



Thai Solar Energy Public Company Limited

TSE PRESENTATION

FY 2019

February 28, 2020

DISCLAIMER

The information contained in this presentation is provided by Thai Solar Energy Public Company Limited (“TSE”) solely for information purposes. This presentation does not constitute or form part of any offer or invitation by or on behalf of TSE for sale or subscription of or solicitation or invitation of any offer to or recommendation to buy or subscribe for any securities of TSE, nor shall it or any part of it form the basis of or be relied on in connection with any contract, commitment or investment decision in relation thereto (“Securities”) in Thailand, the United States or any other jurisdiction. The information contained herein does not take into consideration the investment objectives, financial situation or particular needs of any particular investor, and should not be treated as giving investment advice.

In addition, this presentation contains certain financial information and results of operation, and may also contain certain projections, plans, strategies, and objectives of TSE, that are not statements of historical fact which would be treated as forward looking statements that reflect TSE’s current views with respect to future events and financial performance. These views are based on a number of estimates and current assumptions which are subject to business, economic and competitive uncertainties and contingencies as well as various risks which are in many cases beyond the control of TSE, and which may change over time and may cause actual events and TSE's future results to be materially different than expected or indicated by such statements. No assurance can be given that future events will occur, that projections will be achieved, or that TSE's assumptions are correct. Such forward-looking statements are not guarantees of future performance and accordingly, the actual results, financial condition, performance or achievements of TSE may differ materially from those anticipated by TSE in the forward looking statements. The recipient is cautioned not to place undue reliance on these forward looking statements.

In providing this presentation, TSE does not undertake to provide any recipient with access to any additional information or to update the information contained in this presentation or to correct any inaccuracies herein which may become apparent.

AGENDA

- ▶▶ 01
Company Overview
- ▶▶ 02
Highlights of the Year 2019
- ▶▶ 03
Financial Highlights FY 2019
- ▶▶ 04
Outlook 2020



COMPANY OVERVIEW

Listed in
Secondary
Market:



30 OCT 2014



14 MAY 2019

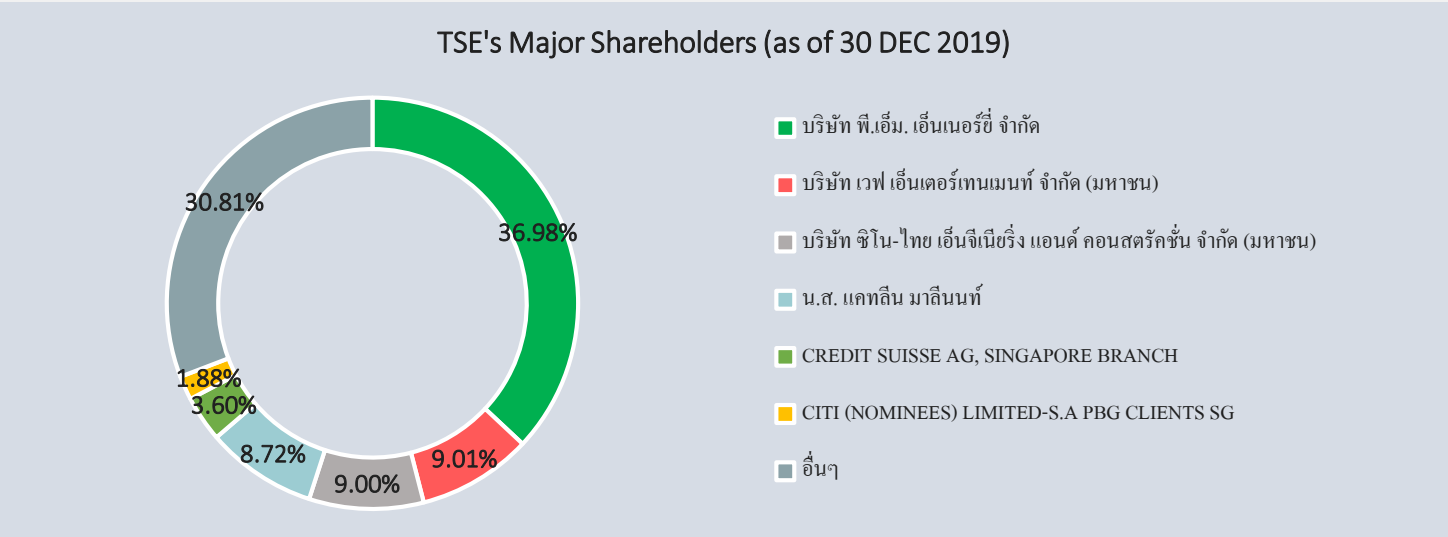
Paid-Up Capital:

2,117.7 MB

Thai Solar Energy Public Company Limited (“TSE”) was **established in 2008** with a mission to establish a solid footprint in Thailand in the solar power industry and expand into other renewable energies as well as developing an international solar power business focusing in Asia and Oceania regions.

Thailand				Japan			
Category	No.	Capacity (MW)	COD	Category PV Farm	No.	Capacity (MW)	COD
PV Farm	15	101	2013	6 Plants	6	8.24	2015
PV Rooftop	14	14	2014	Hanamizuki	1	13.5	2019
Biomass	3	22.2	2018	Onikoube	1	154.73	4Q2022
Total	32	137.2		Total	8	176.47	

TOTAL CAPACITY OF 313.67 MW PPA



MILESTONES



2008
Established TSE

2013

- COD Solar PV TH 5 projects* (40 MW) / Partnership with GPSC (40%)

2015

- Expanded TSE's business operation in Japan
 - COD Solar PV JP 1 project (0.5 MW)
 - COD Solar Rooftop 9 projects (9 MW)

2017

- Large Investment in Japan "Onikoube project" (154.73 MW)



Moved to SET 14 MAY 2019

2019

- COD Solar PV JP: Hanamizuki (13.5 MW)
- Fully Operate Biomass 3 projects (22.2 MW)
- Capital Increase to 2,117.7 MB. completely in OCT 2019

Note: TSR 212 million shares: Total value approx. 530 MB.

- Acquired a new project "BSS" in Ayutthaya province (5.0 MW) in MAR 2019
- Acquired a new project "BSE" in Udonthani province (5.0 MW) in AUG 2019
- Acquired a new project "SSP" in Ang Thong province (8.0 MW) in NOV 2019
 - Note: All new acquired projects have been COD already.

2011

- Majority owned by Cathleen Maleenont, Ed.D.
- COD Solar Thermal (4.5 MW)

2014

Listed in MAI



- COD Solar PV TH 5 projects* (40 MW) / Partnership with GPSC (40%)
- COD Solar Rooftop 5 projects (5 MW)

2016

- COD Solar PV Co-Op 1 project (1 MW)
- COD Solar PV JP 4 projects (6.49 MW)
- Invested in Biomass 3 projects

2018

- COD Biomass 3 projects (22.2 MW)
- COD Solar PV JP: Jyoso (1.25 MW)
- Acquired a new project "INS" in Ang Thong province (2.0 MW) in OCT 2018

2020

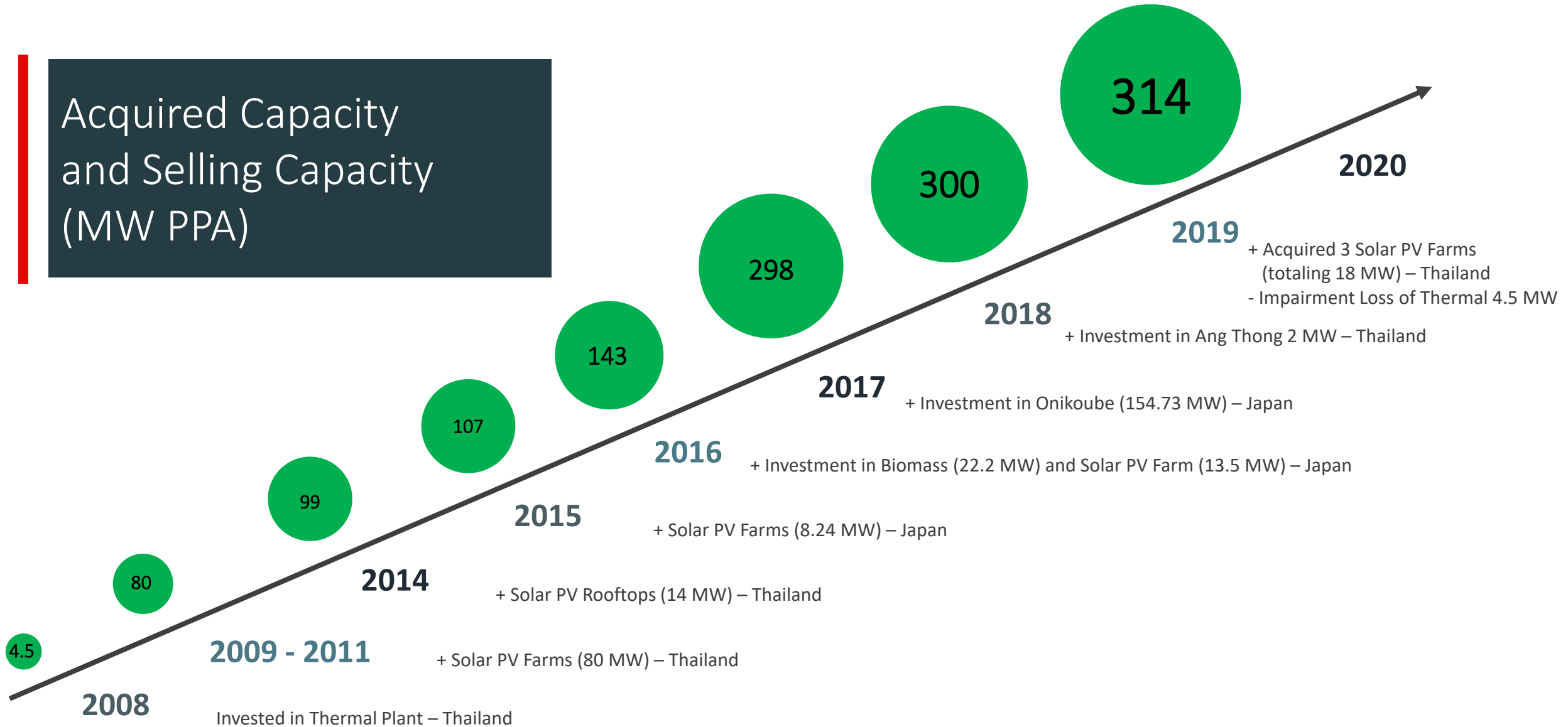
- Planning to do M&A in Thailand approx. 50 MW within 1 – 2 years
- Planning to bid for Power Plant for Community approx. 50 MW
- Planning to invest in new renewable energy projects overseas approx. 100 – 200 MW PPA within 3 years

2022

- SCOD "Onikoube" (154.73 MW) in 4Q2022

TIMELINE

Acquired Capacity and Selling Capacity (MW PPA)



TSE operates 3 types of renewable energy generation and distribution:

