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Sermsang Power Corporation PCL

SSP TB	IPO
Fair price	Bt7.8-9.4
Valuation	**DCF**
Sector	**Resources**

Investment fundamentals

Year end Dec 31	2016	2017E	2018E	2019E
Company Financials				
Revenue (Btmn)	869	883	1,172	1,353
Core profit (Btmn)	447	459	530	592
Net profit (Btmn)	447	445	545	604
Net EPS (Bt)	0.65	0.48	0.59	0.66
DPS (Bt)	0.00	0.19	0.24	0.27
BVPS (Bt)	1.80	3.94	4.32	4.72
Net EPS growth (%)	-9.92	-25.42	22.42	10.89
ROA (%)	9.02	5.66	6.09	4.82
ROE (%)	36.03	12.26	13.70	13.90
Net D/E (x)	2.50	0.60	0.83	1.70

Analyst
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1 September 2017
Kasikorn Securities Public Company Limited

Making gains while the sun shines

We estimate a fair value for SSP of Bt7.8-9.4 a share using a DCF methodology. SSP is a new solar farm operator with one existing project (SPN) and seven under development in Thailand and Japan. We believe SPN has potential to generate profit/MW and ROA in line with that of other major solar farm projects in Thailand. Meanwhile, we expect the five ongoing projects will allow SSP to achieve a CAGR capacity growth of 23.9% in 2017-20, yielding a core earnings CAGR of 10.9%. Moreover, the company is also in the process of acquiring two additional projects in Japan, which could enhance its capacity and core earnings CAGR to 35.3% and 14.2%, respectively. With a 40% dividend policy, SSP could offer a DPS of Bt0.19-Bt0.34 during 2017-20E.

Investment highlights

- **Profitability/MW comparable to major players:** The Serm Sang Palang Ngan (SPN) solar project should be able to generate a return for shareholders comparable to that of other major solar farm players in Thailand, thanks to its strategic location in Lopburi, use of thin-film technology (lower investment per MW) and proper installed/contracted capacity ratio. Based on its FY2015 financial performance, SSP generated annualized EBITDA/MW for installed capacity of Bt15.7mn, in line with the range of Bt15.1mn-16.8mn for BCPG, SPCG and EA. As such, SSP's FY2015 ROA could be as high as 13.8%, compared with 8.1-17.9% for BCPG, SPCG and EA.
- **Core earnings up 10.9% CAGR in FY2017-20E:** We expect SSP's core earnings to grow from Bt447mn in 2016 to Bt677mn in 2020 (10.9% CAGR) on the back of stable operations at SPN and a potential rise in the electricity tariff, as well as additional capacity from new solar farm projects. We expect Automatic tariff adjustment (Ft) to gradually increase along with domestic natural gas prices in 2017-19. Meanwhile, contracted capacity at the other five secured solar farm projects should result in a CAGR of 23.9% to 94 MWe by 2020 from 40 MWe currently.
- **Another two projects under acquisition to drive earnings CAGR to 14.2%:** SSP is in the process of acquiring two additional solar farm projects in Japan, the Yamaga 2 (10.0 MW), and Leo (30 MW). Both are expected to start operating in 2Q20. SSP is satisfied with the results of due diligence and feasibility studies, which the projects have already obtained the necessary licenses and permissions to operate the facilities. If the acquisitions are completed, its contracted capacity will be boosted by 42.6% to 134 MWe at YE2020, representing a growth CAGR of 35.3% in 2017-20. As such, we estimate core earnings to grow at a 14.2% CAGR during that period.
- **Projected DPS of Bt0.19-Bt0.34:** Based on the current CAPEX plan of all seven investment projects and a payout ratio of 40%, we expect SSP's dividend to increase from Bt0.19 in 2017E to Bt0.34 in 2020E. In worst case, if the company fails to acquire such two additional solar farm projects in Japan for any reason, the company is likely to have Bt880mn additional cash available either to pay out as dividend or invest in other new projects.

Valuation

- **DCF-based mid-2018 fair price of Bt7.8-Bt9.4**: We assume a WACC of 5.9% for solar farm projects in Thailand and 3.5%-3.8% for those in Japan. We do not apply any terminal growth rate. The low end of our fair price assumes inclusion of the SPN project and only five secured solar farm projects under construction (worst case); the high end includes the two solar farm projects under acquisition.

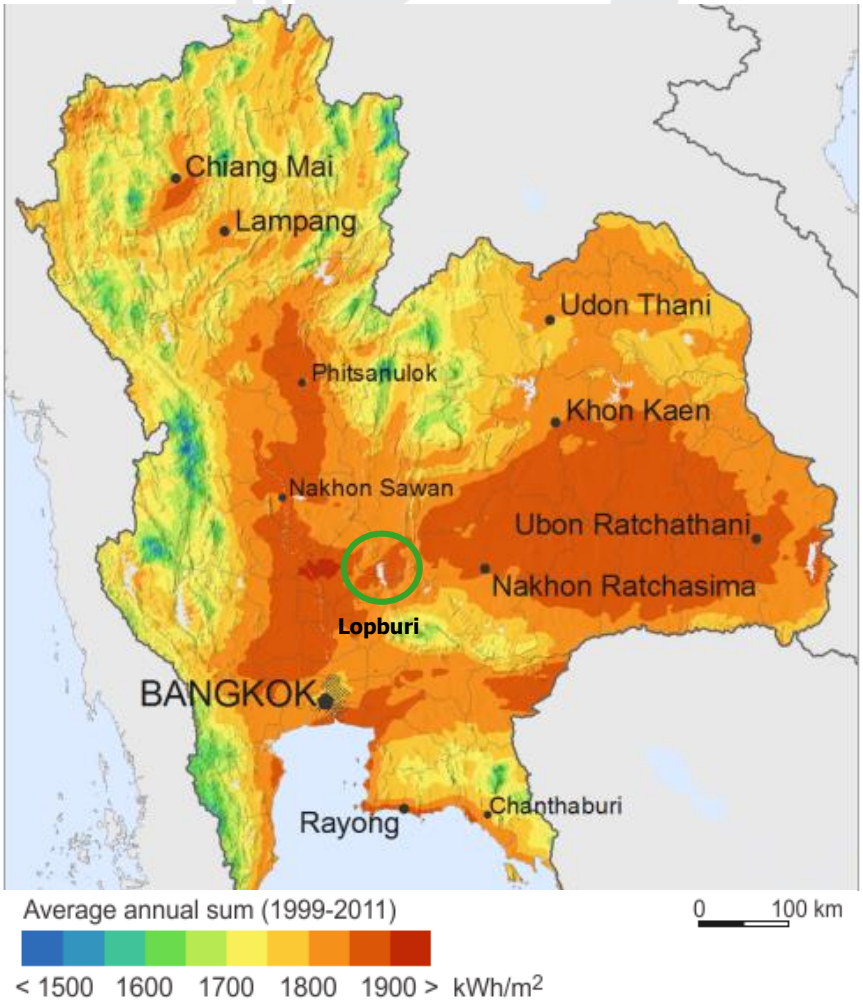
Investment Highlights

Comparable profitability per MW with major players

Sermsang Power Corporation PCL (SSP) currently has only one project in operation — SPN, which entered into a non-firm 40 MW Power Purchase Agreement (PPA) with EGAT in 2013, under a second round of electricity purchases from solar power projects with an "adder" rate of Bt6.5/kWh. SPN commenced operation two years later (February 2015). Due to the declining trend in solar panel costs in 2014, total investment in SPN was approximately Bt3.1bn, or just Bt60mn/MW. A project financing package was secured for SPN with a D/E ratio of 75:25. Given all this, SPN has been able to yield a project IRR of approximately 25% and an equity IRR of approximately 40%.

We see SPN generating a return for shareholders comparable with that of other major solar farm players in Thailand thanks to its strategic location in Lopburi, its use of thin film technology with lower investment per MW, and a proper installed/contracted capacity ratio. Based on its FY2015 financial performance, SSP could generate EBITDA/MW installed capacity at Bt15.7mn (annualized EBITDA based on 2015A), in line with Bt15.1mn-16.8mn range for BCPG (BCPG TB, Neutral, Bt15.6, TP Bt15.0), SPCG (SPCG TB, Outperform, Bt20.5, TP Bt23.0) and EA (EA TB, Underperform, Bt37.75, TP Bt28.50). This is despite "adder" rate of Bt6.5/kWh (vs. Bt6.5-Bt8.0/kWh for the others). As such, SSP's FY2015 ROA could be as high as 13.8%, compared with 8.1-17.9% for BCPG, SPCG and EA.

