

# STERLING AND WILSON SOLAR LIMITED

## Issue highlights

- Incorporated on March 9, 2017 Sterling and Wilson Solar Limited (“SWSL”) is a global pure-play, end-to-end solar engineering, procurement and construction (“EPC”) solutions provider and were the **world’s largest solar EPC solutions provider in 2018** based on annual installations of utility-scale photovoltaic (“PV”) systems of more than 5 mega-watt peak (“MWp”), according to IHS Markit.
- The company provides EPC services primarily for utility-scale solar power projects with a focus on project design and engineering and manage all aspects of project execution from conceptualizing to commissioning. They also provide operations and maintenance (“O&M”) services, including for projects constructed by third-parties.
- As of March 31, 2019, they had 205 commissioned and contracted solar power projects with an **aggregate capacity of 6,870.12 MWp**. Currently they have **presence across 26 countries**.
- As at March 31, 2019 their **order book was Rs.3,831.58 crore and received letters of intent of Rs.3,908.16 crore** (of which Rs.2,195.93 crore were converted into definitive EPC contracts since March 31, 2019) for solar power projects for which they have won the bid, but have not yet executed definitive EPC contracts.
- SWSL is the sole EPC solutions provider for the **world’s largest single location solar PV plant of 1,177 MWp in Abu Dhabi**, according to CRISIL Research.
- SWSL is also the largest solar EPC solutions providers in each of India, Africa and Middle East in 2018 with 16.6%, 36.6% and 40.4% market share, respectively, according to IHS Markit.

## Brief Financial Details

*(Rs. In Cr)*

	Pertaining to the Company-SWSL (as derived from the Restated Consolidated Summary Financial Information)		Pertaining to the SWPL-Solar EPC Division (as derived from the Carved Out Combined Financial Statements)	
	As at March 31,			
	2019	2018*	2017	2016
Equity Share Capital	16.04	16.04	16.04	16.04
Reserves	841.01	196.59	-	-
Net worth	1,022.90	383.50	-	-
Revenue from Operations	8,240.41	6,871.71	1,640.27	2,739.43
Revenue Growth (%)	19.92%	-	(40.12)	-
EBITDA as stated	851.63	550.46	64.65	195.86
EBITDA (%)	10.33%	8.01%	3.94%	7.15%
Profit Before Tax	759.17	528.68	60.28	194.29
Profit for the year	638.23	450.54	31.43	125.36
Net Profit as % to Revenue	7.75%	6.56%	1.92%	4.58%
EPS (Rs.)	39.85	29.97	-	-
RONW(%)	62.00%	118.00%	-	-
Net Asset Value (Rs.)	63.79	25.42	-	-
Debt to Equity ratio	2.16	0.46	-	-

Source: RHP, \* The P&L details for the period 9<sup>th</sup> March 2017 to 31<sup>st</sup> March 2018.

## Issue Details

### Offer for sale of Equity Shares aggregating upto 3,125 Cr.

(Offer for sale of equity shares aggregating upto Rs.2,083.33 cr by shapoorji Pallonji & Co. Pvt. Ltd. and upto Rs.1,041.67 Cr by Khurshed Yazdi Daruvala)

## Issue highlights

**Issue size: Rs.3,125 Cr**

**No. of shares: 40,064,102 – 40,322,580 Equity Shares**

**Face value: Rs.1**

## Issue summary

**Price band: Rs.775 - 780**

**Bid Lot: 19 Shares** and in multiple thereof

## Post Issue Implied Market Cap:

**Rs.12,428 Cr – 12,508 Cr**

**GCBRLMs:** Axis Capital, ICICI Securities, Credit Suisse Securities, Deutsche Equities, IIFL Securities, SBI Cap Markets

**BRLMs:** Indusind Bank, Yes Securities

**Registrar:** Link Intime India Pvt. Ltd.

**Issue opens on: Tuesday, 6<sup>th</sup> August 2019**

**Issue closes on: Thursday, 8<sup>th</sup> August 2019**

## Indicative Timetable

Activity	On or about
Finalisation of Basis of Allotment	14-08-2019
Refunds/Unblocking ASBA Fund	16-08-2019
Credit of equity shares to DP A/c	19-08-2019
Trading commences	20-08-2019

**Listing: BSE and NSE**

## Issue break-up

Cat	No. of Shares		% of Issue
	No. of Shares	Rs. In Cr	
QIB*	30,241,935 – 30,048,077	2,343.75	75%
NIB	6,048,387 – 6,009,615	468.75	15%
Retail	4,032,258 – 4,006,410	312.50	10%
<b>Total</b>	<b>40,322,580 – 40,064,102</b>	<b>3,125.00</b>	<b>100%</b>

\* Company may allocate up to 60% Shares of the QIB Portion to Anchor Investors.