Solar PV Farms



Solar PV Farm

Solar PV TH	101.0 MW
Solar PV JP	176.47 MW

Solar PV Rooftops



Solar Rooftop

Solar PV RT	14.0 MW
-------------	---------

Biomass



Biomass

BSW	4.6 MW
OSW 1	8.8 MW
OSW 2	8.8 MW

Under Development of 154.73 MW

Total Operation of 158.94 MW

TOTAL CAPACITY OF 313.67 MW

PORTFOLIO SUMMARY

Project	Operated by	Status	Ownership	Capacity		Power Purchase Rate	Tenor	Tax Rate
				Gross	Selling			
Solar PV Farms	TSR	Fully operated	60%	104.80	80.00	Base Tariff + FT + Adder 6.5 THB/kWh (10 years from COD)	5 years with automatic renewal	0% (year 0 – 8) 10% (year 9 - 13) 20% (year 14 - 25)
Solar PV Rooftops	TSER	Fully operated	100%	14.00	14.00	FiT 6.16 Baht	25 years	
Japan Solar PV Farms	TSEO	7 of 8 COD already	100%	187.31	176.47	FiT 32 – 36 Yen	20 years	0% (CIT 20 years) 20 years 20.42% (WHT on allocation)
Co-operative Solar PV Farm (SLC)	SV	Fully operated	100%	1.00	1.00	FiT 5.66 Baht	25 years	0% (year 0 - 8) 20% (year 9 - 25)
Solar PV Farm (INS)	SV	Fully operated	100%	2.00	2.00	FiT 5.66 Baht	25 years	0% (year 0 - 8) 20% (year 9 - 25)
Solar PV Farm (BSS)	SV	Fully operated	100%	5.00	5.00	FiT 5.66 Baht	25 years	0% (year 0 - 8) 20% (year 9 - 25)
Solar PV Farm (BSE)	SV	Fully operated	100%	5.00	5.00	FiT 4.12 Baht	25 years	0% (year 0 - 8) 20% (year 9 - 25)
Solar PV Farm (SSP)	SV	Fully operated	100%	9.7	8.00	Base Tariff + FT + Adder 8 THB/kWh (10 years from COD)	5 years with automatic renewal	0% (year 0 – 8) 10% (year 9 - 13) 20% (year 14 - 25)
Biomass Power Plant (BSW)	TCE	Fully operated	100%	6.00	4.60	FiT 4.24 Baht	20 years	0% (year 0 – 8) 20% (year 9-20)
						+ Premium 0.30 THB (8 years)		
Biomass Power Plants (OSW1 and OSW2)	TCE	Fully operated	100%	19.80	17.60	FiT 4.24 Baht	15Y4M	0% (year 0 – 8) 20% (year 9 – 15Y4M)
						+ Premium 0.30 THB (8 years)		
TOTAL				354.61	313.67			



KEY HIGHLIGHTS

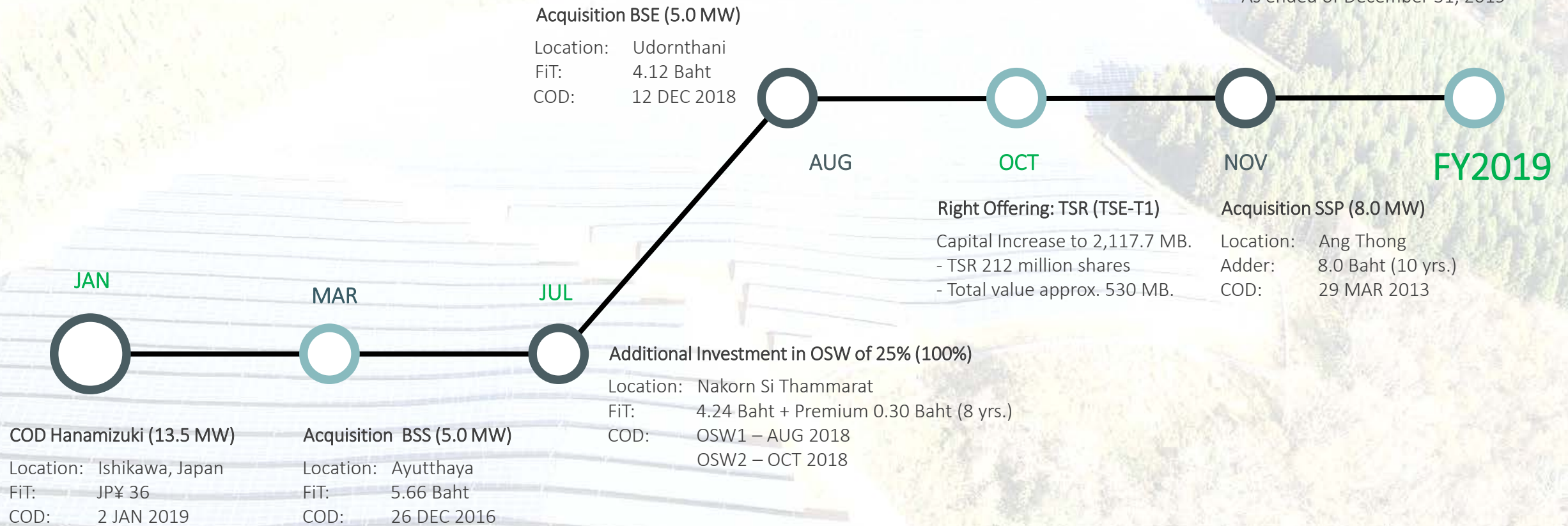
FY2019

SSP 8 MW

KEY HIGHLIGHTS FY2019

Total Capacity **313.67** MW PPA

As ended of December 31, 2019




KEY HIGHLIGHTS FY2019



Project	Hanamizuki
Location:	Ishikawa
Operated by:	TSI
Ownership:	100%
Selling Capacity:	13.5 MW
Tenor:	20 years
Power Purchase Rate:	JP¥ 36
COD:	2 JAN 2019

KEY HIGHLIGHTS FY2019



Project	BSS
Location:	Ayutthaya
Operated by:	SV
Ownership:	100%
Selling Capacity:	5.0 MW
Tenor:	25 years
Power Purchase Rate:	FiT 5.66 Baht
COD:	26 DEC 2016

KEY HIGHLIGHTS FY2019

Project	BSE
Location:	Udonrthani
Operated by:	SV
Ownership:	100%
Selling Capacity:	5.0 MW
Tenor:	25 years
Power Purchase Rate:	FiT 4.12 Baht
COD:	12 DEC 2018



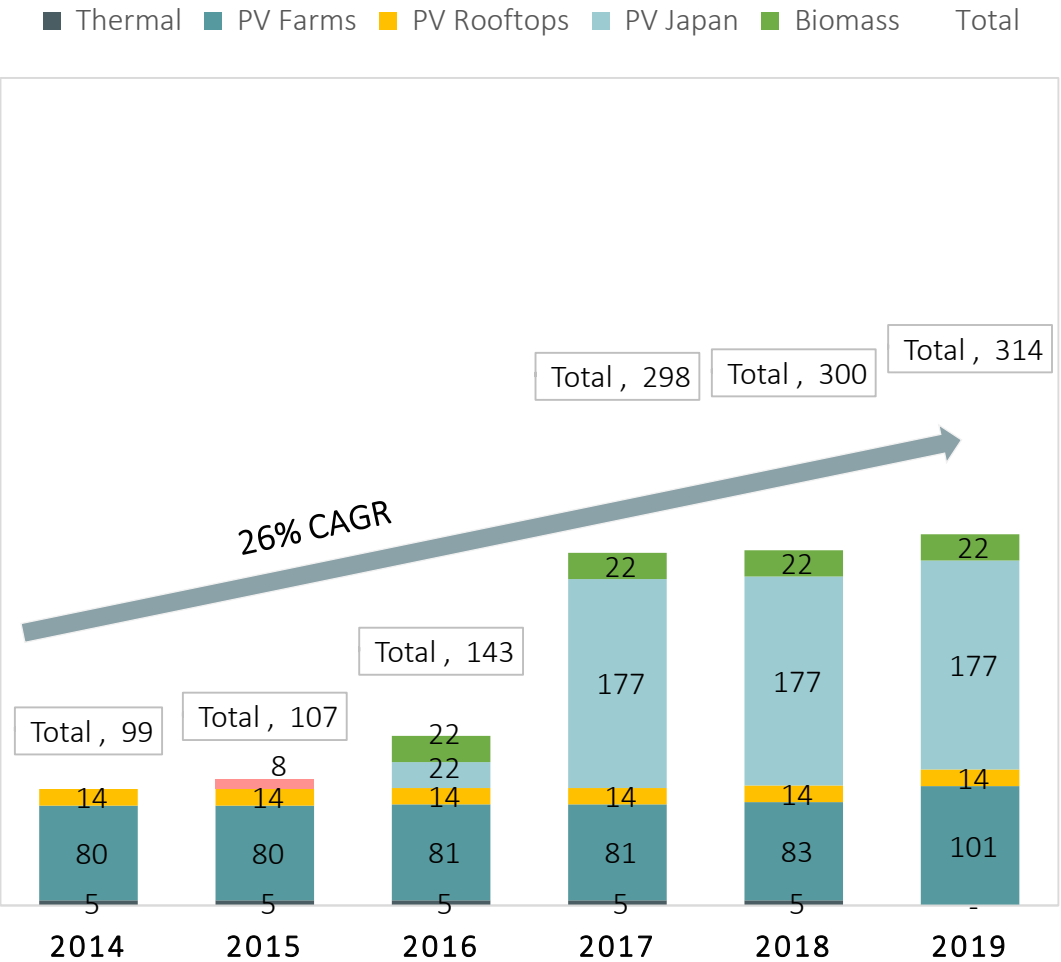
KEY HIGHLIGHTS FY2019

Project	SSP
Location:	Ang Thong
Operated by:	SV
Ownership:	100%
Selling Capacity:	8.0 MW
Tenor:	5 years with automatic renewal
Power Purchase Rate:	Base Tariff + FT + Adder 8 THB/kWh (10 years from COD)
COD:	29 MAR 2013

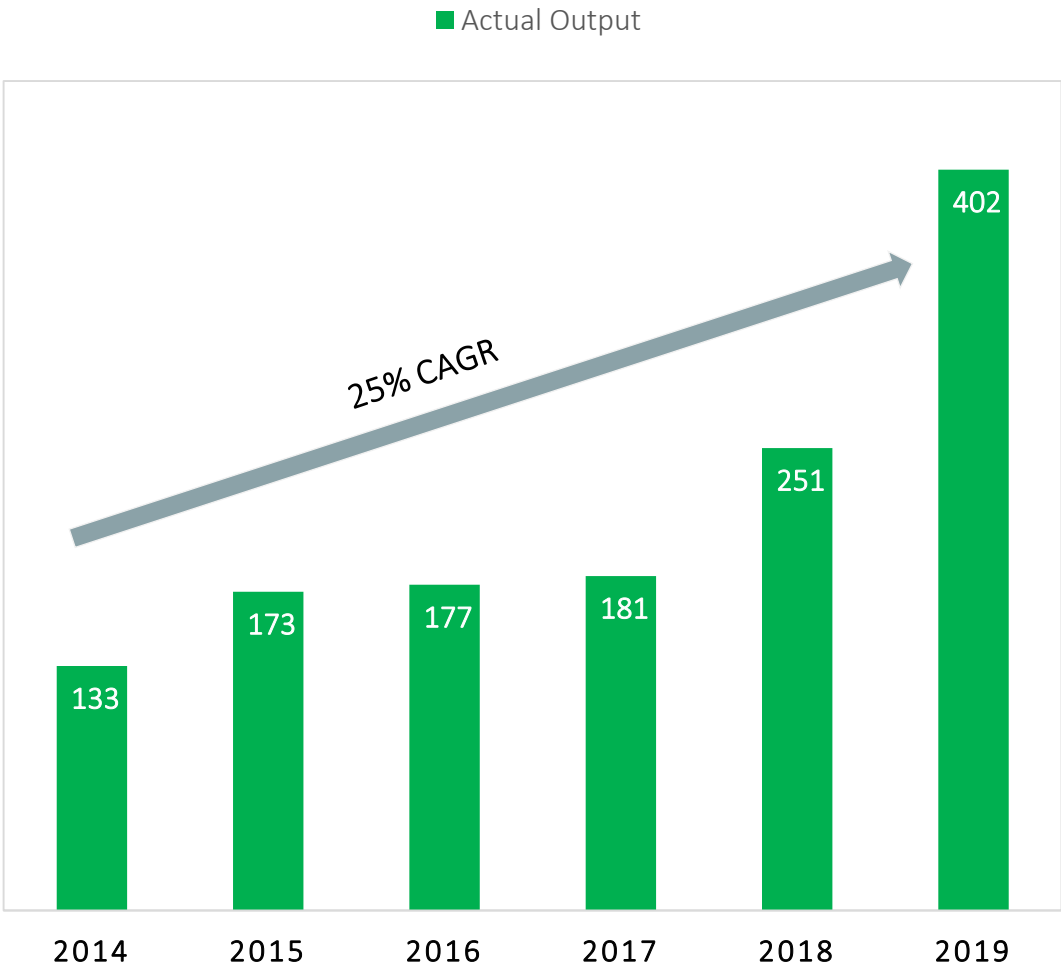


CAPACITY GROWTH (as of December 2019)

