Sky Energy Indonesia Tbk (JSKY IJ)

A Professional Manufacturer of Solar Modules

NH KORINDO SEKURITAS

Initiation Report | Oct 8, 2019

Being one of the publicly listed companies, with a unique business model makes JSKY potential for growing aggressively in the future. The company's performance continues to show an upward trend in revenue. Besides, JSKY continues to expand and innovate products so that its market share grows significantly in the future.

Boosted Growth

JSKY is an experienced solar module manufacturing company from 2008 with diversified exports to various countries such as the USA, Canada, Japan, China, Finland, Germany, and others. JSKY plans to continue to grow by releasing new products in the renewable energy sector. In 2018A, JSKY managed to record total sales of IDR424 billion (+1,92% YoY), and in 1H19 this company was able to achieve IDR234 billion (+4,9% YoY), this performance proved that JSKY continued to boost revenue growth. Currently, Solar Panel and Battery sales contribute most dominantly with contributions of 20,6% and 47,2%, respectively.

Organic Expansion with Environmental Benefits

JSKY currently has 200MW solar panels and 100MW solar cells. As demands increase, JSKY plans to increase the capacity of solar panels and solar cells in 2020 to 300MW and 200MW, respectively. The PLTS project in Karampuang JSKY is working on has already been completed. Its organic expansion of JSKY has a positive impact on its business and environment.

New Product Innovations

In December 2019, JSKY will have released 3 new products: J-Bifacial, J-Leaf, and J-Feather. Those 3 products with cutting-edge tech. Innovations are the first lightweight solar modules in the world. J-Bifacial has two panels functioning to maximize energy production and produce 5-30% more energy than ordinary solar module products. Meanwhile, J-Leaf and J-Feather are able to produce energy, with an efficiency level of 18,6-18,8%.

Market Penetration and Business Potential

Indonesian solar resources have the potential for generating electricity-power up to 207,8 GWp, but currently, those resources have only less than 1% of achievable possibilities. Domestic market penetration is vital, and the Ministry of Energy and Mineral Resources Regulation No. 49 of 2018 supports JSKY revenue growth of 12,5-13,4% until 2021.

Sky Energy Indonesia Tbk | Summary

	2018A	2019F	2020F	2021F
Sales	425	474	534	605
Growth (%)	4.4%	11.7%	12.5%	13.4%
EBITDA	59	84	101	114
Net Profit	24	34	45	60
EPS (IDR)	23	33	44	49
Growth (%)	4.4%	42.6%	31.8%	33.8%
P/E	30.0x	24.1x	20.5x	17.2x
P/BV	3.5x	3.4x	3.2x	3.0x
EV/EBITDA	16.4x	12.5x	11.2x	10.6x
ROE (%)	10.7%	15.3%	17.1%	19.1%
DER (%)	136.8%	120.0%	90.0%	68.0%
Net Debt	254	237	220	187

Unit: IDR bn, %, x
Source: Company Data, Bloomberg, NHKS Research
Please consider the rating criteria & important disclaimer

Not Rated

Dec 2020 TP (IDR)	N/A
Consensus Price (IDR)	N/A
TP to Consensus Price	N/A
vs. Last Price	N/A

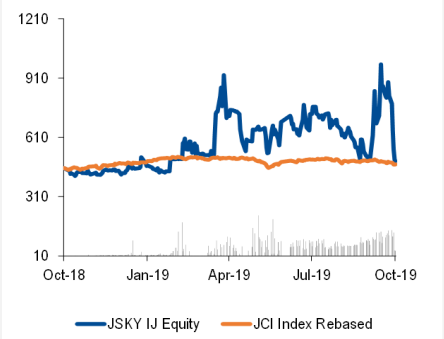
Shares data

Last Price (IDR)	498
Price Date as of	Oct 4, 2019
52 wk Range (Hi/Lo)	1000 / 413
Free Float (%)	79.0
Outstanding sh.(mn)	2,033
Market Cap (IDR bn)	1,209
Market Cap (USD mn)	85
Avg. Trd Vol - 3M (mn)	29.61
Avg. Trd Val - 3M (bn)	20.13
Foreign Ownership	64.5%

Miscellanous Industry
Electronics

Bloomberg	JSKY IJ
Reuters	JSKY.JK

Share Price Performance



	YTD	1M	3M	12M
Abs. Ret.	2.5%	-0.4%	-32.7%	7.7%
Rel. Ret.	4.5%	2.9%	-27.8%	4.1%

Meilki Darmawan
(021)797-6202, ext: 170
meilki.darmawan@nhsec.co.id

Summary of Financials

INCOME STATEMENT

(IDR bn)	2018/12A	2019/12F	2020/12F	2021/12F
Sales	**425**	**474**	**534**	**605**
Growth	*0.0%*	*11.7%*	*12.5%*	*13.4%*
COGS	(331)	(349)	(388)	(440)
Gross Profit	**93**	**126**	**146**	**165**
Gross Margin	*22.0%*	*26.5%*	*27.3%*	*27.3%*
Operating Expenses	(42)	(48)	(54)	(61)
EBIT	**52**	**78**	**92**	**105**
EBIT Margin	*12.2%*	*16.4%*	*17.3%*	*17.3%*
Depreciation	7	6	9	9
EBITDA	**59**	**84**	**101**	**114**
EBITDA Margin	13.8%	17.7%	19.0%	18.8%
Interest Expenses	(18)	(40)	(41)	(36)
EBT	**30**	**44**	**59**	**78**
Income Tax	(6.8)	(10.7)	(14.4)	(18.5)
Minority Interest	0.0	0.0	0.0	0.0
Net Profit	**24**	**34**	**45**	**60**
Growth	*4.4%*	*42.6%*	*31.8%*	*33.8%*
Net Profit Margin	*5.6%*	*7.1%*	*8.3%*	*9.8%*