## Shareholding (No. of Shares)

Pre-Offer and Post-Offer Equity Shares	
No of Shares	160,360,000

## Shareholding (%)

	Pre-Issue	Post-Issue
Promoters & Promoters Gr	100.00%	75.02%
Public	-	24.98%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

## BACKGROUND

The company was incorporated on March 9, 2017 as Rashmika Energy Private Limited. The Promoters of the company are Shapoorji Pallonji and Company Pvt. Ltd (“SPCPL”) and Khurshed Yazdi Daruvala.

The Solar EPC Division of Sterling and Wilson Private Limited (“SWPL”) was demerged into the company pursuant to the Scheme of Arrangement, with the appointed date for the transfer of such Solar EPC Division being April 1, 2017. Thereafter, to reflect the association of the company with the Sterling and Wilson group, the name of the company was changed to Sterling and Wilson Solar Private Limited.

**Khurshed Yazdi Daruvala** is the Promoter, Chairman and a Non-Executive Non-Independent Director of the company. He has been part of the Sterling and Wilson group for about 25 years and has held the position of managing director of SWPL. He has been on the Company Board since April 25, 2018.

**Pallon Shapoorji Mistry** is the Non-Executive Non-Independent Director of the company. He is on the board of companies such as Shapoorji Pallonji and Company Pvt. Ltd., Afcons Infrastructure Ltd, Shapoorji Pallonji Infrastructure Capital Co. Pvt. Ltd., Shapoorji Pallonji Oil and Gas Pvt. Ltd. and SWPL. He has been on the Company Board since August 2, 2018.

**Bikesh Ogra** is the Non-Executive Non-Independent Director of the Company and global CEO. He joined the Sterling and Wilson group in 1996 and has over 22 years of experience in the EPC sector. He has been on the company Board since March 27, 2019.

**Keki Manchershia Elavia, Arif Saleh Doctor and Rukhshana Jina Mistry** are the Independent Directors of the company.

**Bahadur Dastoor** is the Chief Financial Officer of the company. He has been part of the company since July 1, 2018. He has been associated with the Sterling and Wilson group since December 1, 2010.

**Jagannadha Rao Ch. V.** is the Company Secretary and Compliance Officer of the company. He joined the company on May 8, 2018. He has about 29 years of experience in secretarial and legal matters.

## BUSINESS OVERVIEW

**Sterling and Wilson Solar Limited (“SWSL”)** is a global pure-play, end-to-end solar engineering, procurement and construction (“EPC”) solutions provider, and were the world’s largest solar EPC solutions provider in 2018 based on annual installations of utility-scale photovoltaic (“PV”) systems of more than 5 mega-watt peak (“MWp”), according to IHS Markit. The company provides EPC services primarily for utility-scale solar power projects with a focus on project design and engineering and manage all aspects of project execution from conceptualizing to commissioning. They also provide operations and maintenance (“O&M”) services, including for projects constructed by third-parties.

The company commenced operations in 2011 as the Solar EPC Division of SWPL and demerged from SWPL with effect from April 1, 2017. Over a span of 7 years, they became the largest solar EPC solutions provider in each of India, Africa and the Middle East according to IHS Markit in 2018 and currently have a presence across 26 countries. As of March 31, 2019, they had 205 commissioned and contracted solar power projects with an aggregate capacity of 6,870.12 MWp. Their order book, which is the value of solar power projects for which they have entered into definitive EPC contracts minus the revenue already recognized from those projects, was Rs.3,831.58 crore as of March 31, 2019.

The company offers a complete range of customized solutions for solar power projects. Their customers include leading independent power producers (“IPPs”), developers and equity funds. The company adopts a consultative approach to their customers’ solar energy needs and capabilities, which enables them to provide customized solutions to meet their requirements. The company follows a “**hub-and-spoke**” business model where they manage the complete supply chain from India, including the design and engineering functions, and engage a few suppliers and third-party subcontractors and procure part of the raw materials for their operations locally in each of their markets, where there is a cost advantage or to comply with local regulations.

The company seek to leverage this business model to procure products and services solutions for their customers at competitive prices. In Fiscal 2018 and 2019, the revenue from operations outside India accounted for 59.11% and 69.82% of their total revenue from operations, respectively. The company often receive repeat orders from their customers and as of March 31, 2019 customers in India and outside India for whom they have executed more than one project constituted 83.26% and 64.35% of their total commissioned solar capacity, respectively.

Company's operations are supported by a competent and sizable design and engineering team who are responsible for designing solutions that are innovative and cost-effective, with an aim to increase the performance ratio of solar power projects. The design and engineering team of 154 employees continually seeks to improve the efficiency of their solutions and services.

SWSL strategically focus on markets that have conducive solar power policies and high solar resources, and invest in geographies with long-term solar opportunities. They adopt a disciplined expansion strategy that they customize for each market with a view to enhancing their bidding abilities in these geographies.

