

Risk Factors

Risk factors as described below are some key factors that may negatively affect our business, financial status, operational performance, business opportunities, and price of our securities. In addition, there may be additional factors that we may not foresee currently, or may, in our view, not be material factor at current circumstance.

Forward-looking statements contained below, i.e. “believe(d)”, “estimate(d)”, “expect(ed)”, “plan(ned)”, “intend(ed)”, “project(ed)”, or financial projection, future project(s), performance projection/expectation, business operation, business expansion plan, change in related laws and regulations, and all other estimated/expected factors in the future, are our opinion at current circumstance. They are not factor to guarantee our business operation and future circumstance in any aspects. As such, future actual circumstance may be substantially/significantly deviate from our opinion.

Key risk factors of our business consist of

- (1) Risk associated to our Holding Company status
- (2) Risk associated to business operation
- (3) Risk associated to management of our business
- (4) Financial Risk
- (5) Risk associated to new projects
- (6) Risk associated to common shares of the Company

can be divided into more details:

Risks associated to our Holding Company status

Company is a holding company in nature, without its own revenue generating operation. Therefore, its operational results and dividend payment depend on operation and dividend stream of subsidiaries. Currently, Company hold stakes in subsidiaries in Thailand and foreign countries, totaling 24 companies, which invested through GK-TK structure for solar projects in Japan for 5 companies.

Subsidiaries in Thailand has dividend payment policy for at least 70% of net profit, after deducting applicable income tax and required legal reserve, based on company-only financial statement of each company. Subsidiaries in foreign countries has dividend payment policy for at least 40% of net profit or retained earnings, after deducting reserves legally required, based on company-only financial statement of each company. However, subsidiaries may not be able to pay dividend to its shareholders due to certain constraints, i.e. conditions from loan agreement(s) with financial institution(s), requirement to reserve fund for expansion, and changes in laws/regulations of domicile country, etc. In such case, there may be impact to Company’s dividend revenue, which may result in negative impact to its financial results and financial status

As of 31 December 2019, Sermasang Palang Ngan Company Limited (SPN), a subsidiary operating solar farm in Thailand (SPN project), has project finance loan with financial institutions. The conditions of such loan include certain debt serviceability and financial covenants to be satisfied before payment of dividend. Therefore, Company has risk in case that SPN cannot pay dividend as a result of breach in debt serviceability or financial covenants, as well as cannot comply with terms and conditions of such loan agreement. Nevertheless, since start of commercial operation, SPN has sufficient financial results and liquidity to continually pay dividend to shareholders.

For Solar farm projects in Japan Vietnam and Mongolia which have started commercial operation. Company invests in these projects with conditions of project finance loan from financial institutions. Therefore, it has similar risk to SPN project as mentioned above.

For solar rooftop project in Thailand, company invested in these projects through SN, currently without project finance loan at project company. Therefore, SN has currently no constraints arisen from loan condition. However, SN may have additional risk on dividend payment ability if the performance of the project is not per expectation, or in case that Company decide to procure project finance facilities for the project, and may result into governance of dividend payment similar to SPN project as mentioned above.

Risks associated to business operation

Our group of companies currently engages in

- (1) generation and sell of renewable power in Thailand and foreign countries
- (2) related business to renewable power generation and sell.

Our group has project under commercial operation phase and under construction phase. Therefore, we have risks associated to business operation as follow:

Risks on operation of solar power plant

Risks from lower radiation than expected level

Solar power plant heavily relies on solar radiation on its power generation. If the solar radiation is lower, which may be as a result of cloud, deviated atmosphere, etc, our plants may not be able to generate power at expected level. In such case, there may be negative effect to our financial results and financial status. Therefore, our group of companies has risks associated to solar radiation level, similar to other solar power producers.

However, location of our solar power plant in Thailand is close to equator, which typically has higher solar radiation level.

Moreover, in site location assessment both in Thailand and in foreign countries, we studied historical data on solar radiation of each location, typically for 25-28 years track record from accountable source, i.e. from Ministry of Energy, NASA, New Energy Industrial Development Organization (NEDO), Meteonorm, etc. Our focus is to ensure that site is located on location having appropriate radiation level to allow materialization of expected return on investment.

We also typically consider hiring technical advisor to assess various technical factors, i.e. solar radiation, site characteristics, and appropriate equipment for the project to be used for our investment decision.

Risks from higher/faster degradation than expected level

Solar panel is one of the key equipment of solar power plant. If the solar panel is degraded faster, or at higher level, than expected level, it may result in lower power generation of the plant and negatively affect financial results and financial status of the group of companies.