PROFITABILITY & STABILITY

	2018/12A	2019/12F	2020/12F	2021/12F
ROE	10.7%	15.3%	17.1%	19.1%
ROA	4.1%	5.9%	7.2%	8.9%
ROIC	8.3%	11.3%	13.0%	13.9%
Cash Dividend (IDR bn)	-	-	-	-
Dividend Yield	-	-	-	-
Payout Ratio	-	-	-	-
DER	136.8%	120.0%	90.0%	68.0%
Net Gearing	188%	156%	112%	81%
LT Debt to Equity	3.7%	3.5%	2.5%	2.0%
Capitalization Ratio	57.8%	54.5%	47.4%	40.5%
Equity Ratio	35.9%	40.5%	43.6%	49.4%
Debt Ratio	49.1%	48.7%	39.2%	33.6%
Financial Leverage	261.3%	237.4%	229.6%	202.3%
Current Ratio	123.4%	130.7%	134.0%	146.3%
Par Value (IDR)	100	100	100	100
Total Shares (mn)	1,016	1,016	1,016	1,016
Share Price (IDR)	700	800	900	1,000
Market Cap (IDR tn)	0.7	0.8	0.9	1.0

BALANCE SHEET

(IDR bn)	2018/12A	2019/12F	2020/12F	2021/12F
Cash	25	49	34	45
Receivables	100	115	118	125
Inventories	152	121	166	164
Total Current Assets	**389**	**391**	**425**	**441**
Net Fixed Assets	95	115	138	166
Other Non Current Asset	84	80	84	84
Total Assets	**568**	**586**	**647**	**691**
Payables	36	11	20	28
ST Bank Loan	271	277	247	226
LT Debt	8	8	7	7
Total Liabilities	**364**	**349**	**365**	**349**
Capital Stock + APIC	157	157	157	157
Retained Earnings	47	81	125	185
Shareholders' Equity	**204**	**238**	**282**	**341**

VALUATION INDEX

	2018/12A	2019/12F	2020/12F	2021/12F
Price/Earnings	30.0x	24.1x	20.5x	17.1x
Price/Book Value	3.5x	3.4x	3.2x	3.0x
Price/Sales	1.7x	1.7x	1.7x	1.7x
PE/EPS Growth	6.8x	0.6x	0.6x	0.5x
EV/EBITDA	16.4x	12.5x	11.2x	10.6x
EV/EBIT	18.6x	13.5x	12.3x	11.5x
EV (IDR bn)	965	1,049	1,133	1,203
Sales CAGR (3-Yr)	-	-	-	12.5%
EPS CAGR (3-Yr)	-	-	-	36.0%
Basic EPS (IDR)	23	33	44	59
Diluted EPS (IDR)	23	33	44	59
BVPS (IDR)	201	234	277	336
Sales PS (IDR)	418	467	525	595
DPS (IDR)	-	-	-	-

CASH FLOW STATEMENT

(IDR bn)	2018/12A	2019/12F	2020/12F	2021/12F
Operating Cash Flow	(30)	40	53	69
Investing Cash Flow	(95)	(23)	(36)	(36)
Financing Cash Flow	140	6	(32)	(22)
Net Changes in Cash	16	24	(15)	11

TOP OWNERSHIP

By Geography	%	Shareholders	%
Other Nation	53.0	Mirae Asset Sekuritas	20.9
Indonesia	35.5	Asuransi Adisarana	20.7
Japan	11.5	Trinitan Global Pasifik	16.7
		Hitachi High Tech.	6.6

Source: Company Data, NHKS Research

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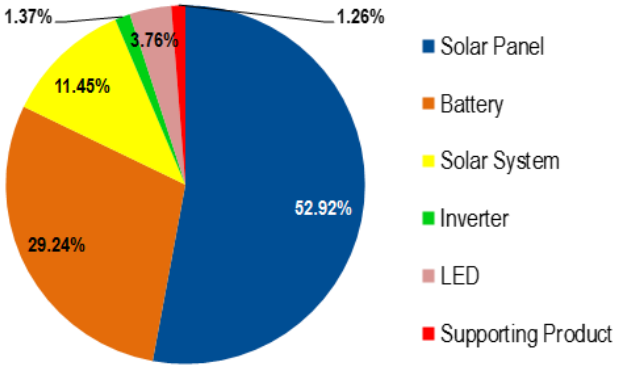
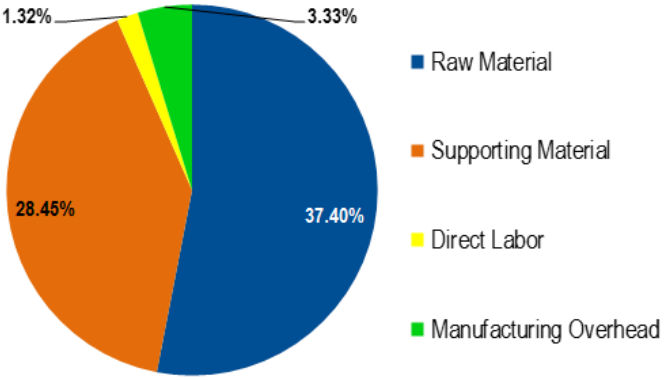
Key Charts