To tap opportunities in the United States, they adopted a co-development business model to help them secure EPC rights through equity investments in relevant projects. In other markets, such as Australia and Kazakhstan, they have acquired local entities to help them establish a permanent presence in such markets. In addition, as part of their expansion strategy, the company conducts on-the-ground market diligence to evaluate each local opportunity and establish relationships with local suppliers and subcontractors. This helps them identify potential bids in advance and prepare for bids quickly when opportunities arise.

In 2018, they were awarded the Specialist Contractor of the Year Award by MEED Awards, the EPC of the Year by Solar + Power Awards and the certificate of honor in the category of "RE International Excellence - Indian Companies" at the Renewable Energy India Awards.

The company benefit from the brand reputation, industry relationships and project management expertise of the Shapoorji Pallonji Group (the "**SP Group**") and the Sterling and Wilson Group ("**S&W**"). The SP Group is a global conglomerate and has over 150 years of experience as an EPC solutions provider in various industries across 45 countries. As of March 31, 2018, the total consolidated assets of Shapoorji Pallonji and Company Pvt. Ltd. ("**SPCPL**"), the flagship company of the SP Group was Rs.56,353.14 crore, which helps them meet certain financial requirements for bidding for solar power projects. They also benefited from global presence and stakeholder relationships of the SP Group. S&W has over 90 years of experience in offering EPC solutions with operations across 34 countries. In particular, before entering a new market, they typically leverage from the presence of the SP Group and S&W in that market to get a head start in establishing their operations. In connection with the Demerger, the company entered into a Framework Agreement with SWPL, pursuant to which SWPL will execute all their service contracts entered into prior to the Demerger from its branch offices and transfer all related benefits to the company.

The company also has the right to continue using SWPL's branch offices for their operations going forward and avail certain shared services that they require to operate their business and have the right to use the "S&W" brand without payment. Further, their Subsidiary, SW FZCO and the company have entered into brand sharing agreements dated September 26, 2018 with SPCPL (the "**Brand Sharing Agreements**") under which the company has the right to use intellectual property belonging to the SP group and to benefit from the SP Group's track record of project execution in bidding for large scale projects.

The company operates an **asset-light business model**, under which their customers are responsible for sourcing and acquiring real estate while they typically lease equipment required for their operations. The asset-light business model generally entails low capital expenditures and fixed costs, and offers flexibility and scalability to meet their customers' needs, provide customized solutions and respond quickly to market conditions. They are able to operate with low working capital requirements as their EPC contracts are typically of short duration. They typically require an advance payment from customers for certain deliverables and their EPC contracts include shorter payment cycles from their customers compared to longer payment cycles from their suppliers.

SWSL has demonstrated strong financial performance and their Total Income has grown at a CAGR of 72.37% from Rs.1,650.07 crore in Fiscal 2017 to Rs.8,449.93 crore in Fiscal 2019.

The EBITDA increased from Rs.64.65 crore in Fiscal 2017 to Rs.851.63 crore in Fiscal 2019.

The Profit after Tax has grown at a CAGR of 172.82% from a combined profit after tax of Rs.31.43 crore in Fiscal 2017, to a consolidated profit after tax of Rs.450.54 crore in Fiscal 2018, and Rs.638.23 crore in Fiscal 2019.

In Fiscals 2018 and 2019, the Revenue from Operations outside India accounted for 59.11% and 69.82% of the Total Revenue from Operations, respectively.

## REVENUE FROM OPERATIONS

### Details of Revenue from Operations

	For the year ended March 31,					
	2019		2018		2017	
	Sterling and Wilson Solar Limited (Post-Demerger)				SWPL – Solar EPC Div. (Prior to Demerger)	
	Rs. Cr	% to Total	Rs. Cr	% to Total	Rs. Cr	% to Total
<b>Sale of services</b>	<b>8,238.84</b>	<b>99.98%</b>	<b>6,870.99</b>	<b>99.99%</b>	<b>1,640.01</b>	<b>99.98%</b>
• <i>Income from Works contracts</i>	8,145.26		6,827.24		1,615.73	
• <i>Revenue from Operation &amp; maintenance Services</i>	93.58		43.75		24.28	
<b>Other operating income</b>	<b>1.58</b>	<b>0.02%</b>	<b>0.72</b>	<b>0.01%</b>	<b>0.27</b>	<b>0.02%</b>
• <i>Sale of scrap</i>	1.38		0.25		0.03	
• <i>Export incentive</i>	-		0.36		0.24	
<b>Others</b>	<b>0.20</b>		<b>0.11</b>			
<b>Total</b>	<b>8,240.41</b>	<b>100.00%</b>	<b>6,871.71</b>	<b>100.00%</b>	<b>1,640.27</b>	<b>100.00%</b>