Fig. 1 Solar radiation in Thailand



Source: Solargis

Fig. 2 EBITDA per MW of Thai solar farm operators

	Unit	SSP (SPN)	BCPG (Phase I-III)	SPCG (36 projects)	EA (3 projects)
Panel type		Thin Film	Polycrystalline	Polycrystalline	Crystalline/ Thin Film
Investment cost/MW	Bt mn.	60	74	86	85
Annualized EBITDA	Bt mn.	815	2,841	3,935	4,081
Installed capacity	MW	52	169	261	264
Contracted capacity	MW	40	118	206	188
Installed/contracted capacity ratio		130%	143%	127%	140%
Adder	Bt/MW	6.5	8.0	8.0	8.0/6.5
EBITDA/MW_installed capacity	Bt mn.	15.7	16.8	15.1	15.5
EBITDA/MW_contracted capacity	Bt mn.	20.4	24.1	19.1	21.7
FY2015 Return on Assets	%	13.8	17.9	10.0	8.13

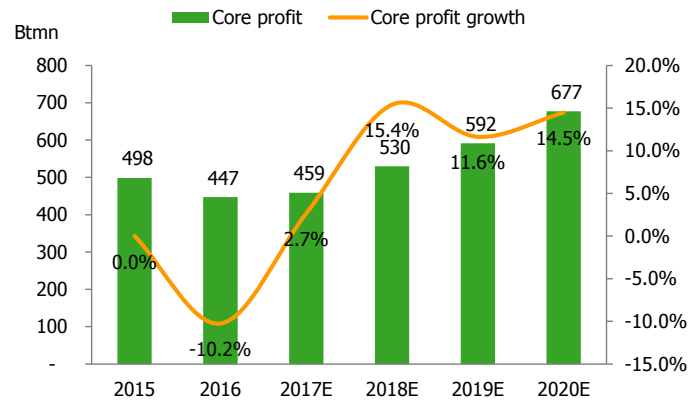
Note: Annualized EBITDA is based on actual numbers in 2015

Source: KS Research

Expect core earnings to grow at a 10.9% CAGR in FY2017-20E …

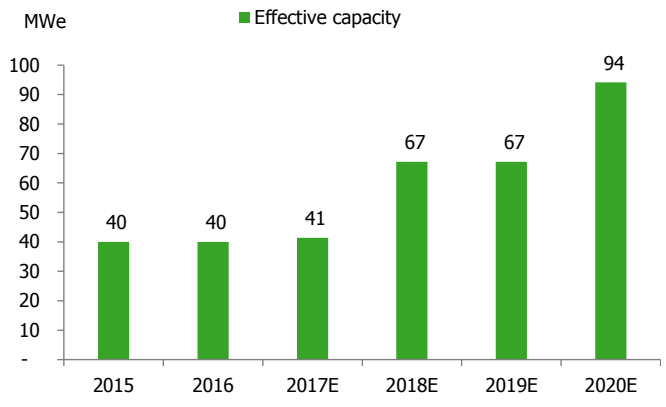
We expect SSP's core earnings to grow from Bt447mn in 2016 to Bt677mn in 2020 (10.9% CAGR) due to stable operations at SPN and a potential rise in the electricity tariff (including Ft), as well as additional capacity from new solar farm projects currently under construction and development. We expect the Automatic tariff adjustment (Ft) to gradually increase over the next few years, with domestic natural gas prices likely to rise alongside Dubai crude oil prices in 2017-19 as OPEC and its allies exert growing control over global demand and supply, resulting in a rebalancing of the market. Meanwhile, contracted capacity at the other five secured solar farm projects will likely see CAGR of 23.9% to 94 MWe by 2020 from 40 MWe currently.

Fig. 3 SSP core profit (SPN+5 ongoing projects)



Source: KS Research

Fig. 4 SSP contracted power generating capacity



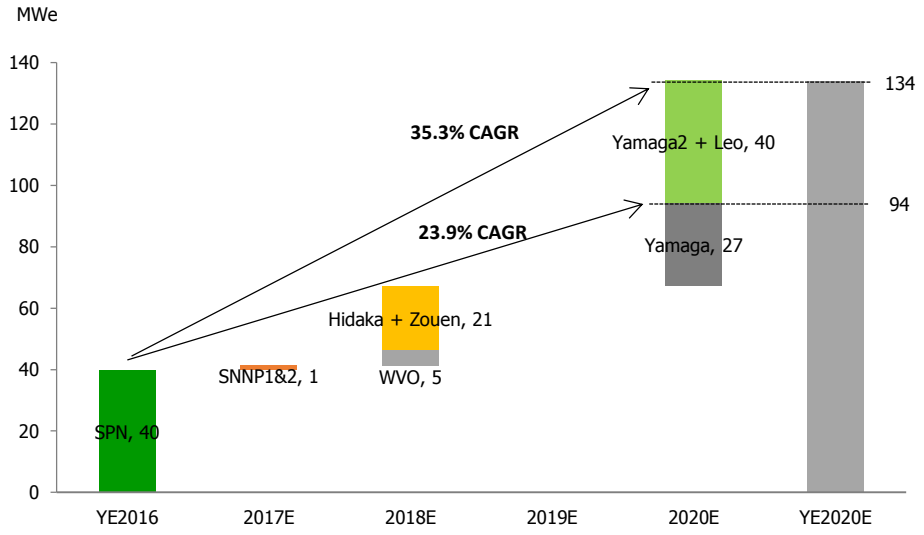
Source: KS Research

… with another two projects under acquisition to drive earnings CAGR to 14.2%

Including its five secured solar farm projects under construction and development will boost contracted capacity to 94 MWe by 2020 from 40 MWe at present. SSP is in the process of acquiring two additional solar farm projects in Japan, the Yamaga 2 (installed/contracted capacity 12.5/10.0 MW, JPY36 Fit tariff, located in Kumamoto), and Leo (installed/contracted capacity 40/30 MW, JPY36 Fit tariff, located in Shizuoka). SSP has already entered into key agreements with the two project owners after being satisfied with due diligence and feasibility studies. The necessary licenses and permissions to operate them, such as METI approval, secured land and grid connection approval, have already been obtained. The projects are expected to start operating in 2Q20. If the documentation process can be completed, management expects to complete the acquisitions. Given this, SSP's contracted capacity would be further boosted by another 42.6% to 134 MWe at YE2020 from total contracted capacity for the five solar farm projects of 94 MWe. Based on this scenario, SSP's contracted capacity would grow from 40 MWe to 134 MWe in 2020, representing a growth CAGR of 35.3% in 2017-20.

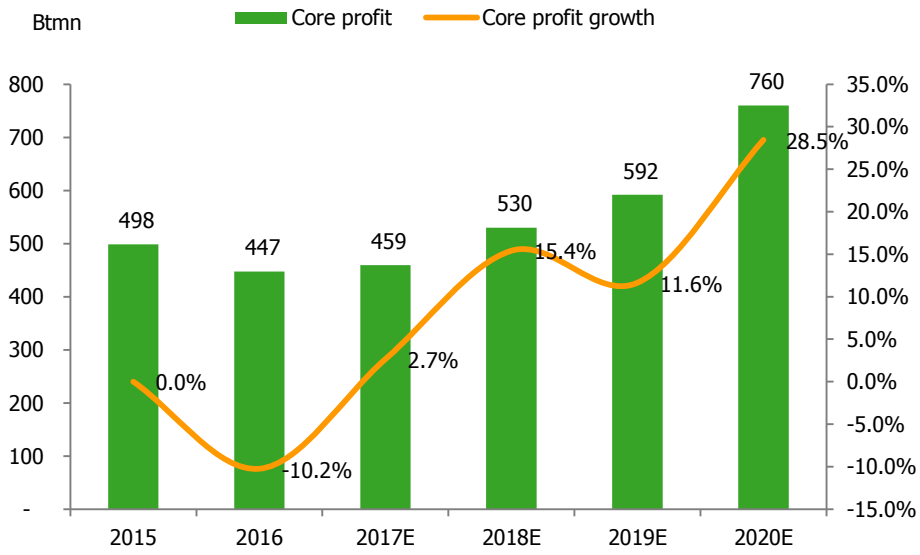
Note that we classify and include land rental fees for all five solar farm projects in Japan as a part of SG&A expense instead of project cost in accordance the existing accounting principle adopted by the company. We estimate FY2017-20 land rental fee at Bt20mn/Bt35mn/Bt38mn/Bt16mn, respectively. If land rental expense is recognized as a part of project cost, SSP's 2017-20E net profit could increase to Bt465mn/Bt580mn/Bt642mn/Bt788mn.

Fig. 5 SSP contracted capacity with two additional project under acquisition



Source: KS Research

Fig. 6 SSP core earnings after two additional project under acquisition

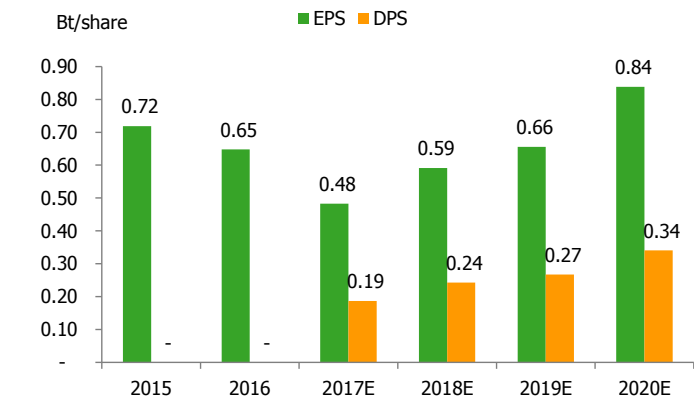


Source: KS Research

Projected DPS of Bt0.19-Bt0.34

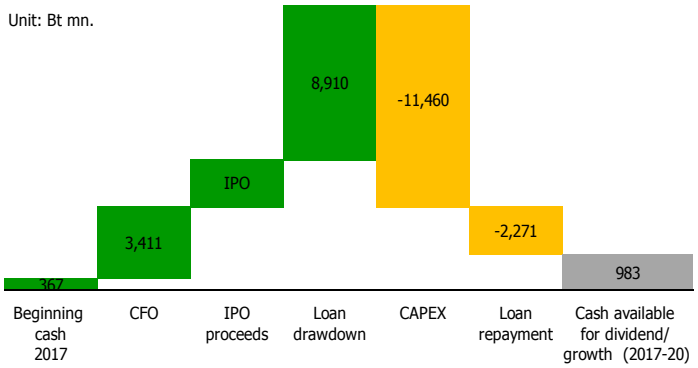
Based on a dividend payout policy of 40%, we estimate SSP's dividend will increase from Bt0.19 in 2017E to Bt0.34 in 2020E. Under the company's current CAPEX plan, which calls for all seven investment projects to be completed by 2020 and projected cash flow generation of Bt579mn-Bt1.2bn in 2017-20E, we believe available cash is still sufficient to serve our projected 2017-20 dividend payment total of Bt889mn given a 40% payout ratio. However, in the worst case, if the company fails to acquire the two additional solar farm projects in Japan for any reason, the company would likely have roughly Bt880mn in additional cash available either for dividend payments or investment in other new projects.