2019F Revenue Breakdown



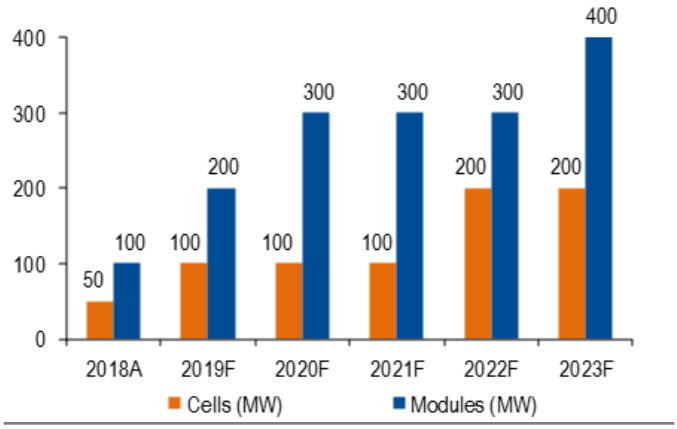
Source: Company Data, NHKS Research

2019F COGS Breakdown



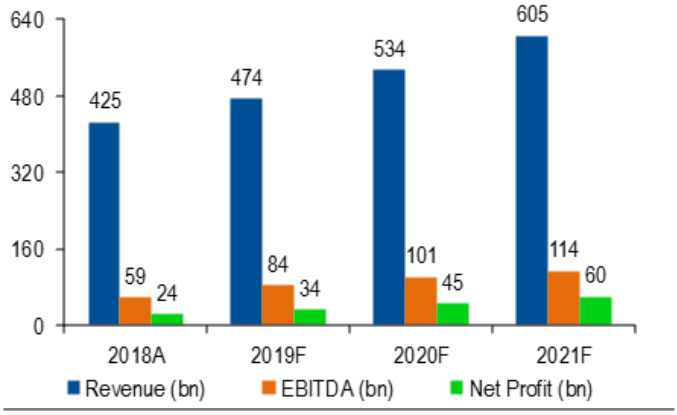
Source: Company Data, NHKS Research

Capacity Expansion Plan



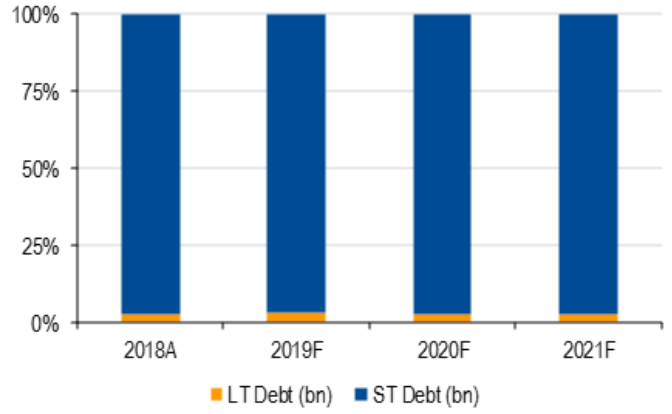
Source: Company Data, NHKS Research

Revenue/EBITDA/Net Profit Forecast



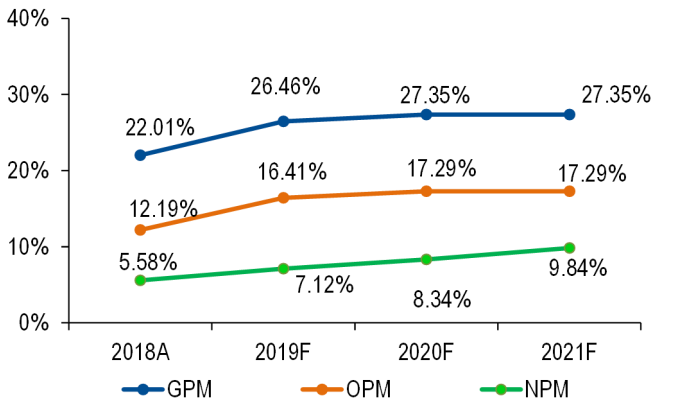
Source: Company Data, NHKS Research

ST Debt & LT Debt Forecast



Source: Company Data, NHKS Research

Margin Ratio Forecast



Source: Company Data, NHKS Research

Valuation

WACC calculation, JSKY only has 4 bank loans with interest in range 5,5% to 11,5% with debt in USD denominated in Rupiah and JSKY's Cost of Bank Loans in the range of 0,09% - 5,95% per 2018, and then calculated with Tax Rate of 25%.