### Details of Revenue from Operations – Geographic Segment

	For the year ended March 31,					
	2019		2018		2017	
	Sterling and Wilson Solar Limited (Post-Demerger)				SWPL – Solar EPC Division (Prior to Demerger)	
	Rs. Cr	% to Total	Rs. Cr	% to Total	Rs. Cr	% to Total
<b>India</b>	<b>2,485.37</b>	<b>30.17%</b>	<b>2,809.62</b>	<b>40.89%</b>	<b>1,629.58</b>	<b>99.36%</b>
• <i>Revenue from EPC services</i>	2,412.97	-	2,774.17	-	1,612.48	-
• <i>Revenue from O&amp;M services</i>	72.40	-	35.45	-	17.10	-
<b>South East Asia</b>	<b>792.80</b>	<b>9.62%</b>	<b>0.41</b>	<b>0.01%</b>	<b>3.26</b>	<b>0.20%</b>
• <i>Revenue from EPC services</i>	792.80	-	0.41	-	3.26	-
• <i>Revenue from O&amp;M services</i>	-	-	-	-	-	-
<b>Middle East and North Africa</b>	<b>3,927.35</b>	<b>47.67%</b>	<b>3,979.80</b>	<b>57.92%</b>	<b>-</b>	<b>-</b>
• <i>Revenue from EPC services</i>	3,918.80	-	3,979.80	-	-	-
• <i>Revenue from O&amp;M services</i>	8.55	-	-	-	-	-
<b>Rest of Africa</b>	<b>671.89</b>	<b>8.16%</b>	<b>75.00</b>	<b>1.09%</b>	<b>7.17</b>	<b>0.44%</b>
• <i>Revenue from EPC services</i>	659.26	-	66.70	-	-	-
• <i>Revenue from O&amp;M services</i>	12.63	-	8.30	-	7.17	-
<b>United States and Latin America</b>	<b>354.62</b>	<b>4.30%</b>	<b>6.53</b>	<b>0.10%</b>	<b>-</b>	<b>-</b>
• <i>Revenue from EPC services</i>	354.62	-	6.53	-	-	-
• <i>Revenue from O&amp;M services</i>	-	-	-	-	-	-
<b>Australia</b>	<b>6.81</b>	<b>0.08%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
• <i>Revenue from EPC services</i>	6.81	-	-	-	-	-
• <i>Revenue from O&amp;M services</i>	-	-	-	-	-	-
<b>Total for Revenue from EPC services</b>	<b>8,145.26</b>	<b>98.86%</b>	<b>6,827.61</b>	<b>99.36%</b>	<b>1,615.74</b>	<b>98.52%</b>
<b>Total for Revenue from O&amp;M Services</b>	<b>93.58</b>	<b>1.14%</b>	<b>43.75</b>	<b>0.64%</b>	<b>24.27</b>	<b>1.48%</b>
<b>Total</b>	<b>8,240.41</b>	<b>100.00%</b>	<b>6,871.71</b>	<b>100.00%</b>	<b>1,640.27</b>	<b>100.00%</b>

## COMPANY BUSINESS

The company is a global pure-play, end-to-end solar EPC solutions provider. They provide EPC services primarily for utility-scale solar power projects with a focus on project design and engineering, and manage all aspects of project execution from conceptualizing to commissioning. They also provide O&M services, including for projects constructed by third-parties.

## Solar EPC business

In their solar EPC business, SWSL offers a complete range of turnkey and BoS solutions for their utility-scale and rooftop solar power projects. As of March 31, 2019, they had 205 commissioned and contracted solar power projects with an aggregate capacity of 6,870.12 MWp, that included 177 commissioned projects having an aggregate capacity of 5,271.34 MWp and 28 contracted projects having an aggregate capacity of 1,598.78 MWp. As at March 31, 2019 the order book was Rs.3,831.58 million and they had received letters of intent of Rs.3,908.16 crore (of which Rs.2,195.93 crore were converted into definitive EPC contracts since March 31, 2019) for solar power projects for which they have won the bid, but have not yet executed definitive EPC contracts.

Currently SWSL has a presence across 26 countries, and use their Subsidiaries and branch offices globally for their operations. For Fiscals 2017, 2018 and 2019 the income from works contracts was Rs.1,615.73 crore, Rs.6,827.24 crore and Rs.8,145.26 crore, respectively, accounting for 98.50%, 99.35% and 98.85% of the total revenue from operations for each such period, respectively.

The solar EPC solutions include design, engineering, procurement, construction and project management.

- **Turnkey EPC solutions:** The turnkey EPC solutions involve building solar power projects from concept designing to commissioning. The company provides end-to-end solutions to their clients including design, engineering, procurement, construction, project management, testing and commissioning, and connecting the solar power project to the electricity grid. Turnkey solutions are used by their customers in India and outside India.
- **BoS and package BoS:** The Balance of System (“BoS”) solutions comprise all project design and execution services other than the procurement of modules and components, which is handled by the customer, and “package BoS” projects include additional civil, mechanical and electrical work solutions. BoS solutions are used primarily by their customers in India and in the United States.