Fig. 7 SSP dividend payments



Source: KS Research

Fig. 8 Cash flow available for dividend payments



Source: KS Research

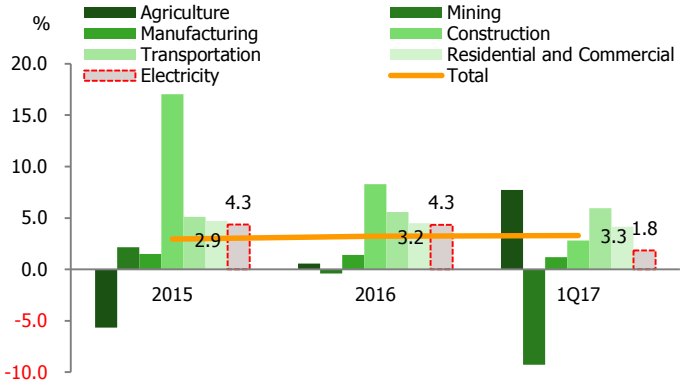
Industry Highlights

Thai power sector decelerates, renewables get stronger

Weaker demand and consumption this year from early rainfall

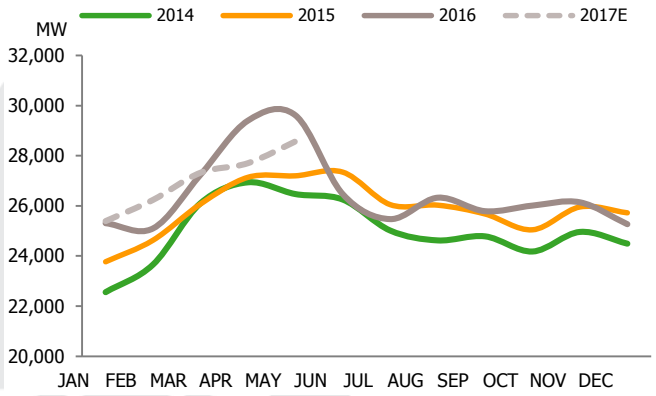
Last year, peak-season (April-May) power demand grew by a sharp 8.3% YoY due to an abnormally warm hot season. This peak season, demand fell 3.5% YoY and was 7.6% lower than EPPO's forecast due to the early start of the rainy season (late April), which weakened residential-sector electricity usage. Electricity consumption growth in term of MW in 1Q17 underperformed GDP growth for the first time since 1Q14.

Fig. 9 Power sector growth vs. GDP



Source: Energy Planning and Policy Office (EPPO), KS Research

Fig. 10 Peak power demand down YoY



Source: Electricity Generating Authority of Thailand (EGAT), KS Research

In 2010-16, annual electricity consumption growth ranged from 0-10%, with the residential, industrial, and business sectors being the main drivers. Total consumption grew by 4.5% YoY in 2016, led by the residential and industrial sectors (weighted contributions of 1.5% and 1.6% YoY), while the business sector showed resilient growth of 1.2%. However, amid weak domestic consumption, residential usage in 5M17 declined 0.4% YoY. This left total consumption flat from the previous year.

Fig. 11 Electricity consumption growth contribution by sector

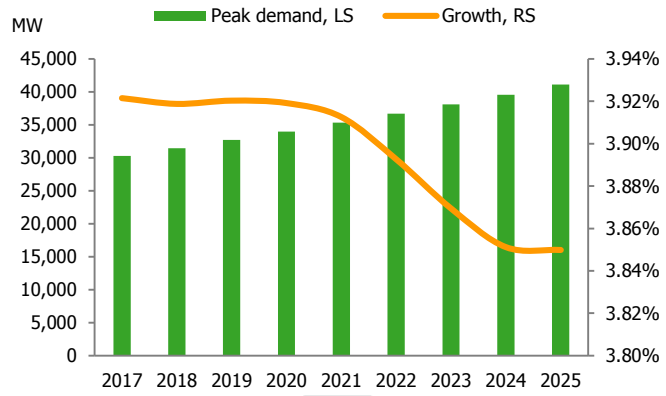
Unit: %	Residential	Business	Industrial	Government and Non-Profit	Agriculture	Other	Total
2010	2.2	1.5	5.8	0.3	0.0	0.6	10.3
2011	(0.3)	0.4	(0.0)	(0.1)	(0.0)	(0.3)	(0.4)
2012	2.5	2.9	3.3	(0.5)	0.1	0.9	8.7
2013	0.8	2.8	0.5	(0.1)	(0.0)	(0.0)	1.5
2014	0.8	0.7	0.9	0.0	0.0	0.1	2.5
2015	1.4	1.5	0.8	0.0	(0.0)	(0.1)	3.5
2016	1.5	1.2	1.6	0.0	(0.0)	0.1	4.5
5M17	(0.4)	(0.0)	0.3	0.0	0.2	0.1	0.1

Source: EPPO, KS

Power demand see to grow by 3-4% a year through 2025

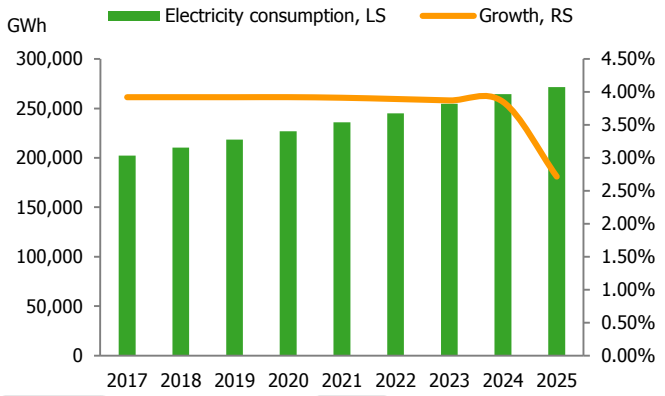
Energy and mining specialists AWR Lloyd and IPA expect Thailand's peak power demand and electricity consumption (MW) to grow by a moderate 3-4% a year through 2025, in line with economic growth. Meanwhile, the Bloomberg consensus expects Thailand's real GDP to grow 3.4-3.6% in 2017-19. However, we believe peak load will be 10%, or 3.0 GW, below expectations, following a rebasing this year.

Fig. 12 Peak power demand growth forecasts



Source: AWR Lloyd, IPA, KS Research

Fig. 13 Electricity consumption growth forecasts

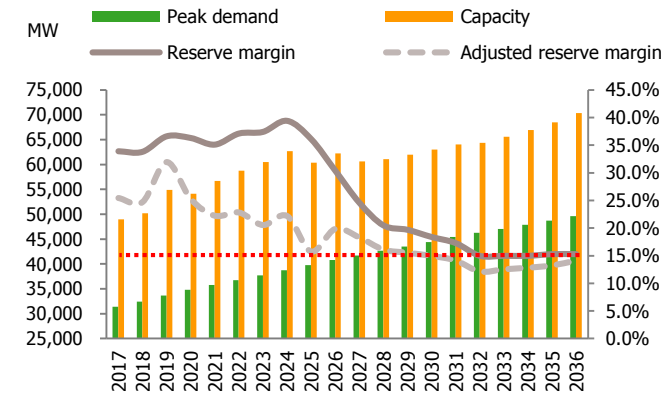


Source: AWR Lloyd, IPA, KS Research

Low growth outlook for new conventional capacity

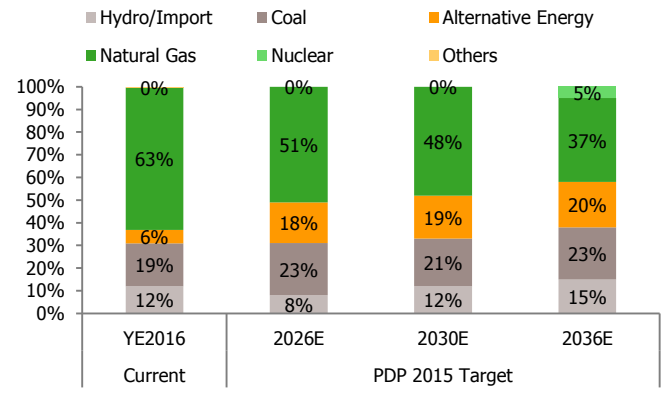
We expect the power reserve margin to stay below the level forecast in the Power Development Plan 2015 (PDP2015) due to delayed launches of coal-fired power plants over the past couple of years and expected further delays. However, we still expect more than enough reserve in the next 10 years. The only foreseeable factor that could potentially reduce the power reserve margin is a delay in the planned coal-fired power plants at Krabi and Thepa, whose commercial operating dates were originally scheduled for 2019/21. Currently, EGAT expects these to be postponed by at least two years. This improves the outlook for renewable energy, creating room for it to expand domestically over the next 20 years with upside to come from government support.