Applying DCF valuation, with several scenarios based on sales growth, the estimated industry growth amid Indonesia's economics condition is as follows:

1. The biggest revenue contributors are solar panels and battery products, with 50% contribution to total revenues as dominant products to support JSKY's business.
2. Using 10 years projection with first-to-ninth year high-growth and product's maturation with a 10% assumption, the tenth year is a stable period on grounds of Indonesia's economic growth at 5.5%.
3. Capital Expenditure uses a projected growth of 4-6% per year. Currently, JSKY dominates 30-34% domestic market share of solar modules. With a span of 10 years we expect an increase in Capital Expenditure with the use of 80% for expansion, will be able to give JSKY a domestic market share of 40-50% in 2028.

DCF Valuation

Constant Growth	5.50%
Terminal Value	Rp2,333,185,207,764
PV of Terminal Value	Rp1,116,928,508,619
Enterprise Value	Rp1,120,334,198,715
LT Employee Benefit	Rp2,773,961,778
Non-Controlling Interest	Rp24,764,630
Number of Shares	1,016,270,000
Intrinsic Value per Shares	Rp1,100

Source: Company Data, NHKS Research

WACC Calculation

Risk Free Rate	7.5%
Market Risk Premium	5.0%
Equity Beta	0.5
Cost of Equity	10.6%
Cost of Debt	7.84%
Weight of Debt	58%
Weight of Equity	42%
WACC	7.6%

Source: Company Data, NHKS Research

Peers Comparison

Global Public Companies

	Market Cap	Total Asset	Sales Growth LTM	Gross Margin LTM	Operating Margin LTM	Net Profit Growth LTM	ROE LTM	P/E LTM	Dividend Yield
Indonesia									
SKY ENERGY INDONESIA TBK	79	39	2.0%	22.0%	12.3%	4.5%	15.4%	45.8x	N/A
Canada									
INNERGEX RENEWABLE ENERGY	1,535	4,757	44.1%	N/A	37.0%	53.4%	4.3%	127.1x	4.5%
ENTRION CORP	55	203	-10.7%	33.8%	-1.8%	N/A	-213%	N/A	N/A
Germany									
ENCAVIS AG	1.196	3,034	11.8%	N/A	28.8%	-69.8%	1.1%	159.7x	2.9%
France									
ALBIOMA SA	802	1,833	7.3%	N/A	23.3%	-0.4%	10.8%	17.2x	1.4%
Spain									
AUDAX RENOVABLES SA	748	954	46.8%	N/A	2.9%	66.0%	11.1%	24.0x	N/A
Denmark									
ATHENA INVESTMENTS AS	101	462	-8.3%	46.7%	30.6%	N/A	-26.6%	N/A	48.0%
Israel									
SUNFLOWER SUSTAINABLE INVEST	58	121	68.2%	56.7%	41.7%	15.9%	10.7%	13.4x	25.5%
India									
UJAAS ENERGY LTD	9	85	-31.3%	N/A	9.6%	-53.5%	8.2%	3.9x	N/A

Unit: USD mn, %, X

Source: Bloomberg, NHKS Research

Company Profile

Background

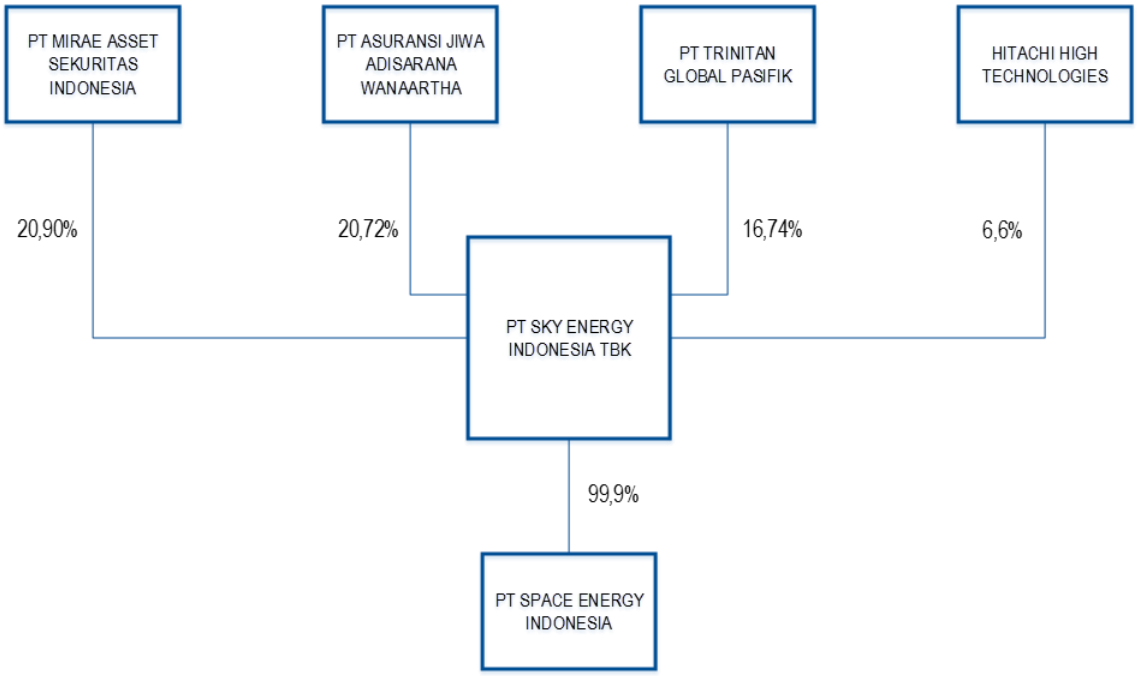
Sky Energy Indonesia is a professional manufacturer of solar modules with more than 10 years of experience in production and quality control. Sky Energy Indonesia is also a provider of technical services for solar power plants (on-grid and o-grid), including the technical design, installation, and maintenance to customers worldwide.

