Sterling & Wilson Solar Ltd.

Recommendation: SUBSCRIBE



Solar Power - EPC

The company is a global pure-play, end-to-end solar engineering, procurement and construction ("EPC") solutions provider, and was the world's largest solar EPC solutions provider in 2018 based on annual installations of utility-scale photovoltaic ("PV") systems of more than five mega-watt peak ("MWp"). It 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. S&W Solar also provide operations and maintenance ("O&M") services, including for projects constructed by third-parties. Its customers include leading independent power producers ("IPPs"), developers and equity funds. It currently has a presence across 26 countries and as of March 31, 2019, It had 205 commissioned and contracted solar power projects with an aggregate capacity of 6,870 MWp. Its order book was INR 38,316 million as of March 31, 2019. S&W Solar benefits 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").

Issue Snapshot	
Issue Open:	6-Aug-19
Issue Close:	8-Aug-19
Price Band (INR)	775 - 780
Issue Size (INR mn)	31,250
Market Cap Pre / Post (INR mn) at upper band	125,081

Particulars	
Fresh Issue (No. of shares) (mn)	NIL
OFS Issue Size (No. of shares) (mn)	40.06 - 40.32
QIBs	75%
Non-institutional	15%
Retail	10%

Capital Structure	
Pre Issue Equity (INR Mn)	160.36
Post Issue Equity (INR Mn)	160.36
Bid Lot	19
Minimum Bid Amount @ INR 775	14725
Minimum Bid Amount @ INR 780	14820.

Shareholding Pattern (%)	Pre Issue (%)	Post issue (%)
Promoters	100.00%	75.00%
Others	NIL	25.00%

Particulars	
Face value	1
FY19 P/E *	19.6
FY19 P/BV *	14.9

^{*}Valuation at Upper band post dilution

Objects of the issue

Offer For Sale (OFS) (INR Mn) 31,250
Fresh Issue (INR Mn) NIL

Achieve the benefits of listing the Equity Shares on Stock Exchanges which the Company expects will enhance its visibility, brand image apart from providing liquidity to the shareholders and pubic market for the equity shares in India

Investment Rationale

Largest global solar EPC solutions provider in a fast growing solar industry S&W Solar was the world's largest solar EPC solutions provider, based on annual installations of utility-scale PV systems of more than five MWp, with a market share of 4.6% in 2018 which increased from 0.3% in 2014, according to IHS Markit. It was also the largest solar EPC solutions provider in each of India, Africa and Middle East in 2018 with 17%, 37% and 40% market share, respectively. In Fiscals 2018 and 2019, revenue from operations outside India accounted for 59 % and 70% of total revenue from operations, respectively. In 2017, It 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.

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

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. It also provide EPC solutions for rooftop solar projects, O&M services, including for projects constructed by third-parties. Its execution track-record, relationships with customers and suppliers, and innovative and cost-effective engineering project designs make it well positioned to benefit from fast growing solar industry and continue to expand operations.

Strong parentage and ability to leverage global "SP" brand

S&W Solar benefits 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 six 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.

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

S&W Solar has demonstrated strong financial performance and total income has grown at a CAGR of 72% to 84,499 million during Fiscal 2017-19. Its EBITDA has increased to INR 8,516 million, 13.2x during Fiscal 2017-19. Its PAT has grown at a CAGR of 173% from a combined PAT of INR 314 million in Fiscal 2017, to a consolidated PAT of INR 4,505 million in Fiscal 2018, and 6,382 million in Fiscal 2019.

Outlook & Valuation

Solar energy is one of the fastest growing forms of renewable energy with its share of annual additions in global power generation capacity increasing from 10 % in 2012 to 25% in 2018. This provides enormous scope of growth for the company as solar energy's share is projected to increase further to 38% in 2022. S&W Solar benefits from the brand reputation, industry relationships and project management expertise of the Shapoorji Pallonji Group and Sterling & Wilson Pvt Ltd. S&W Solar has demonstrated strong financial performance Its asset-light business model has enabled it to generate strong 76% ROE for the fiscal 2019. At the upper price band of INR 780, the issue is priced at FY19 P/E of 19.6x & we recommend SUBSCRIBE to the issue.



