constraints. The company's international ventures in offshore energy storage systems and contributions to some of the world's largest offshore solar farms position it as a global leader in offshore renewable energy. Simultaneously, Sembcorp recognizes the growth potential in onshore wind and solar projects, addressing the diverse needs of its markets.

#### SUPPLY DRIVERS AND SEMBCORP'S STRATEGIC POSITIONING

## SIGNIFICANT ENTRY BARRIERS AND CONSOLIDATION:

The formidable entry barriers and consolidation trends in the renewable energy market play to Sembcorp's advantage. With an established presence in both emerging and developed markets, including India and China, Sembcorp has strategically navigated these challenges. Sembcorp's presence in both emerging and developed markets positions it well, but market realities may lag behind the company's ambitious plans. The industry's rapid growth may not align seamlessly with Sembcorp's aggressive expansion, potentially leading to market misalignment.

Figure 12: Porter's 5 forces for energy industry



Source: Team analysis, Company Data

Figure 13: Porter's 5 forces for energy industry

inguic 15.1 orter 5.5 forces i	or energy maddery
Competition in the industry	High
Potential of new entrants	Low
Supplier Power	Moderate
Consumer Power	Moderate
Threat of Substitutes	Low

Source: Team analysis, Company Data

Figure 14: Yearly EPS

		2022		2023	2024	202
High		-		0.50	0.46	0.4
Low		-		0.36	0.36	0.34
Avera	age	0.45		0.42	0.41	0.40
	0.6					
	0.5	_	Т		_	т
83	0.4		1			
	0.3					
	0.2	2022	2023		2024	2025

- Estimate

Source: Barron's

Yearly Estimates

As conventional energy players saturate the buy-side through non-organic growth, Sembcorp's ability to consolidate its position in these markets strengthens its competitive moat. This market positioning not only shields the company from new entrants but also enhances its capacity to navigate and benefit from the evolving dynamics of the renewable energy sector.

#### SURGING ENERGY PRICES AND GOVERNMENTAL INCENTIVES:

The surge in energy prices due to geopolitical conflicts introduces uncertainties for Sembcorp. While initially, it might seem like an opportunity, the company's reliance on emerging markets may expose it to risks associated with fluctuating energy prices. Additionally, while governmental incentives are driving a net-zero future, Sembcorp's strategic alignment with these initiatives could be insufficient to offset the challenges posed by surging energy prices. The dual scenario may create complexities for the company, potentially affecting its profitability and making it less appealing to investors seeking stability in the face of market uncertainties.

#### **OVERALL IMPACT ON SEMBCORP**

Sembcorp's strategic positioning for success is underscored by a combination of significant entry barriers, consolidation trends, surging energy prices, and governmental incentives. The company's market presence spans both emerging and developed economies, providing resilience against regional variations and ensuring sustained growth. The challenges posed by entry barriers are transformed into opportunities, leveraging Sembcorp's proven adaptability and strategic decision-making.

In the face of substantial transformation in the global energy landscape, Sembcorp stands out as an enticing option for investors seeking exposure to a company strategically poised to capitalize on growing energy demands. Despite this positive outlook, it is important to note that the full impact of these factors on Sembcorp's performance may not materialize in the short term. However, the company's long-term prospects suggest that these strategic advantages could yield positive results over an extended investment horizon.

#### **COMPETITIVE POSITIONING**

Sembcorp's competitive advantage stems from their pivot into their renewable energy mission, targets and infrastructure. Sembcorp's reliability, reputation and knowledge has allowed them to gain an international audience. Furthermore, continuous innovation of infrastructure designs and implementation despite challenges has enabled them to secure new contracts and further solidify their reputation locally and globally.

#### SPEARHEADING THE INDUSTRY

Sembcorp updated its business strategy in 2021 to "brown to green" along with setting ambitious targets for the coming years. This earmarked a significant pivot for the giant in the natural gas and electricity generation market. Its focus on its renewable's portfolio has allowed Sembcorp to successfully attain an incredible gross capacity of 8.6GW to date with an additional 3.3GW under development, due in 2024, surpassing its 2025 target of a 10GW portfolio. As a result, Sembcorp has set forth another target of achieving a capacity of 25GW by 2028. Furthermore, Sembcorp supports the Singapore government in its targets of a 2GWp (gigawatt-peak) solar generation capability and 200 MWh (megawatt-hour) energy storage systems for renewable energy generated. Amidst its conventional energy peers, only Keppel Corporation is listed on the Singapore Exchange (SGX). In comparison to Sembcorp, Keppel Corporation has also managed to achieve its 2030 renewable 2GWp portfolio target, with 3GW worth of renewable infrastructure to date. This pales in comparison to Sembcorp's massive portfolio and targeted renewable capacity.

Figure 15: Singapore energy market share

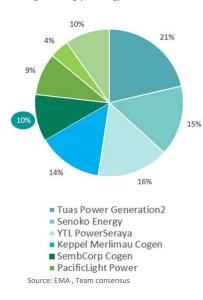


Figure 16: Investment allocation

	Net profit 6-year CAGR	Expected Investment (2024 – 2028)	2028 ROE
Gas and related services	-2%	S\$1 Billion	15%
Renewa bles	+25%	\$11 Billion	10%

#### INNOVATIVE SOLUTIONS VERSUS CHALLENGES

Sembcorp has exceptional foresight and problem-solving capabilities. Sembcorp's BoD understood the future of its industry, identified potential future gaps and recoursed towards renewable energy solutions. Sembcorp supports the Singapore Green Plan 2030 (2GWp energy generation and 200MW ESS) and recognised the issues that Singapore would encounter in its green journey. Sembcorp's proposal of Tengah Floating Solar Farm, one of the world's largest offshore solar farms & first to use electroluminescence testing, beat 3 other local and overseas companies with their highly efficient panels and layout that energy generation. 60MWp. and maximises were appointed project. Furthermore, Sembcorp's 285MWh battery energy storage system located in Jurong Island, the largest in SEA, has assisted Singapore with achieve their 200MWh target 3 years ahead of schedule. In addition, Sembcorp and Keppel are the only 2 energy providers that have been greenlighted by the Singapore government to build a hydrogen plant by 2026. With these implemented innovative solutions and other contracts in its pipeline, we believe Sembcorp has the capabilities and know-how with creative renewable solutions

#### **ENHANCING GLOBAL FOOTHOLD**

Sembcorp has an impressive portfolio of 8.6GW of renewable capacity to date, with 3.3GW under development. Of the 11.9GW portfolio, 898MW of their renewable capacity is in Singapore with the rest of the 11GW located overseas across Vietnam, China, Indonesia, India and the United Kingdom. With current and under development projects overseas, Sembcorp has managed to enter some of the overseas markets and circumvent the issues of legislations and regulations. Recently, Sembcorp has secured its first renewables contract in Oman, Middle East, deepened relations in Vietnam with 4 new Vietnam Singapore Industrial Parks (VSIPs) with MoUs for 10 additional prospective VSIPs, MoU with Gentari (a Malaysia Company) to jointly explore potential collaborations in the fields of clean energy solutions within SEA and low-carbon hydrogen initiatives between Singapore and Malaysia. In comparison, Keppel's 3GW portfolio consists of onshore and offshore wind energy assets across Germany, Norway and Sweden. Keppel and their co-investor also have a controlling stake in Cleantech Solar Asia, an asset company with solar assets in India, Thailand, Malaysia, Singapore, Indonesia, Cambodia and Vietnam.