Fig. 14 Power reserve margin expected to remain high



Source: EPPO, KS Research

Fig. 15 Renewable energy's share of the pie to increase



Source: EPPO, KS Research

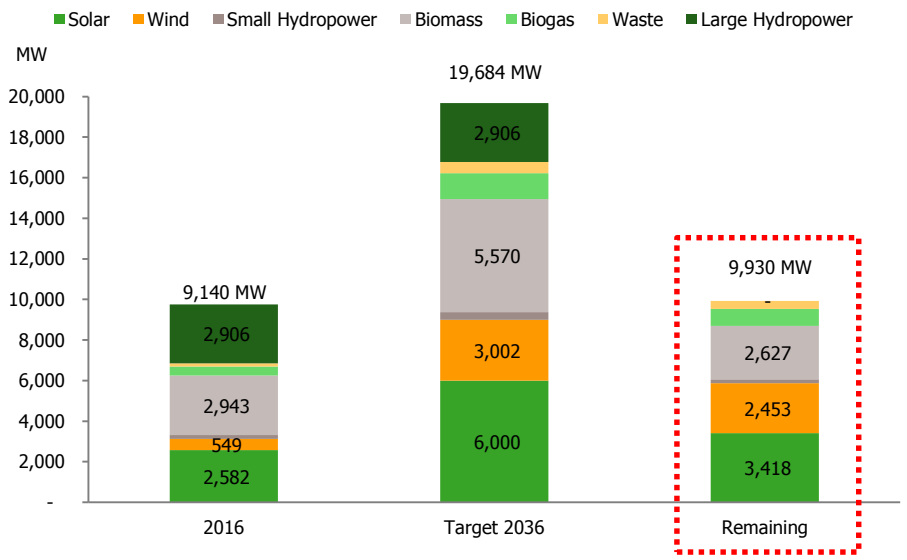
Renewable energy trend to become stronger

PDP2015 calls for the government and related authorities to support a target of electricity from renewable energy sources of 20% of total power supply in 2036 (vs. the current 6%). This implies a target capacity from renewable sources of 19.7 GW. Current renewable capacity is 9.1 GW, leaving 10.6 GW, or more than half, remaining.

We believe the trend toward renewable energy sources is growing as the cost of producing electricity from such sources is decreasing globally, making it more competitive with conventional power sources such as coal, gas, etc. Although some renewable sources such as solar and wind are far less reliable than conventional sources, biomass and waste power plants can be used as a base load as they are able to operate around the clock. In addition, renewable energy production is less polluting than gas and coal-fired power plants.

Furthermore, we see significant potential upside in the renewables industry after the prime minister ordered authorities to study a scenario to increase the proportion of power production from renewable energy sources from the 20% called for under the plan to 30-40%. This followed uncertainty regarding the Krabi coal-fired power plant, which has been delayed by at least two years due to needed revisions in its Environmental Impact Assessment (EIA) and Environmental and Health Impact Assessment (EHIA). We therefore believe the government will support renewable energy as a substitute. We expect renewable energy capacity to double to 30-40 GW by 2036 if the government provides support, which would provide considerable upside to the industry.

Fig. 16 Renewable power capacity halfway to target (PDP2015)



Source: EPPO, KS Research

At the latest meeting of the National Energy Policy Council (NEPC) on May 15, the board approved a power purchase program from municipal solid waste (MSW) under the SPP non-firm scheme without price competitive bidding and with capacity not exceeding 50 MW per power plant. This is a new fast-track program in which participants will have the right to use waste in the area, or refuse-derived fuel (RDF). The power plants under this program will receive a Feed-in Tariff of Bt3.66/kWh, the same rate as the SPP Hybrid Firm program, while a scheduled commercial operation date (SCOD) is set for YE2020.

Besides this new program, other power purchase programs this year include 589 MW in new capacity to be put up for bid. Details are as follows (and shown below):

⇒ 300 MW from the Small Power Plant (SPP) Hybrid Firm program

⇒ 289 MW from the Very Small Power Plant (VSPP) Semi-Firm program

We believe biomass will be the most attractive and competitive source in the market, as the Feed-in Tariff of new capacity is low, and the high reliability requirement implies a high utilization rate. The first program is expected to start in October, with another program to follow. We expect these to be catalysts for renewable energy stocks.

Fig. 17 Power purchase programs to be open for bidding later this year

Total capacity of 589 MW	SPP Hybrid Firm	VSPP Semi-Firm
Target	**300 MW**	**289 MW**
Capacity	Small Power Producer (Capacity 10 MW ≤ 50 MW)	Very Small Power Producer (Capacity ≤ 10 MW)
Tariff	**FiT Competitive bidding** **FiT :** 3.66 Baht **FiT f** : 1.81 Baht **FiT v** : 1.85 Baht (core inflation)	**FiT Competitive bidding** **Biomass** : 4.24-4.82 Baht/Unit **Biogas (Waste)** : 3.76 Baht/Unit **Biogas (Energy crops)** : 5.34 Baht **Premium**: 0.30-0.50 Baht/Unit
Fuel	≥ 1 type of alternative energy, Energy storage is acceptable	Biomass, Biogas (Waste), Biogas (Energy crops), and Energy storage
Contract	**Firm** Capacity factor 100% during Peak Capacity factor ≤ 65% during Off-Peak	**Semi-Firm** **Firm**: 4 months (March-June) Capacity factor 100% during Peak Capacity factor ≤ 65% during Off-Peak **Non-Firm**: 8 months
SCOD	**2020**	**2019**

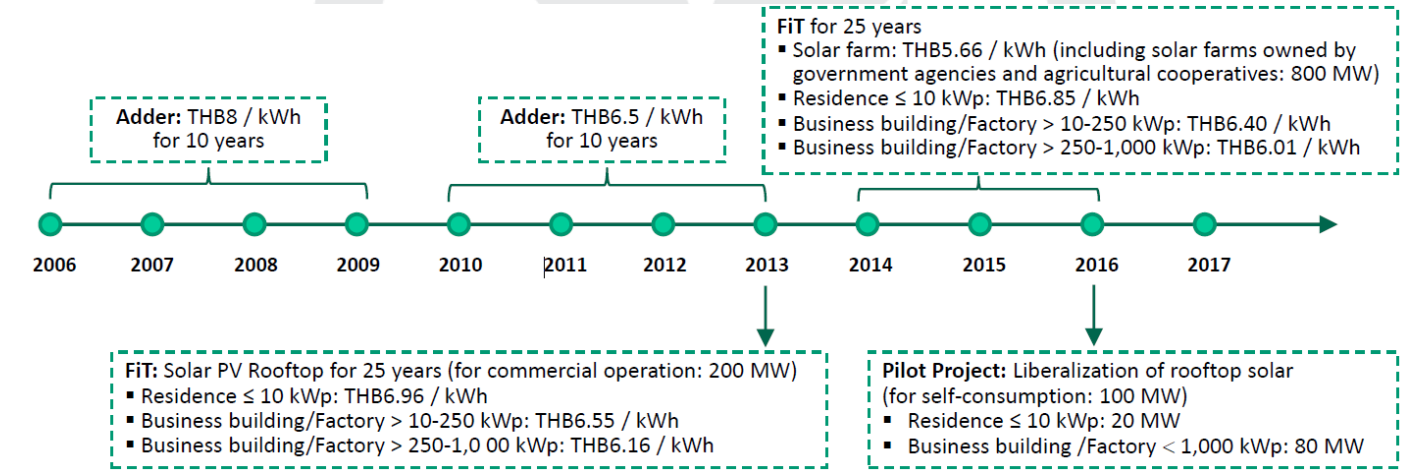
Source: Company data, KS Research

Recap: Thailand's solar market

Solar power is one of the most popular sources of renewable power in Thailand, and enjoys strong government support given the high levels of solar radiation received by almost all areas of the country throughout the year, as well as the short construction period needed for solar farms of only 4-6 months. Therefore, PDP2015 calls for the contribution from solar power to more than triple from 1,820 MW in May 2016 to 6,000 MW by 2036. These same factors of reliability and short construction time mean solar farms will likely be used to fill gaps during peak demand periods.

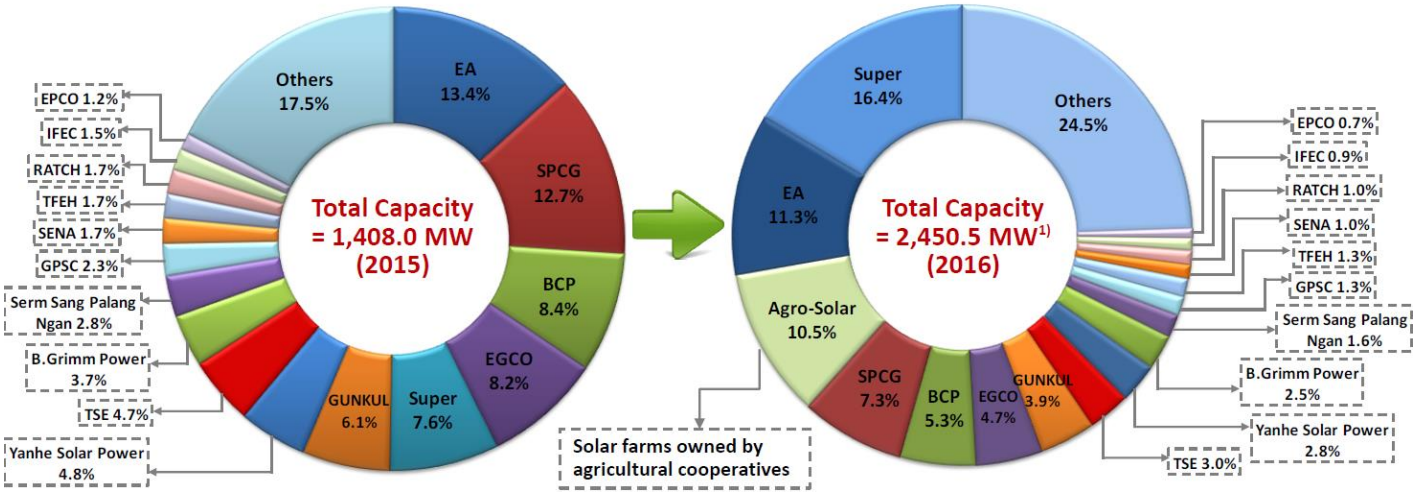
However, competition in this market has intensified owing to the sharp fall in investment cost from about Bt70-80mn per MW installed (2-3 years ago) to Bt40-50mn at present. As such, price competition is highly likely as the government reduces support (as can be seen with the change in the tariff structure from base tariff plus adder scheme to a feed-in tariff system, which resulted in tariff per unit decreasing from Bt11-12/kWh to Bt5.66/kWh, and to Bt4.12/kWh with no escalation over the 25-year period of the contracts), and given its plan to use a competitive bidding process for new renewable power projects.