Company Background

It commenced operations in 2011 as the Solar EPC Division of Sterling & Wilson Pvt Ltd (SWPL) and demerged from SWPL with effect from April 1, 2017. Over a span of seven years, It became the largest solar EPC solutions provider in each of India, Africa and the Middle East in 2018 and currently has a presence across 26 countries. As of March 31, 2019, It had 205 commissioned and contracted solar power projects with an aggregate capacity of 6,870 MWp. Its order book was INR 38,316 million as of March 31, 2019. In Fiscals 2018 and 2019, its revenue from operations outside India accounted for 59% and 70% of total revenue from operations respectively.

In connection with the Demerger, It entered into a Framework Agreement with SWPL, pursuant to which SWPL will execute all our service contracts entered into prior to the Demerger from its branch offices and transfer all related benefits to S&W Solar. It also have the right to continue using SWPL's branch offices for operations going forward and avail certain shared services that it require to operate business and have the right to use the "S&W" brand without payment. Further, its Subsidiary, SW FZCO and the company have entered into brand sharing agreements with SPCPL under which S&W Solar 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.

It follows a "hub-and-spoke" business model where it manages 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 its operations locally in each of its markets, where there is a cost advantage or to comply with local regulations. Its operations are supported by a competent and sizable design and engineering team that is responsible for designing solutions. Its entire design & engineering team consisting of 154 people is based in India. Its customers also benefit from its relationships with key stakeholders, such as, suppliers, project lenders and consultants, which help execute projects for customers efficiently and at competitive prices.

Its total revenue from operations was INR 16,403 million, 68,717 million and 82,404 million in Fiscals 2017, 2018 and 2019, respectively. Its combined PAT was INR 314.32 million in Fiscal 2017 and consolidated PAT was INR 4,505 million and `6,382 million in Fiscals 2018 and 2019, respectively.

Investment Positives

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

S&W Solar was the world's largest solar EPC solutions provider, based on annual installations of utility-scale PV systems of more than five MWp, with a market share of 4.6% in 2018 which increased from 0.3% in 2014, according to IHS Markit. It was also the largest solar EPC solutions provider in each of India, Africa and Middle East in 2018 with 17%, 37% and 40% market share, respectively. In Fiscals 2018 and 2019, revenue from operations outside India accounted for 59 % and 70% of total revenue from operations, respectively. In 2017, It 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.

Solar energy is one of the fastest growing forms of renewable energy. The total cumulative installed solar PV generation capacity is estimated to reach nearly 1,090 GWDC globally by 2022, compared to less than 100 GWDC at the end of 2012, at a CAGR of 27%. Currently It has a presence across 26 countries with operations in India, South East Asia, Middle East and North Africa, rest of Africa, Europe, United States and Latin America and Australia, which has helped diversify business globally. These markets are expected to see a steep growth in solar power capacity additions over the next three years, according to IHS Markit. 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, 42.0% CAGR in the rest of Africa, 30.0% CAGR in Europe, 17.4% CAGR in the United States, 5.4% in CAGR Latin America and 8.1% CAGR in Australia.

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

The company provides EPC services primarily for utility-scale solar power projects with a focus on project design and engineering, and manages all aspects of project execution from conceptualizing to commissioning. It also provides EPC solutions for rooftop solar projects, O&M services, including for projects constructed by third-parties. It follows a "hub-and-spoke" business model where it manages the complete supply chain from India, including the design and engineering functions and engage supplies and third-party subcontractors, and procures raw materials for operations locally in each of markets, where there is a cost advantage or to comply with local regulations. It seeks to leverage this business model to procure optimal product and service solutions for customers at a cost advantage.