Although Keppel also has a decent outreach, Sembcorp has deep seated roots into multiple countries with subsidiaries and collaborations as well. We believe that Sembcorp will continue the expansion of their renewables by acquisitions and capitalise on organic growth opportunities globally.

## ENVIRONMENTAL, SOCIAL, GOVERNANCE

Sembcorp continuously sets ambitious ESG targets and strives to deliver on them.

#### 

FIGURE 17: SCOPE 1, 2 AND 3
GHG EMISSIONS (KTCO2E)

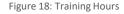
GHG emissions attributed to SEIL was 15.1 million tCO2e

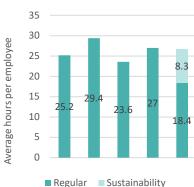
Source: Team analysis, Company Data

#### ENVIRONMENTAL

Sembcorp's decarbonization efforts are in alignment with the global transition towards a lower carbon economy. In 2022, through the sale of SEIL, Sembcorp has achieved their 2025 GHG emissions intensity target, and are on track to net-zero emissions by 2050. Additionally, including pending acquisitions, Sembcorp has surpassed their initial target of 10GW by 2025, achieving 12GW of renewables capacity in 2022. In view of 2022's success, Sembcorp has revised their renewable capacity portfolio target to 25GW by 2028 (Appendix B2). We believe Sembcorp is on track to meet its targets and will continue revolutionising their green solution designs and capabilities. (Appendix B5)

Team Analysis: Sembcorp has been accused of green washing from the sale of SEIL. However, through our analysis, we believe this is a necessary step for their transition into renewable energy, due to their costly expansion plans. An alternative to avoid further tarnishing Sembcorp's premium brand reputation, Sembcorp could provide details on their plans for their heavy carbon footprint assets.





Source: Team analysis, Company Data

Figure 19: Health & Safety



Source: Team analysis, Company Data

Figure 20: Governance Scorecard

Board of Directors	26.90/30.00
Stakeholders - CSR	4.80/5.00
Transparency & Disclosure	28.50/30.00
Shareholders	29.00/30.00
Executive Compensation	4.60/5.00
Overall Score	93.80/100

Source: Team analysis, Company Data

Figure 21: Sembcorp's ESG Rating

ESG Rating Providers	Sembcorp
Refinitiv	В-
FTSE	3.2
MSCI	AA
Morningstar Sustainalytics	35.2

#### SOCIAL

Sembcorp integrates digital and in-person learning opportunities through their Academy's learning platform. An employee receives an average of 26.7 learning hours, of which, 8.3 learning hours were specifically on sustainability skills development, a new metric introduced in 2022. (Figure 18). It is to note that there is little improvement in the female workforce proportion, reaching 18.5% in 2022, from the previous year's 17.5% (Appendix B3).

In community engagement and investment, Sembcorp strategically defined its investment approach to advance SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action). Despite a dip in community engagement from 82.6% in 2021 to 61.5% in 2022, Sembcorp has set its sights on achieving full community support at 100% by 2023. Simultaneously, the company demonstrated its commitment through increased cash donations, contributing S\$2.9 million in 2022 to charities and community initiatives globally, a marked increase from S\$2.7 million in 2021.

Recognizing the inherent health and safety risks associated with its operations, Sembcorp prioritizes the well-being of its workforce. All employees are equipped with the necessary skills and tools to work safely. Additionally, contractors are mandated to comply with the Group's rigorous health and safety policies. These policies undergo meticulous internal audits and adhere to pertinent Occupational Health and Safety Assessment Series and International Organisation for Standardisation (ISO) Standards. Notably, in 2022, there were no work-related fatalities or high-consequence injuries, accompanied by significant improvements in both the Lost Time Injury Rate and Total Recordable Injury Rate (Figure 19). Sembcorp's multifaceted approach underscores its unwavering commitment to sustainability, community welfare, and employee safety.

Team Analysis: Sembcorp has taken precautions, made improvements and plan to further enhance their social responsibility. We believe that Sembcorp has done well in this aspect and will continue to do so in the future. It is to note, there could be improvements their gender ratio.

#### GOVERNANCE

We believe that Sembcorp Industries has an exemplary governance structure to facilitate future growth. The evaluation is based on five factors: the board of directors (BoD), executive management and compensation, shareholder rights, transparency and disclosure, and sustainability. We have assigned a high score of 93.8/100 based on these factors (Figure 20, Appendix B11). In addition, Sembcorp adopts a consistent approach to identify, measure and, mitigate risks through their Integrated Assurance Framework. In 2022, the net number of shares held by the BoD increased by 504,611 shares.

Board of Directors: Sembcorp's BoD has 10 members. BoD comprises of 9 non-executives, of which, 7 are independent directors. They all possess knowledge and experience from various relevant fields. Further strengthening Sembcorp's position for future challenges and opportunities. (Appendix B7).

**Executive Management:** The executive management comprises of 15 members, overseeing the day-to-day operations. The executive management is highly experienced and has relevant educational backgrounds in their specialised fields, including finance, infrastructure and chemical engineering, which contributes to Sembcorp reaching its goals (Appendix B9).

Remuneration: Regulated by their Executive Resource & Compensation Committee (ERCC) and Willis Towers Watson (advisor provider). Most variable remunerations, cash or shares, are subject to the level of completion of all, short, medium and long-term projects. We believe that these project-linked remuneration targets helps to incentivise management to make strategic decisions supporting long-term profitability and sustainability of the company.

**Shareholders:** Sembcorp's free float accounts for 50.3% of outstanding shares and each share carries one voting right. The 50.3% are made up of mainly retail shareholders (13.1%), institutions (22.4%). Sembcorp's substantial shareholder, Temasek Holdings with strong ESG mandates, holds the remaining 49.6% of shares, hence gaining a brand premium (Appendix B4).