Sky Energy Indonesia has developed a solar-cell testing laboratory. Sky Energy Indonesia's technical service is composed of technical design, installation, and maintenance of the power plants. Furthermore, the company has managed to export the best quality Solar Modules to the United States, Japan, Canada, Finland, and Germany.

It has reliable testing laboratories, with standardized production processes; thus its products meet international qualifications. The company has obtained ISO 9001:2015, ISO 14000:2015, and OHSAS 18001:2007 quality management certifications. The Company's products have fulfilled am International standardization, such as IEC 61730-1, IEC 61730-2, IEC 61215, IEC 61701, CE, CSA, and UL certifications. The Company produces solar cells and solar modules under JSKYE trademark.

To fulfil export market share, the Company produces solar cells and solar panels are as Original Equipment Manufacturer ("OEM") products.

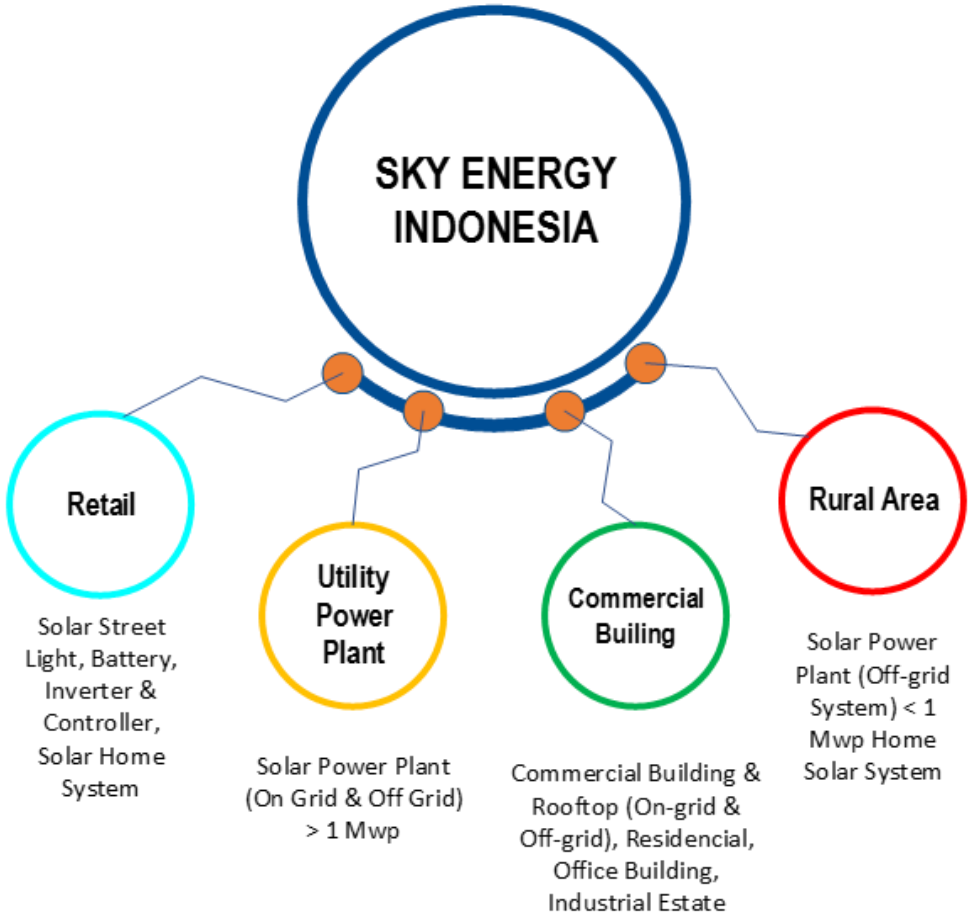
Company Structure and Shares Ownership



	Number of Shares	Percentage
PT Mirae Asset Sekuritas Indonesia	424,740,000	20.90%
PT Trinitan Global Pasifik	340,232,278	16.74%
PT Asuransi Jiwa Adisarana Wanaartha - Desk 4	247,609,600	12.18%
PT Asuransi Jiwa Adisarana Wanaartha - Desk 1	173,544,000	8.54%
Hitachi High Technologies	173,544,000	6.60%
Public	713,314,122	35.04%