Fig. 18 Solar market pathway



Source: Department of Alternative Energy Development and Efficiency (DEDE), K-Research

Fig. 19 Solar generating capacity market share in YE2015, YE2016E

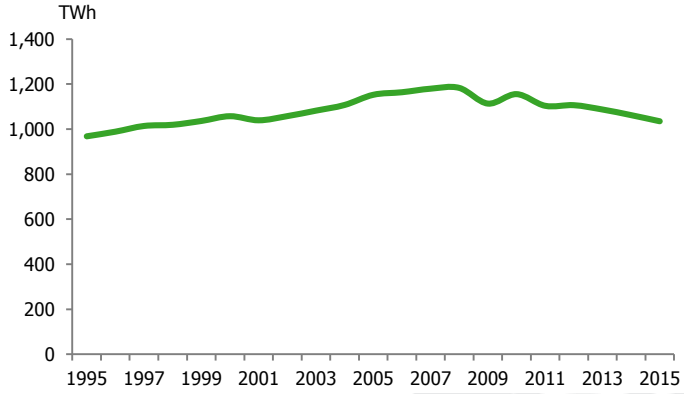


Source: DEDE, K-Research

Recap: Japan's power market

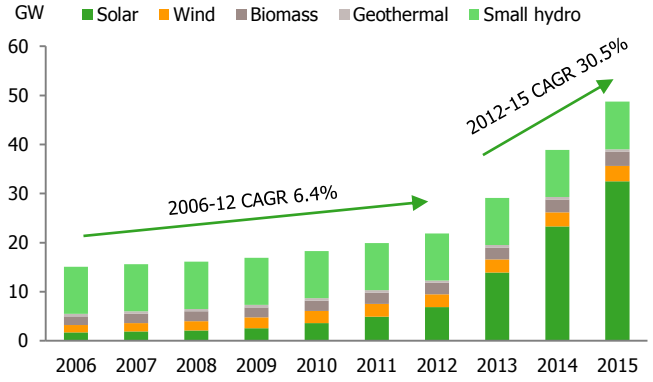
Japan is viewed as a mature power market with demand growth having diminished over the past 10 years, Bloomberg's consensus estimates GDP to grow in a range of 0.9-1.4% p.a. in 2016-19. Moreover, its power sector is different from Thailand's as it is a liberalized market under the regulation of the Electric Power System Council of Japan (ESCJ). The country has about 10 major power operators, who provide services (power generation, transmission lines and merchandising) in separate regions. After the Tohoku earthquake and tsunami in 2011, which led to 48 nuclear power plants being shut down to undergo safety testing, Japan's electricity tariff almost doubled. Tokyo also got serious about supporting renewable energy as a safer and cleaner power source. As part of this, METI introduced a new feed-in tariff scheme for solar farms in 2012 to lure investors. The incentive has proved effective, with generating capacity rising significantly from 20 GW to almost 45 GW (30.5% CAGR) during 2012-15. We expect the growth momentum to continue, supported by the global clean energy trend.

Fig. 20 Historical power demand in Japan



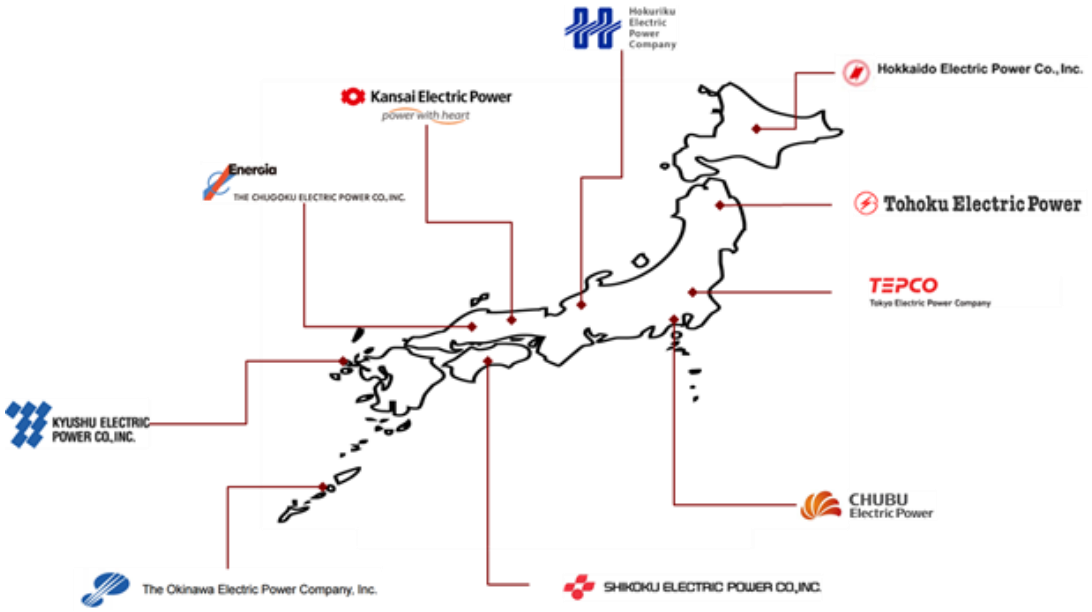
Source: BP statistics, KS Research

Fig. 21 Solar generating capacity up significantly



Source: Renewable Energy Institute

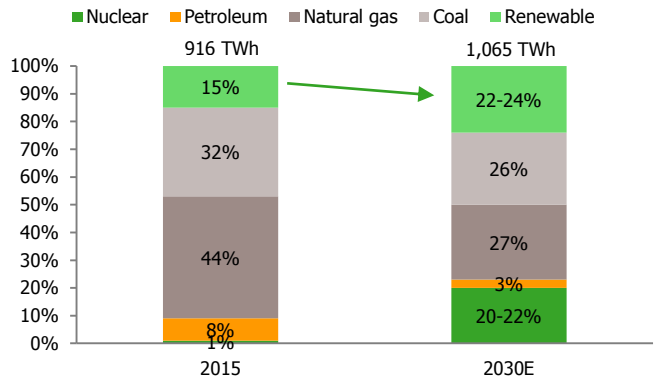
Fig. 22 Private power operators in Japan by region



Source: Electricity Review Japan 2016, The Federation of Electric Power Companies of Japan, Company

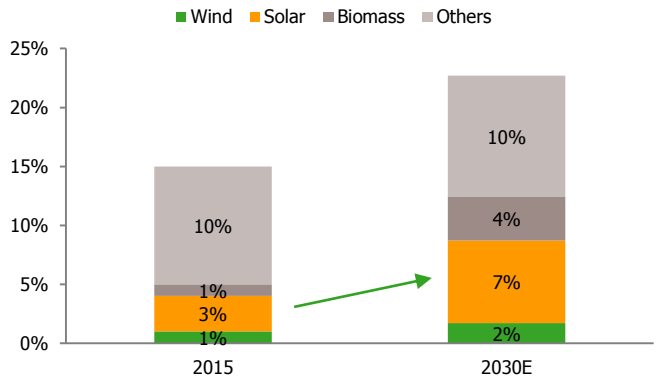
Based on Japan's official target to increase the contribution of renewable energy from 15% of total generating capacity in 2015 to 22-24% in 2030, solar power's share is expected to increase from 3% in 2015 to 7% in 2030. Given this, we expect solar power capacity to grow by as much as 46 GW by 2020, or by an additional 10 GW per annum. Key factors increasing the attractiveness of solar farm investment in Japan are: 1) the low cost of funding; 2) high leverage for projects (low required equity injections); 3) relatively high feed-in tariff of up to JPY32-40/kWh; 4) approximately 50% tax deduction via a GK-TK structure; 5) secured long-term contracts of 20 years; and 6) low country and regulatory risks. Given such positive factors, several Thai power operators have entered the Japanese solar market.

Fig. 23 Higher contribution from renewable energy



Source: Renewable Energy Institute of Japan

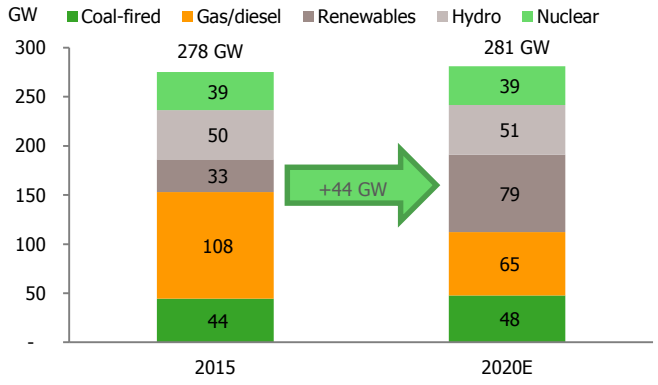
Fig. 24 Solar's contribution to power generation to rise



Source: Renewable Energy Institute of Japan

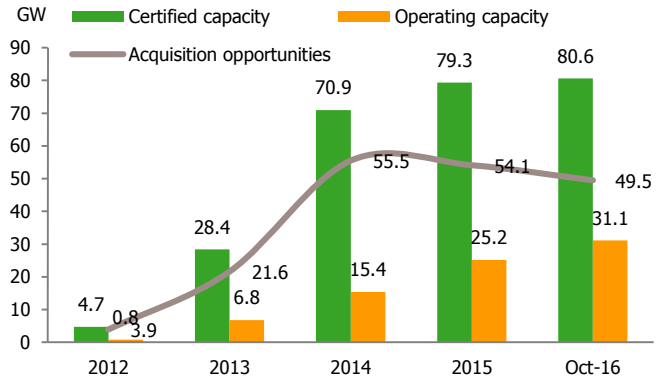
On the other hand, while licenses for new solar farms with total capacity of 80 GW were awarded in just 4 years, obstacles to project development in Japan exist, such as rigid development and construction regulations and limited availability of land. Therefore, actual operating capacity has failed to meet the target, while the remaining 50 GW worth of awarded contracts are either still under development or on hold. Given this, we see acquisition opportunities emerging only for well-qualified developers.