To summarise, we consider Sembcorp's ESG performance to be favourable and expect Sembcorp to continue working towards their ESG goals. Moving ahead, it is to be noted that Sembcorp could face potential accusations in their transition journey. To avoid tarnishing their reputation, we believe Sembcorp should provide their plans with regards to their heavy carbon footprint assets. Information on how they plan to reduce their carbon emissions to achieve their net-zero emissions 2050 objective should also be provided.

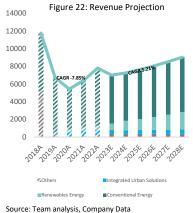
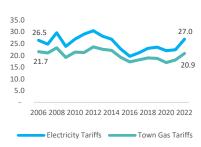


Figure 23: Electricity Tariff chart



Source: Team analysis, Company Data

Figure 24: Cost reduction from Renewables
YoY % Reduction



Figure 25: Cost to revenue



Source: Team analysis, CapIQ



#### Source: Team analysis, Company Data

#### SCALING THE REVENUE WITH EXPANSION FOR RENEWABLE ENERGY

Forecasting revenues over a 5-year period, we estimate a CAGR of 5.21%. SembCorp's revenue is driven by three segments, Renewable energy, Integrated urban solutions and Conventional energy.

Renewable energy is determined by the gross capacity to be delivered and the CAGR of the global renewable energy market. We used estimated rate of global expansion to calculate the growth of its capacity. Since 2020, the renewable capacity of SembCorp has increased by a CAGR of 55% to meet its goal of 12GW in 2023. However, we anticipate a slower growth rate in its gross capacity which means that they will not be able to meet its 2028 goal of 25GW. Going forward, we do believe that renewable energy will become the new revenue driver with its goals of expansion for the renewable energy capacity in the long run. We expect Sembcorp to grow at constant CAGR with the global effort in the capacity expansion of 7.83% in its capacity. Therefore, the revenue generated per MW capacity will increase along with the CAGR of 8.5% for the global renewable energy market.

**Integrated Urban Solutions** is determined by 2 sectors, Water and wastewater treatment and waste collection. Water sectors is determined by gross capacity to be delivered with the CAGR of waste management market. Similarly, the revenue generated by waste collection is determined by the same factors, total waste collected and CAGR of waste management market.

**Conventional Energy** is driven by the gross conventional power capacity that consist of both Gas and Coal & Diesel, the price of electricity price and the CAGR of electricity generation market in Singapore. However, based on historical trend of the electricity tariff in Singapore, the price of electricity is stable since 2006, with a price of 26.5 cents/ kWh and 27.0 cents/ kWh (Figure 23). Therefore, the revenue generated is driven by the 2 other factors mentioned above.

#### RISING CAPEX FOR RENEWABLES IMPACTS ITS CASHFLOW

**CAPEX:** We expect Capex to increase as the company begins its expansion in its renewable domain, initially rising from SGD 282mn in 2021 to 954.8mn in 2028. (Figure 2) The expansion of renewables will require higher working capital, therefore resulting into a large increase in its capex from 2021 to 2023 as Sembcorp begins to scale up its expansion. Due to its high capex, the cashflow of Sembcorp will be decreasing when they engage more towards renewable. Overall, we expect low cash flow by until the end of the forecast period due to its aggressive expansion plan in renewables.

#### COST CONTROL AND TECHNOLOGY ALLOWS MARGIN EXPANSION

Capital Investment: SembCorp's 5-year plan for its capex investment in renewable will reduce its key margin in the long run. The current profit margin is reduced due to the capex for renewable, which will incur higher cost and depreciation during the year. However, their transition to renewables will allow increasing cost reduction due to the technology improvement in renewable energy (Figure 24). The cost will be reduced from 78.43% in 2022 to 73.55% in 2028 (Figure 25). Therefore, allowing margin expansion even with their renewable expansion (Figure 26).

#### PROFITABILITY MARGINS LEADS TO QUALITY SHAREHOLDER RETURNS

We expect Sembcorp to deliver a growth for its EPS from 2019A-2028F while expanding its net margin (from 3.7% 2019A to 7.8% 2028F) despite potential tax concerns and interest rate repricing. We believe that Sembcorp's transition to renewables, and improving operational efficiency will drive net margin expansion moving forward, which in turn will lead to an increase in its ROE of 8.9% 2019A-2028F. (Figure 27)

Figure 27: ROE and EPS Growth



Source: Team analysis, CapIO

#### STRONG LEVERAGE CAPABILITY AND LIQUIDITY ALLOWS EXPANSION

Leveraged ratio: SembCorp has improved its financial position after the increase in debt during the covid period. The company was able to reduce its debt-to-equity ratio from 231% to 180% with \$1.25B in cash equivalents and expect no issue with the repayment on their immediate debt that expires in the following year of \$930Mn. In 2022, SembCorp's leverage ratio of debt-to-equity of 175% and Net/EBITDA of 4.2x is lower than the peer average of 198% and 8.5x (Figure 28). This indicates their leverage ability to take on much more debt that can be used to fund its renewables expansion. SembCorp's superior current ratio of 1.3 as compared to the peer average of 0.9 in 2022 further ensures minimal financing risk.

Figure 28: Leverage Capability

	Net Debt/	Total	Current
FY2022A	EBITDA (x)	Debt/Equity	Ratio
SembCorp Industries	4.2	168%	1.35
Peer Average	8.5	198%	0.91

Source: Team analysis, CapIQ

#### **VALUATION**

Figure 29: WACC In	puts
Input	Value
Risk-free rate	2.97%
Beta	0.96
Equity risk premium	3.4%
Cost of equity	6.3%
After tax Cost of debt	3.1%
Tax rate	17.0%
Debt/Value	56.6%
Equity/Value	43.4%
WACC	4.5%

Source: Team analysis, Company Data

#### DCF VALUATION

Our DCF valuation employs the Free Cash Flow (FCF) methodology to arrive at the intrinsic value of the company. This model best fits Sembcorp due to the nature of its business and its strategic direction, allowing us to account for the high growth prospects that the company would face. We analyzed Sembcorp's historical figures along with its future potential and valued them with an explicit forecast period from 2024-2028.

#### WACC

We estimate a WACC of 4.5% for SembCorp (Figure 28). By adding SembCorp' debt rating implied corporate spread to the risk-free rate, we arrive at the cost of debt. We account for increased target leverage ratio by small adjustment to the corporate debt spread.

The cost of equity is calculated with the CAPM formula, reflecting Singapore's equity risk premium, the risk-free rate and a re-levered beta from industry peers, of 0.96. We use a target market D/E ratio of 10% indicating our long-term expectations for SembCorp' debt level.