Strong relationships with customers and other key stakeholders

S&W Solar's customers include leading IPPs and developers such as Marubeni, EDF Renewables, Alten, Sunseap, Sao Mai, Enfinity, ACWA Power and BNRG Renewables, and equity funds. It adopts a consultative approach to customers' solar energy needs, which enables it to provide customized solutions to meet their requirements. Its global network connects customers to key stakeholders and allows customers to reduce the number of service providers they need to engage with, thus saving them time and cost, while also providing enhanced supply chain visibility. As of March 31, 2019 customers in India and outside India for whom it has executed more than one project constituted 83% and 64% of total commissioned solar capacity, respectively.

Strong parentage and ability to leverage global "SP" brand

S&W Solar benefits 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 six 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. Before entering a new market, It typically leverage from the SP Group's and S&W's presence in that market to get a head start in establishing operations. For example, SP Group's presence in the Middle East, Africa and South East Asia assisted it in accessing these markets. In addition, SP Group's and S&W's relationships with key stakeholders have helped S&W Solar 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

S&W Solar has demonstrated strong financial performance and total income has grown at a CAGR of 72% from INR 16,501 million in Fiscal 2017 to 84,499 million in Fiscal 2019. Driven by strong operational capabilities, It has been able to minimize costs and achieve healthy profit margins. Its EBITDA increased from INR 647 million in Fiscal 2017 to 8,516 million in Fiscal 2019. Its PAT has grown at a CAGR of 173% from a combined PAT of INR 314 million in Fiscal 2017, to a consolidated PAT of INR 4,505 million in Fiscal 2018, and 6,382 million in Fiscal 2019. strong growth and financial performance has been facilitated by focus on risk management and reliance on clearly defined internal processes to manage business. It operates an asset-light business model, under which customers are responsible for sourcing and acquiring

real estate while it typically leases equipment required for operations. Its asset-light business model generally entails low capital expenditures and fixed costslt is able to operate with low working capital requirements as its EPC contracts are typically of short duration. It typically requires an advance payment from customers for certain deliverables and its EPC contracts include shorter payment cycles from customers compared to longer payment cycles from suppliers.

Strategies

Maintain market leadership through strategic expansion of overseas operations

S&W Solar aims to maintain market leadership position through strategic expansion, including through roll up acquisitions in the markets in which it currently operate and into new geographies that present attractive opportunities. Currently, It has a presence across 26 countries, with its Subsidiaries and branch offices globally, and plan to continue expanding operations. It is focused on leveraging global presence, which is a significant competitive advantage, strong project execution track record and relationships with key customers and project lenders to continue to position itself as a credible and reliable EPC player and win repeat orders. Its strategy is to focus on markets with conducive solar power policies and high solar resources. It aims to establish a permanent presence in regions that have continuous and large solar opportunities and leverage this regional presence to strategically access local geographies as needed. It also aims to leverage the global presence of the SP Group and S&W to give it a head start in expanding operations in new geographies. In particular, it expects to leverage 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.

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

It plans to continue expanding O&M operations to solar power projects that were not constructed by it. It is building a dedicated team for O&M operations that is focused on adopting a targeted approach to winning contracts for O&M services. It intends to first expand O&M operations in the regions where it has EPC operations, and enter markets that have conducive solar power polices with commissioned solar power projects. It also intends to continue developing data analytics processes through the CMS and CMMS that it has licensed from SWPL and leverage experience of providing O&M services to understand solar modules and other equipment, which it believes will help improve EPC and O&M services and win repeat orders. In addition, it



plans to expand rooftop solar EPC solutions which it started in Fiscal 2016. It also intends 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.

Industry Overview

The global energy landscape has been transforming, with a rapid uptake in renewable energy sources, such as solar energy, as a result of increasing cost competitiveness, improving technology and robust government approaches to climate change. According to IHS Markit, the share of solar photovoltaic ("PV") generation capacity annual additions in global power generation capacity annual additions has increased from 10 % in 2012 to 25% in 2018, and is further estimated to increase to 38% in 2022.