### EPC contracts

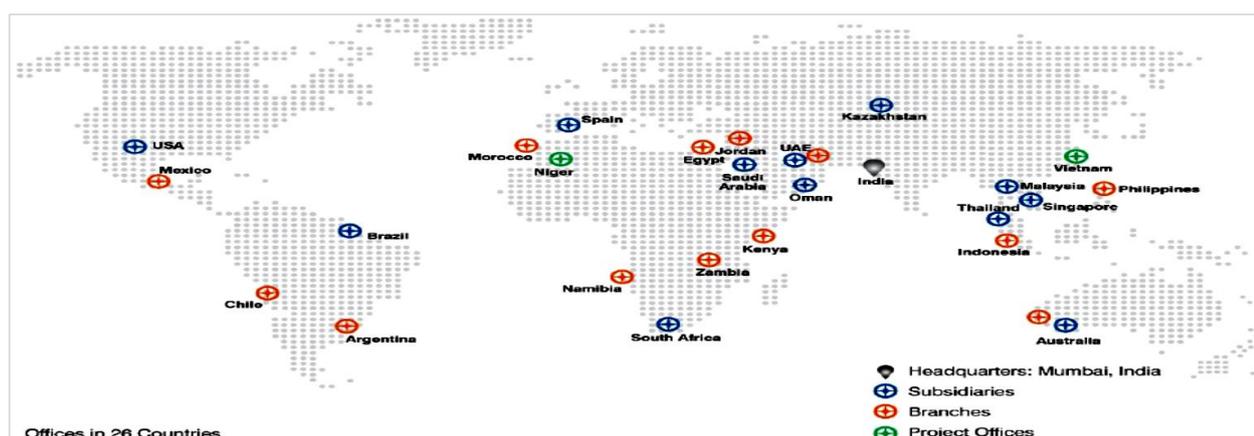
Under the EPC contracts with their customers, the company undertakes to provide solar EPC solutions for solar power projects according to a specified timeline and by a specified completion date. They generally enter into fixed price EPC contracts and bill their customers according to contractually agreed milestones that reflect key stages of execution. They also typically receive an advance payment from their customers at the time they enter into the EPC contract and adjust the advance received against milestone payments.

**Their EPC contracts contain quality and performance guarantees by the company and typically require that they be responsible for the solar power project maintaining a target project performance ratio for a specified time period after commissioning, usually ranging from 18 months to 2 years.** They are also generally required to obtain performance and product warranties and related insurance from suppliers of modules, inverters, transformers and trackers, for their customers and the company, typically ranging from 5 to 10 years. Their EPC contracts may include provisions allowing for changes by their customer to the scope of work.

**In Fiscal 2018 and 2019, the company did not pay liquidated damages related to performance ratios under their EPC contracts** as they achieved the contractually agreed performance ratios under those contracts.

### Company's Global Operations:

**SWSL commenced their operations focusing on solar power projects in India and currently, they have operations in 26 countries.**



## O&M business

SWSL provides O&M services to their customers after solar power projects become operational. As of March 31, 2019, they provided O&M services to 116 solar power projects in India, Middle East and North Africa, United States and Latin America and Rest of Africa, aggregating to 5,557.89 MWp, of which solar power projects having an aggregate capacity of 1,573.66 MWp were constructed by third-parties. For Fiscals 2017, 2018 and 2019, the revenue from O&M services was Rs.24.28 crore, Rs.43.75 crore and Rs.93.58 crore, respectively, accounting for 1.47%, 0.64% and 1.11% of the total income for each such period, respectively.