#### TERMINAL VALUE

We expect the terminal growth rate to stabilize at 1% after 2024 based on (1) projected real GDP growth in core markets and (2) a strong global focus on transitioning to renewable energy. We see potential upside for the terminal growth rate based on the anticipated renewable energy dominance over the next decades and SembCorp's favourable market position. This will result in further appreciation of the share price far beyond our target price. Our terminal value of SGD 14.7bn implies an exit EV/EBITDA multiple of 8.8x.

#### SENSITIVITY ANALYSIS

Our sensitivity analysis on the DCF valuation showed that by varying WACC ( $\pm 0.5\%$ ) and terminal growth rate ( $\pm 0.25\%$ ), it resulted in a potential price range between \$2.00 and \$10.00 (Figure 30). We believe that our sensitivity analysis provides a reliable estimate as each figure in the sensitivity table aligns with figures obtained through various valuation methodologies.

Figure 30: Sensitivity Table

			Terminal Growth Rate (%)						
	4.26	0.50%	0.75%	1.00%	1.25%	1.50%			
	3.47%	5.77	6.53	7.46	8.58	10.00			
<u>8</u>	3.97%	4.42	4.96	5.60	6.35	7.25			
Ş	4.48%	3.40	3.80	4.26	4.79	5.41			
3	4.97%	2.63	2.94	3.29	3.68	4.14			
	5.47%	2.00	2.25	2.52	2.82	3.17			

Source: Team analysis, Company Data

Figure 31: Scenario analysis

Scenario	CAGR growth	Bear Case	Base Case	Bull Case	
Renewables Sector	Renewables Sector Global Renewables capacity		7.3%	8.8%	
	Global energy market 7.2%		8.7%	10.2%	
Integrated Urban Solutions	Waste management market in Singapore	0.25%	1.25%	2.25%	
Conventional Energy	Electricity generation market in Singapore	1.4%	3.4%	5.4%	
GW Delivered 2028		15819.81	16973.39	18193.31	
Price		3.91	4.21	4.54	
% change from current price		-38%	-28%	-19%	

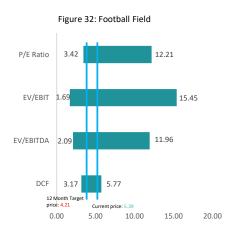


Figure 33: Peer Group

Source: Team analysis, Company Data

Conventional Energy Peer			
Group			P/E Ratio
YTL Power International Berhad	6.4	8.0	7.4
(KLSE:YTLPOWR)			
Energy Absolute Public	17.4	23.5	19.2
Company Limited (SET:EA)			
Keppel Corporation Limited	16.9	19.7	14.3
(SGX:BN4)			
Average	7.9	10.5	12.8
Median	6.4	8.0	11.8
Renewable Energy Peer Group			P/E Ratio
China Three Gorges	12.2	22.4	20.0
Renewables (Group) Co.,Ltd.			
(SHSE:600905)			
CK Power Public Company	13.8	25.9	26.4
Limited (SET:CKP)			
BCPG Public Company Limited	15.0	28.6	16.1

Source: Team analysis, Company Data, CapIQ

Median

#### SCENARIO ANALYSIS

We identify that the CAGR growth of the different industry for each of its revenue contributor as the key variable to our forecasts. Our base scenario shows the current industry growth rate of the energy market globally and Singapore's growth rate on its relevant markets. We believe that SembCorp's investment plan for their upcoming expansion for renewable capacity allows it to advance as a leading player in Singapore. We summarize the results of our analysis as shown above. (Figure 31)

#### RELATIVE VALUATION

To confirm our recommendation, we conduct multiples valuation, where we compare SembCorp to similar listed companies in terms of business characteristics and risk exposure. We construct 2 peer groups based on industry affiliation, where we include peers from the renewable and conventional energy technology industry, following our belief that Sembcorp shares similar industrial characteristics. (Figure 33) We expect a potential repricing of Sembcorp as we believe Sembcorp should trade closer to multiples of broader green technology companies due to its superior technological leadership and innovation. We obtain an implied target price of SGD 3.80, which represents a 25.00% downside and supports our sell recommendation. We identify EV/EBITDA as the most appropriate multiple due to the capital-intensive nature of the industry. However, we also study other relevant multiples, including EV/EBIT and P/E, and reach the same conclusion (Figure 34).

Figure 34: Multiples Comparison

		2023 EV/	EBITDA	2023 EV	//EBIT	2023	P/E
Peer Group		Average	Median	Average	Median	Average	Median
Renewable Energy	3	13.7	13.8	25.6	25.9	20.8	20.0
Conventional Energy	3	7.9	6.4	10.5	8.0	12.8	11.8
Sembcorp 2023 Multiple		8	1	11	L	1	3
Implied Share Price		3.80		4.02		6.1	16
					_	_	

Source: Team analysis, CapIQ

#### **INVESTMENT RISKS**

13.7

13.8

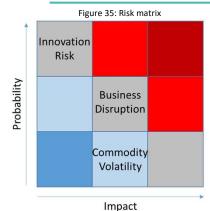
25.6

20.8

20.0

We identify the top investment risks for Sembcorp to be business disruption, volatile prices of commodities and innovation risk. The highly competitive energy market exposes Sembcorp to additional risks as outlined in **Figure 35**. Although we acknowledge that these threats pose a threat to Sembcorp's profitability and reduces investment return, we believe that the management can mitigate these risk factors.

#### INVESTMENT RISKS



Source: Team analysis

Figure 36: Sembcorp acquisitions deal size

Acquisitions	Size (USD\$ mm)
UK Power Reserve Limited	451.85
Aksay Kazakh Autonomous County Huidong New Energy Co., Ltd	8.76
East Saigon Investment and Industrial Development Joint Stock Company	0.66
Hung Viet Phat Solar Power Technology Company Limited	2.15
Green Infra Wind Farms Limited	0.01

Source: CapIQ , Team Analysis

Figure 37: Summary of key risks and mitigation measures in place



Source: Team Analysis

BUSINESS DISRUPTION

Probability: Moderate Impact: Moderate

**B1.** Post Acquisition Risk: Investors may face the risk that Sembcorp fails to translate its offshore acquisitions into profits.

**Valuation Impact:** This is indicated in our bear case scenario whereby Sembcorp fails to capture more than 20% market share by 2028, resulting in a price target of \$3.88 (-8.51% downside from target price).

**Mitigation:** Sembcorp's management conducts scenario analysis and stress-testing of their existing operations to identify potential risks and have prepared contingencies in their operating model. With a 49% stake in Sembcorp, Temasek Holdings be able to more accurately assess synergies in their acquisition. We believe that the post-acquisition risks will be mitigated by the management of Sembcorp and the fund managers at Temasek Holdings.