ACQUIRE CAPACITY (MW PPA)



POWER OUTPUT PRODUCTION



*Note: 177 MW in Japan - including Onikoube Project (154.73 MW) which is under development.

FINANCIAL HIGHLIGHTS

FY2019



BSW 4.6 MW

FINANCIAL HIGHLIGHT FY2019

Revenue

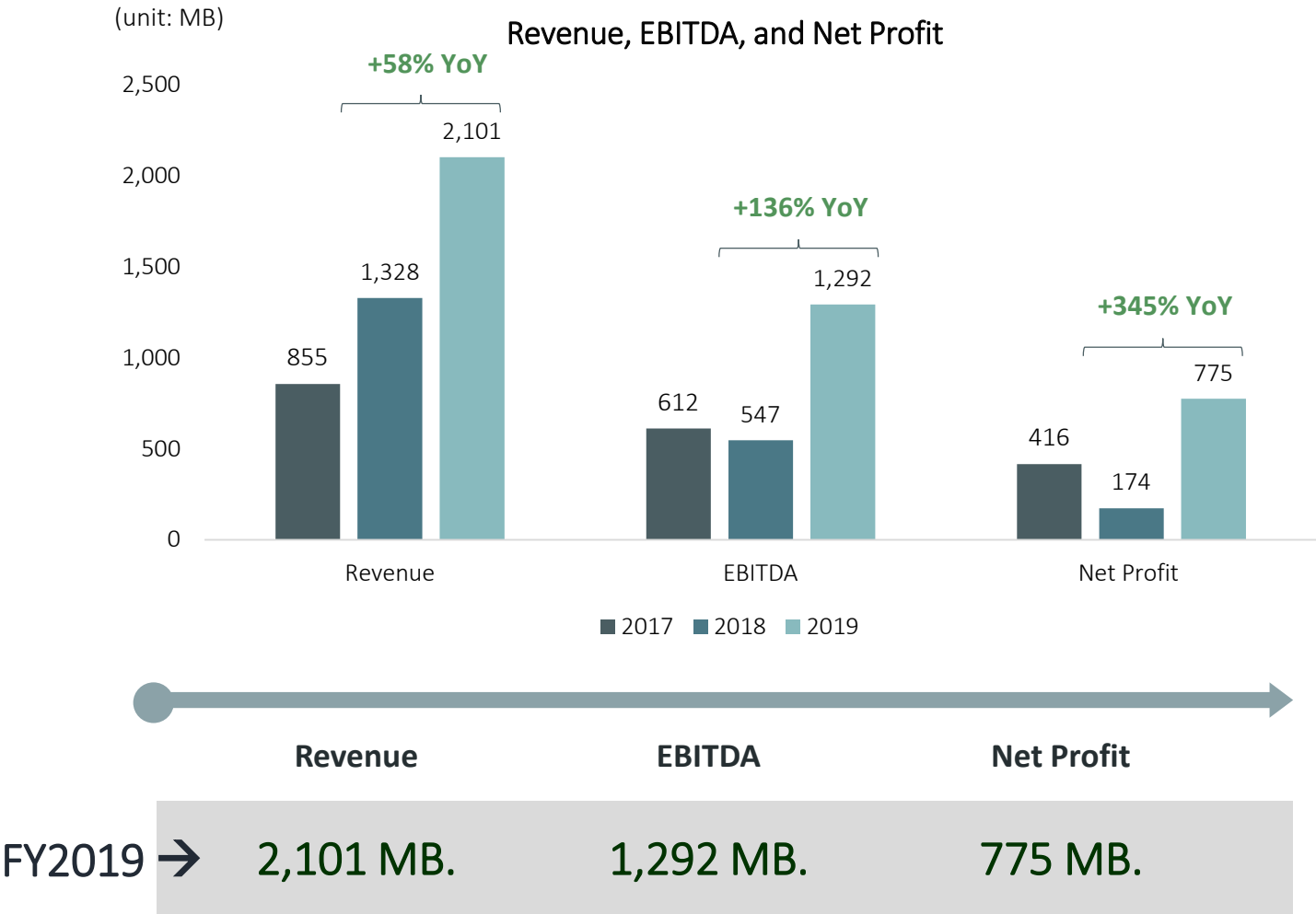
Total Revenues of the year 2019 significantly increased to 2,101 MB or 58% (YoY) as compared to last year. This was primarily due to fully revenue recognition of Biomass 3 plants (22.2 MW), a solar farm in Japan “Hanamizuki” (13.5 MW) that COD since 2 Jan 2019, and acquisitions of 3 solar farm projects in Thailand (totaling 18 MW). All the 3 new projects have already COD which enabled the Company to recognize the revenue within the year 2019.

EBITDA

EBITDA of the year 2019 also significantly increased to 1,292 MB or 136% (YoY) as compared to last year. This was due to the same reason above, whereas there was an extra item of 296 MB (the impairment loss of Thermal Plant) in the year 2018.

Net Profit

Net Profit of the year 2019 also significantly increased to 775 MB, or 345% (YoY) as compared to last year. This was due to the same reasons as above.



Statement of Comprehensive Income

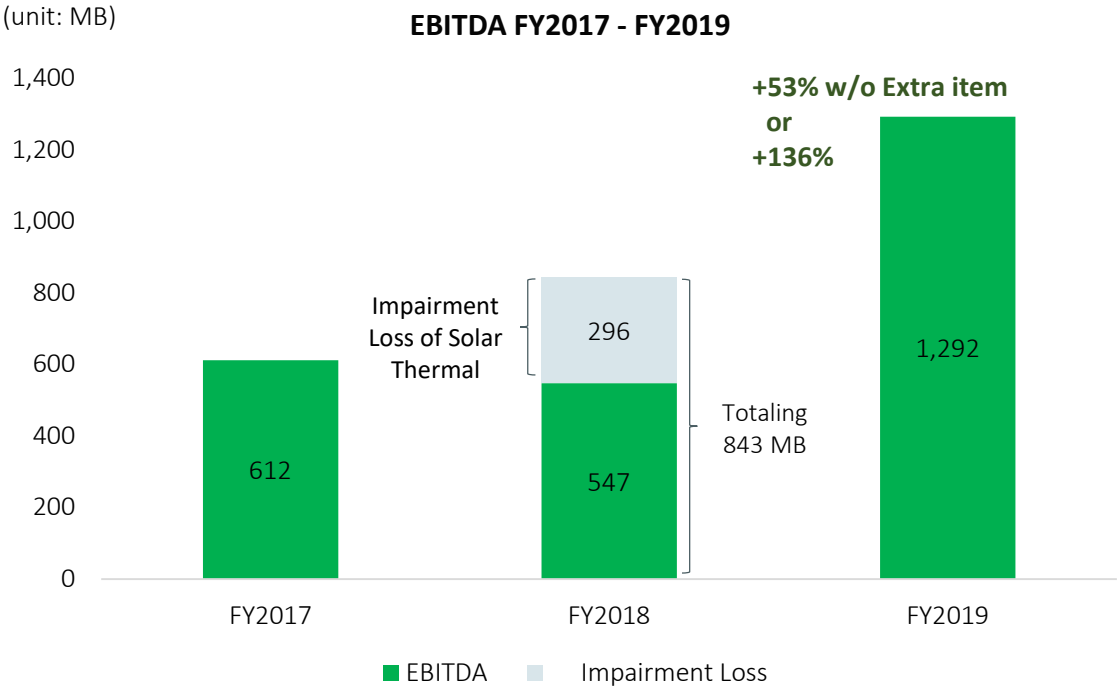
Consolidated (Unit: million Baht)



	FY2019	FY2018	% Change
Revenue			
Electricity Sales	1,304	519	151%
Management Fee	45	43	5%
Total Revenue	1,349	561	140%
COGs	(911)	(435)	109%
Gross Profit	438	126	247%
Other Income	93	156	-41%
SG&A	(233)	(207)	13%
(Loss) gain on exchange rate	(5)	(0)	11305%
Other Expenses	0	(296)	-100%
Profit (Loss) before Interest Expense and Income Tax	291	(220)	-232%
Finance Costs	(147)	(123)	19%
Share of Profit from Joint Ventures	660	610	8%
Profit before Income Tax	804	267	201%
Income Tax	(5)	(84)	-94%
Net Profit from Operation	799	183	336%
Profit (Loss) of Remeasurements of post-employment benefit obligations	(3)	0	
Income Tax on the above item	(0)	0	
Profit (Loss) of Currency Translation Differences	(329)	(4)	7768%
Total Comprehensive Income	467	179	161%
Profit Attributable to:			
Owners of the Parent	775	174	345%
Non-Controlling Interests	24	9	165%
	<u>799</u>	<u>183</u>	336%
Total Comprehensive Income Attributable to:			
Owners of the Parent	443	170	161%
Non-Controlling Interests	24	9	162%
	<u>467</u>	<u>179</u>	245%