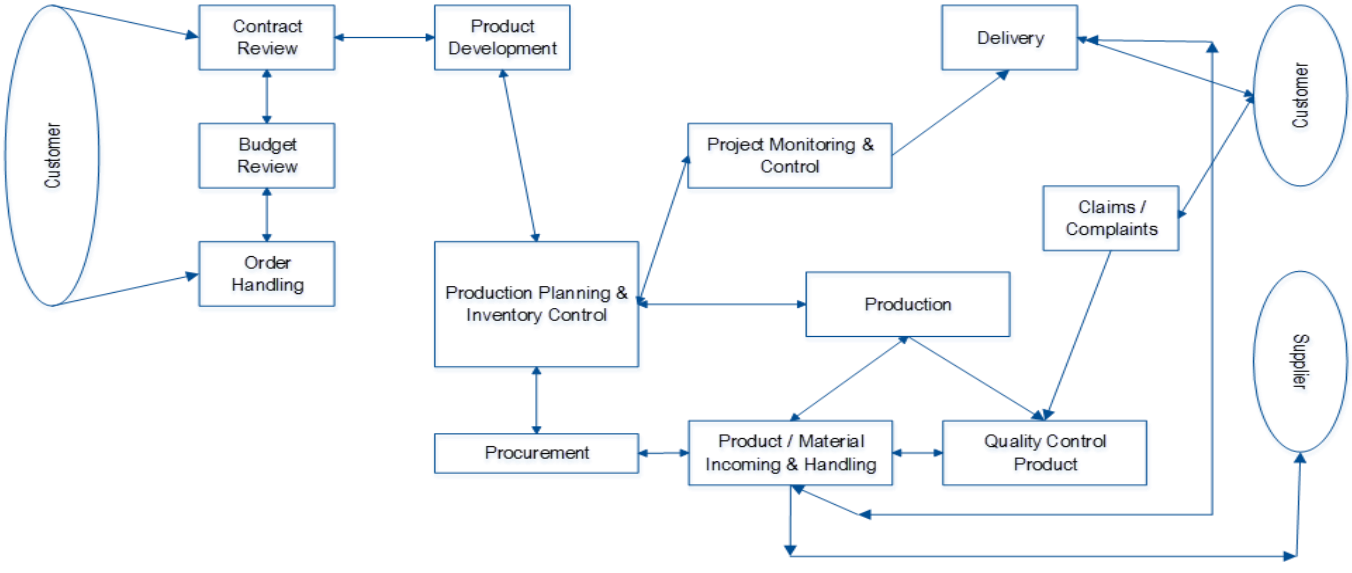
Source: BEI, NHKS Research

Business Line



Source: Company Data, NHKS Research

Mapping Business Process



Source: Company Data, NHKS Research

Solar Module Products

1. Standard-Frame Solar Module

This type of module is generally used in the application of on-grid and o-grid solar modules in industrial and solar home systems. The types of solar modules produced by the Company vary from the ST36M5 series to the ST72M345 series, with maximum power between 5-345 Watt Peak.

2. Flexible-Frame Solar Module

This type of solar module, with unique characteristics has advantages in the form of a low thickness level with high flexibility compared to standard-frame type solar modules (maximum curvature of 300). Solar modules with flexible frames are suitable to be applied to equipment with outdoor placement, such as public street lighting and track signs. The types of solar modules produced by the Company varies from type of ST36TM 18-FLP series to the ST36TM 140-FLP series with a maximum power between 18-140 Watt Peak.

3. Foldable Solar Module

A foldable solar module is a durable and high performance solar module, which has passed trial use in extreme environmental conditions. This solar module is equipped with EVA packing bag that increases comfort for users when using it. Foldable solar modules produced by the Company varies from the ST36TM2 / 40-FDP series to the ST36TM3 150-FDP series with maximum power between 40-150 Watt Peak.

Source: Company Data

Management Background

Board of Commissioners

Ferry Joedianto Robertus Tandiono
President Commissioner

Education
He earned a Bachelor of Industrial and Mechanical Engineering from Christian Albrechts-Universität zu Kiel in Germany in 1976.

Experience
He began his career as a Production Supervisor at PT Nipress Tbk in 1978-1982, then became Production Manager (1983-1986), Director (1987-1991), and Managing Director in 1991-2012. Currently, he also serves as President Commissioner of PT Nipress Tbk, Commissioner of PT Indobatt Industri Permai, Commissioner, PT Indonesia Comcocrown Chemical Industri, and Commissioner of PT Makara Kinara Agung.

Richard Tandiono
Commissioner

Education
He holds a Bachelor of Industrial & Mechanical Engineering, graduating cum laude at the University of Southern California in 2002. He earned a Masters of Engineering Management at the University of Southern California, graduating with cum laude in 2004.

Experience
He began his career as a Plant Manager of PT Nipress Tbk in 2006 and General Manager in 2008-2012 until now he has served as a Director at PT Nipress Tbk, PT Trinitan Plastic Indonesia, and PT Nipress Energi Otomotif.

Henry Gamra Rachmat
Independent Commissioner

Education
He earned Bachelor degree in Electrical Engineering from Universitas Indonesia in 1991

Experience
He began his career by joining PT Guna Era Manufaktura in 1991 as Production Manager until 2000. After that, he served as Senior Manager of PT KMI Wire and Cable Tbk (2000-2010) and served as Director of PT Matra Mandiri Prima (2010- 2012).