However, we have key warranty of our power plant as follow:

	Warranty of Panel	PV Output Warranty	Warranty of construction quality
Sermasang Solar (SPN) project (Thailand)	10 years	25 years	Product Warranty 5-10 years
Hidaka (Japan)	10 years	25 years	2 years
Zouen (Japan)	10 years	20 years	2 years
Solar Rooftop	10 years	25 years	3 years
Solar WVO (Thailand)	10 years	25 years	5 years
Binh Nguyen (Vietnam)	10 years	25 years	2 years
Khunsight Kundi (Mongolia)	10 years	20 years	3 years
Yamaga (Japan)	10 years	25 years	2 years
Leo (Japan)	15 years	25 years	2 years

Risks related to efficiency and reliability of power production process

Key factors affecting efficiency and reliability of power generation process includes

- (1) performance of key equipment in generation process
- (2) weather conditions
- (3) inefficiency of panel due to hot weather
- (4) internal and external factors affecting availability of the plant (for example, internal factors such as technical issues, external factors such as stability and maintenance outage of transmission line, etc.)

Company chose the solar panel which suitable for weather, for instance, Thin Film Silicon technology for SPN project and Poly Crystalline technology for solar projects in Japan, Mongolia, and Vietnam.

In addition, we manage such risks by

- (1) employing Supervisory Control and Data Acquisition (SCADA) system for 24-hours monitoring of plant operation, in order to timely identify and resolve any interruption
- (2) ensure frequent inspection and maintenance
- (3) secure warranty of key equipment
- (4) contract experienced O&M service provider and/or manage standard O&M team to mitigate such risks above mentioned.

Risks related to under construction project managing

As of 31 December 2019, company have 3 projects under construction total installed capacity 62.7 MW. It may have risks on delay in construction from schedule commercial operating date on PPA which may cause additional expenses on construction.

We have strict criteria in selecting EPC contractor for both projects in Thailand and projects in foreign countries. We consider various aspects of their proposal, including experience, expertise, technical know-how, financial results and status, effectiveness and efficiency of proposed equipment, scope of warranty, and acceptance of financial institutions financing the projects, in order to ensure quality EPC contractor with suitable costs.

Our direction is to select EPC contractor who (1) have experience and expertise in related fields, i.e. design and procure equipment of power plant, (2) have technological know-how, (3) have strong financial status. Such criteria are important to ensure sufficient technical and financial sufficient to complete our projects. Furthermore, we consider scope of product and service warranty, as well as, be accepted from the lender of project finance.

For the construction phase, we always monitor progress and budget of project and may hire technical consultant for construction monitoring.

Risks associated to increase costs of operation and maintenance of the plant

Contracted O&M service projects

- SPN, Hidaka and Zouen project

We contracted O&M service provider for operation and maintenance. When contract duration due, the service fee may meaningfully increases for extension period. However, we may consider (1) open for bidding of O&M service provider to select the best proposal, or (2) employing our staffs for maintenance. Since our staffs have closely worked with O&M service providers and we are confident that our staffs have sufficient to engage in these activities efficiently.

Company-owned O&M provider project

- Solar WVO project, Solar Rooftop project, Binh Nguyen Solar project (in Vietnam) and Khunsight Kundi project (in Mongolia)

For the projects above mentioned, Company or Project Company do operation and maintenance. Therefore, the projects may estimate and control expense more efficient than hiring outsource.

Risks associated to additional costs from warranty extension

Key equipment of solar power plant are

- (1) PV module
- (2) inverter
- (3) transformer

Such key equipment are under warranty of EPC contractors and/or equipment manufacturer (depends on case-by-case and practices of each countries). If we decided to extend such warranty, there may be additional costs arisen from such extension.

Risks associated to dependence on key customers

Generally, our solar farm and solar rooftop projects entered into power purchase agreement for medium to long-term tenor with key customers as follow:

Project	Customer (Off taker)	Contract period	Status of contract	Scheduled Commercial Operation Date
Project under commercial operation				
Sermasang Solar (SPN)	Electricity Generation Authority of Thailand (EGAT)	5 years; can be extended for 5 years per extension	Signed	Started commercial operation
Hidaka	Hokkaido Electric Power Company Limited	20 years	Signed	Started commercial operation
Zouen	Kyushu Electric Power Co., Inc	20 years	Signed	Started commercial operation
SNNP1 / SNNP2 and SNNP3	Srinanaporn Marketing Co., Ltd.	25 years	Signed	Started commercial operation
Do Home	Dohome PLC.	25 years	Signed	Started commercial operation
Solar WVO	Provincial Electricity Authority (PEA)	25 years	Signed	Started commercial operation
Khunsight Kundi	National Dispatch Center (of Mongolia)	12 years	Signed	Started commercial operation
Binh Nguyen Solar	Vietnam Electricity (EVN)	20 years	Signed	Started commercial operation