Fig. 25 Expected generating capacity



Source: METI, Frost & Sullivan

Fig. 26 High potential to acquire further solar capacity



Source: Renewable Energy Institute

Financial Highlights

Strong EBITDA base from SPN project …

Based on the electricity tariff structure of the SPN project — base tariff plus adder of Bt6.5/kWh — we expect EBITDA from SPN to remain high at above Bt800mn until 2024, before dropping rapidly to Bt300-400mn for the remaining 15 years of its lifespan due to the expiration of the adder rate (given by the government as support for the first 10 years of operations). We estimate power output from the SPN solar farm to stay in a range of 80-90 GWh per year due to the strong and stable solar radiation levels in Thailand. At the same time, we assume a degradation rate for its solar panels of only 0.5% p.a., as SPN's solar panels are based on Sharp Corp.'s world-class technology.

Fig. 27 SPN project

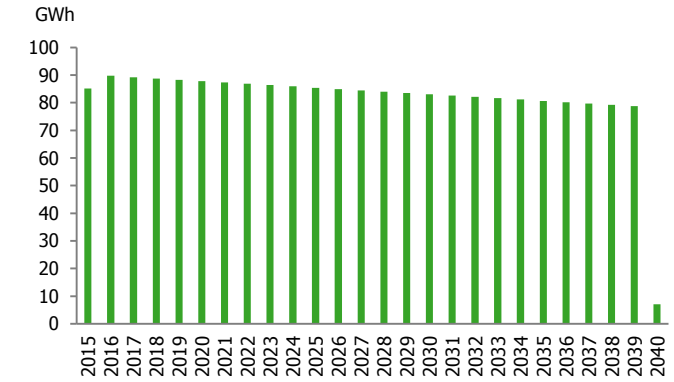
Source: Company data

Fig. 28 SPN project details

Serm Sang Palang Ngan (SPN)	Details
Ownership	100%
Location	Lopburi, Thailand
Installed capacity	52 MW
PPA capacity	40 MW
Equity capacity	40 MW
Solar cell technology	Thin Film Silicon
COD	Feb-15
Power purchaser	EGAT
Adder	Bt6.5/kWh
Tax incentive	Year 1-8: 0% Year 9-13: 10% Year 14-25: 20%

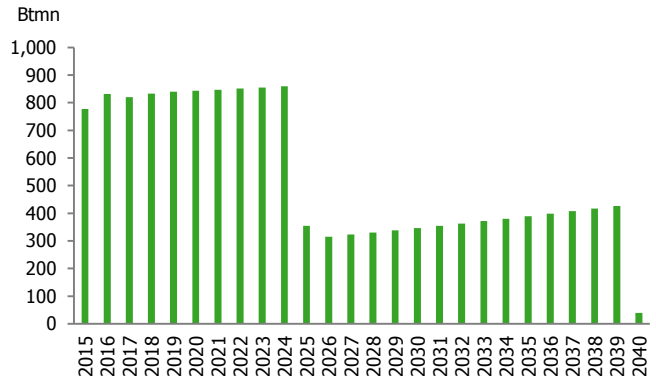
Source: Company data

Fig. 29 Expected power output from SPN



Source: Company data, KS Research

Fig. 30 EBITDA forecast for SPN

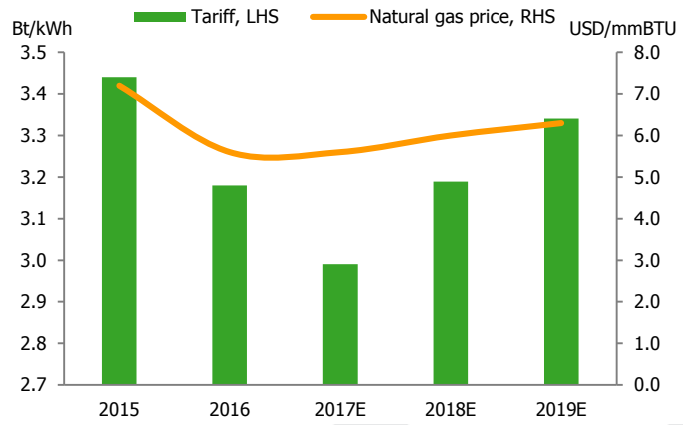


Source: Company data, KS Research

... but faces risk of a swing in electricity tariffs

We see SPN's revenue improving gradually over the next 7 years (until 2024), based on an expected uptrend in the electricity tariff. Any change in the electricity tariff would affect SSP's revenues and EBITDA. We assume the base tariff will grow 3% p.a., while the Ft is likely to increase gradually from -Bt0.3/kWh in 2017 to -Bt0.15/kWh in 2019 in accordance with an expected rise in domestic natural gas prices, which normally lag crude oil price movements by 6-12 months. Our assumptions for domestic natural gas prices and electricity tariffs are shown below. (Note: After 2019, we assume base tariff growth of 3% p.a. with a flat Ft of -Bt0.15/kWh until the end of the plant's life.)

Fig. 31 Average natural gas price, tariff forecasts



Source: Company data, KS Research

Fig. 32 SPN's sensitivity to changes in electricity tariff

	Unit	2017E	2018E	2019E
Base case - Base tariff growth = 3%				
Base tariff	Bt/kWh	3.29	3.39	3.49
Ft	Bt/kWh	-0.30	-0.20	-0.15
Electricity tariff	Bt/kWh	2.99	3.19	3.34
Net profit	Bt mn.	597	627	653
Sensitivity - Base tariff growth = 0%				
Base tariff	Bt/kWh	3.29	3.29	3.29
Ft	Bt/kWh	-0.30	-0.20	-0.15
Electricity tariff	Bt/kWh	2.99	3.09	3.14
Net profit	Bt mn.	597	617	633
Change				
Electricity tariff	Bt/kWh	0	-0.1	-0.2
Net profit	Bt mn.	0	-10	-20
Change		n/a	-1.6%	-3.0%

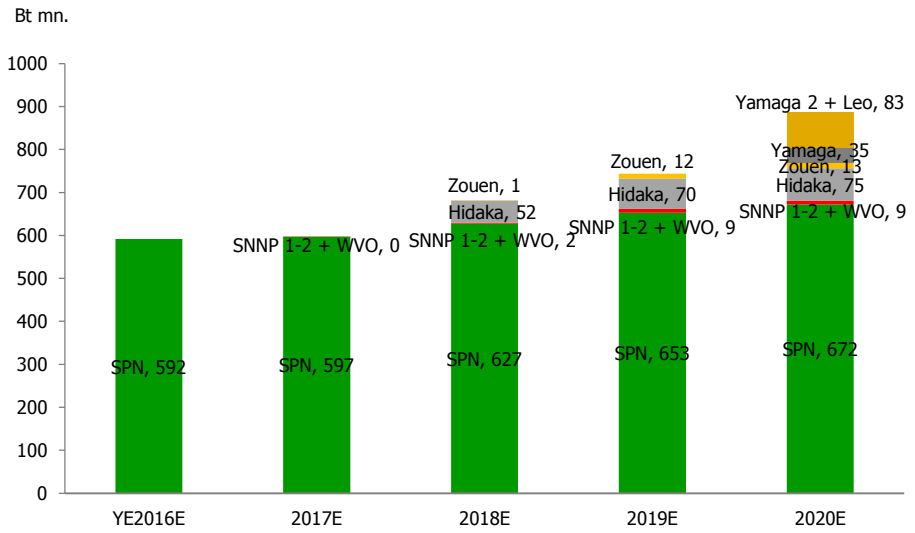
Source: KS Research

Earnings growth largely derived from new solar projects in Japan

We expect SSP's core earnings to increase continuously from Bt447mn in 2016 to Bt677mn in 2020E under a worst case scenario, or to Bt760mn in 2020E under high-end case. (Note that earnings forecasts include expense regarding headquarters office and land rental fee for all solar farm projects under construction and development in Japan.) Apart from benefit from a rising electricity tariff in Thailand, SSP's 2017-20E earnings growth will be driven by capacity increases, both domestically and overseas.

- In a worst-case scenario, SSP has five secured solar farm projects under construction and development.
  - ⇒ Two are in Thailand: SNNP 1-2 (1.4 MW, solar rooftop) and WVO (5 MW, a solar farm being developed in co-operation with a government agency). These are relatively small and expected to start operations in 4Q17 and 4Q18, respectively. They will likely contribute only 1.4% earnings growth from the existing operations, even if fully operational in 2019.
  - ⇒ The remaining growth will come from the start-ups of two of three secured solar farm projects in Japan: Hidaka (17 MW), Zouen (6 MW) and Yamaga (30 MW). These three projects are due to commence operations in 1Q18/4Q18/2Q20, representing additional earnings growth of 11.8%/1.7%/13.0% once fully operational, respectively.
- Under our high-end case, we see another two additional solar farm projects in Japan -- Yamaga 2 (10 MW) and Leo (30 MW) – being added to SSP's investment portfolio on top of the one operating project and five secured solar farm projects under construction and development, as mentioned above. These two projects are due to commence operations in 2Q20 and we expect they will generate additional earnings growth of 2.7% and 20.8% once fully operational, respectively. The full potential of SSP's core earnings should reach around Bt900mn in 2021, when all ongoing projects are up and running for the first -year.