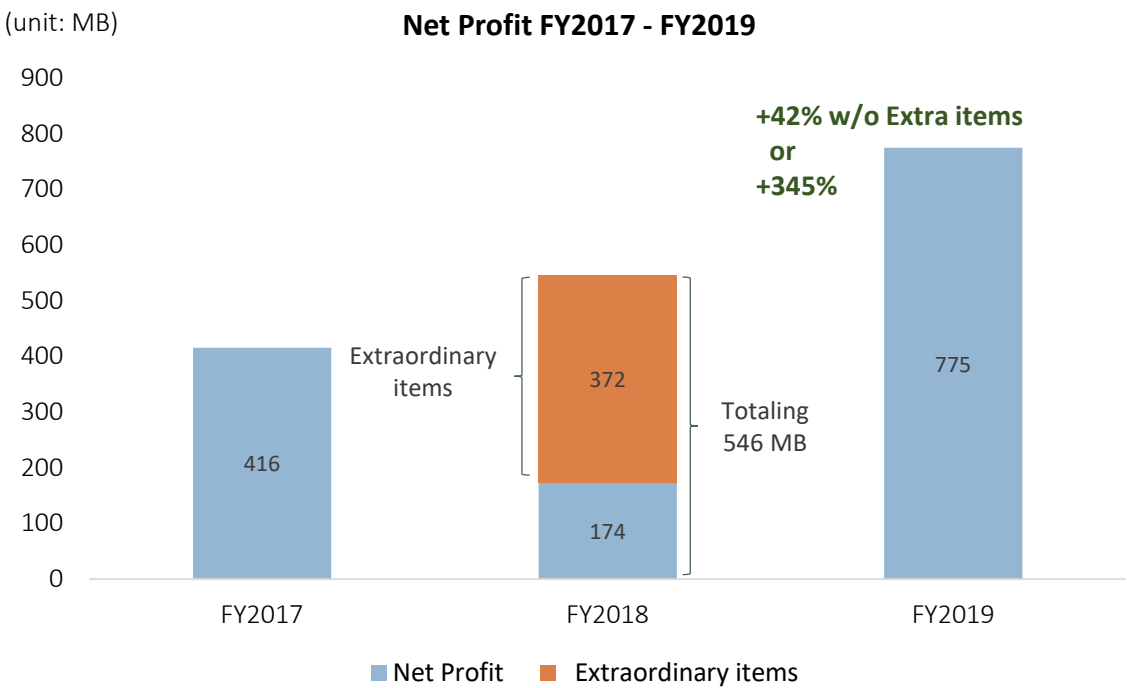
INCOME STATEMENT FY2019

EBITDA and NET PROFIT FY2019



> EBITDA

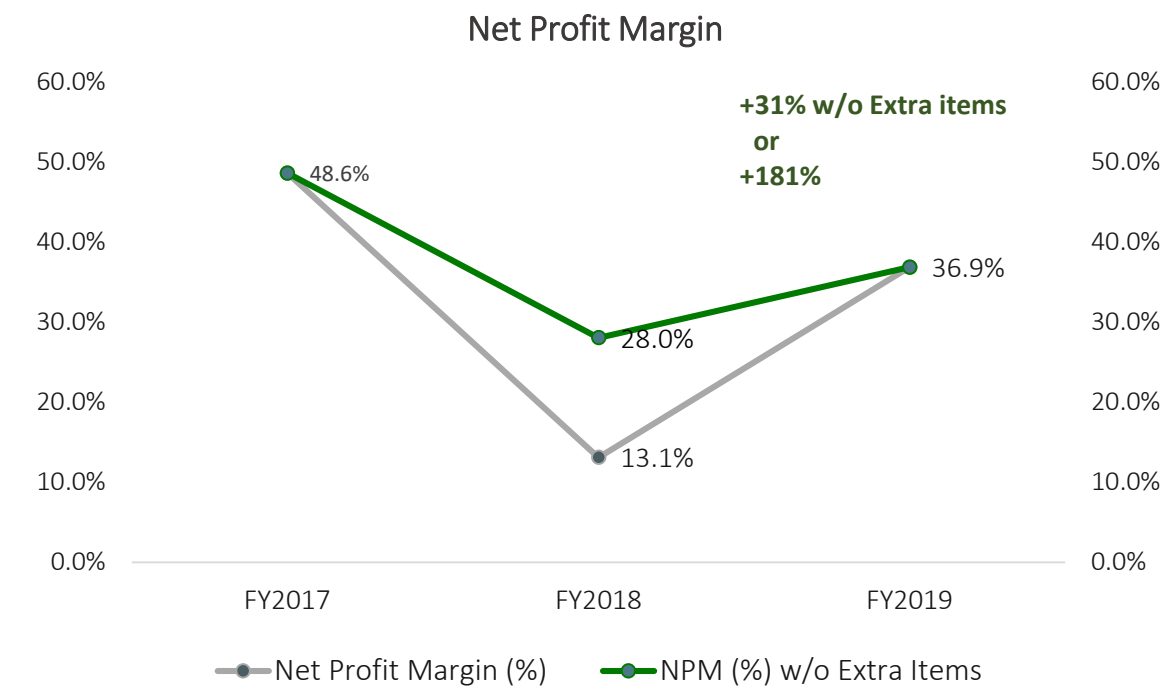
In 2018, there was an impairment loss of Thermal Plant of 296 MB which effected on EBITDA which was 547 MB, whereas EBITDA in 2019 significantly increased to 1,292 MB or 136% as compared to the year 2018.



> Net Profit

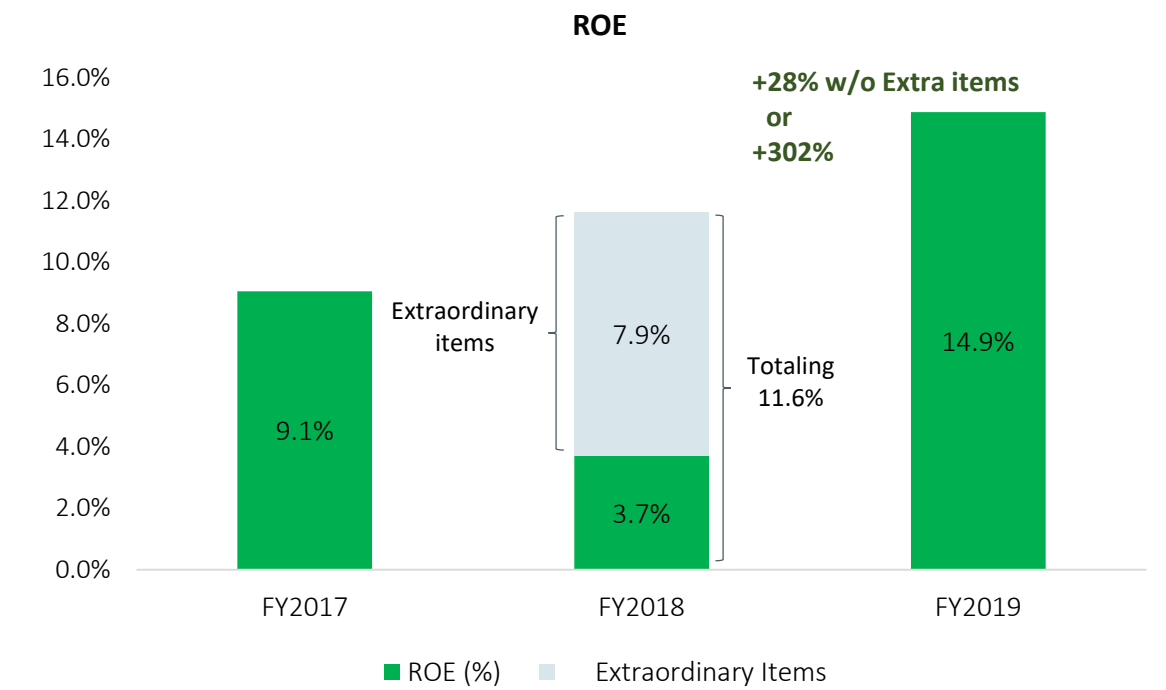
In 2019, Net Profit also significantly increased to 775 MB or 345%. This was primarily due to the growth of business, fully revenue recognition of Biomass projects (22.2 MW) and Solar Farm in Japan “Hanamizuki” (13.5 MW). Also, there were 3 new Solar Farms in Thailand (totaling of 18 MW) that were acquired during the year 2019.

NET PROFIT MARGIN and ROE FY2019



> Net Profit Margin

In 2019, Net Profit Margin increased to 36.9% or 181% as compared to last year of 13.1% that was mainly affected by the extraordinary items of 372.3 MB in 2018. In addition, Net Profit Margin in 2019 was declined as compared to the year 2017 of 48.6%. This was because of an increase in expenses such as cost of sales and services, administrative expenses, loss on exchange rate, and finance costs in 2019.

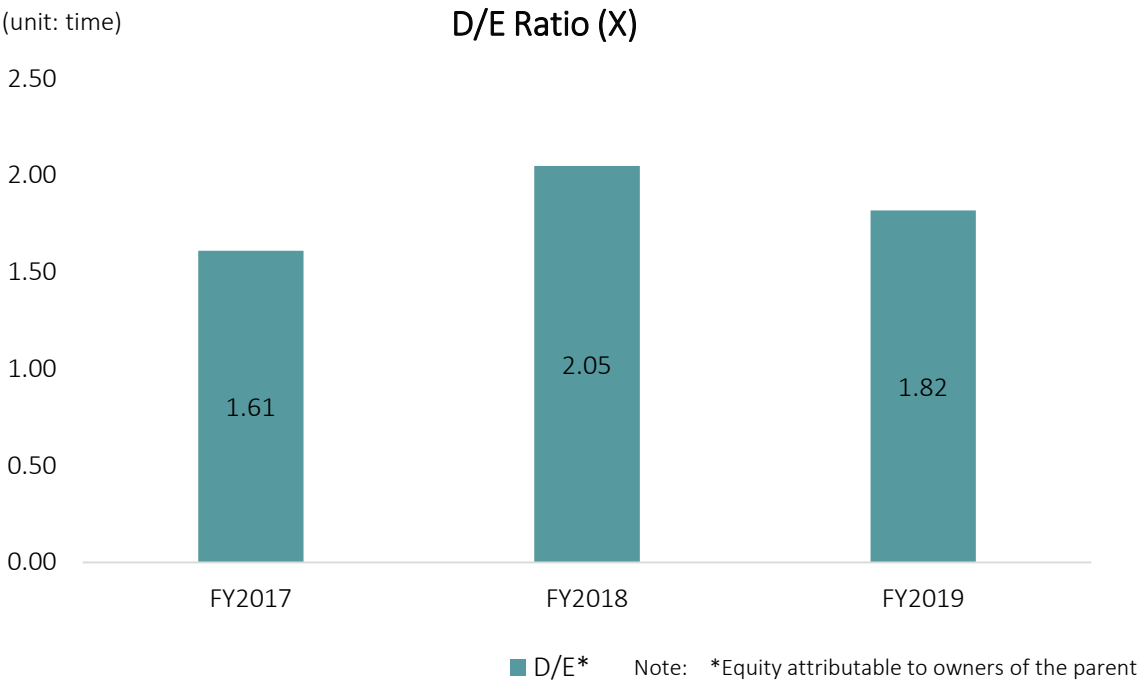
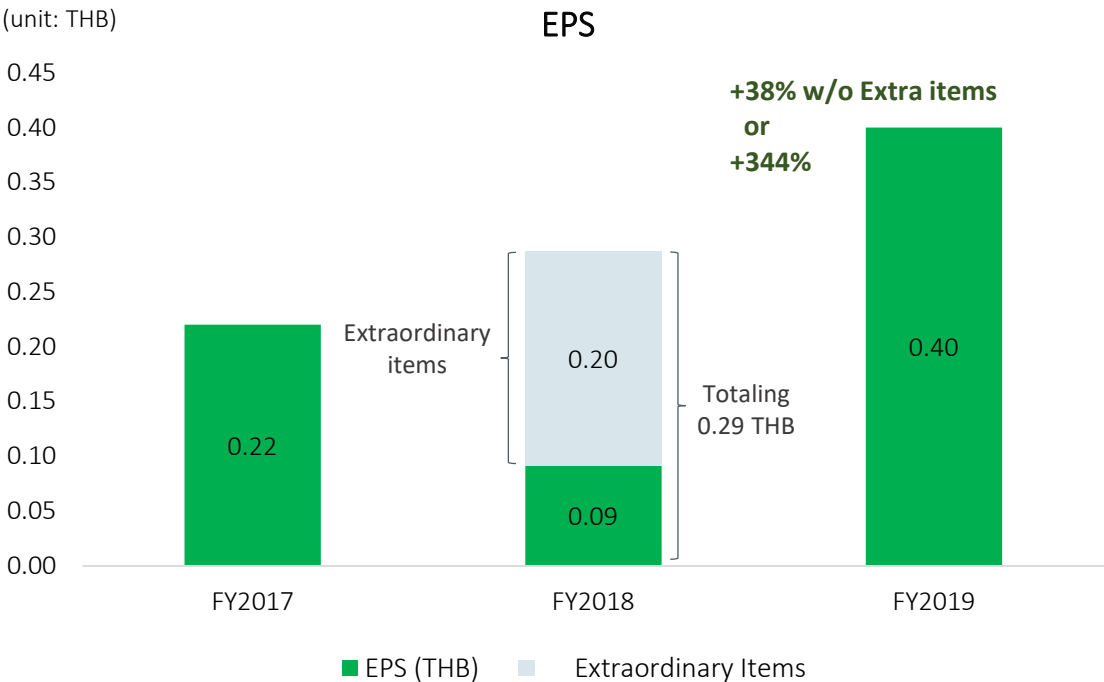


Note: *Equity attributable to owners of the parent

> ROE

In 2019, ROE increased to 14.9% or 302% as compared to last year of 3.7%. This was mainly due to the growth of business and an increase in retained earning for the year 2019.