Projects under construction

SNNP4	Srinanaporn Marketing Co., Ltd.	25 years	Signed	Within 1st quarter 2020
PRC	PRC Plast (Thailand) Co., Ltd.	25 years	Signed	Within 1st quarter 2020
TAPACO	Tapaco Public Company Limited	25 years	Signed	Within 1st quarter 2020
Yamaga	Kyushu Electric Power Co., Inc	20 years	Under process	Within 2020
Leo (Ashita Power 1 & Ashita Power 2)	Tokyo Electric Power Company Holdings, Inc	20 years	Under process	2020-2021

Based on projects described above, if customers evoke their contractual rights to terminate power purchase agreement, it may cause significant negative effects to our financial results and status of Company.

However, we have controlling and monitoring process on operation of our plant, including compliance of key standard required by customers, to ensure strict compliance with requirements under power purchase agreement and related laws and regulations.

In addition, we have policy to explore business expansion opportunities in the area of renewable energy, within both Thailand and more foreign countries, in order to mitigate risks from dependence of limited numbers of customers.

Risks associated to natural disasters and force majeure

Currently, we engage in solar power business in Thailand, Japan, Mongolia and Vietnam. If natural disasters or force majeure events, i.e. disruption of power system, flood, storm, snowstorm, fire, earth quake, or terrorism events, occurs in the area that our projects locate, there may be disruption of our plants' operation, or damages to our properties. Such disruption or damages may negatively affect our financial results and status.

In selecting project site and location, we have studied historical statistics related to natural disasters, in order to ensure that site and location of our projects located in low risk area. In addition, we also acquire insurance coverage to limit financial impacts that may arise from natural disasters.

Risks associated to engagement of business in Thailand

Risks associated to dependence on key management positions

- Knowledge, experiences, and expertise of human resources are important factors for engaging in renewable energy business, especially for the top management positions. If we cannot retain such management, or cannot find suitable replacement, there may be risks in continuity of operation of our businesses.

Risks associated to change in policy of government and other related government agencies

- Currently, we engaged in renewable energy business and entered into power purchase agreement with government both in Thailand and foreign countries. If government or other related government agencies change or terminate conditions in renewable energy purchase, it may affect

our power purchase agreement and negatively effect to our financial results and status. Our management and team, which comprised of competent and experienced personnel, continually monitor development related to policy of government and related government agencies, in order to develop plan to cope with prospected changes in laws/regulations. We also focus on business development in foreign countries to mitigate risks discussed above.

Risks associated to effects from curtailment for the project in Japan

In general, for business operation of solar farm in Japan, we shall enter into power purchase agreement with utility company operating in zone our solar farm located. The power purchase agreements have tenor of 20 years. Under such agreement, projects don't have contractual obligation to sell electricity to utility company, whereas utility company has contractual obligation to purchase all electricity generated by the project.

However, in early 2015, the Agency of Natural Resources and Energy (ANRE) of Japan announced decree to govern purchase of electricity from power producers, including curtailment measure. With such regulations, utility company has rights to curtail power purchased from renewable power producers for not more than 360 hours per year, without compensation. In addition, the regulation also gave rights for unlimited curtailment to certain utility company. Utility company shall officially announce curtailment for acknowledgement of power producer.

Utility companies who are purchaser of power generated from Hidaka project (being Hokkaido Electric Power Company Limited), and Yamaga and Zouen (being Kyushu Electric Power Co, Inc.) are in the area for unlimited curtailment.

With circumstance mentioned above, there is risk associated to loss of revenue resulted from curtailment.

We took such curtailment factor into consideration from feasibility study stage of solar projects in Japan. We have policy to

- (1) hire technical advisor to study in details on expected curtailment level to be imposed to each project
- (2) co-ordinate with utility company as power purchaser of each project (if any), in order to have sufficient information before make investment decision for each project.

For Hidaka, Yamaga and Zouen projects, we have considered study from technical advisor regarding curtailment, and found that the projects are feasible and have justifiable returns on investment.