Fig. 33 Core earnings contributions (before holding company expenses)

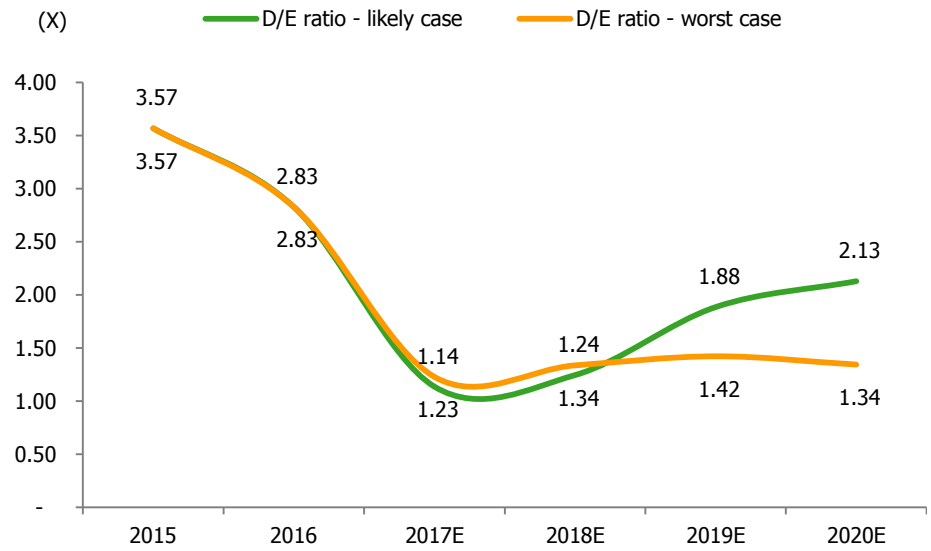


Source: KS Research

Financial health good with sharp post-IPO decline in D/E

Upon completion of this IPO, SSP's financial status will improve significantly. We estimate its D/E ratio will decline from 2.8x at YE2016 to 1.2x at YE2017, and then gradually increase to 2.1x at YE2020 as the company will continue to invest heavily over the next three years with a high project D/E for each solar farm project. However, a maximum D/E ratio of 2.1x at YE2020 is still far below its debt covenant of 3.0x. In a worst-case scenario, its D/E ratio is likely to be maintained at nearly 1.3x until YE2020 due to lower investment expenditure for the Yamaga 2 and Leo projects totaling Bt5.6bn, of which 80% of the total budget is expected to be financed by debt.

Fig. 34 SSP D/E ratio



Source: Company data, KS Research

Valuation

DCF-derived mid-2018 fair price of Bt7.8-9.4

We derive SSP's mid-2018 fair price using the DCF method. We assume a WACC of 5.9% for solar farm projects in Thailand and 3.5-3.8% for the solar farm projects in Japan. We assume a 75:25 D/E ratio to finance the solar farm project in Thailand and 80:20 for the solar farm project in Japan. We do not apply terminal growth rates to any solar farm projects, domestic or foreign.

Our underlying assumptions are as follows:

- Ke of 11% is applied for all solar farm projects, domestically and oversea, which we derive from the Capital Asset Pricing Model (CAPM) with risk-free rate of 3% and market risk premium of 8% and Beta of 1.0x.
- We use Kd of 5.2% for all domestic projects and 2%-2.5% for solar farm projects in Japan.
- Solar farm projects in Thailand are developed by using project financing technique with project D/E of 75%: 25%, while 80%:20% is applied for solar farm projects in Japan.

The low end of our fair price (worst case) incorporates the SPN project and five secured solar farm projects under construction and development; the high-end incorporates two additional solar farm projects under acquisition, Yamaga 2 and Leo.

Fig. 35 SSP DCF-based fair prices

Plants	Location	COD/SCOD	PPA (Years)	% stake	Contracted MWe	Project cost	Mid-2018 value/shr
Operating project							
SPN	Lopburi, Thailand	Feb 15	Renew every 5 yrs	100.0%	40.0	3,120	5.29
Sub-total					**40.0**	**3,120**	**5.29**
Projects under construction and development							
WVO	Ratchaburi, Thailand	Dec 18	25	100.0%	5.0	190	0.04
SNNP1-2	Samut Sakhon, Ratchaburi, Thailand	4Q17	25	100.0%	1.4	51	0.06
Hidaka	Hokkaido, Japan	Mar 18	20	86.9%	14.8	2,206	1.35
Zouen	Kumamoto, Japan	Dec 18	20	100.0%	6.0	810	0.25
Yamaga	Kumamoto, Japan	Jun 20	20	90.0%	27.0	3,461	0.97
Sub-total					**54.2**	**6,718**	**2.67**
Total secured projects					**94.2**	**9,838**	**7.96**
						Cash adjustment	**-0.2**
						mid-2018 fair value (Worst case)	**7.8**
Projects under acquisition							
Yamaga2	Kumamoto, Japan	Jun 20	20	100.0%	10.0	1,291	0.11
Leo	Shizuoka, Japan	Jun 20	20	100.0%	30.0	4,295	1.15
Sub-total					**40.0**	**5,585**	**1.26**
						Cash adjustment	**0.3**
						mid-2018 fair value (High-end)	**9.4**

Source: KS Research

After doing cross comparisons with relative valuation techniques (PER and PBV), we believe our DCF-based mid-2018 fair prices for SSP are reasonable.

- Based on a PBV valuation, our high-end fair price of Bt9.4 implies an average FY2018-19 PBV of 2.1x with a 13.8% ROE, compared with the average of 3.3x and 22% for its peers. With a linear correlation between PBV and ROE, our high-end fair price is proper as it reflects a 36% discount.
- Based on a PER valuation:
  - ⇒ Our worst-case fair price of Bt7.8 implies an average FY2018-19 PER of only 12.5x with earnings growth of 16.7% compared with 14.3x and 19.3% for its peers, respectively. This worst-case fair price perfectly reflects the linear correlation between PER and earnings growth.
  - ⇒ In our high-end fair price, if we include its FY2020 earnings forecast into the calculation, SSP should trade at a 9% premium or average PER of about 15.4x, as we expect growth CAGR to increase to 21%. Our high-end fair price of Bt9.4 implies a PER of only 15.1x.

Fig 36 Peer comparison

Stock	Rating	Price (Bt) 31-Aug-17	Target price (Bt.)	Upside (%)	P/E (x)		P/BV (x)		Net profit grth (%)		Div. yield (%)		ROE (%)	
					2018E	2019E	2018E	2019E	2018E	2019E	2018E	2019E	2018E	2019E
EA	UP	37.75	28.50	-24.5	30.0	19.2	7.4	5.5	8.9	56.0	0.6	0.9	24.6	28.6
SPCG	OP	20.50	23.00	12.2	7.3	6.8	1.7	1.5	8.3	7.0	6.2	6.6	23.7	22.2
BCPG	N	15.60	15.00	-3.8	11.8	10.7	1.9	1.8	24.7	10.8	4.2	4.7	16.3	16.5
Simple Average					16.4	12.2	3.7	2.9	14.0	24.6	3.7	4.1	21.5	22.4
SSP (Worst case)			7.80	N/A	13.2	11.9	1.9	1.8	22.4	10.9	3.1	3.4	14.7	14.8
SSP (High-end)			9.40	N/A	15.9	14.3	2.2	2.0	22.4	10.9	2.6	2.8	13.7	13.9

Source: KS Research

Risks

Operating risk

All of SSP's projects (both in Thailand and future projects in Japan) are solar farms. Any operational disruption to its power plants (i.e., as a result of equipment malfunctions/deterioration — particularly for solar panels — natural disasters, lower sunlight intensity or power demand uncertainty) will impact earnings and cash flow. In the event of any disruption as a result of an error or fault of its own, SSP has 5-10 year equipment warranties and insurance policies to cover property damage, business interruption and third-party liability with some minor deductible periods/expenses. Every project has a 25-year output warranty for solar PV.

Customer concentration risk

SSP's dependence on large customers (such as EGAT) could have a material adverse effect on revenue and operating results. However, the firm considers its customers to be blue chip, as in the case of EGAT, it is obliged to purchase all the electricity SSP produces. Meanwhile, future solar projects in Japan have committed clients in Hokkaido Electric Power Co., Ltd, Kyushu Electric Power Co., Ltd and Tokyo Electric Power Company Holding Inc. However, having just one customer per project could pose a risk to SSP's earnings and financial status should those customers break their contracts.

Interest rate risk

Any increase in interest rates would negatively impact SSP's earnings performance, as financing packages for new power plants in Japan always involve a floating interest rate (e.g., 3-month Japan LIBOR plus premium). Also, SPN has long-term loans with a floating interest rate tied to the 3-month THB fixed rate plus premium. However, when project risk diminishes upon completion of construction, the firm might be able to use swap instruments to mitigate interest rate risk.

Foreign exchange rate risk

Any volatility in foreign exchange rates would have an impact on SSP's operations and financial performance, as the firm has: 1) JPY loans; 2) maintenance expenses/expenses related to equipment and spare parts in JPY; and 3) revenue received in JPY. However, the company applies a natural hedge policy to each operation, mitigating the impact of translation losses on its financial statement.