Share of solar PV and renewables in global power generation capacity annual additions % of annual additions (% of giga-watt alternating current ("GWAC"))											
			2014								
Solar PV	1%	1%	1%	2%	3%	5%	6%	8%	10%	12%	12%

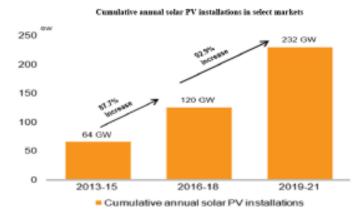
According to IHS Markit, by 2022, total cumulative installed solar PV generation capacity is estimated to reach nearly 1,090 gigawatt direct current ("GWDC") globally, compared to less than 100 GWDC at the end of 2012, at a CAGR of 27%. The share of solar PV generation capacity in installed power capacity has been growing across the regions. In India, the share of solar PV generation capacity in installed power capacity base has grown from 1% in 2012 to 6% in 2018, and is estimated to increase to 12% in 2022.

Share of solar PV in installed power capacity base (% of cumulative GWAC at year end)											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
India	1%	1%	1%	2%	3%	5%	6%	8%	10%	12%	12%
Grand total	2%	2%	3%	3%	4%	5%	6%	8%	9%	10%	10%

According to IHS Markit, annual solar PV installations have seen strong growth globally, increasing from 32 giga-watts ("GW") in 2012 to 103 GW in 2018, representing 22% CAGR. Regionally, for the period from 2012 to 2018, annual solar PV installations have increased by 10 GW in India. According to IHS Markit, annual solar PV installation is expected to grow at 12% CAGR in India for the period from 2018 to 2021. On an aggregate basis, annual solar installations across the globe (excluding primarily China & Japan) are estimated to increase from 49 GW in 2018 to 85 GW in 2021 at a CAGR of 20%.

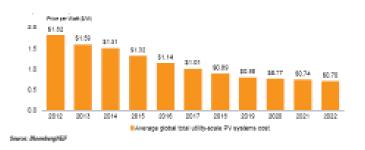
The cumulative annual solar PV installations in India, South East Asia, the Middle East & North Africa, the rest of Africa, Europe, the United States, Latin America and Australia increased

from 64 GW in a three year period over 2013 to 2015 to 120 GW over 2016 to 2018 representing a 88% increase. This is likely to increase by 232 GW in a three year period over 2019 to 2021 representing a further 93% increase.



The use of solar energy has become increasingly competitive over the years due to the declining costs associated with its use, making this a key factor driving the global growth of the solar industry. Solar energy has emerged as a low-cost source of energy and has become lower in cost than traditional energy sources, such as coal and gas, in some key markets. Awarded tender prices for large solar PV projects have fallen below the cost of conventional power generation in several markets with high solar resources.

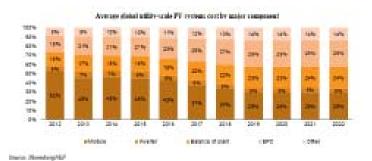
The declining costs of using solar energy can be attributed to a decrease in the costs of solar PV systems. According to BloombergNEF's 4Q 2018 Global PV Market Outlook report published November 19, 2018, the average global total utility-scale PV systems cost decreased from \$1.82/watt in 2012 to \$0.89/watt (DC) in 2018, and is expected to further decrease to \$0.70/watt (DC) in 2022.



A key driver of this decline in costs of solar PV systems is the decreasing costs of solar PV modules over the years, with the average price of solar PV modules decreasing by 69% between 2012 and 2018, according to BloombergNEF. The share of modules and invertors as a percentage of total PV system costs has



declined globally from 58% in 2012 to 38% in 2018 and is expected to further decline to 34% by 2022. Improvement of module efficiency, while not directly affecting the module price, lowers the per watt spending of non-module components in the system.



According to CRISIL Research, due to favorable policy, the low tariff discovery that results from competitive bidding processes and declining solar technology costs, tariffs for solar energy have declined globally, notably in comparison to coal-based energy. The table shows the decline in average solar energy tariffs across major regions from 2013 to 2018.