Risks associated to procurement of Chief Electrical Engineer for supervision of operation of solar projects in Japan

The Electricity Business Act of Japan dictate that Operator shall have Chief Electrical Engineer to supervise safety measures during construction, operation, and maintenance of the power plant. Level of certification required for eligible Chief Electrical Engineer is determined by size of power plant. Therefore, there may be risks from delay in procuring Chief Electrical Engineer for the project, which may result in delay of start commercial operation or increased cost to the project.

However, for our solar projects in Japan, it's duty of Asset Manage to procure Chief Electrical Engineer for each project. We have contracted reputable, experienced, and financially sound Asset Manager, which is also accepted by financial institutions financing the project.

Risks associated to involvement in operation fo solar farm projects in Japan

Currently, we invested in 5 solar farm projects in Japan through GK-TK structure, which is appropriate structure for the purpose of managing tax for investment in Japan. We invested in GK-TK structure as TK investor through SEG, 100% Hong Kong subsidiary of Company.

Under GK-TK structure, and in accordance to clause 536 of Commercial Code of Japan (contribution by silent partner and right and obligations), SEG as TK investor shall be silent investor. If applicable conditions satisfied, Operator and investor will obtain certain tax privileges: investment return distribution from Operator to TK investor (TK Distribution) could be used as taxable expenses of Operator.

However, Operator has obligation to make Withholding Tax for 20.42% of investment return distribution from TK Distribution made.

SEG, as TK investor, will not involve in operation and decisions in day-to-day operations of the projects. We establish governance of solar farm projects in Japan through selection of credible and experienced business partners for operation of the project. In addition, we decide on objectives provisions of key contracts related to operation including

- (1) TK agreement between operator and TK investor
- (2) all key agreements related to development and operation of the project during project development phase, including financing, EPC contract, and appointment of Asset Manager whereas such agreements are key factors to success factor to control and management of the projects, in order to ensure the benefits to Company and its shareholders.

However, even though GK-TK investment structure is widely used and governed under clear legal framework, if SEG as TK investors engage in activities that can be deemed as having involvement in operation of the project, it may affect to requirement for silent investor under GK-TK structure. As such, there is a risk that the status of Operator can be re-characterized to be normal corporation (NK; nin-i-kumiai), which will result in loss of tax privileges. If that is the case, the TK Distribution that Operator made to SEG will not be taxable expenses, and resulted into additional tax burden, penalty, surcharge, and other associated costs, to the project which may lead to lower investment return than expected.

Currently, solar projects in Japan have started commercial operation (for Hidaka and Zouen projects). TK Distribution has been made from Operator to TK investor.

Risks associated to management of our business

Risks associated to control of shareholders resolution by major shareholders

As of 31 December, 2019, Kraipisitkul family holds stake in Company for 59.8% of paid-up capital. Moreover, members of the family also hold positions of director, authorized director, and management of the Company. Therefore, such major shareholder has power to control management of Company, including most of the shareholders resolutions. Most of the shareholders resolutions required more than half of vote including appointment of directors, except the resolutions required by laws to obtain more than ¾ of the vote. As such, minority shareholders may not be able to collect vote against proposal of major shareholders to shareholders meeting.

However, our Company has management structure comprising of staffs with knowledge and competency, and set-up clear and transparent scope, duties, and responsibilities of board of directors and management. In addition, we also established measures regarding related party transactions (for example, persons who has conflict of interest to the related party transactions shall have no rights to vote for such transactions), in order to ensure transparency of our business operation.

Our board of directors consisted of 4 independent directors. 3 of independence directors are members of our audit committee, whereas another independent director holds position of Chairman of the board of directors. One of the roles of independent directors is to consider key transactions before propose to shareholders meeting, in order to make good balance in management of our business and create confidence to minority shareholders that all transactions shall be for the purpose of company's benefits.

Financial Risks

Risks associated to fluctuation of interest rate

SPN project has been financed under long-term project finance structure, with Thai financial institutions. The interest of such financing is float rate in nature, being float benchmark rate plus fixe credit spread. If the float benchmark rate significantly changes over time, it may have negative effects to our financial results and status.

However, we have also entered into Interest Rate Swap (IRS) for majority of our exposure level throughout loan tenor period, in order to lower our risk exposure to interest rate fluctuation.

For the solar projects in Japan both under commercial operation and under construction, we have entered into long-term project finance facilities with Japanese financial institutions. The interest rate of such financing is also float rate in nature: float benchmark rate plus fixed credit spread. However, the float benchmark rate applied to current loan is close to zero. Therefore, we may consider enter into IRS after commercial operation and during construction of the plant.