Board of Director

Jackson Tandiono
President Director

Education
He holds a Bachelor of Science (B.Sc.) in Finance from the University of Southern California in 1998.

Experience
He began his career at PT Nipress Tbk as a Production Supervisor in 2000. The career continue as he served as Deputy Finance Director and Plant Manager until May 2006. Furthermore, in 2008, he founded a company engaged in the field of new renewable energy namely PT Sky Energy Indonesia Tbk.

Hengky Loa
Director

Education
He completed his studies at the Faculty of Engineering, Universitas Kristen Indonesia, majoring in Electrical Engineering in 1991.

Experience
He began his career as a Sales Engineer at PT Guna Elektro from 1992 to 2000. Furthermore, he also served as Marketing Director at PT Sinar Inti Elektrindo Raya in 2005 and owner of PT Sumber Rejeki Bersama.

Naoki Ishikawa
Director

Education
He completed his Bachelor of Engineering education from Hokkaido University School of Science, Sapporo, Japan, in 1988.

Experience
He is a Japanese citizen. He served as Senior Staff, Hoxan Corp, Sapporo, Hokkaido, Japan (Current: Air Water Inc.) (1988 - 2000). Manager, Ebara Corp, Tokyo, Japan (2000-2003). Manager / Chief Scientist, Shin-Etsu Chemical Co., Ltd., Tokyo, Japan (2003 - 2009). CEO, PVG Solutions Inc., Yokohama, Kanagawa, Japan (2009-2016).

Pui Siat Ha
Independent Director

Education
She earned her bachelor of accounting degree in 1988 from ASMI.

Experience
She started her career at PT Nipress Tbk in 1988 as a purchasing staff until 1990, Assistant Accounting Manager (1991-2000), and Head of Finance Division of PT Nipress (2000-2015).

Industry Outlook

International

Throughout 1Q19, industry analysts agreed that the world's solar market will grow double-digit. China, as one of the largest solar-producing countries, through the National Energy Administration (NEA) meeting in November 2018 gave a signal to continue subsidies for the renewable energy sector by preparing a budget of around RMB3 billion (USD440 million). China's economic growth in the coming years is needed to drive the growth of the solar power market in the world, but other countries in Europe and North America also continue to play an essential role in the solar power sector that has been demonstrated in 2018, when demand is experiencing an increasing trend.

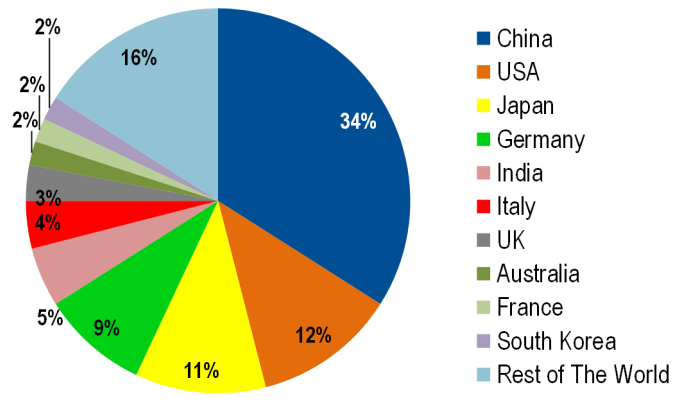
India's condition will miss the estimated solar infrastructure development. For the 2018-2019 period, India is targeting the development of solar power infrastructure to reach 59%, by increasing the capacity of solar power in some places that had only had a capacity of 6,5 GW to become 11 GW, planned for completion in 2019. Until 2018, India has a total installed capacity of 25,2 GW, which leaves nearly 75 GW to meet the 100 GW target of the National Solar Mission by 2022. The Indian Government also recently approved a total budget of 1,7 billion USD to accelerate the installation of solar power infrastructure.

While in the US, although the import tariffs on solar modules are still occurring, which caused market stagnation in the US last year, it is presumably will continue for the next few years. The decline in the cost of solar power in the US also continues, but progressive investment taxes, state incentives, strong public support, and growing demand in solar power keep the growth of renewable energy companies in the US still growing. The US Solar Industry Association believes that lower costs and strong public sentiment in supporting environmentally friendly energy will cause solar power capacity to double in the next five years in the US.

For the European Union market, there are renewable energy targets in 2020, which must be obeyed by EU members, and as many as 17 countries have not reached the renewable energy target until 2017. For this reason, the current EU regulations will move member countries with low-cost schemes and attractive solar incentives.