Average solar energy tariffs across major regions

Solar auction/FiT price (US\$/KWh)	2013	2014	2015	2016	2017	2018
India	0.12	0.11	0.08	0.07	0.05	0.04
Middle East & North Africa	0.17	0.17	0.17	0.16	0.06	0.03
South Africa	0.1	0.1	0.07	0.07	0.07	0.06
Latin America	0.1	0.12	0.09	0.08	0.08	0.08

Source: CRISIL Research

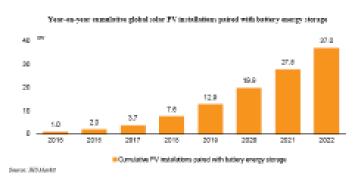
As the chart below shows, weighted average solar energy tariffs for India have fallen significantly from INR 7.4/unit in 2013 to 2.7/unit in 2018, representing a decline in approximately 18% CAGR, and are now lower than tariffs for coal based energy.



According to IHS Markit, the increasing use of battery energy storage in solar PV plants could help to drive further growth in the solar industry. Pairing batteries with solar PV plants helps to overcome the inherent intermittency of solar PV generation by

smoothing output and/or storing generated energy which can then be utilized when energy is not being generated in off-peak times.

global solar PV installations paired with battery energy storage has increased from 76 megawatts ("MW") in 2012 to 3,825 MW in 2018. This is expected to increase to 9,232 MW in 2022. The figure below depicts the year on year cumulative global solar PV installations paired with battery energy storage.



Solar EPC solutions providers coordinate the turn-key construction of a PV plant, including design and engineering. The EPC role in a solar PV project will vary according to the developer's preferences and the EPC provider will require enough financial resources to commit to the project.

Projects for solar EPC solutions providers range from full turn-key EPC projects, where the EPC provider manages plant construction in its entirety and typically provides O&M services for the plant for two to five years, making a margin on the procurement of components and on the services provided; partial EPC projects, where the EPC provider is only hired for the engineering and construction of the plant; or in-house EPC projects, where the EPC provider only takes on specific subcontracted tasks from an in-house EPC team.

The solar EPC industry is highly fragmented, but has been trending towards increased consolidation in recent years. According to IHS Markit, Excluding China, the combined global market share of the five largest solar EPC solutions providers in 2018, based on annual installations of utility-scale PV systems of more than five MWp, increased from 6 % in 2015 to 19 % in 2018. In 2010, global solar PV system additions were dominated by Europe with a large number of local EPC solutions providers based in countries such as Germany, Italy and Spain. As Europe scaled back its support schemes for solar PV systems, competition increased, and scale became an important factor for EPC solutions providers. As solar PV deployment has grown, successful EPC solutions providers have been able to scale-up their businesses and increase their market share.



Share of global (excluding PV projects installed in China) annual installations of all utility-scale PV systems > 5 MW for companies with the largest market shares in 2018

	Country of headquarters	2014	2015	2016	2017	2018
Sterling and Wilson	india	0.5%	1.8%	2.2%	6.4%	8.6%
Prodlel	Spain	0.0%	1.2%	0.6%	4.8%	2.7%
Swinerton Renewable Energy	United States	1.2%	2.6%	5.8%	3.9%	2.7%
RCR Tomlinson	Australia	0.0%	0.0%	0.0%	0.0%	2.7%
Risen Energy	China	0.0%	0.1%	0.1%	0.0%	2.6%
Black & Veafch	United States	0.5%	0.0%	1.3%	0.0%	2.2%
Grupo ACS	Spain	0.0%	0.0%	0.1%	0.0%	2.1%
First Solar	United States	12.6%	9.1%	6.4%	1.6%	2.0%
ACCIONA	Spain	0.2%	0.0%	1.1%	0.0%	2.0%
Mortenson Construction	United States	0.9%	1.6%	4.1%	2.6%	1.9%
Others		84.1%	83.5%	78.4%	80.7%	70.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