**B2.** Risk of disasters and pandemics: Sembcorp is susceptible to supply chain disruption and energy production in the event of natural disasters and/or pandemic.

**Valuation Impact:** Our sensitivity analysis indicates that a 10% decrease in energy production is required to downgrade our recommendations to \$4.05 ( -4% downside from target price).

Mitigation: The geographical diversification of Sembcorp's facilities combined with its high degree of vertical integration reduces the risk of a full stoppage in production.

#### COMMODITY VOLATILITY

Probability: Low Impact: Moderate

**C1.** Commodity Volatility: Sembcorp is subject to fluctuations in commodity prices such as energy, coal, oil and natural gas for its conventional energy business and prices of raw materials required for the manufacture of wind and solar assets for its renewables business. Prices of electricity are also subjected to the **Uniform Singapore Energy Price (USEP)** which changes every half- hourly.

Valuation Impact: Our sensitivity analysis indicates that for us to downgrade our recommendations, the cost of goods sold will have to increase by 15%.

**Mitigation:** The Energy Market Authority (EMA) has initiated a circuit breaker protocol in the event of extended high electricity prices to relief the burden on the retailers such as Sembcorp. The management also engages in hedging instruments to hedge against price volatilities.

#### INNOVATION RISK

Probability: High Impact: Low

**I1. Innovation Risk:** If the management is unable to dominate the renewable energy market in Singapore, investors are exposed to downside.

**Valuation Impact:** Our bear scenario demonstrates the impact of failure to innovate in the renewable energy sector, resulting in their overall market share falling short of 50% in 2028, reaching a price of \$3.98 (-5.46% downside from current target price).

Mitigation: In their \$14 billion expansion plan, 10% has been allocated to maintain cash flow generation in their operating activities. Risk management on new green projects will also give good insights into the success rate of the project.

I2. Threat of new entrants: The attractive margins of the green energy sector may potentially lure in independent competitors as the high barriers to entry of the Open Energy Market (OEM) does not apply to the retailers that offers service only.

Valuation Impact: We consider the threat of entrants through a decrease in 10% of revenue in the retail sector. We do not foresee any change in our recommendations.

Mitigation: Sembcorp has signed power purchase agreements (PPA) with ST Telemedia Global Data Centres, Singtel and Micron with agreements to supply these companies' power for 8 to 18 years. This helps to stabilise a portion of Sembcorp's revenue stream in times of uncertain profits.

# **Appendix Title**

Appendix A1 – Porter's Five Forces (Energy)

Appendix A2 – Porter's Five Forces (Waste Management)

Appendix A3 – SWOT Analysis

Appendix B1 - ESG Scorecard

Appendix B2 - Goals and Timeline

Appendix B3 - Gender Ratio

Appendix B4 - Share Ownership

Appendix B5 - Sembcorp's Innovative Solutions

Appendix B6 - Board of Directors

Appendix B7 – Board of Directors Skills Matrix

Appendix B8 - Key Executives Chart

Appendix B9 – Key Executives Overview

Appendix B10 – BoD Recent Developments

Appendix B11 – Corporate Governance Scorecard

Appendix C1 – Income Statement

Appendix C2 - Balance Sheet

Appendix C3 – Cashflow Statement

Appendix C4 – WACC Computation

# **Appendix A1: Porter's 5 Forces for Energy Industry**

Competition in the industry	High	<ul> <li>6 major competitors</li> <li>4 licensed LNG importers</li> <li>Diversification of energy sources (renewable &amp; hydrogen)</li> <li>Strong brand recognition</li> </ul>
Potential of new entrants	Low	<ul> <li>Difficult in gaining electricity generation regulation</li> <li>Extremely high barriers to entry</li> <li>Highly specialised technicians and engineers required</li> <li>Difficulty in gaining significant brand loyal &amp; recognition</li> </ul>
Supplier Power	Moderate	<ul> <li>Suppliers of natural gas and specialised equipment hold significant bargaining power</li> <li>Significant time, cost and labour required to diversify energy sources</li> <li>Multiple suppliers of mechanical equipment &amp; LNG</li> </ul>
Consumer Power	Moderate	<ul> <li>Large consumer base of residential and commercial consumers</li> <li>PPA secures clientele for the duration</li> <li>Singapore's electricity market uses a gross pool model, limiting the pricing power of players</li> </ul>
Threat of Substitutes	Low	<ul> <li>No perfect/close substitutes for energy even as the primary source differs</li> <li>Homogenous product provided by all electricity retailers</li> </ul>

## Energy Industry



# **Appendix A2: Porter's 5 Forces for Waste Management Industry**

Competition in the industry	Moderate	<ul> <li>Dominated by 3 large companies</li> <li>Undifferentiated offerings</li> <li>Unable to directly compete for end-consumers</li> </ul>
Potential of new entrants	Low	<ul> <li>Increasing demand for waste management services</li> <li>Regulatory and capital barriers</li> <li>Established companies are better positioned as they serve as national images</li> </ul>
Supplier Power	Moderate	<ul> <li>Waste management provided under fixed-term contracts between governments and companies</li> <li>Limited alternatives for waste management and qualified specialized labour</li> </ul>
Consumer Power	Low	<ul> <li>Necessity of waste disposal severely limits consumer power</li> <li>Large size of government contracts have greater consumer power</li> <li>Buyer unlikely to create new waste disposal system due to costs and difficulty</li> </ul>
Threat of Substitutes	Very Low	<ul> <li>No real substitute for waste management</li> <li>Private waste disposal is often financially impractical</li> <li>Change in consumption habits could decrease waste produced</li> </ul>

# **Appendix A3: SWOT Analysis**

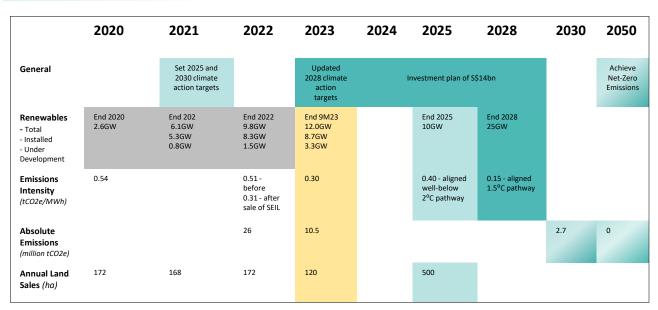
Strengths	Weaknesses	Opportunities	Threats
Strong position within the industry & good brand recognition	Strong competition within the industry	Current renewables leader with a 12GW capacity	Strong competition from other companies
Diversified portfolio of business, regular revenue stream	Dependent on global energy prices and government regulations	Wide area of expertise and able to capitalise on demand	
Clear objectives and steps to achieve them		Strategically positioned with an exceptional renewable portfolio and solutions	Geo-political issues might hinder growth
Excellent financial position and governance structure		Ability to continue investments into business	
Reliable financial backing and strict regulations by Temasek Holdings			