Moreover, our risk committee will also set-up policy and guideline for risk management in various aspects, including interest rate risk.

Risks associated to fluctuation in foreign exchange rate

For investment, company invest in foreign countries in US Dollar currency and Japanese Yen currency, as well as, part of investment in renewable projects will be incurred in foreign currencies. Moreover, revenue from electricity selling will be in local currency. Therefore, if foreign exchange rate significantly deviated from estimates in our investment budget, it may have negative effects to our financial results and status.

Although majority of power purchase agreement will be paid in local currencies, electricity price always be adjusted with US Dollar currency. In addition, our risk committee will also set-up policy and guideline for risk management as follow: (1) allocate long-term financing for the project under the same currency as revenue stream (Natural Hedge) in order to mitigate risks from fluctuation of foreign exchange rate (2) utilize derivative such as Forward Contract to manage exchange rate risk from purchasing construction equipment.

Risks associated to debt serviceability

For investment of solar projects, we used long-term project finance facilities for approximately 70-75% of projects value and 80-90% for projects in Japan. As such, we have debt servicing obligations, i.e. interest payment and principal repayments, for such project finance facilities as agreed in agreement. If the operation of the plant is significantly deviated from expected financial projection, we may have risks in debt serviceability or to satisfy required financial covenants, which may result in acceleration of debt repayment to be fully repaid immediately.

However, renewable energy business generally has relatively stable cash flow from operation. We also make long-term financial plan and closely monitor the operation, in order to ensure our debt service ability and strictly compliance to applicable covenants of loan agreement.

Risks associated to new projects

Risks associated to expected investment return

We have target to continually expand our business. Therefore, before making investment decisions in projects, we have conducted feasibility study of the project with key steps as follow:

- Selection of credible business partners who have experience in solar power and/or renewable energy in Thailand and Japan
- Consider return on investment in various scenario (sensitivity analysis), including worst case scenario, in order to assess impact to Company in the worst case. In addition, we also evaluate projects by also adding contingency for investment amount.
- Conduct in due diligence an may consider hiring advisors in various area (case-by-case), i.e.
 - Technical advisor/engineer: to
 - ★ assess solar radiation from historical statistic data
 - ★ assess feasibility of the project
 - ★ give key technical/engineering advise for development of the project,
 - ★ monitor development/construction process to ensure timely implementation of the plan
 - Legal advisor: to provide advise related to legal and procedure requirement related to investment, to investigate/check status of key documents (i.e. land deed, project documents, licenses) and compliance to applicable regulations,
 - Other advisors, i.e. financial advisor, accounting and tax advisor, etc.: to ensure compliance with applicable regulations and reasonable transaction costs.

The information from above study shall be submitted to the board and/or approver for investment decision.

Risks associated to compliance to power purchase agreements and licenses in Thailand

We continually seek for investment opportunity for renewable power business in Thailand. In developing renewable power business in Thailand, we shall strictly comply with requirements of power purchase agreement, i.e. application of applicable licenses. If we cannot comply to all requirements of power purchase agreement, as well as other applicable laws and regulations (i.e. laws and regulations related to city planning, building and construction, energy business, etc), it may affect start of commercial operation of projects, which may result in lower growth/delay of revenue and profit contribution from new projects.

However, we have working team with knowledge and experience and have procedure to ensure that our operation will be in accordance with required duties under power purchase agreement and applicable laws and regulations.

Risks associated to financing of the projects

Financing of the project consisted of both loan from financial institution(s) and equity injection of the shareholders. If we cannot procure capital for both debt and equity portion, it may cause prospect of investments significantly different from planned.

However, we have experience in project development and good relationship with many financial institutions. After the Initial Public Offering, we will have improved financial structure. And after commercial operation of projects under construction/development, we should have more debt capacity also. Both factors should lead to better access to capital market.

Risks associated to common shares of the Company

Risks associated for foreign shareholding limitation

Based on our Company Regulation, foreign shareholding is limited at 49.0% of total paid-up capital. Moreover, foreign ownership is also governed by Thai laws, i.e. Foreign Business Act 1999. Therefore, liquidity and price of our common shares may be negatively affected by this factor, especially when foreign ownership reach the limit, which may affect ability to register shares under foreign shareholders. If that's the case, foreign shareholders may not know in advance whether share registrar will reject to register share under their names or not.

(Investor can further study our information from annual registration statement (Form 56-1) as shown in www.sec.or.th)