EPS and D/E FY2019



> EPS

Due to the growth of business as well as fully revenue recognition of all projects COD since 2018 and 2019, EPS was significantly increased to 0.40 Baht or 344% as compared to last year of 0.09 Baht.

> D/E

In 2019, D/E* Ratio decreased to 1.82 times or 11% as compared to last year of 2.05 times. This was primarily due to its debts that were slightly increased, whereas its Equity* that were significantly increased thanks to the growth of business.

> Corporate Loan

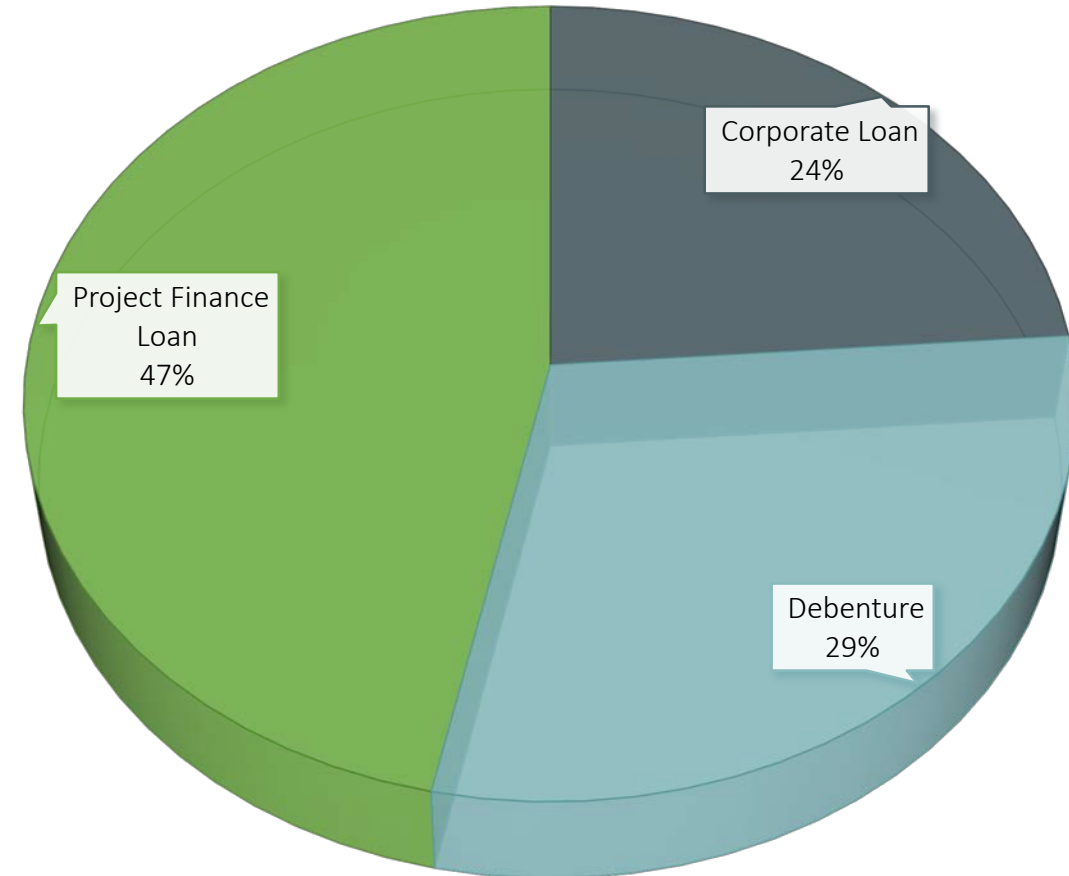
Most of interest-bearing debt were from Corporate Loan for 53% (Corporate Loan for 24% and Debenture for 29%)

> Finance Loans

All projects under Project Finance Loans have been COD.

> Project Finance Loan

The remaining Project Finance Loan for 47% decreased from last quarter since TSE had paid off some outstanding principal.



FINANCIAL POSITION (as of 31 DEC 2019)



Assets

As of 31 December 2019, the Assets were slightly increased to 15,870 MB or 8% as compared to the same period last year of 14,689 MB. This was due to the growth of business and an increase in Short-term investments.



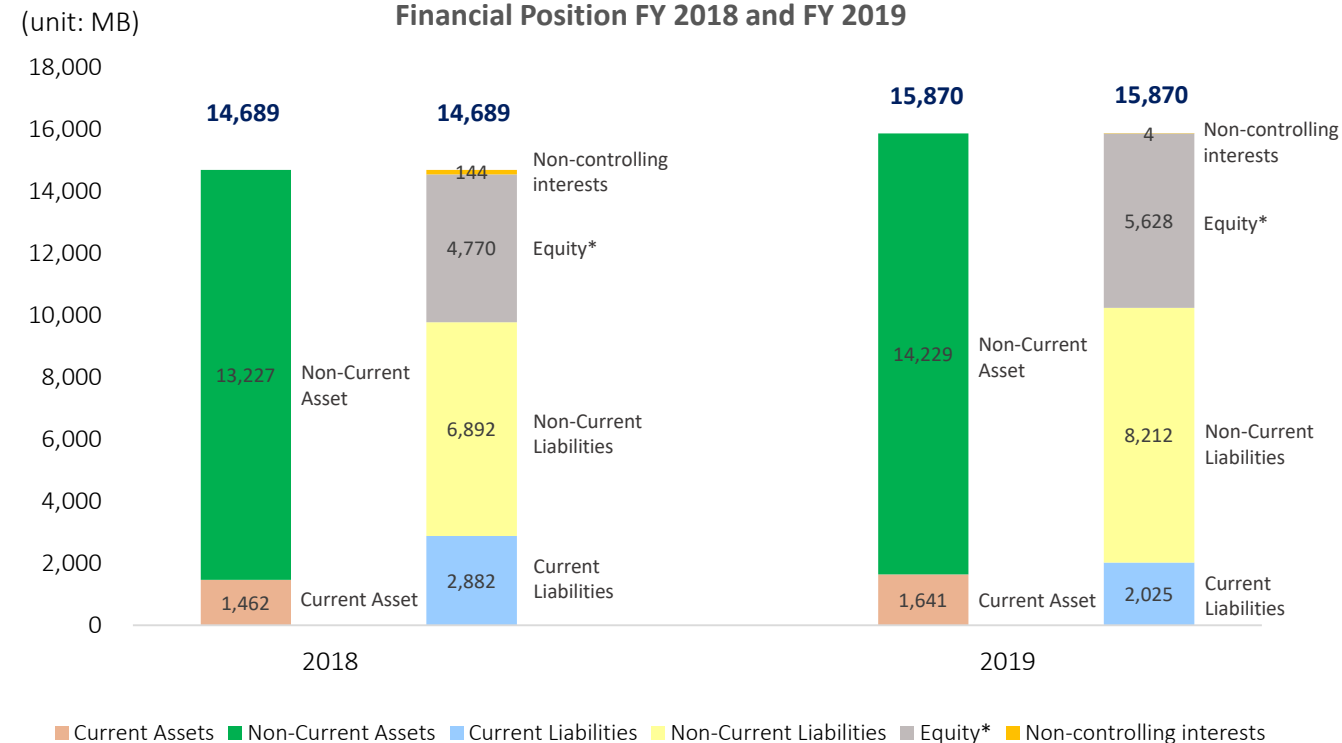
Liabilities

As of 31 December 2019, the Liabilities were slightly increased to 10,238 MB as or 5% as compared to the same period last year of 9,775 MB. This was due to long-term borrowings from financial institutions as a result of the business expansion loans.



Equity*

*Equity attributable to owners of the parent increased to 5,628 MB or 18% as compared to the same period last year of 4,770 MB of which was mainly due to the increase in retained earnings in 2019.



Note: *Equity attributable to owners of the parent

	Assets	Liabilities	Equity*
FY2019 →	15,870 MB.	10,238 MB.	5,628 MB.

OUTLOOK

A large, blue solar panel is mounted on a metal frame, tilted at an angle. The panel is surrounded by lush green vegetation and white flowers. The sky is clear and blue.

Hanamizuki 13.5 MW

OUTLOOK

➤ Thailand

- Acquiring new projects approx. **50** MW PPA within 1 – 2 years
- Planning to bid for Power Plant Community approx. **50** MW PPA

➤ Overseas

Investing in new renewable energy projects overseas approx. **100 – 200** MW PPA within 3 years



INVESTMENTS



Grand Total 40 projects
Total Capacity of 313.67 MW PPA

INVESTMENTS

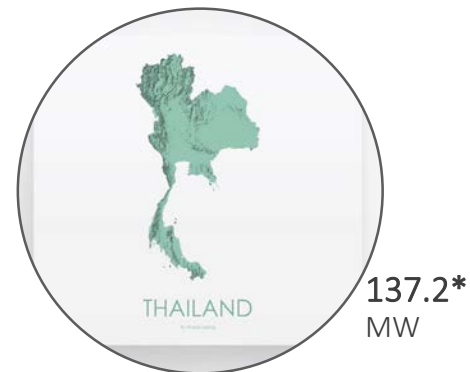
By Country

Thailand:

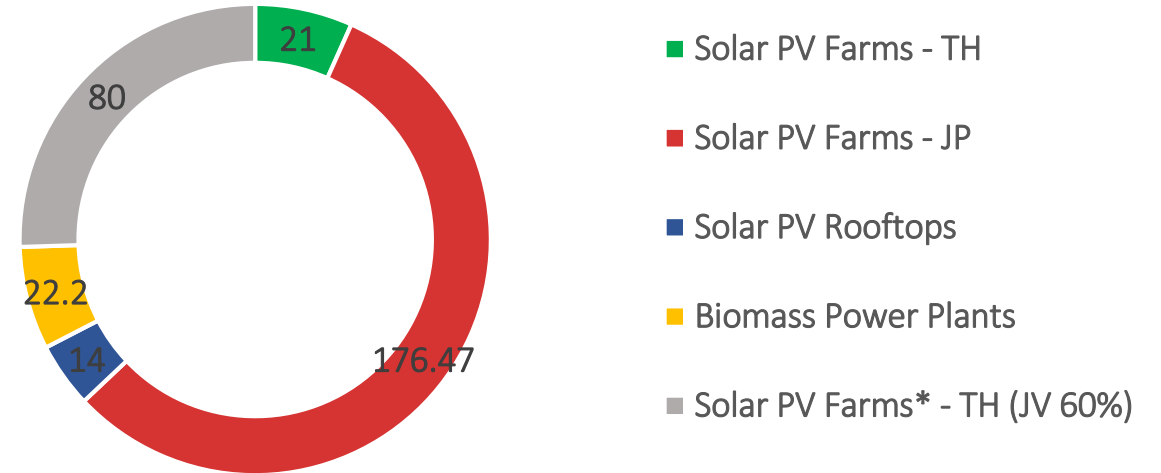
- Solar PV Farms: totaling 15 projects (101 MW)
- Solar PV Rooftops: totaling 14 projects (14 MW)
- Biomass: totaling 3 projects (22.2 MW)
- Total: 32 projects (137.2 MW)

Japan:

- Solar PV Farms: totaling 8 projects (176.47 MW)
- Total: 8 projects

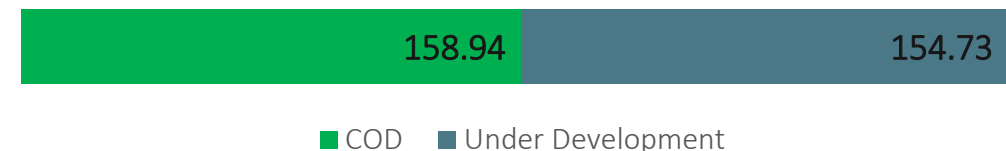


Investments (MW)



Grand Total **40** projects (313.67* MW PPA)

(*as of December 2019)



■ COD ■ Under Development

Solar PV Farms in Thailand (101 MW PPA)



Prachuap Kirikhan

SLC

Location: Bang Saphan
Selling Capacity: 1.0 MW
COD: 29 DEC 2016

Udonrthani

BSE (Acquisition in AUG 2019)

Location: Udonrthani
Selling Capacity: 5.0 MW
COD: 12 DEC 2018

Ang Thong

INS

Location: Ang Thong
Selling Capacity: 2.0 MW
COD: 28 DEC 2015

SSP (Acquisition in NOV 2019)

Location: Ang Thong
Selling Capacity: 8.0 MW
COD: 29 MAR 2013

Ayutthaya

BSS (Acquisition in MAR 2019)

Location: Ayutthaya
Selling Capacity: 5.0 MW
COD: 26 DEC 2016

Kanchanaburi

SSE1-PV01

Location: Bo Phloi
Selling Capacity: 8.0 MW
COD: 4 SEP 2013

SSE1-PV06

Location: Dan Makham Tia
Selling Capacity: 8.0 MW
COD: 6 JUNE 2014

SSE1-PV07

Location: Ta Muang
Selling Capacity: 8.0 MW
COD: 20 MAR 2014

SSE1-PV08

Location: Panom Tuan
Selling Capacity: 8.0 MW
COD: 6 JUNE 2014

Suphanburi

SSE1-PV02

Location: Don Chedi
Selling Capacity: 8.0 MW
COD: 17 JUL 2013

SSE1-PV03

Location: Nong Ya Sai
Selling Capacity: 8.0 MW
COD: 28 OCT 2013

SSE1-PV04

Location: Doem Bang Nang Buet
Selling Capacity: 8.0 MW
COD: 21 NOV 2013

SSE1-PV05

Location: Doem Bang Nang Beut
Selling Capacity: 8.0 MW
COD: 21 NOV 2013

SSE1-PV09

Location: U Thong
Selling Capacity: 8.0 MW
COD: 9 APR 2014

SSE1-PV10

Location: Sam Chuk
Selling Capacity: 8.0 MW
COD: 30 MAY 2014

Solar PV Farms in Thailand (101 MW PPA)



SSE1-PV01 (8MW)
COD SEP 2013



SSE1-PV02 (8MW)
COD JUL 2013



SSE1-PV03 (8MW)
COD OCT 2013



SSE1-PV04 (8MW)
COD NOV 2013



SSE1-PV05 (8MW)
COD NOV 2013



SSE1-PV06 (8MW)
COD JUN 2014



SSE1-PV07 (8MW)
COD MAR 2014



SSE1-PV08 (8MW)
COD JUN 2014



SSE1-PV09 (8MW)
COD APR 2014



SSE1-PV10 (8MW)
COD MAY 2014



SLC (1MW)
COD DEC 2016



INS (2MW)
COD DEC 2015



BSS (5MW)
COD DEC 2016



BSE (5MW)
COD DEC 2018



SSP (8MW)
COD MAR 2013

Solar PV Rooftops in Thailand (14 MW PPA)



North Metropolitan

TSER-RT03

Location: Nakorn Sawan
Selling Capacity: 1.0 MW
COD: JUN 2015

TSER-RT01

Location: Lopburi
Selling Capacity: 1.0 MW
COD: SEP 2014

North East

TSER-RT09

Location: Khao Yai
Selling Capacity: 1.0 MW
COD: NOV 2014

TSER-RT08

Location: Ubon Ratchathanee
Selling Capacity: 1.0 MW
COD: MAR 2015

North

TSER-RT02

Location: Phrae
Selling Capacity: 1.0 MW
COD: FEB 2015

South

TSER-RT04

Location: Chumporn
Selling Capacity: 1.0 MW
COD: SEP 2014

TSER-RT05

Location: Surat Thani
Selling Capacity: 1.0 MW
COD: DEC 2014

TSER-RT06

Location: Nakhon Si Thammarat
Selling Capacity: 1.0 MW
COD: JUL 2015

TSER-RT07

Location: Hat Yai
Selling Capacity: 1.0 MW
COD: OCT 2015

Bangkok

TSER-RT10

Location: Ekamai – Ramindra
Selling Capacity: 1.0 MW
COD: FEB 2015

TSER-RT11

Location: Ratchapruek
Selling Capacity: 1.0 MW
COD: NOV 2014

TSER-RT12

Location: Thapra
Selling Capacity: 1.0 MW
COD: JUL 2015

TSER-RT13

Location: Bangkapi
Selling Capacity: 1.0 MW
COD: JUL 2015

TSER-RT14

Location: Ngamwongwan
Selling Capacity: 1.0 MW
COD: AUG 2015



Solar PV Rooftops in Thailand (14 MW PPA)



RT-01 Lopburi
COD SEP 2014



RT-02 Phrae
COD FEB 2015



RT-03 Nakorn Sawan
COD JUN 2015



RT-04 Chumporn
COD SEP 2014



RT-05 Surat Thani
COD DEC 2014



RT-06 Nakhon Si Thammarat
COD JUL 2015



RT-07 Hat Yai
COD OCT 2015



RT-08 Ubon Ratchathanee
COD MAR 2015



RT-09 Khao Yai
COD NOV 2014



RT-10 Ekamai-Ramindra
COD FEB 2015



RT-11 Ratchapruek
COD NOV 2014



RT-12 Thapra
COD JUL 2015



RT-13 Bangkok
COD JUL 2015



RT-14 Ngamwongwan
COD AUG 2015

Biomass in Thailand (22.2 MW PPA)

BSW (4.6 MW)



OSW 1 (8.8 MW)



OSW 2 (8.8 MW)



Details / Projects	BSW	OSW 1 & OSW 2
Installed Capacity:	6.0 MW	19.8 MW
PPA Capacity:	4.6 MW	17.6 MW
Purchase Rate:	FiT 4.24 Baht + Premium 0.30 Baht (8 yrs.)	FiT 4.24 Baht + Premium 0.30 Baht (8 yrs.)
Tenor:	20 years from COD	15 years 4 month from COD
TSE's Ownership:	100%	100%
Location:	Surat Thani	Nakhon Si Thammarat
COD:	MAR 2018	OSW1 – AUG 2018 OSW2 – OCT 2018

Solar PV Farms in Japan (176.47 MW)



Toyama

Shima

Selling Capacity: 1.25 MW
COD: 2 MAR 2016
FiT: JP¥ 32
Operated by: TSI

Sakura

Selling Capacity: 1.99 MW
COD: 2 NOV 2017
FiT: JP¥ 32
Operated by: TSI

Ishikawa

Hanamizuki

Selling Capacity: 13.5 MW
COD: 2 JAN 2019
FiT: JP¥ 36
Operated by: TSI

Ibaraki

Jyoso

Selling Capacity: 1.25 MW
COD: 2 MAY 2018
FiT: JP¥ 36
Operated by: TSI

Ryugasaki

Selling Capacity: 1.75 MW
COD: 1 SEP 2016
FiT: JP¥ 36
Operated by: TSI

Kuno

Selling Capacity: 0.5 MW
COD: 31 AUG 2015
FiT: JP¥ 36
Operated by: TSI

Miyagi

Onikoube

Selling Capacity: 154.73 MW
SCOD: Q4 2022
FiT: JP¥ 36
Operated by: OSP
Status: Under development

Ishikawa

Hikeme

Selling Capacity: 1.5 MW
COD: 1 APR 2016
FiT: JP¥ 32
Operated by: TSI

Solar PV Farms in Japan (176.47 MW)