## Appendix B1 - ESG Scorecard

Company	Refinitiv	FTSE Rating	MSCI Rating	Morningstar Sustainalytics	Scope 1 & 2 emissions/ Sales
Mean	В	3.06	А	33.03	0.004132
Sembcorp VS Mean	Same as mean	Better than mean	Better than mean	Near mean	Better than mean
Sembcorp	B-	3.2	AA	35.2	0.001850
Keppel	B+	3.0	AAA	35.3	0.000036
ReNew Energy	A-	NA	Α	11.6	0.000041
Datang International	C+	NA	Α	54.5	0.122815
TATA Power	B+	3.0	BBB	40.7	0.006451
Wärtsilä Oyj Abp	NA	NA	AAA	20.9	NA

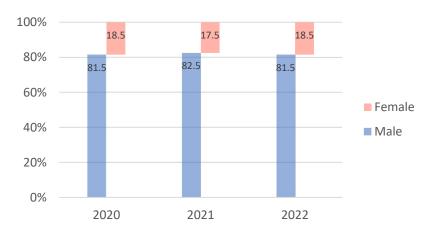
Source: Team Analysis, Refinitiv, Morningstar, FTSE, MSCI

## **Appendix B2 – Goals and Timeline**



Source: Company Data, Team Analysis

## **Appendix B3: Gender Ratio**



Source: Company Data

## **Appendix B4: Share Ownership**



Source: Company Data

**Appendix B5: Sembcorp's Innovative Solutions** 

Project	Key Differentiators
Singapore Tengeh Floating Solar Farm	<ul> <li>Singapore's first large-scale floating solar photovoltaic (PV) systems</li> <li>One of the world's largest inland floating solar farms</li> <li>First in the world to deploy electroluminescence imaging technology on a utility-scale PV system</li> </ul>
1,000ha VSIP Binh Duong III	<ul> <li>Onsite 50ha solar farm, offering grid reliability and sustainability benefits to industrial tenants</li> <li>The first 100ha phase is pre-qualified to meet Singapore's Building and Construction Authority;s Green Mark for industrial districts.</li> </ul>
Singapore Hydrogen Plant (2026)	<ul> <li>1 of 2 to gain licenses to develop a hydrogen plant in Jurong Island in Singapore</li> </ul>

Source: Company Data, Singapore International Water Week, Singapore Business Review

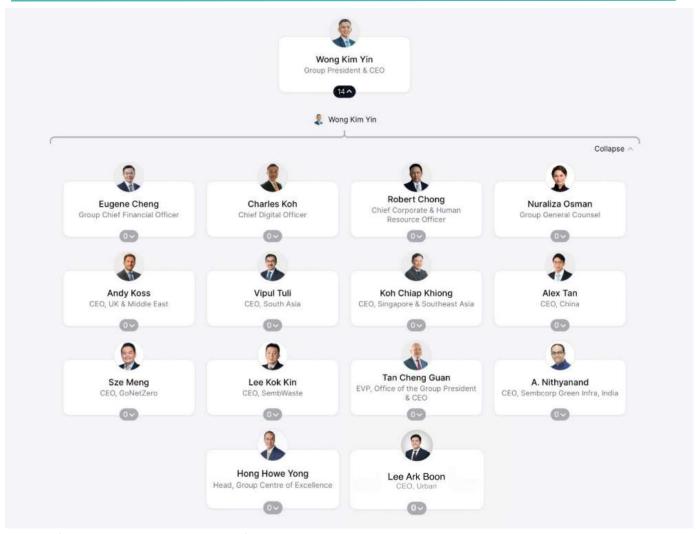
Name	Position	Gender (M/F)	Member since	Number of shares (at 21/01/23)	Independent	Education	Professional Competencies	Work Experience
Wong Kim Yin	Group President & CEO	M	2020	2,829,688	No	- BSc Computer Science & Informatio n Systems - MBA	- Strategic leadership and management in the energy sector - Investment management	CEO of SP Group
Tow Heng Tan	Chairman	М	2021	8,700	No	- ACCA	- Leadership and strategic management - Financial expertise and risk management	CEO of Pavilion Capital International Ex-CIO of Temasek International
Lim Ming Yan	Member	М	2021	19,100	Yes	- BSc Mechanical Engineerin g and Economics - Advanced Manageme nt Program HBS	- Strategic leadership and management - International diplomacy and global business acumen	Chairman of Singapore Business Federation
Nagi Hamiyeh	Member	М	2020	29,600	No	- BSc Civil Engineerin g - MSc Civil and Environme ntal Engineerin g	- Global business leadership and investment management with expertise in consumer, industrials, natural resources and real estate	Temasek's head of portfolio development
Ajaib Haridass	Member	М	2014	155,500	Yes	- Bachelor of Laws	- Legal expertise - Corporate directorship and expertise in the energy industry	Consultant with Haridass Ho & Partners
Dr Josephine Kwa Lay Keng	Member	F	2018	54,300	Yes	- PhD and BSc Mechanical Engineerin g	- Technology leadership and R&D in the energy and engineering industry	Member of board and audit committee of Agency for Science, Technology and Research
Yap Chee Keong	Member	М	2016	116,800	Yes	- Bachelor of Accounting - CPA	- Financial & risk management and audit expertise in energy, infrastructure and real estate industries	CFO of SP Group
Kunnasagara n Chinnah	Member	М	2023	0	Yes	- Bachelor of Engineerin g (Electrical) - MBA - CFA	- Global investment, strategy and risk management with expertise in energy and real estate	Head of GIC Infrastructure Group and co- head at GIC Special Investments
Marina Chin Li Yuen	Member	F	2023	0	Yes	- Bachelor of Laws	- Legal expertise and dispute resolution across various industries in Asia	Senior Counsel of Singapore Academy of Law Joint Managing Partner of Tan Kok Quan Partnership
Ong Chao Choon	Member mpany Data	M	2023	0	Yes	- Bachelor of Accounti ng - CPA - MBA	- Financial leadership and advisory expertise in M&A and businesses	Deputy Chairman and Advisory Leader of PwC Singapore and Managing Partner of PwC Myanmar