## CASE STUDIES

Customer	Case study details
Single location solar power plant of 1,177 MWp in Abu Dhabi	<p>SWSL is the sole EPC solutions provider for the world's largest single location solar PV plant of 1,177 MWp in Abu Dhabi, according to CRISIL Research. It is developed by a group of customers, including Marubeni at a tariff of \$2.42 cents per kilo-watt hour ("kWh"), which is one of the lowest LCOE bids for solar energy discovered globally in 2018, according to CRISIL Research. The solar power project is also government-supported by the Abu Dhabi Water and Electricity Authority.</p> <p>SWSL is constructing this project on a turnkey basis and are responsible for providing end-to-end EPC services, including designing, engineering, constructing, executing, testing and commissioning a fully-completed, new and operational solar power plant.</p> <p>While the developers invited bids for constructing a solar power plant of minimum 350 MWp, SWSL deployed innovative design solutions of placing PV solar modules in an east-west orientation instead of the standard south facing orientation to maximize 1,177 MWp on limited available land. They also deployed an 8 high fixed structure design to optimize electricity generation. They deployed 1,412 robots to automate the cleaning of the plant to reduce water consumption and operating expenses. They were able to install approximately 200 MWp within a short timeline of 1 month. To further optimize time and cost, SWSL engaged local contractors for procurement and construction.</p> <p>The project was financed by a consortium of financiers, including BNP Paribas, Credit Agricole, First Gulf Bank, the Norinchukin Bank, MUFG, Natixis and Sumitomo Mitsui Banking Corporation, and achieved financial closure before SWSL started operations. SWSL has also agreed to provide O&amp;M services for at least 2 years after the plant is commissioned. This project has been built with over 5 million accident free safe man hours.</p>
22.32 MWp solar power project in Philippines	<p>SWSL completed the construction of 22.32 MWp solar power project for Enfinity Philippines Renewable Resources, Inc., a joint venture company of Sindicatum Sustainable Resources in Philippines within the scheduled timeline despite various topographical challenges of high-speed wind and soft, mushy soil at the project site.</p> <p>SWSL deployed a 3 leg module mounting structure with a combination of concrete ballast and piling foundations to make the project site flood resistant. They also conducted a detailed flood analysis and installed outdoor inverter stations with RCC beams to tackle soft, mushy soil. SWSL partnered with local subcontractors to assist with project execution and procured majority of their raw materials from local suppliers in Philippines, which helped them manage their costs and project timelines. To meet the short timelines, they were able to mobilize project managers and engineers from India to assist the team in Philippines quickly.</p>
36.3 MWp solar power project in Rajasthan, India	<p>SWSL provided the complete EPC solution for a 36.3 MWp solar power project in Bavdi, Rajasthan on a turnkey basis for Giriraj Enterprises (part of the Malpani Group). This project was the first utility scale project SWSL developed on a turnkey basis. This project was commissioned in March 2013 and was completed within 4 months. SWSL were responsible for providing end-to-end EPC services including designing, construction and commissioning the solar power plant. They were also responsible for bay extension at 33 kV level and 8 kilometers of transmission line.</p> <p>The plant is designed to provide 100% redundancy for evacuation of power from each inverter station. To optimize time, cost and providing local employment, SWSL strategized procurement and sourcing by engaging with local transporters and contractors. SWSL were required to provide O&amp;M services as part of the contract for a period of 6 years after the date of completion under the EPC contracts and have been maintaining the plant with an availability of over 99% which is 1.3% above the contractually agreed value. Due to their performance under the EPC and O&amp;M contracts for this matter, the Malpani Group awarded them the mandate to</p>

Customer	Case study details
580 MWp solar power project in Rajasthan, India	<p>construct a 50 MWp solar power project in Tamil Nadu in 2015. They were also awarded the O&amp;M contract for the same.</p> <p>SB Energy One Pvt. Ltd., SB Energy Three Pvt. Ltd., and SB Energy four Pvt. Ltd., subsidiaries of SB Energy Holdings Ltd (together “<b>SB Energy</b>”), awarded EPC contracts for the construction of the 580 MWp solar power plant at the Bhadla Solar Park in Rajasthan to SWSL. SWSL has already commissioned 290 MWp of this total awarded capacity and are constructing the remaining 290 MWp.</p> <p>This solar power project was executed under harsh and challenging environmental conditions, such as shifting sand dunes, heat waves and scorching temperatures. SWSL deployed an automated robotic cleaning mechanism to enhance power generation, reduce water consumption and reduce operating expenses. To further optimize schedule and cost efficiency, SWSL engaged local contractors for procurement and construction activities. A sourcing strategy was developed for the solar power project to improve uptime availability of major equipment and spare parts. This solar power project has resulted in substantial employment and inclusive growth in the local areas of Bhadla, Rajasthan.</p> <p>SWSL is also awarded the O&amp;M contract for 10 years for this solar power project, which is the largest O&amp;M contract awarded in India, according to CRISIL.</p>

## COMPETITIVE STRENGTH

- Largest global solar EPC solutions provider in a fast growing solar industry**

SWSL is the world’s largest solar EPC solutions provider, based on annual installations of utility-scale PV systems of more than 5 MWp, with a market share of 4.6% in 2018 which increased from 0.3% in 2014, according to IHS Markit. They were also the largest solar EPC solutions providers in each of India, Africa and Middle East in 2018 with 16.6%, 36.6% and 40.4% market share, respectively, according to IHS Markit. In 2017, they won the bid for the 1,177 MWp solar power project in Abu Dhabi, which is the world’s largest single location solar PV plant, according to CRISIL Research.

Currently SWSL has a presence across 26 countries. For the period from 2018 to 2021, annual solar PV installations could grow at a compound annual growth rate (“**CAGR**”) of 11.7% in India, 70.6% CAGR in South East Asia, 22.2% CAGR in the Middle East and North Africa, 42% CAGR in the rest of Africa, 30% CAGR in Europe, 17.4% CAGR in the United States, 5.4% in CAGR Latin America and 8.1% CAGR in Australia. On an aggregate this represents a cumulative 20.0% CAGR growth in annual solar installations.