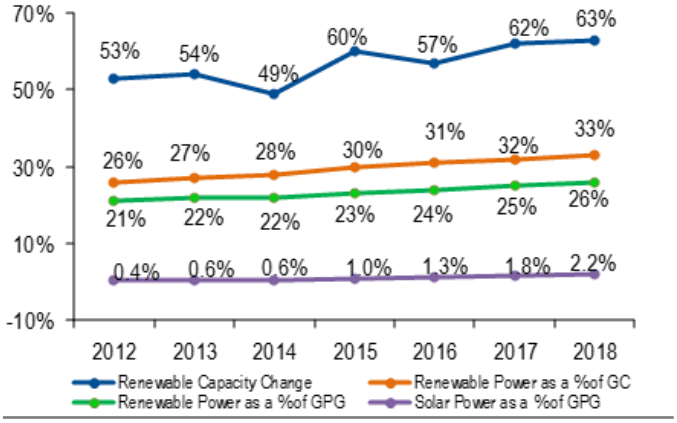
SolarPower Europe organization estimates that the cumulative installed capacity of 645 GW in the world in 2019, more optimistic 4% than the estimation in 2018. Estimates until 2022 will range between 824 and 1.290 GW installed capacity with the possibility of producing 1.041 GW of solar power that operates cumulatively in the year 2022.

Global Solar Power Installed 2018



Source: SolarPower Europe, NHKS Research

Renewable Power Capacity as a Share of Global 2018



Source: SolarPower Europe, NHKS Research

National

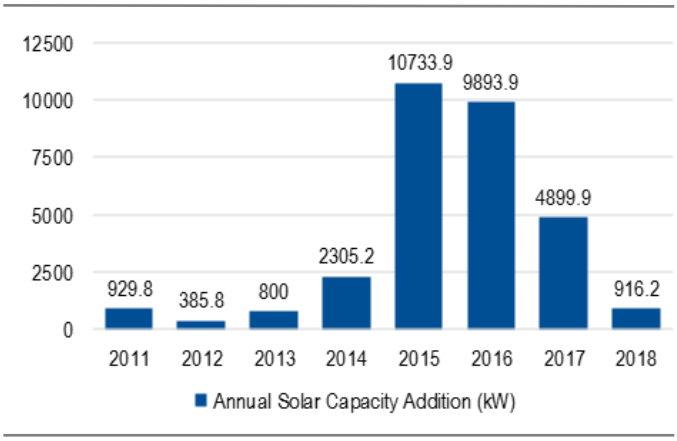
Currently, Indonesia has enormous solar power potential, more than 500 GW, and the largest compared to other renewable resources owned by ASEAN countries. The International Renewable Energy Agency that located in Abu Dhabi, IRENA, reports that Indonesia can develop domestic solar power up to 3.1 GW per year from 2016 to 2030 and reach 47 GW for solar capacity by 2030 which is sufficient to meet the targets of the General Plan National Energy (RUEN).

At the end of 2017, Indonesia only had 90 MW of solar power installed. Although incorporated in the RUEN as one of the strategies to develop solar power, solar power generation has only a small role in the energy sector in Indonesia. As of June 2018, Indonesia only has an installed capacity of 521 kWp for housing, 5 kWp for mass use, and 1080 kWp for industrial processes. Regarding the cost of technology development, Indonesia has comparable capabilities with other ASEAN countries, for USD 0,06-0,11 per kWh compared to Thailand at USD 0,07-0,12 per kWh.

RUEN has mandated 45 GW of renewable energy capacity, which will be spurred until 2025 with 6,5 GW coming from solar power plants. Most of these targets can be met by developing solar PV. Ministry of Energy and Mineral Resources Regulation No. 49 of 2018 has stipulated that PLN will only compensate 65% of the development of solar PV to be channeled into the national electricity distribution. Based on the assumption, there will be 1 GW of capacity from solar PV development in 2020, with an estimate that PLN's revenue will only decrease by 0,58%, a negligible reduction compared to the benefits brought to Indonesia.

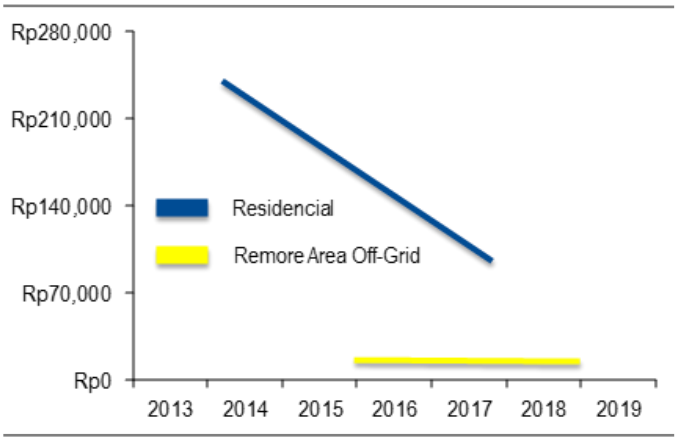
Despite the huge potential of solar power plants (on-grid and off-grid) to replace or reduce the use of diesel power plants, the limited solar power project in 2019 is due to the PLN procurement process and the ability of the network to integrate more into the development of solar PV. Considerations such as technology costs, electricity generation costs (BPP), and procurement processes are the main factors affecting solar power projects in Indonesia, and currently, the development of solar PV is only in Jakarta's greater areas because there is no financial support or incentives for households. But there is potential in the development of solar PV for industrial areas/areas where electricity is not supplied by PLN to become wide open as a support in the solar power business segment for the next 5 years.

Indonesia Annual Solar Capacity



Source: IESR, NHKS Research

Trendline of Solar Instalation Cost / kWp



Source: IESR, NHKS Research

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