## **Appendix B7: Board of Directors Skills Matrix**

Experience / Skills	Industry Experience	Senior Management Experience	Strategic Planning	Audit / Accounting & Finance	Legal	E	Research & Development (R&D)	Risk Management	Human Resource Management
Wong Kim Yin	Y	Υ	Υ	Y		Y	Y	Υ	Y
Tow Heng Tan	Υ	Υ	Υ	Υ				Υ	Υ
Lim Ming Yan	Υ	Y	Υ	Υ				Υ	Υ
Nagi Hamiyeh	Υ	Υ	Υ	Υ		Υ		Υ	Υ
Ajaib Haridass	Y	Y	Y	Y	Y			Υ	Υ
Dr Josephine Kwa Lay Keng	Υ	Υ	Υ	Υ		Υ	Y	Υ	Υ
Yap Chee Keong	Y	Y	Y	Y		Υ		Υ	Y
Kunnasagaran Chinnah	Y	Y	Y	Y			Y	Υ	Υ
Marina Chin Li Yuen	Y	Y	Y		Y			Υ	Y
Ong Chao Choon	Y	Y	Y	Y				Υ	Υ

Source: Company Data, Team Analysis

## **Appendix B8: Key Executives Chart**



Source: The Org, Company Data, Team Analysis

Name	Position	Appointed	Education	Work Experience
Wong Kim Yin	Group President & CEO	2023	- BSc Computer Science & Information Systems - MBA	CEO of SP Group
Eugene Cheng	Group CFO	2021	- BSc & MSc in Accounting	CCO of SATS & IMC Industrial Group
Charles Koh	Chief Digital Officer	2021	- BSc in Economics & Management	Head of Tech in Sovereign Wealth Fund - Asia
Robert Chong	Chief Corporate & HR Officer	2020	<ul><li>BA in Sociology</li><li>MBA in Accountancy</li><li>Advanced Management Program at HBS</li></ul>	Chief Corporate & HR Officer of Shangri-la Asia
Nuraliza Osman	Group General Counsel	2023	- Bachelor of Laws	Managing Legal Counsel of Shell Eastern Petroleum
Andy Koss	CEO, UK	2020	- BSc Mathematics, Operational Research, Statistics and Economics	CEO of Drax Group
Vipul Tuli	CEO, South Asia, Hydrogen Business & Middle East	2018	- BSc in Chemical Engineering - BSc Business Management	Director of McKinsey & Company
Koh Chiap Khiong	CEO, Singapore & SEA	2020	- BSc in Accounting - Advanced Management Program at HBS	Group CFO of Sembcorp
Alex Tan	CEO, China	2021	- BSc in Economics & Statistics - MBA	President, SEA of Air Products
Soon Sze Meng	CEO, GoNetZero	2021	- BA in Public Policy - MBA	Managing Director of SSM Global Advisory
Lee Kok Kin	CEO, SembWaste	2021	<ul><li>BSc Engineering (E&amp;E)</li><li>MBA</li><li>CPEngineer</li></ul>	Director of SP Group
Lee Ark Boon	CEO, Urban	2023	- BA in Economics - MA in International Economics	CEO, China Logistics Development of Mapletree Investments
Tan Cheng Guan	EVP, Office of the Group President & CEO	2021	- BSc in Civil Engineering - Advanced Management Program at HBS	Various Senior Appointments in Sembcorp
A.Nithyanand	CEO, Sembcorp Green Infra (India)	2022	- BSc in Economics - MBA & MSc Finance	CEO, Asia of Roadis Transportation
Hong Howe Yong	Head, Group Centre of Excellence	2020	- BSc in Chemical Engineering - Master of Business in Information Technology	Head of Engineering Services, Refining & Supply, Petrochemicals in ExxonMobil

Source: Company Data

## **Appendix B10: BoD Recent Developments**

- Mr Ang Kong Hua, Chairman of Sembcorp since 2010 and Mr Tham Kui Seng, non-executive independent director since 2011 has retired and stepped down respectively
- The current Deputy Chairman of Sembcorp, Mr Tow Heng Tan, will be replacing Mr Ang as Chairman of Sembcorp.
- In the current year, there are 3 new non-executive independent directors added to the BoD, Mr Kunnasagaran Chinniah, Mr Ong Chao Choon and Ms Marina Chin Li Yuen.
- All BoD hold Sembcorp shares except the new directors, further ensuring the commitment of the board.

Source: Company Data

# **Appendix B11 – Corporate Governance Scorecard**

Board of Directors	26.90/30.00
Board members are independent and owners of shares	25.00
Board ensures company has sound corporate governance	30.00
Board members possesses relevant experience and skillset	30.00
Aligned board reducing potential problems	30.00
Audit committee with non-executive members	30.00
Efficient systems to identify and manage risk	30.00
Composition & Diversity	10.00
Separation of Chairman and CEO role	30.00
Stakeholders - CSR	4.80/5.00
Good performance in terms of ESG	5.00
ESG included in business model and decision-making process	5.00
Committed to long-term objective	5.00
Interest and degree of increasing social welfare	4.00
Transparency & Disclosure	28.50/30.00
Clear business objectives, strategy and risks	30.00
Annual report includes explanatory statements about business model and financial strategy	25.00
Updated assets and capacity	30.00
Complete & timely annual and quarterly reports	30.00
Transparency in Financial statements	25.00
Transparency in high shareholder interest	30.00
Shareholders	29.00/30.00
AGM held annually with members of the board and clear objective	30.00
Disclosure of insider trading and interested party transactions	30.00
Classes of stock with the same voting rights	25.00
Transparent and clear dividend declared	30.00
Profiles of directors seeking election/reelection	30.00
Executive Compensation	4.60/5.00
Compensation composed of base pay, bonus and equity	5.00
Compensation creates short, medium and long-term incentives for management	5.00
Regulation and approval of compensation by multiple parties	4.00
Overall Score	93.80/100

Evaluation Rubric: 60%-70% Satisfactory 70%-80% Good 80%-90% Great 90%-100% Excellent

## **Appendix C1 - Income Statement**

Income statement (mSGD)	2020	2021	2022	2023E	2024F	2025F	2026F	2027F	2028F
Total Revenue	5,447	6,408	7,825	7,516	8,144	8,640	9,306	10,103	11,073
	,					,			
COGS	- 4,081	,	- 6,137	- 5,359	- 6,058	- 6,380	- 6,812	- 7,320	
Gross Profit	1,366	1,276	1,688	2,158	2,086	2,260	2,494	2,783	3,146
OPEX	- 310	- 455	- 300	- 249	- 482	- 511	- 540	- 594	- 649
EBITDA	1,056	821	1,388	1,908	1,604	1,749	1,954	2,189	2,497
Depreciation and Amortization	- 579	- 457	- 461	- 369	- 421	- 473	- 530	- 591	- 658
EBIT	477	364	927	1,539	1,183	1,275	1,424	1,598	1,839
Interest Expense	- 499	- 296	- 310	- 259	- 244	- 235	- 227	- 218	- 208
EBT	- 22	68	617	1,280	939	1,040	1,197	1,380	1,630
Share of results of associates and joint ventures, net of	233	206	248	146	-	-	-	-	-
Income tax expense	- 32	- 123	- 138	- 237	- 160	- 177	- 204	- 235	- 277
Profit from continuing operations	179	151	727	1,189	779	863	994	1,145	1,353
Discontinued operations									
Profit/(Loss) from discontinued operation, net of tax	- 1,300	149	144	- 78	-	-	-	-	-
Profit for the year	- 1,121	300	871	1,111	779	863	994	1,145	1,353