- Comprehensive end-to-end EPC solutions provider with a global execution track record**

SWSL is a global pure-play end-to-end solar EPC solutions provider. They provides EPC services primarily for utility-scale solar power projects with a focus on project design and engineering, and manage all aspects of project execution from conceptualizing to commissioning. They also provide EPC solutions for rooftop solar projects, O&M services, including for projects constructed by third-parties.

As of March 31, 2019, SWSL had 205 commissioned and contracted solar power projects with an aggregate capacity of 6,870.12 MWp, that included 177 commissioned projects with an aggregate capacity of 5,271.34 MWp and 28 contracted solar power projects (which include solar power projects for which SWSL has executed definitive EPC contracts) with an aggregate capacity of 1,598.78 MWp. As at March 31, 2019 their order book was Rs.3,831.58 crore and they had received letters of intent of Rs.3,908.16 crore (of which Rs.2,195.93 crore were converted into definitive EPC contracts since March 31, 2019) for solar power projects for which they have won the bid, but have not yet executed definitive EPC contracts.

- A dedicated design and engineering team focused on innovation and developing efficient and cost effective engineering solutions**

As of March 31, 2019, all of their design and engineering team is based in India, which provides SWSL a cost advantage over their competitors. Their design and engineering team is engaged on their projects from the pre-bid stage through commissioning.

SWSL is in the process of establishing an Innovation Center in Rajasthan, India, with an aim to facilitate the analysis of various developed and futuristic module technologies, robotics for module cleaning, inverter technologies and tracker systems, thereby enabling them to stay in the forefront of technology adoption for their customers and developers. They have installed a Computerized Monitoring System (“CMS”) and are in the process of installing the Computerized Maintenance Management System (“CMMS”) that they share with SWPL under the Framework Agreement, to improve their operational efficiency by providing real-time automated performance analysis through data mining, track key performance indicators, generate automatic performance reports, record management with best-in-class international quality standards and track assets.

- ***Strong relationships with customers and other key stakeholders***

SWSL offers a complete range of customized solutions for solar power projects. Their **customers include leading IPPs and developers such as Marubeni, EDF Renewables, Alten, Sunseap, Sao Mai, Enfinity, ACWA Power and BNRG Renewables, and equity funds.** The company adopts a consultative approach to their customers’ solar energy needs, which enables them to provide customized solutions to meet their requirements. The company often receives repeat orders from their customers and as of March 31, 2019 customers in India and outside India for whom they have executed more than one project constituted 83.26% and 64.35% of their total commissioned solar capacity, respectively.

As part of their global network, SWSL maintains relationships with other key stakeholders in the industry, such as, a diversified group of global and local suppliers of modules and other raw materials as they are critical to the success of their supply chain.

- ***Strong parentage and ability to leverage global “SP” brand***

The company benefited from the brand reputation, industry relationships and project management expertise of the SP Group and S&W. The SP Group is a global conglomerate and has over 150 years of experience as an EPC solutions provider in 6 major business areas and operations across 45 countries. Currently, S&W has over 90 years of offering EPC solutions and has operations across various industries, including mechanical engineering and plumbing, co-gen solutions, transmission and distribution, turnkey data centers, diesel generators and renewables in 34 countries.

SWSL benefits from global presence and stakeholder relationships of the SP Group and S&W. In particular, before entering a new market, they typically leverage from the SP Group’s and S&W’s presence in that market to get a head start in establishing their operations. In addition, SP Group’s and S&W’s relationships with key stakeholders have helped them establish connections with major customers and market leading subcontractors, lenders, designers and consultants.

- ***Strong growth and financial performance backed by an asset-light business model***

SWSL has demonstrated strong financial performance and their Total Income has grown at a CAGR of 72.37% from Rs.1,650.07 crore in Fiscal 2017 to Rs.8,449.93 crore in Fiscal 2019. The strong growth and financial performance has been facilitated by their focus on risk management and reliance on clearly defined internal processes to manage their business. The company follows a multi-stage approval process which seeks to maintain technical, commercial and financial discipline across their projects. They have a successful track record of winning competitive bids as indicated by their solar power project portfolio of 205 solar power projects, an order book of Rs.3,831.58 crore and letters of intent of Rs.3,908.16 crore (of which Rs.2,195.93 crore letters of intent were converted into definitive EPC contracts since March 31, 2019), respectively, as of March 31, 2019.

- ***Experienced key management personnel, project management and operations team***

SWSL is led by a management team with extensive experience in the solar EPC industry and the solar power sector, deep understanding of managing projects and a proven track record of performance. SWSL has an experienced global team of 1,160 employees as of March 31, 2019. They benefited from the broad experience gained by their management and project execution teams through their involvement in end-to-end solar EPC projects. As a result, their management and certain members of their project execution teams bring a deep understanding of the local markets in which they operate with strong global project execution expertise that enables them to identify and take advantage of strategic opportunities.