Notes: Ranked in order of 2018 market share

Source: IHS Markit



Financials

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for the pe	riod ended	for the year ended
•	rch 9, 2017	31st March 2019
to Mar	ch 31, 2018	
Income		
Revenue from operations	68,717.08	82,404.08
Other income	127.12	2,095.25
Total income	68,844.20	84,499.33
Expenses		
Cost of construction materials,	F2 724 40	F.C. 000.03
stores and spare parts	53,734.49	56,090.93
Changes in inventories of stock-in-trade	118.97	12.67
Direct project costs	7,336.27	16,450.41
Employee benefits expense	986.24	1,778.88
Other expenses	1,163.60	1,650.18
Total expenses	63,339.57	75,983.07
EBITDA	5,504.63	8,516.26
Finance costs	186.17	846.51
Depreciation and amortisation expense		78.04
Consolidated profit before income tax	5,286.78	7,591.71
Tax expense:		
Current tax	850.14	1,392.56
Current tax relating to earlier period		28.22
Deferred tax (credit)	-68.71	-211.4
	781.43	1,209.38
Consolidated profit for the year/period	4 505 35	6 262 22
after income tax	4,505.35	6,382.33
Consolidated profit attributable to:		
Owners of the Company	4,521.76	6,389.89
Non-controlling interests	-16.41	-7.56

Balance Sheet		
(INR mn)	31st March'18	31st March'19
Non-current assets		
Property, plant and equipment	202.2	265.4
Capital work-in-progress	28.7	24.2
Goodwill Other intensible assets	10.4	31.2 18.3
Other intangible assets Financial assets	10.4	18.3
(i) Loans		11.7
Deferred tax assets (net)	110.2	321.2
Non-current tax assets (net)	10.2	32212
Other non-current assets	54.0	24.5
Total non-current assets	415.6	672.3
Current assets		
Inventories	185.6	131.5
Financial assets	1.6	1 7
(i) Investments (ii) Trade receivables	1.6 18214.7	1.7 19002.2
(iii) Cash and cash equivalents	954.7	4207.7
(iv) Bank balances other than cash		4207.7
cash equivalents	86.7	337.7
(v) Loans	93.6	19533.9
(vi) Derivatives	33.0	39.5
(vii) Other financial assets	10298.8	2416.8
Current tax assets (net)	9.0	8.4
Other current assets	18943.6	7567.5
Total current assets	48788.2	53246.9
Total assets	49203.8	53919.2
Equity and liabilities		
Equity	160.4	160.4
Equity share capital	20011	10011
Other equity		
Capital reserve on demerger	-1817.4	-1817.4
Capital reserve	-16.5	-16.5
Foreign currency translation reserv	re -35.2	14.9
Legal reserve	2.7	2.7
Effective portion of cash flow hedge		
Retained earnings	3672.0	10066.0
Total equity attributable to		
owners of the Company	1965.9	8410.1
Non-controlling interest Total equity	-27.2	-34.9
Non - current liabilities	1938.8	8375.2
Financial liabilities		
(i) Borrowings	0.0	0.0
Provisions	55.7	86.1
Total non - current liabilities	55.8	86.1
Current liabilities		
Financial liabilities		
(i) Borrowings	1841.4	22277.7
(ii) Trade payables		
Total outstanding dues of micro		
enterprises and small enterprises		19.3
Total outstanding dues of creditors oth	27207 0	19106.2
than micro enterprises and small enter	•	19100.2
(iii) Derivatives	104.2	
(iv) Other financial liabilities	204.8	337.5
Other current liabilities	7025.6	2446.0
Provisions Current tax liabilities (net)	552.0 83.4	768.5 502.6
Total current liabilities	47209.3	45457.9
Total equity and liabilities	49203.8	53919.2
iotal equity and habilities	77203.0	33313.2



V--/NI-

No

Solar Power - EPC

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