## Appendix C2 - Balance Sheet

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## Appendix C3 - Cash Flow Statement

Cash Flow Statement (mSGD)	2020	2021	2022	2023E	2024F	2025F	2026F	2027F	2028F
Profit for the year:	2020	2021	2022	20252	20241	20201	20201	20271	20201
- Continuing operations	179	151	727	1,189	779	863	994	1,145	1,353
- Discontinued operation	-1,300	149	144	-78	0	0	0	0	0
Adjustments for non-cash transactions	1,119	10	-194	-159	0	0	0	0	0
Finance income	-73	-26	-54	-29	0	0	0	0	0
Finance costs	569	423	444	259	244	235	227	218	208
	579	457	461	369		473	530	591	658
Depreciation and amortisation				237	421	177	204		277
Tax expense	-25	123	166	237	160	1//	204	235	2//
Cashflow from operating activities before change in	1.045	4 205	1.502	4 700	1 504	1 740	1.054	2 400	2 407
NWC	1,046	1,285	1,692	1,788	1,604	1,749	1,954	2,189	2,497
Changes in NWC	-452	-30	24	-251	-36	101	-108	-57	-39
Tax paid	-103	-36	-64	-233	-160	-177	-204	-235	-277
Cash flows from operating activities	491	1,219	1,652	1,304	1,409	1,673	1,643	1,898	2,181
One Time Item	-1,188	47	14	42	0	0	0	0	0
Dividends received	198	95	95	61	0	0	0	0	0
Interest received	68	30	51	26	0	0	0	0	0
Proceeds from:		-			_	_		-	
- disposal of other financial assets and business	150	311	617	332	37	58	81	104	132
Acquisition of subsidiaries, net of cash acquired	-9	0	-350	-401	0	0	0	0	0
Acquisition of additional investments in joint ventures		ŭ	330	101	, and the second	Ü	ŭ	· ·	ŭ
and associates	-2	0	-630	-128	0	0	0	0	0
Acquisition of other financial assets	-165	-293	-567	-301	-51	-73	-97	-121	-152
	103	255	307	301	31	73	37	121	152
Purchase of property, plant and equipment and investment properties	-318	-282	-608	-365	-867	-912	-985	-1,071	1 171
		-282	-7		-807			-1,071	-1,171
Purchase of intangible assets	-15	-100		-2 726		-3 -929	-3	1	1 104
Cash flows from investing activities	-1,281	-100	-1,385	-736	-885	-929	-1,004	-1,091	-1,194
One Time Item	-220	0	21	7	0	0	0	0	0
Purchase of treasury shares	-15	-13	-27	-26	0	0	0	0	0
Repayment of lease liabilities	-28	-15	-23	-17	-21	-21	-21	-21	-21
Proceeds from borrowings	5,241	3,403	3,854	2,890	465	465	465	465	465
Repayment of borrowings	-4,351	-3,752	-3,544	-2,869	-930	-930	-930	-930	-930
Dividends paid to owners of the Company	-54	-107	-125	-143	-123	-136	-156	-180	-213
Dividends paid to non-controlling interests of									
subsidiaries	-8	-17	-12	-4	0	0	0	0	0
Receipts / (Payment) in restricted cash held as collateral	5	-24	39	-25	0	0	0	0	0
Interest paid	-515	-330	-386	-232	-244	-235	-227	-218	-208
Cash flows from financing activities	55	-855	-203	-418	-853	-858	-869	-884	-908
National in each and each assistal ant-	-735	264	64	149	-329	-114	-231	-78	80
Net increase in cash and cash equivalents									
Cash and cash equivalents at beginning of the year	1,740	1,009	1,297	1,246	1,430	1,101	987	757	679
Effect of exchange rate changes on balances held in		3500	1000	10		100	244	100	
foreign currency	4	24	-79	2	0	0	0	0	0
Cash and cash equivalents at end of the year (including		2 DO	1,112			7,700	1 1000		
held for sale)	1,009	1,297	1,282	1,397	1,101	987	757	679	758
Cash and cash equivalents classified as held for sale	0	0	-36	32	0	0	0	0	0
Cash and cash equivalents at end of the year	1,009	1,297	1,246	1,429	1,101	987	757	679	758

## **Appendix C4 – WACC Computation**

WACC Calculation	
Inputs	Value
Risk free rate	2.97%
Equity risk Premium (Singapore)	3.43%
Cost of debt	3.74%
Tax rate	17.00%
After tax cost of debt	3.11%
Beta	0.96
Cost of equity	6.27%
Debt/Value	56.56%
Equity/Value	43.44%
WACC	4.48%

Risk-Free Rate Computation				
Region	Risk-free rate	Revenue %		
Singapore	2.66%	75%		
United Kingdom (UK)	3.46%	11%		
China	2.44%	5%		
India	7.08%	5%		
Rest of Asia	3.10%	4%		
Combined risk-free rate	2.97%	100%		

Levered Beta			
Levered Beta	<b>Unlevered Beta</b>		
0.75	0.41		
0.77	0.08		
0.71	0.17		
0.72	0.22		
1.18	1.42		
	0.46		
	17.00%		
	0.96		
	Levered Beta 0.75 0.77 0.71 0.72		

**Cost of debt**: We revenue-weight 10-year government bond yields from all countries above 1% of Sembcorp's revenue to arrive a countries' risk-free rate. We then revenue-weight the average risk-free rate for each country, yielding a combined risk-free rate of By adding Sembcorp's debt implied corporate spread to the risk-free rate and subtracting taxes, we arrive at an after-tax cost of d 3.11%. We believe this cost of debt accurately represents the long-run interest rate environment we expect to materialize.

**Cost of equity**: We further re-lever the beta of near peers to compute Sembcorp's levered beta of 0.96. Using the CAPM formula, risk premium for Singapore, we calculated the cost of equity to be 6.27%.

**WACC**: This gives an overall WACC of 4.48% for Sembcorp.