## KEY BUSINESS STRATEGIES

- **Maintain market leadership through strategic expansion of overseas operations**

Currently, SWSL has a presence across 26 countries, with their Subsidiaries and branch offices globally, and plan to continue expanding their operations through strategic expansion. They are focused on leveraging their global presence to continue to position themselves as a credible and reliable EPC player and win repeat orders.

The company aims to leverage the global presence of the SP Group and S&W to give them a head start in expanding their operations in new geographies. In particular, they expect to leverage their market leadership and customer relationships in Africa and India to be attractively positioned to bid for African projects funded by India under the International Solar Alliance (“ISA”) treaty.

- **Grow the customer base and maintain relationships with other key stakeholders**

As there is a substantial opportunity to grow company’s customer base in existing and new markets through a combination of their strong track record and market leadership in the regions in which they operate, their global presence (including through the broader network of the SP Group and S&W) and their relationships with key stakeholders in the solar power industry.

- **Focus on increasing operational and financial efficiency**

SWSL plans to continue focusing on operational and financial efficiency by investing in their competent and sizable design and engineering team in India and their innovative engineering efforts. The company intends to continue to devote significant resources to recruit, train and retain a talented workforce and offer competitive compensation packages, training and career opportunities to attract and retain capable employees.

- **Focus on expanding O&M, rooftop solar EPC and solar storage solutions**

The company plans to continue expanding their O&M operations to solar power projects that were not constructed by them. They are building a dedicated team for their O&M operations that is focused on adopting a targeted approach to winning contracts for O&M services. They also intend to continue developing their data analytics processes through the CMS and CMMS and leverage their experience of providing O&M services to understand solar modules and other equipment, which will help them improve their EPC and O&M services and win repeat orders. They also intend to benefit from the evolving energy storage and ancillary service technologies and intend to leverage from SWPL’s energy storage capabilities by offering solar + storage solutions.

## KEY PERFORMANCE INDICATORS

### Key performance indicators

(Rs. In Cr)

	As of and for the period ended March 31,		
	2019	2018	2017
	Sterling and Wilson Solar Limited (Post-demerger)		SWPL – Solar EPC Division (Prior to Demerger)
<b>Bid conversion ratio (%)</b>			
India	24.39%	31.53%	48.20%
South East Asia	47.72%	-	-
Middle East and North Africa	13.99%	14.80%	45.53%
Rest of Africa	13.73%	46.33%	22.82%
United states and Latin America	16.84%	4.59%	0%
Europe	34.26%	-	-
<b>Bid Conversion ratio Total</b>	<b>21.59%</b>	<b>17.86%</b>	<b>37.61%</b>
<b>Order Book (EPC) (Rs. Cr)</b>			
India	715.30	1,814.81	1,262.16
South East Asia	608.93	-	-
Middle East and North Africa	1,544.89	4,014.21	6,081.92
Rest of Africa	931.18	1,168.62	-
United states and Latin America	31.29	333.65	-
<b>Order Book Total</b>	<b>3,831.58</b>	<b>7,331.29</b>	<b>7,344.08</b>
<b>Lost time injury frequency rate</b>	<b>0.18</b>	<b>0.22</b>	<b>0.30</b>

1. Order book is defined as the value of solar power projects for which the company has entered into definitive EPC contracts minus the revenue already recognized from those projects. 2. Lost time injury frequency rate refers to the number of lost time injuries occurring in a workplace per one million hours worked

## OVERVIEW OF THE SOLAR EPC INDUSTRY

### Competition in the solar EPC industry

Share of annual installations in 2018 of all utility-scale PV systems > 5 MW for companies with largest market shares in 2018					
In India		in Africa		in the Middle-East	
<b>Sterling and Wilson</b>	<b>16.6%</b>	<b>Sterling and Wilson</b>	<b>36.6%</b>	<b>Sterling and Wilson</b>	<b>40.4%</b>
L&T ECC Solar	5.0%	China Jiangxi	11.6%	Acciona	7.1%
Mahindra Susten	4.3%	GreenYellow	5.9%	TBEA	5.7%
Tata Power Co.	4.2%	Vinci Energies	4.9%	OHL	4.0%
ACME Solar	2.8%	InnoSun	4.2%	TSK	4.0%
Others	67.1%	Wartsila	3.6%	ET Solutions	3.9%
		AEC Jabil Consolidated Power Projects	2.5%	ib vogt	3.1%
		Grupo ACS	2.3%	Orad Solar Power	2.0%
		Caterpillar	1.5%	Belectric	1.7%
		Others	24.6%	Kawar Energy	1.0%
				Others	27.1%
<b>Total</b>	<b>100.0%</b>	<b>Total</b>	<b>100.0%</b>	<b>Total</b>	<b>100.0%</b>

Notes: Ranked in order of 2018 market share Source: IHS Markit

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