Kuno (0.5 MW)
COD AUG 2015



Shima (1.25 MW)
COD MAR 2016



Hikeme (1.50 MW)
COD APR 2016



Hanamizuki (13.5 MW)
COD JAN 2019



Ryugasaki (1.75 MW)
COD SEP 2016



Sakura (1.99 MW)
COD NOV 2017



Jyoso (1.25 MW)
COD MAY 2018



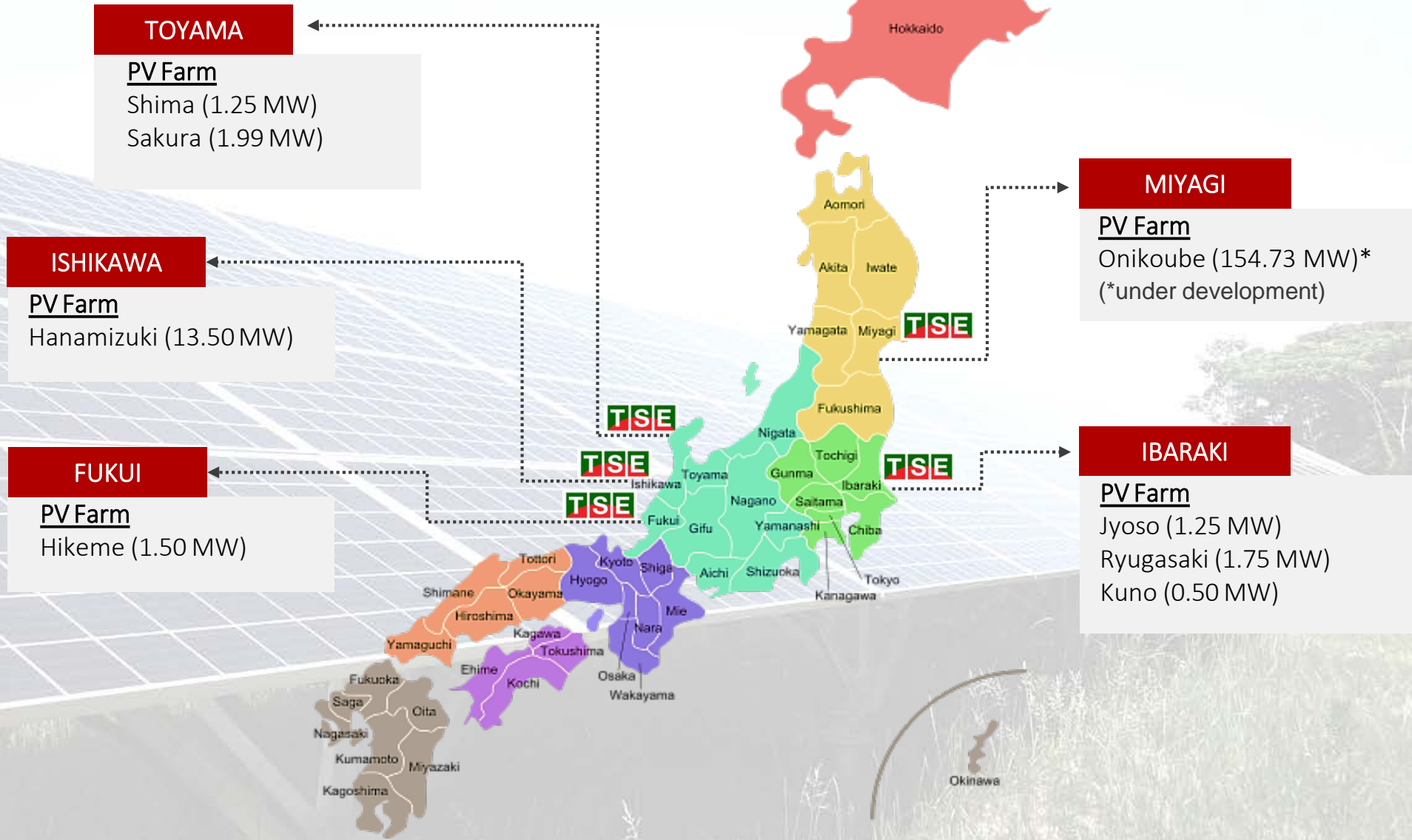
Onikoube (154.73 MW)*
SCOD 4Q2022

(*under development)

Solar PV Farms in Japan (176.47 MW)

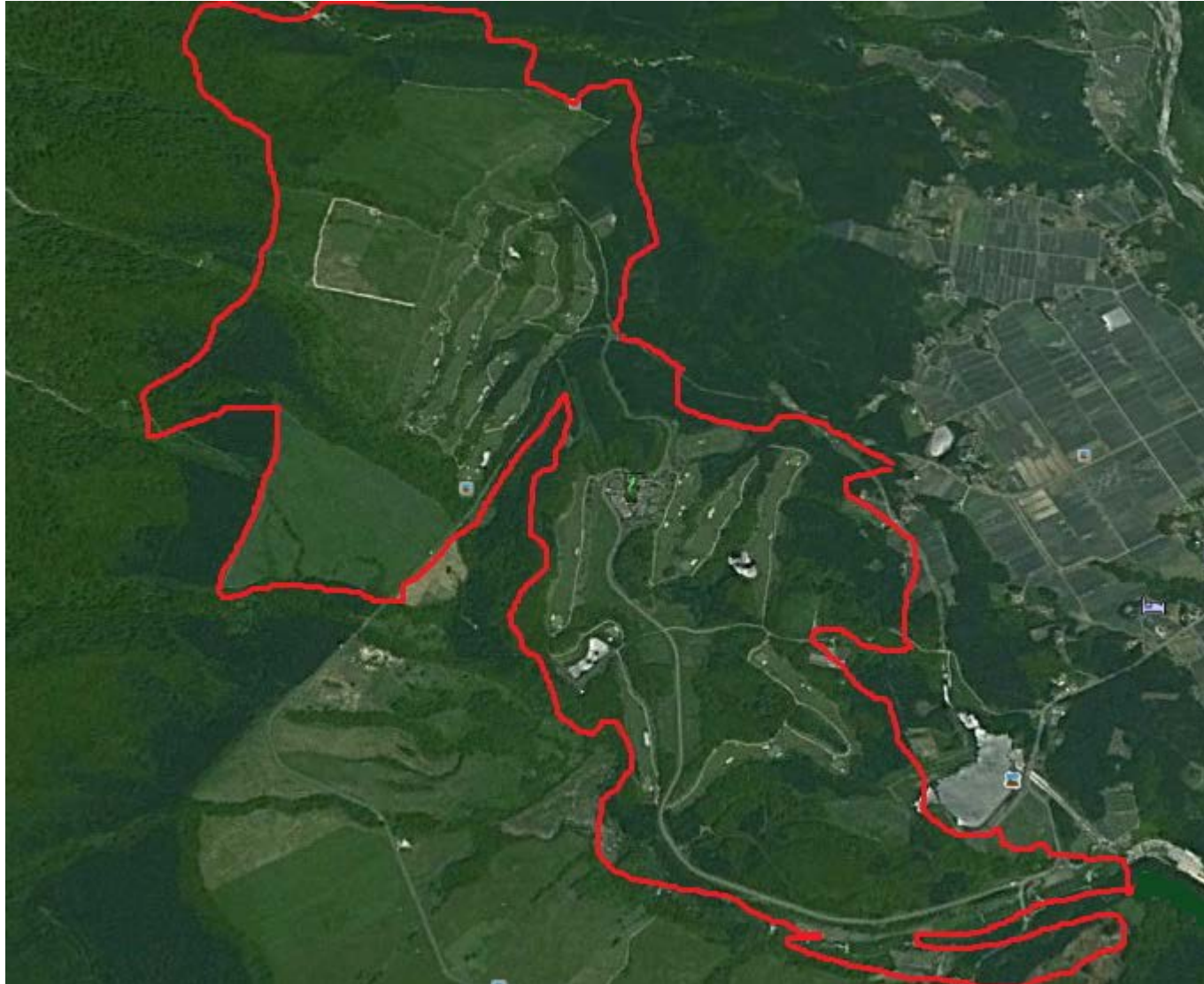
Project Site	Location	Company	Installed Capacity (MW)	Selling Capacity (MW)	Feed-in- Tariff	COD
Kuno	Ibaraki	TSI	0.65	0.50	36 Yen	31/8/2015
Shima	Toyama	TSI	1.43	1.25	32 Yen	2/3/2016
Hikeme	Fukui	TSI	1.86	1.50	32 Yen	1/4/2016
Ryugasaki	Ibaraki	TSI	2.36	1.75	36 Yen	1/9/2016
Sakura	Toyama	TSI	2.55	1.99	32 Yen	2/11/2017
Jyoso	Ibaraki	TSI	1.59	1.25	36 Yen	2/5/2018
Hanamizuki	Ishikawa	TSI	18.1	13.50	36 Yen	2/1/2019
Onikoube	Miyagi	OSP	159.0*	154.73	36 Yen	4Q2022
Total			187.54	176.47	(*under development)	

Solar PV Farms in Japan (176.47 MW)



ONIKOUBE PROJECT

Onikoube Project



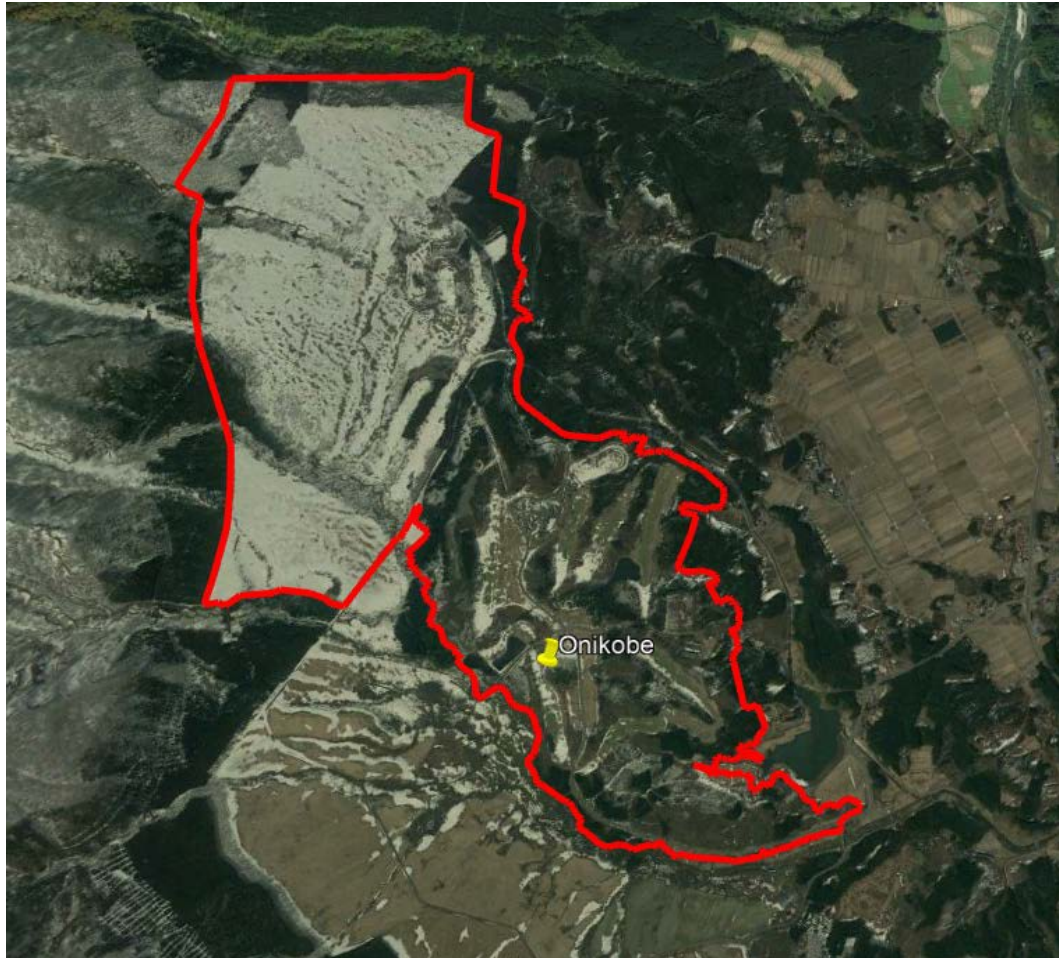
Summary of Onikoube Project

Operated by:	OSP
PPA Capacity:	154.73 MW*
Purchase Rate:	Fit JP¥ 36
Expected NTP:	2Q2020
Off-taker:	Tohoku Utility
Location:	Miyagi, Japan
SCOD:	4Q2022
Project Component:	
	- PV module by Trina Solar
	- Inverter by Huawei

(*under development)