Curtailment risk

Generally, solar projects in Japan secure PPAs with electricity firms, which commit to purchasing all the power produced. However, some offtakers have rights to limit power purchases (curtailment) per producer not exceeding 360 hours per year without having to pay any compensation. However, Hokkaido Electric Power Company Limited and Kyushu Electric Power Co., Inc, which are the offtakers of the Hidaka, Zouen, and Yamaga solar farms, have unlimited curtailment. This could cost SSP revenue. However, the result of a study on the Hidaka project by Hokkaido Electric Power indicates that the curtailment of purchases from the solar farms would be approximately 10 days per year. SSP has a policy to hire an independent consultant to study this issue.

Investment, construction risks

As almost all its PPAs for projects in Thailand include a fixed date for the expiration of the concession period, any major delay in construction would hurt SSP's overall earnings, cash flow, and return on investment. The basic conditions for project financing normally include a schedule for the first repayment to be made six months after the commercial operation date, as specified in the PPA. Any delays could leave the company with insufficient cash to support such loan repayment and even significantly lessen the project's IRR. Meanwhile, the COD process in Japan is different; the deadline COD is not given and the license expiration can be postponed in tandem with it.

Company Background

A new solar player

Sermsang Power Corporation PCL (SSP) is a holding company that has invested in projects that produce and distribute electricity generated from renewable sources in Thailand and overseas. The company currently has one solar farm project in operation (SPN) with installed/contracted capacity of 52/40 MW, located in Lopburi. SPN is a greenfield solar farm project, which entered into a PPA to sell electricity with EGAT under the SPP scheme with an adder rate of Bt6.5/kWh in 2013. After the SPN project commenced operations in 2015, SSP acquired SPN as a part of a group restructuring.

Looking forward, SSP has another seven projects in the pipeline awaiting construction and development. Among these, five are secured with ownership control – they have either signed a PPA with counterparties, or obtained rights/ material licenses with Japanese offtakers to construct solar farms and sell electricity to a grid. All licenses needed to develop the remaining two projects (listed at the bottom of the table below) have been obtained, but ownership has yet to be transferred to the SSP (under documentation process).

Fig. 37 Company investment portfolio

Projects	Location	COD/SCOD	Stake (%)	Installed capacity (MW)	Contracted capacity (MW)	Effective capacity (MWe)
Operating projects						
Domestic						
SPN	Thailand	Feb-15	100%	52	40	40
Total				**52**	**40**	**40**
Project under construction and development						
Domestic						
WVO	Ratchaburi, Thailand	Dec-18	100%	5	5	5
SNNP1-2	Samut Sakhon, Ratchaburi, Thailand	4Q17	100%	1.4	1.4	1.4
Oversea						
Hidaka	Hokkaido, Japan	Mar-18	87%	21	17	15
Zouen	Kumamoto, Japan	Dec-18	100%	8	6	6
Yamaga	Kumamoto, Japan	Jun-20	90%	35	30	27
Total				**70**	**59**	**54**
Total firmed projects				**122**	**99**	**94**
Project under acquisition						
Yamaga2	Kumamoto, Japan	Jun-20	100%	13	10	10
Leo	Shizuoka, Japan	Jun-20	100%	40	30	30
Grand Total				**174**	**139**	**134**

Source: Company data, KS Research

Shareholder structure: Pre-and post IPO

SSP is currently a wholly owned company of Kraipisitkul family, both directly or indirectly through Primary Energy Company Limited and Unity I. Capital Limited. Post IPO its shareholder structure will be split into two groups: 1) Kraipisitkul family, which is allotting 46mn existing shares to this IPO, which will dilute its shareholding to 70%; 2) the publicly held portion of 230mn newly issued shares and the 46mn existing shares (totaling 30.0% of total paid-up shares).

Fig. 38 SPP shareholder structure

Shareholders	Pre-IPO		Post-IPO	
	Number of shares (Share)	%	Number of shares (Share)	%
Group of Kraipisitkul family				
1. Primary Energy Co., Ltd. ("PME")	276,650,000	40.0	276,650,000	30.0
2. Unity I. Capital Limited ("UNITY")	242,070,000	35.0	196,070,000	21.3
3. Kraipisitkul family	172,905,000	25.0	172,905,000	18.9
Sub-total	**691,625,000**	**100**	**645,625,000**	**70.0**
7. Public	-	-	276,375,000	30.0
Total	**691,625,000**	**100**	**922,000,000**	**100**

Note: Kraipisitkul family also holds 100% stakes in PME and UNITY

Source: Company data, KS Research

Year-end 31 Dec

Income Statement (Btmn)	2015A	2016A	2017E	2018E	2019E
Revenue	846	869	883	1,172	1,353
Cost of sales and services	-159	-169	-174	-332	-440
Gross Profit	687	700	708	840	914
SG&A	-55	-114	-122	-139	-144
Other income	6	8	8	8	9
EBIT	639	593	580	724	791
EBITDA	747	713	713	941	1,082
Interest expense	-140	-146	-135	-157	-152
Equity earnings	0	0	0	0	0
EBT	498	447	445	568	638
Income tax	0	0	0	-15	-24
NPAT	498	447	445	552	615
Minority Interest	0	0	0	-8	-11
Core Profit	498	447	459	530	592
Extraordinary items	0	0	0	0	0
FX gain (loss)	0	0	-14	15	12
Reported net profit	498	447	445	545	604
Balance Sheet (Btmn)					
Cash & equivalents	320	367	1,910	1,583	709
Accounts receivable	156	152	155	205	237
Inventories	0	0	0	0	0
Total current assets	538	586	2,132	1,878	1,048
Investment in subs & others	0	0	0	0	0
Fixed assets-net	2,964	3,685	5,041	6,442	10,919
Total assets	3,625	4,963	7,868	9,066	12,747
Short-term debt	580	364	496	552	812
Accounts payable	20	33	34	65	86
Total current liabilities	651	411	545	640	929
Long-term debt	2,178	3,251	3,634	4,381	7,393
Total liabilities	2,831	3,666	4,183	5,026	8,328
Paid-up capital	693	691	921	921	921
Share premium	0	0	1,796	1,796	1,796
Retained earnings	0	0	269	616	985
Minority interests	0	55	55	63	74
Total shareholders' equity	794	1,297	3,685	4,040	4,419
Total equity & liabilities	3,625	4,963	7,868	9,066	12,747
Key Assumptions					
Effective capacity (MWe)	40	40	41	67	67
Power output (GWh)	85	90	89	112	130
Currency (Bt/100JPY)	28.3	32.5	30.2	30.4	31.1
Revenue breakdown					
Thailand	831	893	883	900	938
Japan	0	0	0	272	416
Revenue portion					
Thailand	98%	103%	100%	77%	69%
Japan	0%	0%	0%	23%	31%

Cashflow (Btmn)	2015A	2016A	2017E	2018E	2019E
Net profit	498	447	445	552	615
Depreciation & amortization	109	119	119	232	303
Change in working capital	-624	-48	-4	-83	-50
Others	138	145	20	27	28
CF from operation activities	121	663	579	729	896
Capital expenditure	-361	-831	-1,475	-1,632	-4,781
Investment in subs and affiliates	0	57	0	0	0
Others	66	-507	0	0	0
CF from investing activities	-295	-1,282	-1,475	-1,632	-4,781
Cash dividend	-362	0	-176	-198	-235
Net proceeds from debt	530	666	516	802	3,273
Capital raising	226	0	2,027	0	0
Others	0	-1	92	8	11
CF from financing activities	394	665	2,459	611	3,049
Net change in cash	220	47	1,563	-292	-837
Key Statistics & Ratios					
Per share (Bt)					
Reported EPS	0.72	0.65	0.48	0.59	0.66
Core EPS	0.72	0.65	0.50	0.58	0.64
DPS	0.00	0.00	0.19	0.24	0.27
BV	1.14	1.80	3.94	4.32	4.72
EV	9.02	10.28	10.27	11.50	16.02
Free Cash Flow	-0.35	-0.24	-0.97	-0.98	-4.22
Valuation analysis					
Reported P/E (x)	7.65	8.49	16.15	13.19	11.90
Core P/E (x)	7.65	8.49	15.65	13.56	12.14
P/BV (x)	4.81	3.06	1.98	1.81	1.65
EV/EBITDA (x)	8.36	9.96	13.27	11.26	13.64
Price/Cash flow (x)	31.41	5.73	12.41	9.86	8.02
Dividend yield (%)	0.00	0.00	2.40	3.11	3.43
Profitability ratios					
Gross margin (%)	81.18	80.55	80.24	71.69	67.49
EBITDA margin (%)	88.34	82.02	80.78	80.32	79.91
EBIT margin (%)	75.48	68.28	65.73	61.81	58.42
Net profit margin (%)	58.91	51.47	50.40	47.14	45.41
ROA (%)	13.75	9.02	5.66	6.09	4.82
ROE (%)	62.81	36.03	12.26	13.70	13.90
Liquidity ratios					
Current ratio (x)	0.83	1.42	3.91	2.93	1.13
Quick ratio (x)	0.73	1.26	3.79	2.79	1.02
Leverage Ratios					
D/E ratio (x)	3.57	2.83	1.14	1.24	1.88
Net debt/EBITDA (x)	3.26	4.56	3.11	3.56	6.93
Net debt/equity (x)	3.07	2.50	0.60	0.83	1.70
Int. coverage ratio (x)	4.56	4.06	4.29	4.63	5.19
Growth					
Revenue (%)	n/a	2.72	1.57	32.77	15.47
EBITDA (%)	n/a	-4.63	0.04	32.01	14.88
Reported net profit (%)	n/a	-10.25	-0.55	22.42	10.89
Reported EPS (%)	n/a	-9.92	-25.42	22.42	10.89
Core profit (%)	n/a	-10.25	2.65	15.41	11.64
Core EPS (%)	n/a	-9.92	-23.02	15.41	11.64

Source: Company, KS estimate

Figures based on share price at lower end of estimated fair value range (for presentation purpose only)

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