ONIKOUBE PROJECT

Project Area



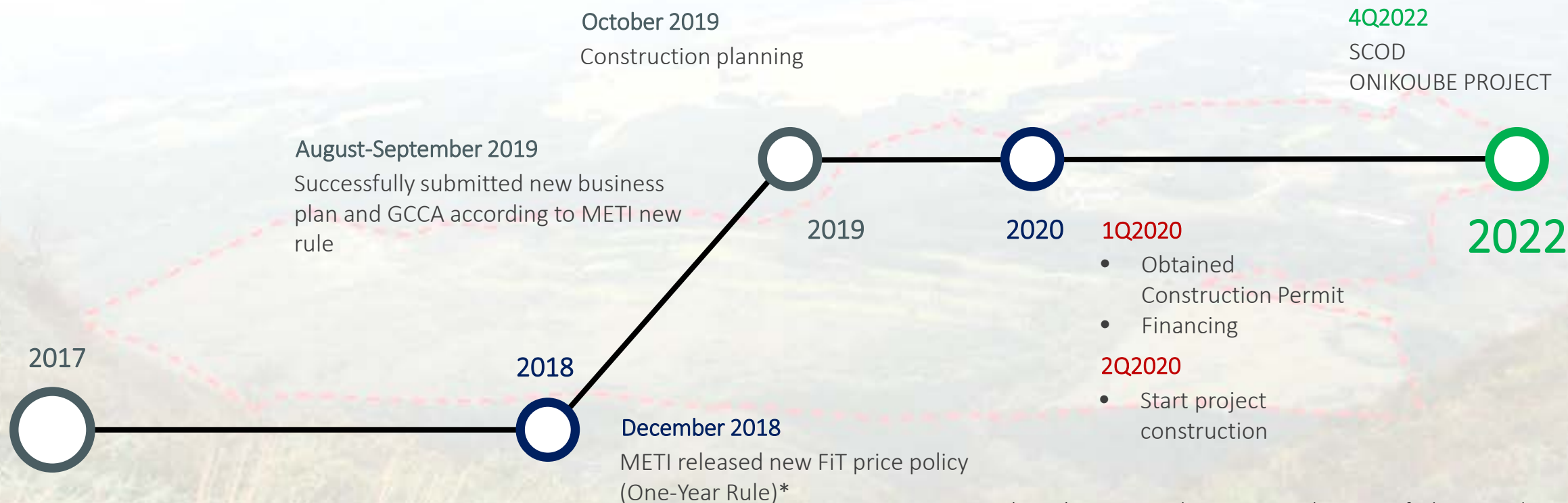
Onikoube

Selling Capacity:	154.73 MW
SCOD:	Q4 2022
FiT:	JP¥ 36
Operated by:	OSP
Status:	Under development

Image NASA
Image © 2008 TerraMetrics

© 2007 Google™

Work Back Timeline of Onikoube Project

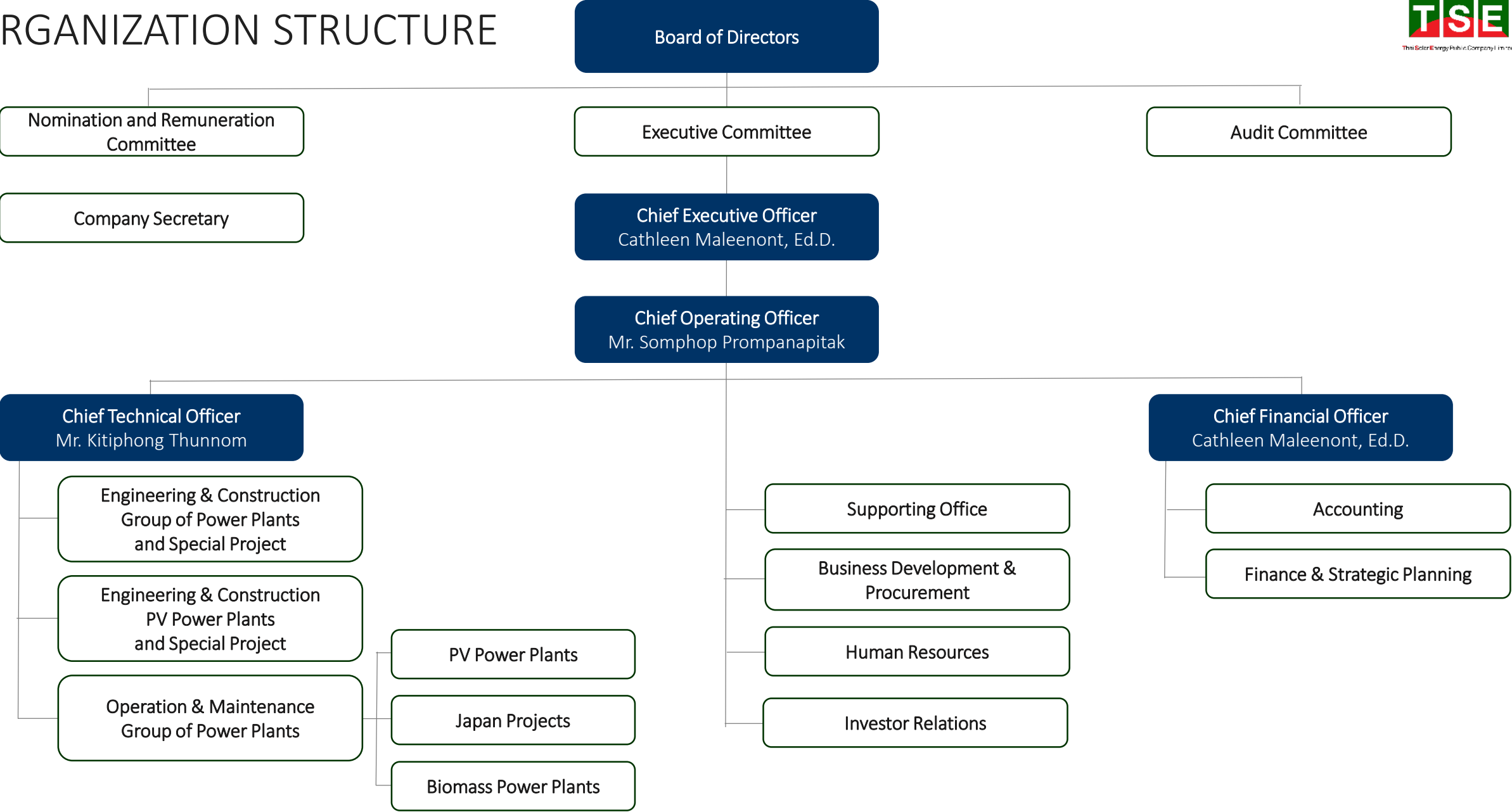


**METI's one-year rule requires resubmission of a business plan in order to secure project's FiT price and tenor year under the condition that the project is ready for the construction and to COD within a certain timeline. The conditions required by METI such as, EIA Approval, Forest Permit. Onikoube does not subject to such requirements so the project successfully secures FiT price under the new rule.*

APPENDIX



ORGANIZATION STRUCTURE



BOARD OF DIRECTORS and Audit Committee

Board of Directors

Chairman of Board of Directors:	Cathleen Maleenont Ed., D.
Vice Chairman + Independent Director:	Mr. Prommin Lertsuridej
Independent Director:	Mr. Pala Sookawesh
Independent Director + Chairman of Audit Committee:	Mrs. Siripen Sitasuwan
Independent Director + Chairman of Nomination and Remuneration Committee:	Mr. Prasan Chuapanich
Independent Director:	Mr. Aran Apichari
Director:	Mr. Somphop Prompanapitak
Director:	Mrs. Angkanee Rerksirisuk
Director:	Mr. Masthawin Charnvirakul

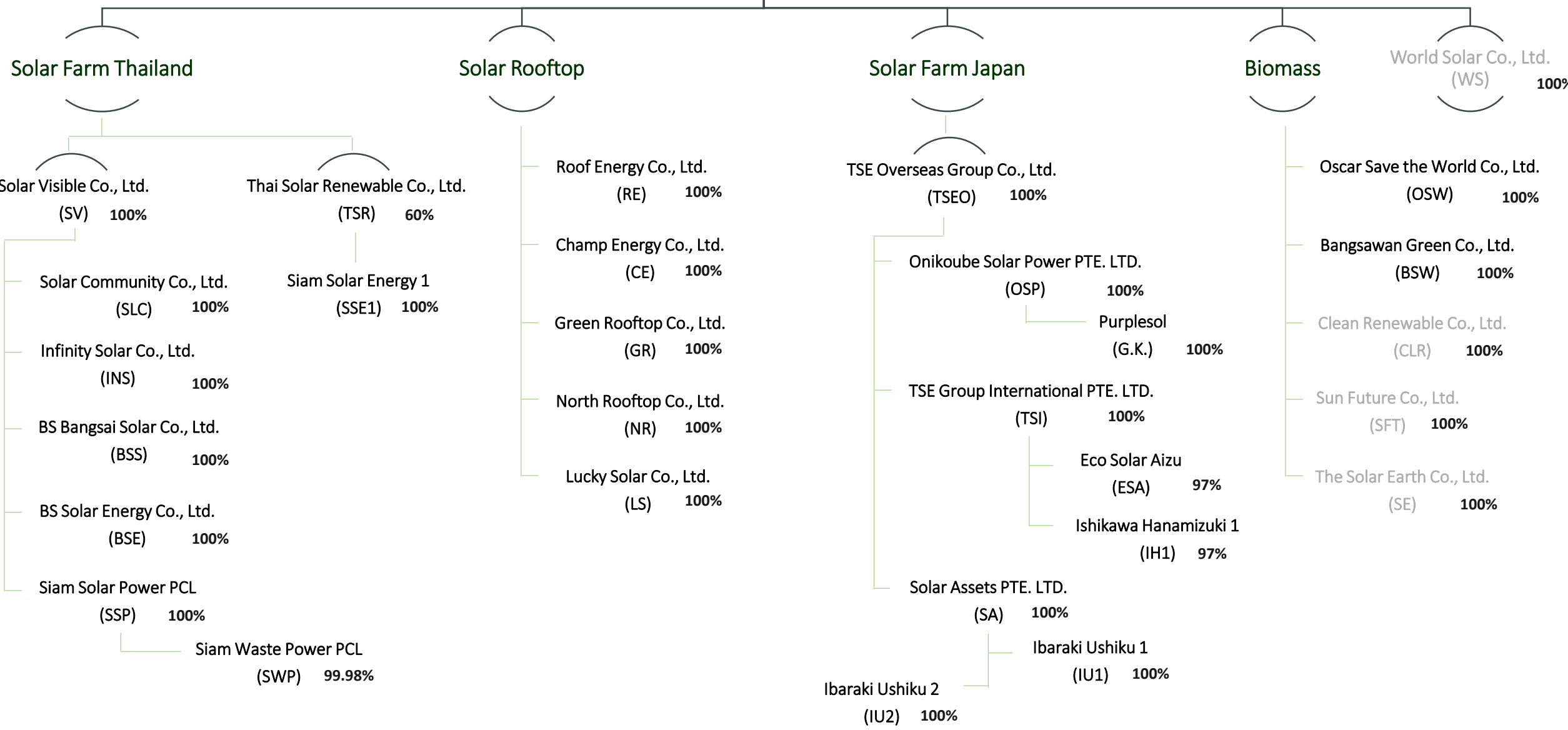
Audit Committee

Chairman of Audit Committee + Independent Director :	Mrs. Siripen Sitasuwan
Member of Audit Committee + Independent Director :	Mr. Prasan Chuapanich
Member of Audit Committee and Independent Director :	Mr. Pala Sookawesh

INVESTMENT STRUCTURE



Thai Solar Energy
PCL. (TSE)





Thai Solar Energy Public Company Limited

Renewable for Future

THANK YOU

WWW.THAISOLARENERGY.COM

TEL. +66 2258 4530-34